Financial inclusion and poverty reduction in India

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Abstract

This study empirically investigates the impact of financial development through commercial banks on poverty conditions in India. Specifically, we estimate models in which the poverty ratio is explained by financial inclusion, as well as financial deepening, for public sector banks and private sector banks, respectively. Using unbalanced panel data for Indian states and union territories from 1973 to 2004, and applying the generalized method of moments estimation, the results show that financial inclusion and financial deepening have statistically significant negative relationships with the poverty ratio for public sector banks, but not for private sector banks. In addition, the coefficients of the interaction term between financial inclusion and financial deepening are estimated to be negative and statistically significant in most cases of public sector banks. Considering the positive impacts of financial inclusion and financial deepening on poverty reduction, this result implies that promoting the breadth and depth of public sector banks could have a synergistic effect on poverty reduction in India.

1. Introduction

Financial inclusion is a multi-dimensional concept of financial development. It is the process of ensuring access to and usage of basic formal financial services for all individuals at an affordable cost. Basic formal financial services include credit, savings, insurance, payments, and remittance facilities. Without these services, individuals often resort to using high-cost informal financial sources; this financial exclusion likely exerts a disproportionately negative impact on low-income groups. Therefore, the promotion of financial inclusion plays an important role in alleviating poverty and reducing income inequalities within a country.

In India, we can trace the concept of financial inclusion back to the start of social control of the banking sector in the late 1960s. Since then, India has undertaken various initiatives to expand formal financial services to rural areas (RBI, 2008). During its initial phase, financial inclusion in India was state-controlled, mainly limited to the nationalization of large commercial banks, the implementation of a branch licensing policy, the establishment of regional rural banks (RRBs), and the introduction of priority sector lending.

With the onset of economic reforms of the early 1990s, however, systematic financial sector reforms were implemented that placed greater emphasis on the efficiency and profitability of the banking system, alleged to have been neglected in earlier decades (Chavan, 2007). As a result, the attempts to achieve financial inclusion underwent significant modification. While state-controlled initiatives were deemphasized, financial inclusion in the 1990s was encouraged mainly by promoting microfinance in the country through the Self Help Group-Bank Linkage Program (SBLP) (RBI, 2008).

In April 2005, the Reserve Bank of India (RBI), India's central bank, explicitly used the term "financial inclusion" as a primary policy objective in its annual policy statement for 2005 (*ibid.*). In this statement, while recognizing concerns that banking practices tended to exclude vast sections of the population, particularly pensioners, the self-employed, and those employed in the informal sector, the RBI urged banks to review their existing practices in order to provide banking services to all segments of the population on an equitable basis (RBI, 2005; Leeladhar, 2006).

Although new measures in the form of microfinance, such as the SBLP, have been implemented in India because of economic liberalization since the 1990s, commercial banks

still account for more than 60% of the financial sector's assets. In addition, they play a pivotal role in the promotion of financial inclusion in India. Accordingly, by using relevant data on commercial banks, we empirically investigate the impacts of financial inclusion, as well as financial deepening, the traditional concept of financial development, on poverty conditions in India.

Specifically, we estimate models wherein the poverty ratio is explained by financial inclusion and financial deepening, their interaction terms, as well as control variables for the two banking groups—public sector banks and private sector banks. Public sector banks are composed of nationalized banks, the State Bank of India (SBI), and its associated banks in which a majority stake is held by the Government of India. Private sector banks are non-public sector banks composed of private banks, foreign banks, and the RRBs in this study.

Since financial inclusion is a multi-dimensional concept of financial development, it is measured by different indicators. Following Beck, Demirgüç-Kunt, and Martínez Pería (2007) and the Alliance for Financial Inclusion (2013), we use the number of bank branches and accounts to measure the degree of financial inclusion in terms of accessibility and usage of banking services, respectively. We also use the amount of bank credit to measure the degree of financial deepening. The numbers of branches and accounts are indicators of banking breadth, whereas the amount of credit is an indicator of banking depth (Demirgüç-Kunt, Cordova, Martínez Pería, and Woodruff, 2011). Therefore, by estimating the models, we examine whether, and to what extent, the breadth and depth of the banking sector interact with each other in the process of poverty reduction.

The rest of this article is organized as follows. Section 2 reviews relevant extant literature. Section 3 provides a brief explanation of the model, the essential definitions, and the sources of the data. Section 4 presents the empirical results, and Section 5 checks the robustness of our results. Lastly, in Section 6, the concluding remarks summarize the main findings of the study.

2. Literature Review

An expansive stream of literatures addresses the relationship between financial development

and poverty conditions. Generally, relevant empirical studies define financial development as the increased proportion of the financial sector in the real economy. They indicate that financial development—measured by monetary aggregates, bank credit and deposits, and/or banking sector assets relative to GDP—contributes to poverty reduction both directly and indirectly through economic growth in less developed countries (Honohan, 2004; Jalilian and Kirkpatrick, 2005; Beck, Demirgüç-Kunt, and Levine, 2007; Quartey, 2008; Jeanneney and Kpodar, 2011; Inoue and Hamori, 2012). Since, unlike these studies, we especially focus on financial inclusion, this section surveys relevant prior studies in search of the link between financial inclusion and poverty reduction.[1,2]

First, Honohan (2008) constructed a composite indicator of financial access for 162 countries by combining information about the number of accounts in commercial banks and microfinance institutions with household surveys for a smaller set of countries. Using cross-country data, the author regressed the composite indicator on a set of country structural characteristics. The author found that better institutions of governance and higher mobile phone penetration correlate with financial access, even after controlling for per capita income. In addition, the author compared the composite indicator with the poverty headcount ratio, and found that financial access negatively correlates with poverty conditions, but the correlation loses significance in multiple regressions that include per capita income. On the other hand, banking depth measured by private credit as a percentage of GDP has a significantly negative relationship with the poverty ratio, even after controlling for average income. Therefore, Honohan (2008, p. 2499) concluded that "If financial development lowers poverty, it is in its depth dimension rather than the access dimension."

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[1] Several studies empirically analyzed the relationship between financial inclusion and variables other than poverty conditions. For example, Ghosh (2011), Sharma (2016), and Kim, Yu, and Hassan (2018) examined the impact of financial inclusion on economic growth, while Morgan and Pontines (2014) and Ahamed and Mallick (2017) analyzed the impact of financial inclusion on financial stability.

[2] Ghosh (2011) and Sharma (2016) are among the papers on financial inclusion in India. Using the cross-sectional and system GMM estimations, Ghosh (2011) found that financial inclusion measured by the number of bank branches per 100,000 persons has a positive effect on economic growth in India. Also, by estimating a vector autoregressive model, Sharma (2016) found that the number of bank accounts, the number of bank branches and ATMs, and outstanding deposits lead to higher economic growth in India.

Park and Mercado (2016) examined the significance of financial inclusion in reducing poverty and income inequality in 177 countries, including 37 countries from the developing Asian region. Following the methodology of Sarma (2008), the authors utilized five measures to construct a composite indicator of financial inclusion.[3] The measures are the numbers of commercial bank branches, ATMs, and borrowers with and depositors from commercial banks per adults each, along with the domestic credit to GDP ratio. Using cross-sectional data of average values from 2002 to 2012, they found that financial inclusion significantly correlates with lower poverty ratio in both the full sample and the developing Asia sample; however, there is no significant correlation between financial inclusion and income inequality in either sample.

Neaime and Gaysset (2018) analyzed the impact of financial inclusion on income inequality, poverty conditions, and financial stability using panel data of eight countries in the Middle East and North Africa for the period 2002–2015. The authors measured the degree of financial inclusion by either the number of banks or ATMs per 100,000 adults. Using the generalized method of moments (GMM) estimation, they found that financial inclusion proxied by the number of banks reduces income inequality, whereas it has no significant effect on the poverty ratio. Using the generalized least squares method, they found evidence that financial inclusion measured by the number of ATMs contributes positively to financial stability in this region.

Some studies focused on the relationship between financial inclusion and poverty reduction in India. For example, Burgess and Pande (2005) evaluated the importance of the state-led branch expansion program in India by examining its impact on the poverty ratio in rural and urban areas. They stated that, due to the introduction of the new branch licensing policy in 1977, rural branch expansion was relatively higher in financially less-developed states between 1977 and 1990, and that the reverse was true both before 1977 and after 1990. Based

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[3] Based on the composite indicator of financial inclusion developed by Sarma (2008), Sarma and Pais (2011) explored the empirical association between this composite indicator and an array of variables. Using cross-country data, they found that financial inclusion is positively and significantly affected by per capita GDP, adult literacy, road network, and telephone and internet usage, and it has a negative relationship with the Gini coefficient, rural population, the non-performing asset ratio, the capital asset ratio, and asset share of foreign banks.

on these observations, and using panel data for 16 states from 1961 to 2000, the authors empirically analyzed how the increase in the number of branches in rural unbanked locations affected the poverty headcount ratio. They reported that, when evaluated at the sample mean, rural branch expansion could explain a 14- to 17-percentage point decline in the rural poverty headcount ratio, but it did not affect urban poverty.

Finally, Bhandari (2009) measured progress toward financial inclusion in India in the form of growth in deposit bank accounts and calculated the Spearman's rank correlation between state-wise growth in bank accounts and the percentage changes in the population below the poverty line. Using data from 1999 and 2004 for Indian states and union territories, Bhandari found that, while changes in the poverty ratio and growth of bank accounts were negatively correlated in both rural and urban areas, the coefficients were statistically insignificant. Therefore, he concluded that the provision of banking services to the maximum number of individuals is unsuccessful as a poverty-reduction strategy.

This study differs from the cited studies in the following ways. First, Honohan (2008) and Park and Mercado (2016) constructed composite indicators for a large sample of countries.[4] Burgess and Pande (2005), Bhandari (2009), and Neaime and Gaysset (2018) used the numbers of banks, bank branches, ATMs, or bank accounts to measure the degree of financial inclusion. Unlike these analyses, we apply both the numbers of bank branches and accounts as the measure of accessibility and usage of banking services in India. Second, by adding the interaction term between financial inclusion and financial deepening, we empirically analyze whether, and to what extent, the breadth and depth of the banking sector interact with each other in the process of poverty reduction. Third, by dividing the Indian commercial banks into public sector banks and private sector banks, we compare their impacts of financial inclusion and financial deepening on poverty conditions.

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[4] Goel and Sharma (2017) constructed the composite indicator of financial inclusion for India from 2004 to 2015. The indicator showed that India could be categorized as low financial inclusion between 2005 and 2012, medium financial inclusion in 2013, and high financial inclusion in 2014 and 2015, respectively.

3. Model and Data

In our empirical analysis, we consider models wherein the poverty headcount ratio is explained by proxies for financial inclusion and financial deepening, their interaction, as well as a set of control variables. We apply the dynamic GMM estimator to unbalanced panel data for 25 states and union territories covering seven time periods between 1973 and 2004 (1973, 1977, 1983, 1987, 1993, 1999, and 2004).[5,6] Our model is as follows:

$$POV_{i,t} = \alpha POV_{i,t-1} + \beta_{i0} + \beta_{i1}FI_{i,t} + \beta_{i2}FD_{i,t} + \beta_{i3}\left(FI_{i,t} * FD_{i,t}\right) + \beta_{i4}X_{i,t} + u_{i,t}, \quad (1)$$

where $POV_{i,t}$ is the poverty ratio for region i at time t, $FI_{i,t}$ is the indicator of financial inclusion for region i at time t, $FD_{i,t}$ is the indicator of financial deepening for region i at time t, $X_{i,t}$ is a vector of control variables for region i at time t, $u_{i,t}$ is the error term, $i(=1,2,\cdots,N)$ is the number of cross-sections, and $t(=1,2,\cdots,T)$ is the number of time series.

In the abovementioned model, the poverty ratio (POV) is used as the dependent variable. This is the percentage of the population below the poverty line set by the Indian government. A higher poverty ratio means a more impoverished condition.

The independent variable of interest in our study is financial inclusion. We use the numbers of bank branches ($FI1$) and bank accounts ($FI2$) to measure access to and usage of banking services, respectively. Since the primary objective of financial inclusion is to alleviate poverty conditions by promoting the provision of financial services, the coefficients of $FI1$ and $FI2$ in the model are expected to be negative.

Financial deepening (FD) is the traditional concept of financial development. We measure the degree of financial deepening by the amount of bank credit relative to nominal GDP. Financial deepening is thought to contribute to poverty reduction by eliminating credit

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[5] The 25 states and union territories covered in this study are as follows: Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa (Odisha), Punjab, Rajasthan, Tamil Nadu, Tripura, West Bengal, Andaman and Nicobar Islands, Chandigarh, Delhi, and Pondicherry (Puducherry).

[6] All benchmark years are fiscal years, except for 1983, which is a calendar year.

constraints on the poor and increasing their productive assets and productivity (World Bank, 2001; Jalilian and Kirkpatrick, 2002). Therefore, the coefficient of FD in the model is expected to be negative.

The interaction term ($FI * FD$) indicates to what extent financial inclusion (FI) modulates the effect of financial deepening (FD) on poverty conditions. The marginal impact of a change in financial deepening on poverty is defined as $\partial POV/\partial FD = \beta_2 + \beta_3 FI$. Given that financial inclusion and financial deepening have a positive impact on poverty reduction, when a lower value of poverty indicates improved poverty conditions, a negative interaction term will indicate that financial inclusion can be thought of a complement of financial deepening in the poverty-alleviation process. In this case, financial inclusion and financial deepening support each other and have a synergistic effect on poverty reduction in India. Conversely, if the coefficient of the interaction term has a positive sign, financial inclusion can be considered a substitute for financial deepening in the poverty-alleviation process. In this case, financial inclusion would have a greater poverty-alleviating effect in states and union territories with a lower level of financial depth, and vice versa.

As control variables, we use the regressors frequently used in the literature as factors that influence poverty, namely, real per capita GDP (GDP), the inflation rate (INF), and the measure of trade openness ($OPEN$). We consider real per capita GDP to capture the level of average income of a sample region. Based on previous studies (Ravallion and Chen, 1997; Ravallion, 2001; Dollar and Kraay, 2002; Besley and Burgess, 2003; Jalilian and Kirkpatrick, 2005), a higher level of income ameliorates the well-being of the poor. Therefore, the coefficient of GDP in the model is expected to be negative.

Inflation is defined as the annual change in wholesale prices. High and unpredictable price changes are considered to have a disproportionately negative impact on the poor because they are likely to have a larger share of cash in small portfolios and relatively limited instruments for hedging against inflation (Easterly and Fischer, 2001; Holden and Prokopenko, 2001). In line with these studies, we expect the coefficient of INF to have a positive sign in the model.

As the measure of trade openness, we use the sum of exports and imports of goods and services relative to nominal GDP. The impact of trade openness on poverty conditions is

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ambiguous. For example, Dollar and Kraay (2004) observed that, in a large sample of countries, economic openness measured in terms of trade integration alleviates poverty. However, some scholars have questioned whether international openness actually contributes to poverty reduction (e.g., Mold, 2004; Wade, 2004; Milanovic, 2005). Since neither theoretical nor empirical studies have provided conclusive evidence, we cannot *a priori* predict the sign of $OPEN$ in the model.

All variables are expressed in natural logarithm. The log transformation allows the interpretation of the coefficients as elasticities. Table 1 shows the definitions of the variables and the sources of the data, and Table 2 indicates the summary statistics.

4. Empirical Results

Since the explanatory variables include the lagged value of the explained variable, we cannot apply ordinary regression techniques. Furthermore, we need to address the potential endogeneity of included explanatory variables. Accordingly, we estimate the models by using the dynamic panel GMM estimators developed by Arellano and Bond (1991) in order to deal with the endogeneity problem.[7] In estimating the models, we divide the Indian commercial banks into public sector banks and private sector banks, and compare the coefficient estimates across the banking groups.

Tables 3 and 4 show the results of the GMM estimation for public sector banks group and private sector banks group, respectively. In each table, the estimation results are divided into eight cases. Cases 1 to 4 report the estimation results of the dynamic panel model when we measure financial inclusion by the number of bank branches. On the other hand, Cases 5 to 8 report the estimation results when we measure financial inclusion by the number of bank accounts. In Cases 1 and 5, we use only financial inclusion and financial deepening as the independent variable. In the other cases, we individually add the control variables (i.e., real GDP per capita GDP, the inflation rate INF, and trade openness $OPEN$).

Table 3 shows the empirical results when we use the data of financial inclusion and

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[7] In the model, the poverty ratio is used as the dynamic instrumental variable, while the indicators of financial inclusion and financial deepening are used as standard instrumental variables.

financial deepening for public sector banks group. Our main findings are as follows. First, the estimated coefficients of $FI1$, $FI2$, and FD are negative and statistically significant at the conventional levels in all cases. This suggests that financial inclusion and financial deepening through public sector banks have positive impacts on poverty alleviation in India. This is partly consistent with the findings of Burgess and Pande (2005), who stated that branch expansion could explain the decline in the rural poverty ratio in India.

In addition, Table 3 shows that the coefficients of the interaction terms ($FI1*FD$ and $FI2*FD$) are estimated to be negative and statistically significant at the conventional levels in all cases except Case 3. Considering the positive impacts of financial inclusion and financial deepening on poverty reduction, these results suggest that the accessibility and usage of banking services and the increased scale of the banking sector complement each other in the poverty-alleviation process. In other words, banking breadth and depth have a synergistic effect on poverty reduction in India.

With regard to the control variables, the results show that the coefficients of GDP are estimated to be negative as expected and statistically significant at the 1% level. Thus, an increase in per capita GDP could have a positive impact on poverty reduction. The coefficients of INF are estimated to be positive as expected and statistically significant at the 1% level. Thus, a rise in the inflation rate might lead to an increase in the poverty ratio. The coefficients of $OPEN$ are estimated to be negative and statistically significant at the 1% level. Thus, trade openness contributes to poverty reduction in India.

Table 4 reports the empirical results for private sector banks group. The results are different from those reported in Table 3 in that the coefficients of financial inclusion in terms of usage of banking services lose their statistical significance. Specifically, the estimated coefficients of $FI1$ and FD are likely to be negative and statistically significant, whereas the coefficients of $FI2$ are likely to be negative but statistically insignificant. In addition, the coefficients of the interaction term between $FI2$ and FD are statistically insignificant in all cases. Therefore, there is heterogeneity among banking groups in the effect of usage of financial products on poverty conditions in India. Gopalan and Rajan (2018) examined the impact of foreign bank presence on financial inclusion for 50 developing countries, including India, between 2004 and 2009, and found that foreign banks have a substantial positive effect with

respect to enhancing financial access, while they tend to hinder the usage of financial services. Therefore, the insignificant impact of financial inclusion through private sector banks on poverty reduction is likely to be affected by the presence of foreign banks in India, which are included in the group of private sector banks in our study.

Finally, we examine the relative effects of financial inclusion through public sector banks and private sector banks on poverty conditions. By comparing the magnitude of the significant coefficients, we find that public sector banks have larger estimated values of $FI1$ and $FI2$ than private sector banks do. These results suggest that, among Indian commercial banks, public sector banks made a greater contribution to reducing poverty in India.

5. Robustness Check

Each table reports the J-statistic and its associated p-value for each case. The J-statistic is used as a test of over-identifying moment conditions. As Tables 3 and 4 clarify, in no case can the over-identifying restriction be rejected at the 5% level of significance. Therefore, the model specification is empirically supported. In addition, each table reports the p-value of the Arellano–Bond test for second-order autocorrelation in the first-differenced errors. The null hypothesis is that there is no autocorrelation. As Tables 3 and 4 clarify, there is no significant evidence of serial correlation in the first-differenced errors at order 2 at the 5% level of significance in all cases except Case 8 in Table 3. Therefore, the moment conditions are generally valid. Finally, in estimating the models, we individually add the control variables. The main findings remain the same even after including the control variables. Therefore, the results are robust in this sense.

6. Concluding Remarks

In India, the central bank formally announced that financial inclusion would be a primary policy objective in 2005, although the concept of financial inclusion can be traced back to the start of social control of the banking sector in the 1960s. Since the late 1960s, the Indian government has successively implemented various initiatives to expand formal banking services to all areas.

In this study, we measured financial inclusion in terms of access to and usage of banking services, and empirically examined whether, and to what extent, financial inclusion interacts with financial deepening in the process of poverty reduction.

Using unbalanced panel data for Indian states and union territories from 1973 to 2004, we estimated models wherein the poverty headcount ratio is explained by financial inclusion and financial deepening, their interaction term, and a set of control variables for public sector banks and private sector banks, respectively.

Our empirical results are as follows. First, financial inclusion and financial deepening through public sector banks have a statistically significant negative relationship with the poverty ratio, irrespective of which financial inclusion indicator is used. Therefore, the breadth and depth of public sector banks have contributed to poverty reduction in India. This does not apply to private sector banks, in which case, the coefficients of usage of banking services are likely to be negative, but statistically insignificant. Second, the coefficients of the interaction terms are estimated to be negative and statistically significant in most cases of public sector banks. Considering the positive impacts of financial inclusion and financial deepening on poverty reduction, this result implies that promoting the breadth and depth of public sector banks have a synergistic effect on poverty reduction in India. Third, by comparing the magnitude of the significant coefficients, we found that public sector banks tend to have larger estimated values of financial inclusion than private sector banks do. This implies that, among Indian commercial banks, public sector banks made a greater contribution to reducing poverty in India. Therefore, public sector banks should promote access to and usage of banking services especially in remote areas by expanding the branch network and utilizing mobile banking technology.

Public sector banks were set up in order to serve the welfare needs of the poor and weaker sections of society. The Indian banking system continues to be dominated by public sector banks, which still have more than 70% market share of the banking system assets. In addition, while private sector banks shifted their operational emphasis to urban areas, public sector banks continued financial penetration into rural areas, playing a pivotal role in the promotion of financial inclusion.

In recent years, the asset quality of public sector banks has worsened and these banks have registered an increase in non-performing assets. The main cause for this phenomenon is

their lending to the industrial sectors, but not to the financial inclusion target segments, such as agriculture and small industries. In order for the banks to operate properly, the RBI has ordered them to clean up their balance sheets. In April 2017, the RBI revised the prompt corrective action framework and has put the banks with weak balance sheets under the framework to improve their financial health. These banks are required to deal proactively with stressed assets. However, as we have empirically observed, public sector banks in India have contributed to poverty reduction through financial inclusion. Therefore, when addressing the issues of non-performing loans, authorities and banks themselves need to consider that restructuring will not adversely affect the social mandate of public sector banks with respect to financial inclusion.

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Table 1 Definitions and Sources of Variables

Variable	Definition	Source(s)
POV	Logarithm of the percentage of the population below the poverty line set by the Indian government	The Planning Commission (2014) and various issues of *Handbook of Statistics on Indian Economy* published by the RBI
$FI1$	Logarithm of the state-wise number of bank branches divided by the population of each state	Various issues of *Banking Statistics: Basic Statistical Returns* and *Basic Statistical Returns of Scheduled Commercial Banks in India* published by the RBI (state-wise population from Indiastat.com (http://www.indiastat.cm/)) (nominal GDP from various issues of *Handbook of Statistics on Indian Economy* published by the RBI)
$FI2$	Logarithm of the state-wise number of credit accounts divided by the population of each state	
FD	Logarithm of the state-wise amount of bank credit divided by nominal GDP	
GDP	Logarithm of the state-wise real net domestic product per capita	Indiastat.com (http://www.indiastat.cm/)
INF	Logarithm of the percentage change in the wholesale price index	Various issues of *Handbook of Statistics on Indian Economy* published by the RBI
$OPEN$	Logarithm of the sum of exports and imports of goods and services divided by nominal GDP	

Table 2 Summary Statistics

Variable	Mean	Standard Deviation	Maximum	Minimum
POV	3.412	0.583	4.249	1.247
*FI*1 (public sector banks)	−10.011	0.566	−8.468	−11.752
*FI*1 (private sector banks)	−11.198	1.001	−9.556	−15.998
*FI*2 (public sector banks)	−3.667	1.007	−1.818	−7.264
*FI*2 (private sector banks)	−5.421	2.084	−2.197	−12.554
FD (public sector banks)	−6.420	2.194	−2.752	−11.408
FD (private sector banks)	−8.335	2.625	−3.296	−16.131
GDP	9.438	0.482	11.040	8.333
INF	1.992	0.514	3.006	1.184
OPEN	−1.886	0.389	−1.188	−2.420

Table 3 Financial Inclusion and Poverty Conditions, Public Sector Banks

	1	2	3	4	5	6	7	8
POV(−1)	0.496***	−0.519***	0.190***	−0.251***	0.536***	−0.755***	0.074**	−0.364***
	(0.041)	(0.062)	(0.064)	(0.089)	(0.021)	(0.083)	(0.033)	(0.058)
FI1	−2.192***	−0.957**	−1.272*	−2.009***				
	(0.404)	(0.443)	(0.650)	(0.414)				
FI2					−0.331***	−0.597***	−0.863***	−0.705***
					(0.098)	(0.197)	(0.170)	(0.096)
FD	−3.564***	−1.724**	−2.030*	−3.210***	−0.245***	−0.786***	−1.087***	−0.685***
	(0.652)	(0.729)	(1.042)	(0.689)	(0.049)	(0.194)	(0.123)	(0.106)
*FI1*FD*	−0.332***	−0.138*	−0.140	−0.282***				
	(0.065)	(0.074)	(0.105)	(0.070)				
*FI2*FD*					−0.028*	−0.091***	−0.104***	−0.087***
					(0.015)	(0.034)	(0.025)	(0.016)
GDP		−1.297***				−1.518***		
		(0.119)				(0.134)		
INF			0.536***				0.629***	
			(0.048)				(0.053)	
OPEN				−0.664***				−0.755***
				(0.073)				(0.068)
J-statistic (p-value)	0.106	0.163	0.221	0.080	0.071	0.216	0.070	0.055
AR(2) (p-value)	0.634	0.099	0.659	0.078	0.540	0.105	0.870	0.010
Observations	114	114	114	114	114	114	114	114

Notes: Standard errors are reported in parentheses. Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

Table 4 Financial Inclusion and Poverty Conditions, Private Sector Banks

	1	2	3	4	5	6	7	8
POV(−1)	−0.154	−0.352***	0.227***	−0.236**	−0.074	−0.326***	0.224**	−0.220***
	(0.104)	(0.052)	(0.076)	(0.096)	(0.119)	(0.056)	(0.077)	(0.067)
FI1	−1.115**	−0.651	−1.074***	−1.178***				
	(0.519)	(0.426)	(0.238)	(0.399)				
FI2					−0.109	−0.050	−0.153*	−0.139
					(0.123)	(0.077)	(0.090)	(0.100)
FD	−1.915**	−0.747	−1.400***	−0.124**	−0.342***	−0.057	−0.144**	−0.265***
	(0.734)	(0.619)	(0.342)	(0.049)	(0.083)	(0.055)	(0.056)	(0.065)
*FI1*FD*	−0.127**	−0.057	−0.106***	−0.283***				
	(0.063)	(0.051)	(0.028)	(0.080)				
*FI2*FD*					−0.001	0.001	−0.002	−0.006
					(0.013)	(0.007)	(0.010)	(0.011)
GDP		−1.130***				−1.207***		
		(0.105)				(0.095)		
INF			0.302***				0.330***	
			(0.037)				(0.034)	
OPEN				−0.283***				−0.392***
				(0.080)				(0.052)
J-statistic (p-value)	0.083	0.069	0.096	0.136	0.087	0.061	0.089	0.063
AR(2) (p-value)	0.184	0.734	0.073	0.384	0.544	0.554	0.078	0.574
Observations	108	108	108	108	112	112	112	112

Notes: Standard errors are reported in parentheses. Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.