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Working Paper

Financial inclusion, financial regulation, and education in Bangladesh

ADB Working Paper, No. 621

Provided in Cooperation with:

Asian Development Bank Institute (ADBI), Tokyo

Suggested Citation: Khalily, M. A. Baqui (2016) : Financial inclusion, financial regulation, and education in Bangladesh, ADB Working Paper, No. 621, Asian Development Bank Institute (ADBI), Tokyo

This Version is available at:

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ADB Working Paper Series

**FINANCIAL INCLUSION, FINANCIAL
REGULATION, AND EDUCATION
IN BANGLADESH**

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No. 621
December 2016

Asian Development Bank Institute

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Suggested citation:

Khalily, M. A. B. 2016. Financial Inclusion, Financial Regulation, and Education in Bangladesh. ADBI Working Paper 621. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/financial-inclusion-financial-regulation-and-education-bangladesh>

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Abstract

Like in many other countries, inclusive finance for inclusive growth has become a policy issue in Bangladesh following the global financial crisis in 2008. Over the past 10 years, intensity of financial deepening and access to financial services has increased. Both banks and microfinance institutions have contributed to higher intensity. A recent study shows that around 40% of the adult population and 75% of households have access to financial services in Bangladesh. Several factors may have contributed. Proactive regulatory policies and expanded financial literacy are the major determinants. In this paper, regulatory policies have been evaluated and the effect of financial literacy on financial inclusion has been examined empirically. Our analysis suggests that the regulatory agencies in Bangladesh have formulated policies for promoting financial inclusion and creating investment opportunities for micro and small firms in particular. Our empirical evidence, based on household-level data, shows that the intensity of financial literacy in Bangladesh is moderate, and it has a positive impact on inclusive finance. These findings warrant more emphasis on increasing financial literacy for access to finance and informed investment decisions.

JEL Classification: G21, G28, I22, O16

Contents

1.	INTRODUCTION	1
2.	STRUCTURE OF FINANCIAL MARKETS IN BANGLADESH	1
	2.1 The Banking Sector	2
	2.2 The Microfinance Sector	3
	2.3 Cooperative Sector and Postal Savings Banks	5
3.	SOURCES AND USES OF FUNDS.....	6
4.	INCLUSIVE FINANCE IN BANGLADESH	10
5.	FINANCIAL LITERACY IN BANGLADESH.....	13
	5.1 Financial Literacy Policy	14
	5.2 Empirical Evidence on Financial Literacy in Bangladesh.....	14
6.	IMPACT OF FINANCIAL LITERACY ON FINANCIAL INCLUSION IN BANGLADESH	17
7.	FINANCIAL REGULATION.....	18
8.	REGULATION OF MICROFINANCE INSTITUTIONS.....	20
9.	REGULATION OF INSURANCE COMPANIES AND COOPERATIVES	21
10.	CONCLUSION.....	21
	REFERENCES	24

1. INTRODUCTION

Following the global financial crisis of 2008, policy makers have focused on reducing financial risk and stabilizing the financial system. Among the strategies, emphasis has been given to inclusive finance,¹ financial education,² and financial regulation. Inclusive finance for inclusive growth diversifies portfolios and minimizes risks for lenders on the one hand, and creates economic opportunities for deprived households, and micro and small enterprises in particular, on the other. Therefore, inclusive finance promotes growth through more investment and redistribution of financial resources—it promotes equitable and balanced regional growth within a country (Khalily and Khaleque 2013; King and Levine 1993; Beck and Demirgüç–Kunt 2004, 2008; Levine 2005). It also contributes to financial stability (e.g., Morgan and Pontines 2014). The end result is higher financial development and economic growth (Rajan and Zingales 1998; Beck et al. 2001; Demirgüç–Kunt and Maksimovik 1998; Love 2003; Claessens 2006; Claessens and Laeven 2005; De Gregorio and Guidatti 1995).

In Bangladesh, great emphasis has been placed on financial inclusion, but the responsibility for increasing financial inclusion lies with Bangladesh Bank, the central bank of Bangladesh. Bangladesh Bank has adopted various policy measures, including targeted credit programs, requiring banks to open branches in rural areas, promoting savings habits through school banking, requiring the opening of a bank account for conditional cash transfers, and encouraging financial innovations like mobile banking and Internet banking. Furthermore, changes have been made to the regulatory framework and institutional landscape of Bangladesh. Such policy changes may have contributed to greater financial inclusion as intensity of access to financial services through the banking sector has increased. And microfinance institutions (MFIs), even without any policy intervention by the regulatory agency, the Microcredit Regulatory Authority (MRA), have continued to expand financial services because of their flexibility and their objective of working for poverty alleviation.

The basic objective of this paper is to examine the issues of financial literacy and financial regulation in the context of inclusive finance for inclusive growth and financial stability in Bangladesh.

2. STRUCTURE OF FINANCIAL MARKETS IN BANGLADESH

Financial markets in Bangladesh encompass a formal financial market (banks, insurance companies, and nonbank financial institutions), a microfinance market (MFIs and cooperatives), and informal markets (friends, relatives, moneylenders, and traders). These three markets have different characteristics. Financial institutions in the formal market generally operate in urban areas, provide relatively large collateral-based loans at low transaction cost, and mobilize deposits from high- and middle-income households. MFIs in Bangladesh offer financial services to the targeted poor

¹ Inclusive finance refers to availability and accessibility of provisions of formal financial services including savings, credit, and insurance at affordable prices to all members of the economy (Ardic et al. 2014; Beck and Demirgüç–Kunt 2004; Leeldhar 2004; and Claessens and Laeven 2005).

² Financial literacy, as defined by the Organisation for Economic Co-operation and Development (OECD), is the combination of understanding financial products and concepts by consumers/investors, and their ability to be aware of the financial risks and opportunities, so they are able to make informed choices, know where to go for help, and take effective steps to improve their financial welfare (Miller et al. 2009).

and low-income households. The transaction cost of providing such financial services is relatively high because of the small size of transactions of doorstep services. The informal credit market continues to exist because of its flexibility, reciprocity, and product diversification (Adams and Fitchett 1992; Khalily and Khaleque 2013). Both formal and microcredit markets can learn lessons from the experiences of the informal credit market.

2.1 The Banking Sector

Following financial liberalization in the mid-1980s and privatization of the banking sector, four major types of banks operate in formal financial markets—public sector commercial banks (PSCBs), development financial institutions (DFIs), private commercial banks (PCBs), and foreign commercial banks (FCBs). Some 55 scheduled banks including four PSCBs, four DFIs, 39 PCBs, and nine FCBs operated within a network of 8,794 branches in total at the end of June 2014 (Table 1). Although the DFIs have been operating largely in rural areas, the commercial banks have basically been concentrating in urban areas.

Table 1: Structure of the Banking System in Bangladesh, end of 2014
(Tk in billions and number of accounts in millions)

Bank Type	Number of Banks	Number of Branches		Deposits			Advances		
		Rural	Urban	Tk	%	Accounts	Tk	%	Accounts
PSCBs	4	2,271	1,282	1,816.8	26.2	28.11	912.2	18.0	2.88
DFIs	4	1,322	178	375.8	5.4	10.72	348.5	6.9	4.29
PCBs	39	1,557	2,360	4,403.0	63.5	30.17	3,594.8	70.8	2.39
FCBs	9	n.a.	70	335.6	4.8	0.37	220.7	4.3	0.20
Total	55	5,150	3,890	6,931.1	100	69.37	5,076.3	100	9.76

PSCBs = public sector commercial banks; DFIs = development financial institutions; PCBs = private commercial banks; FCBs = foreign commercial banks, Tk = taka.

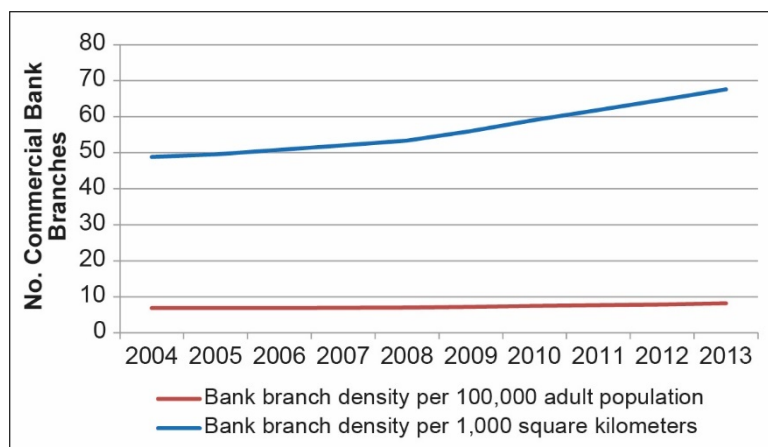
Source: Schedule Bank Statistics, Bangladesh Bank, September–December 2014.

Bank branch density increased over 2004–2013. Both bank branch density per 1,000 square kilometers (geographical penetration) and branch density per 100,000 households (demographic penetration) increased during this period (Figure 1). The geographical penetration of banks through the number of branches increased from 48.8 in 2004 to 67.6 in 2013. But the demographic penetration of banks progressed relatively slowly over this period—it increased from 6.9 branches in 2004 to 8.2 branches in 2013. The lower growth of demographic branch density perhaps indicates that either banks have not been very responsive to the growing demand of financial services of large segments of the population, or they have focused mainly on the urban clients with access to more resources.

Despite increasing geographical penetration, public sector commercial banks and private banks are mostly concentrated in urban areas. Urban bias of the banking sector is evident in the advance–deposit ratio in rural and urban areas. The ratio decreased from 0.54 in 2004 to 0.43 in 2014 in rural areas, i.e., by more than 20%, whereas in urban areas it remained more or less the same, around 0.84 (Khalily and Islam 2014). The declining share of rural advances to rural deposits, despite an increasing trend in rural deposits, undermines rural investments through banks. This decline cannot be attributed to possible low demand for rural credit for investment, as MFIs have deepened their operations in both size and scope. It is also a major concern that in

2013 the total amount of rural loans disbursed by banks was almost 30% less than the volume of microfinance loans disbursed by MFIs. Essentially, the collateral-based risk and transaction cost minimizing approach in conjunction with the profit maximizing behavior of banks restricts rural investments by banks. Hence, banks are not expected to play a dominant role in terms of increasing inclusive growth in Bangladesh. The failure of formal financial institutions to do so has contributed to the emergence of MFIs.

Figure 1: Bank Branch Density 2004–2013



Source: World Bank Global Financial Development Database; Bangladesh Bank.

2.2 The Microfinance Sector

In Bangladesh, MFIs are the dominant players in rural financial markets. The group-based targeted programs for poor households have expedited resource mobilization for onlending to borrowers. The clients and production technology of the formal banking sector and the microfinance sector are different. By and large, as argued above, the traditional banking sector in Bangladesh has been unable to reach a large segment of rural poor and low-income households, essentially due to the problems of asymmetric information and high transaction costs. The group-based approach of the MFIs has solved these dual problems. Until the emergence of MFIs, these segmented groups of population were dependent on informal credit markets for their investment or consumption needs as they are screened out of formal markets because of their high transaction costs and inability to offer collateral for loans.

The microfinance sector in Bangladesh comprises two types of institutions. One type is Grameen Bank, which was established in 1983 under the Grameen Bank Ordinance enacted by the Government of Bangladesh. It operates like a specialized bank for poverty alleviation. The other type is nongovernment MFIs (NGO–MFIs) that include institutions like the Bangladesh Rural Advancement Committee (BRAC) and the Association for Social Advancement (ASA). Until the establishment of a separate regulatory authority in 2006, these institutions were independent and self-regulated. Over the past 3 decades, quite a large number of NGO–MFIs have sprung up, also including international nongovernment organizations (NGOs). The development of the microfinance sector in Bangladesh has had two major drivers: cheap funds³ and the establishment of a wholesale lending agency—Palli Karma Sahayak Foundation

³ Cheap funds are funds bearing interest rates lower than banks' normal lending interest rates.

(PKSF).⁴ Dependency on donor funds was quite high from 1980–1995 (Khalily and Imam 2001; Khandker, Khalily, and Khan 1996). The latest statistics show that the contribution of donor funds in the financing activities of NGO–MFIs is negligible (Credit Development Forum 2015). With the funds from PKSF becoming available, the microfinance sector has expanded enormously. PKSF now finances some 220 NGO–MFIs. Member savings finance almost 60% of loans. Commercial banks are also involved in financing these institutions.

Over the years, the microfinance sector has expanded rapidly in Bangladesh in terms of the number of NGO–MFIs, the number of branches, and active membership. Since NGO–MFIs started with a mission to alleviate poverty and empower poor people, these institutions emerged easily as social organizations. At present, some 692 licensed NGO–MFIs and Grameen Bank operate with a network of 17,241 branches and 33.17 million members (Table 2).

Table 2: Outreach of Microfinance Institutions in Bangladesh, 2011–2013

Year	Grameen Bank			Licensed NGO–MFIs			Aggregate		
	2011	2012	2013	2011	2012	2013	2012	2012	2013
Number of branches	2,565	2,567	2,567	18,066	17,977	14,674	20,631	20,544	17,241
Number of members	8.36	8.36	8.54	26.08	24.64	24.60	34.44	33.00	33.14
Number of borrowers	6.58	6.71	6.74	20.65	19.31	19.27	27.23	26.02	26.01
Loans disbursement	108.54	118.61	126.02	303.18	456.02	432.28	411.72	574.63	558.30
Loans Outstanding	75.29	80.32	84.38	173.79	211.32	257.01	249.08	291.64	341.40
Borrowers per branch	2,565	2,613	2,625	1,143	1,074	1,313	1,319	1,267	1,509
Clients per branch	3,259	3,257	3,327	1,444	1,371	1,676	1,670	1,606	1,922

NGO–MFIs = nongovernment microfinance institutions.

Note: Number of borrowers and members are in millions. Amount of loans disbursement and loans outstanding are in billion taka.

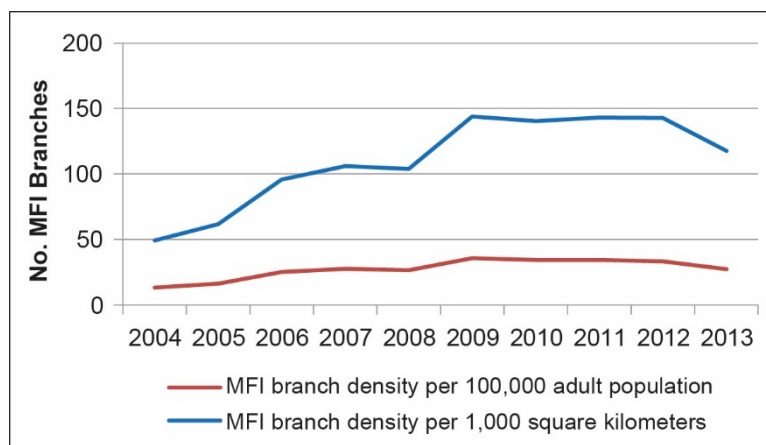
Source: Grameen Bank and Microcredit Regulatory Authority statistics, 2011–2013.

Not all the NGO–MFIs are of the same size. The top 20 NGO–MFIs and Grameen Bank together have a market share of almost 75% of the microcredit market. The other 672 licensed NGO–MFIs, with a market share of some 25%, have been operating like small localized or regional institutions with fewer branches. This makes the market more or less oligopolistic in nature. Nevertheless, MFIs in this market operate with increasing branch density. The branch density of MFIs per 1,000 square kilometers and per 100,000 adult population has increased (Figure 2), despite a decline in 2013 from the 2012 level due to a decrease in the number of MFI branches. Following the regulation of MFIs, many of them merged branches to make them more cost-effective. It has also led to an increase in average loan size and a marginal fall in the number of borrowers (Khalily, Khaleque, and Baddrudoza 2014). Nevertheless, MFIs with their expanding branch networks over the past decade have contributed to greater

⁴ Palli Karma Sahayak Foundation (PKSF) is an institute set up for facilitating rural economic activities with a view to alleviating poverty through financing the programs of NGO–MFIs and also by implementing other models or programs for reducing poverty through partner NGO–MFIs. It is a public sector organization that operates independently with almost no government intervention. Since its establishment in 1990, PKSF has broadened its activities—from finance to nonfinance interventions. It also contributes to the institutional development of the financed NGO–MFIs through both off-site and on-site monitoring, and facilitating development of appropriate governance structures. It was initially funded by the Government of Bangladesh and through grants and loans from international agencies like the World Bank. In 2014, total assets amounted to Tk52.71 billion (\$659 million). Capital funds (grants and retained earnings) financed around 66% of the assets and the remaining assets were financed by current liabilities.

geographical and demographical penetration, which has contributed to higher levels of inclusive finance and inclusive growth.

Figure 2: MFI Branch Density 2004–2013



MFI = microfinance institutions.

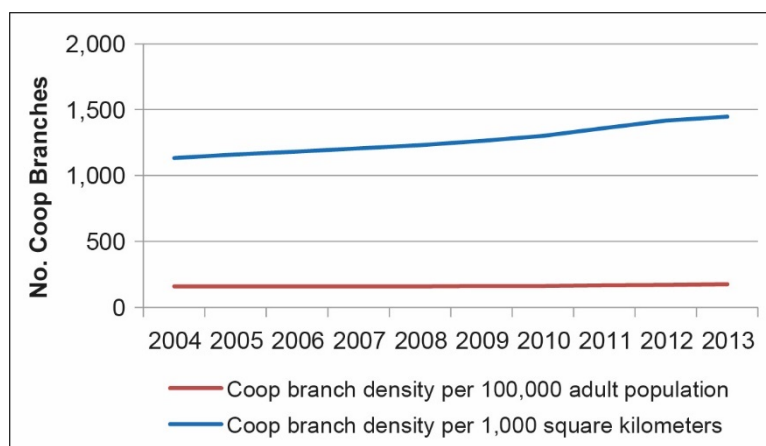
Source: World Bank Global Financial Development Database; Bangladesh Bank.

2.3 Cooperative Sector and Postal Savings Banks

Although Bangladesh has a more than 100-year-long history of cooperative and postal banking, the cooperative movement and postal savings banks have not been successful, in part because households have access to more cost-effective and flexible alternative institutional services. Heterogeneity of membership, the dominance of wealthy members in management committees, and limited financial resource capability are other key reasons for the failure of cooperatives in Bangladesh. Cooperatives are established legally under the Bangladesh Cooperatives Act.

The statistics of the Directorate of Cooperatives in Bangladesh show that by the end of 2013 there were 193,512 primary cooperative societies with a total of 10.3 million members. But the aggregate unadjusted numbers show that the demographic density of cooperative societies per 100,000 adult population has remained more or less constant—it increased to 175 members in 2013 from 160 per cooperative society in 2004. Demographic density per 1,000 square kilometers, on the other hand, appears to have marginally increased over the past decade (Figure 3), which suggests that despite the increase in the number of cooperative societies per 1,000 square kilometers, inclusive finance through cooperatives has been somewhat limited. A recent study found that almost 50% of the cooperative societies are inactive (Zulfiqar 2011), indicating that cooperatives have limited effectiveness. This is validated by Khalily and Khaleque (2011), which showed that less than 1% of households have access to cooperative membership.

Postal savings banks date back to 1880, when there was only a limited banking network. Although financial services continue to be provided at the postal offices, their importance as financial services providers has declined with the increasing demographic and geographical penetration of banks and MFIs. The postal savings banks are monitored by the Directorate of Savings and the General Postal Department. By the end of 2014, there were 9,000 postal savings banks, but no statistics are available on the number of accounts. The postal savings banks do not lend directly, but simply maintain the deposits of account holders.

Figure 3: Cooperative Density 2004–2013

Source: World Bank Global Financial Development Database; Bangladesh Bank.

3. SOURCES AND USES OF FUNDS

Institutions operating in financial markets mobilize deposits or savings. These institutions have different characteristics. Banks mobilize large deposits and offer large loans through reducing transaction costs and mostly operate in urban areas. MFIs offer financial services to the unbanked poor households mostly living in rural areas, and they mobilize small savings and offer small loans to their members. Postal savings are limited. Table 3 shows the deposit market share of each type of institution. Banks also accept current or checking deposits, but neither MFIs nor postal savings banks accept current deposits. Despite lower geographical and demographic banking density, banks have a large share of deposits. Private banks have the largest share, at around 60%, followed by the public sector banks with a share of about 25%. MFIs and cooperatives have a small share of 2.78%, but postal savings banks have the smallest share. This suggests that banks play a significant role in financial deepening, but with a low intensity of household access to both credit and deposits of banks. The estimates based on Global Financial Development data for Bangladesh show that around 7% and around 58% of the adult population in Bangladesh have access to bank credit and deposits, respectively. From 2004–2013, intensity of access to credit steadily increased (Figure 4), but a marginally increasing trend can be observed from 2010 following the pro-inclusive finance policies of Bangladesh Bank. There has been a substantial increase in the share of the adult population with access to bank deposit services (Figure 5). Since 2010, it has increased at a higher rate. It was below 30% for 2004–2009, and it increased to around 58% in the following 3 years. Some aggressive policies of the central bank, like providing government subsidy to farmers, freedom fighters, and elderly people through the “Taka 10” account as well as introducing school banking, have been contributing factors.

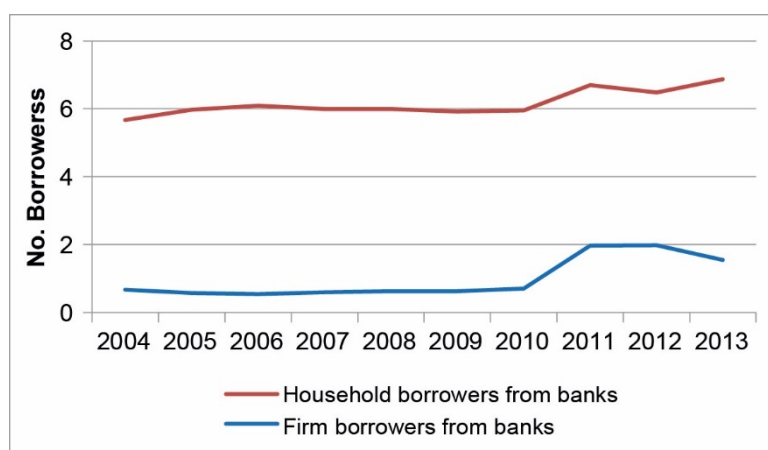
Table 3: Deposits Mobilized by Source of Institutions, June 2014
(Tk million)

Types of Financial Institutions	Total Deposits (Including Current Deposits)		Total Deposits (Excluding Current Deposits)	
	Tk	%	Tk	%
State owned banks	1,694,878.10	24.42	1,521,587.00	23.65
Private banks	4,118,804.90	59.33	3,852,093.00	59.86
Specialized banks	348,736.30	5.02	335,301.50	5.21
Foreign banks	331,980.90	4.78	281,240.60	4.37
Microfinance institutions and cooperatives ^a	192,810.20	2.78	192,810.20	3.00
Nonbank financial institutions	210,467.00	3.03	207,703.20	3.23
Postal banks ^b	44,045.00	0.63	44,045.00	0.68
Aggregate	6,941,722.40	100	6,434,780.50	100

Note: ^aMFI figures are for 2013; ^b Postal bank figures are for 2012.

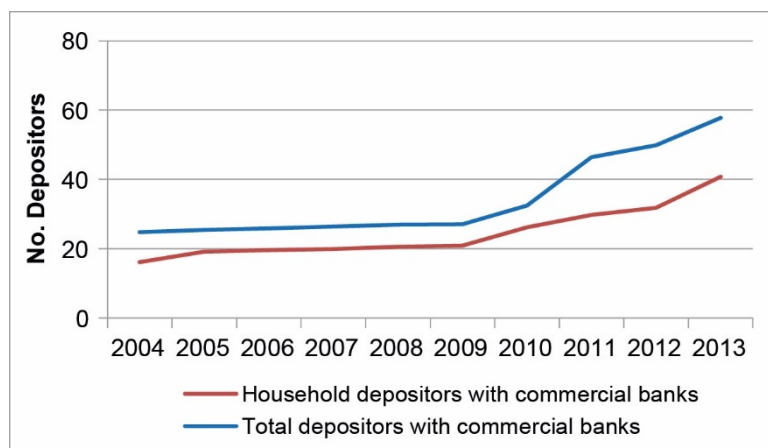
Source: Bangladesh Bank; Ministry of Finance; Credit and Development Forum.

Figure 4: Intensity of Access to Bank Borrowing per 100 Adult Population 2004–2013



Source: World Bank Global Financial Development Database 2005–2013; Bangladesh Bank.

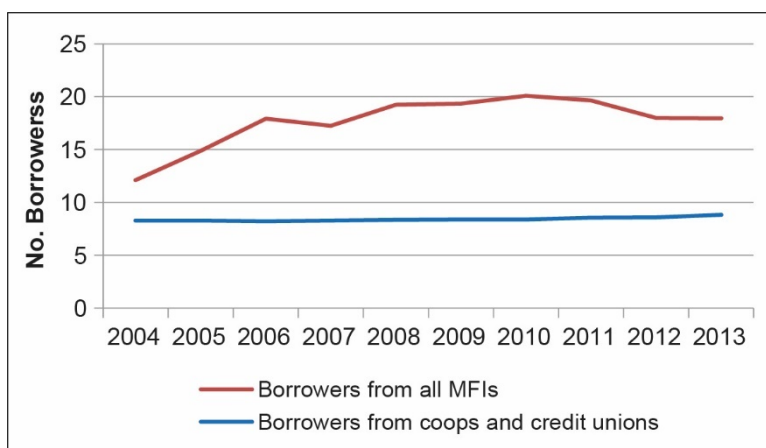
Figure 5: Intensity of Access to Bank Deposits per 100 Adult Population 2004–2013



Source: World Bank Global Financial Development Database; Bangladesh Bank.

MFIs mobilize poor members’ savings and finance their income-generating economic activities and microenterprises. From 2004–2013, intensity of depositors increased (Figure 6), as did the intensity of borrowing (Figure 7). But the intensity of access of depositors and borrowers to cooperatives has either remained constant or increased only marginally. Higher intensity of access to financial services is a prerequisite for inclusive growth and MFIs have played a pivotal role in increasing inclusive finance and inclusive growth in Bangladesh.

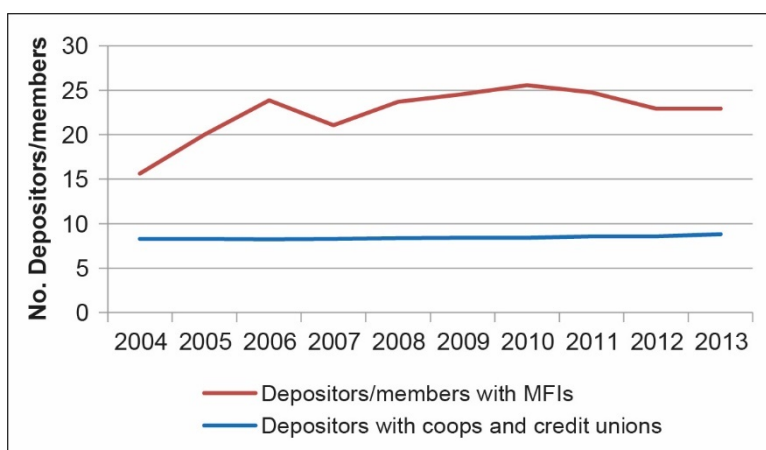
Figure 6: Intensity of Depositors per 100 Adult Population 2004–2013



MFIs = microfinance institutions.

Source: World Bank Global Financial Development Database 2005–2013; Bangladesh Bank.

Figure 7: Intensity of Borrowers per 100 Adult Population 2004–2013



MFIs = microfinance institutions.

Source: World Bank Global Financial Development Database; Bangladesh Bank.

In Bangladesh, banks are the major providers of loan funds, both in terms of size and scope. Private and public commercial banks provide mostly industrial working capital loans, and finance trade and commerce, which taken together account for 70% of their loans (Table 4). Foreign banks provide loans for working capital and consumer finance. Specialized banks (e.g., BKB) finance working capital, the agriculture sector, and trade and commerce, but mostly the agriculture sector. In recent years, MFIs have been increasing their presence in agricultural finance.

Table 4: Uses of Funds by Institution Type, June 2014
(%)

Uses of Funds	State Owned Banks	Private Banks	Specialized Banks	Foreign Banks	Microfinance Institutions	Nonbank Financial Institutions	Aggregate
Agriculture ^a	5.63	1.67	43.45	5.51	47.94	1.53	8.02
Industry ^b	36.39	35.91	21.05	41.85	47.43	42.49	36.42
SMEs	21.17	7.86	12.11	13.87	–	4.76	–
Construction	10.60	9.10	4.68	0.86	1.12	12.68	8.42
Transport	0.58	1.18	2.17	0.92	2.89	5.33	1.49
Trade and commerce	36.83	42.59	23.78	24.41	0.00	13.90	35.38
Other institutional loan	0.17	2.02	0.45	0.93	–	–	1.34
Consumer finance	7.70	5.02	2.27	22.68	0.62	–	5.41
Others	2.11	2.51	2.16	2.84	–	24.07	3.52
Total	100	100	100	100	100	100	100
Aggregate (Tk billion)	838.52	3,305.33	334.11	217.88	343.88	307.33	5,347.05
Share of each bank type in total loans	15.67	61.81	6.25	4.07	6.43	5.75	100

SMEs = small and medium-sized enterprises, Tk = taka.

^a Bangladesh Krishi (Agricultural) Bank (BKB) is a specialized bank that provides agricultural credit for farming, livestock, fisheries, and forestry. It also finances agriculture-related industries through term loans (more than 1 year) and working capital loans (1 year or less). Commercial banks also finance the agriculture sector, but their role is very limited. MFIs are bigger providers of agricultural credit than the specialized banks.

^b Commercial banks mostly provide working capital loans for industries, and often provide long-term loans. A specialized bank for industrial finance operates in Bangladesh, but its contribution has been negligible because of poor performance. BKB provides term and working capital loans for agriculture-related industrial activities. MFIs finance microenterprises and micro and small manufacturing undertakings to a maximum amount of \$15,000. Industrial loans provided by banks are large and those provided by MFIs are very small.

Note: No disaggregated data on the uses of loans from cooperatives are available. Bank statistics are for 2014 and MFI statistics for 2013. Specialized banks like Bangladesh Krishi (Agricultural) Bank provide agricultural credit and finance working capital of agriculture-based industrial undertakings. Microfinance institutions finance poor households. They provide loans for financing agriculture and microenterprises as well as micro cottage industries. The maximum loan amount provided by MFIs is \$15,000.

Source: Schedule Bank Statistics, Bangladesh Bank (2014); and CDF (2014).

Banks contribute to growth through financing growth-oriented sectors like agriculture and industries. Interestingly, private banks have been the key players in supply of credit despite their limited number of branches (around one-third of the total number of branches), mostly located in urban areas. At the end of 2014, their share was about 62% compared with around 22% for the public sector commercial and specialized banks. However, both private and public sector banks have around 36% of their total loan portfolio in industrial finance. In recent years, small and medium-sized enterprise (SME) financing has been regarded as a strategy for inclusive growth and employment creation. MFIs in Bangladesh do not finance SMEs, but in recent years, they have increasingly financed microenterprises. The financing of SMEs, therefore, has become the responsibility of the banks. Private banks have a small share in SME financing, but public sector commercial and specialized banks are the major players in SME financing, because of their wider networks and targeted credit programs.

4. INCLUSIVE FINANCE IN BANGLADESH⁵

Although expanding financial inclusion has received much attention in Bangladesh, unfortunately there is no national policy for inclusive finance, which appears to be the responsibility of Bangladesh Bank more than of the government. Bangladesh Bank has no policy document dealing specifically with financial exclusion, but it has implemented various policies to further financial inclusion in Bangladesh. These policies include those of the Taka 10 account program, expansion of rural bank branches, refinancing, mobile banking, SME financing, school banking, and street child banking. Taken together these policies have had a positive effect on the intensity of financial inclusion through the banking sector in Bangladesh, as reiterated by the governor of Bangladesh Bank in his lectures on financial inclusion in Bangladesh (see Bangladesh Bank website).

Above we reported the intensity of inclusive finance in Bangladesh in terms of geographical and demographic indicators using aggregate financial data. But such measures of intensity of access to financial services may overestimate access because of overlapping users of services. Overlapping of services can be avoided if costly household- or individual-level data is available. Use of primary data sets enables policy makers to identify the people or households or firms that have been excluded from financial markets.

The Institute of Microfinance conducted two rounds of surveys on access to financial services in Bangladesh, in 2010 and 2014. We here report some of the findings of the 2014 survey. Khalily et al. (2015) considered savings and credit and insurance in formal, microcredit, and informal markets in their study. Access to credit was defined based on transaction information of the past 5 years and of 1 year for informal credit. Access to deposits or savings was defined based on usage. Mobile banking was also considered in the study—as it is tied with banks, it was considered as a formal financial service and included in the formal or banking sector.

Bangladesh is one of the leading countries in South Asia in trying to achieve higher intensity of access of households to financial services. Not every individual will use financial services; one accesses it when needed. Therefore, reliable statistics on inclusive finance should cover long periods. The Institute of Microfinance survey of 2014, as reported in Khalily et al. (2015), showed that financial inclusion in Bangladesh has increased over the years. Based on financial accesses of households from

⁵ Various indicators can be used to measure the extent of access to financial services (for example, Demirgüç-Kunt et al. 2012; Mehrotra et al. 2009; Sarma and Pais 2011). They measured the extent of access to financial services using geographical and demographic penetration, e.g., the number of depositors or the number of borrowers per 1,000 square kilometer. Broadly speaking, these indicators refer to two aspects of financial access: (i) outreach dimension and (ii) actual usage dimension. In the case of outreach dimension, there are two types of indicators: geographical penetration (number of bank branches or automated teller machines [ATMs] per 1,000 square kilometers) and demographic penetration (number of bank branches or ATMs per 100,000 people). More bank branches and ATMs per 1,000 square kilometers signify lower distances to the nearest physical bank outlets and easier geographical access. Demographic penetration measures the average number of people served by each bank branch or ATM. Higher numbers imply that there are fewer clients per branch or ATM and also indicate easier access to bank services. Sarma and Pais (2011) provided a multidimensional index for measuring the degree of financial inclusion that includes information on bank penetration, availability of banking services, and usage of the banking system. Demirgüç-Kunt et al. (2008) also compiled demographic and geographic penetration data on access of general banking branches or ATM booths. In the case of actual usage dimension, two widely used indicators are (i) number of loan accounts per 1,000 people and (ii) number of deposit accounts per 1,000 people. These indicators measure the use of banking services or access to financial services. Another frequently used indicator of usage is the deposit–GDP ratio or the credit–GDP ratio or the (deposit plus credit)–GDP ratio.

2005–2014, the survey found that intensity of access to financial services in any market including the informal market was around 89%. But it was only 75% when access to the informal credit market was excluded. From a policy perspective, the relevant information is access to formal and microfinance markets.

Access to financial services based on usage was defined at two levels—at the household and individual level. Table 5 presents access of the households to financial services through the formal and microfinance markets. Formal financial markets include banks and insurance. Financial services include deposits, credit, mobile banking, and insurance. Some 53% of the households have access to formal financial services, which is based on two major drivers—access to deposits and access to mobile banking. Around 32% of households have access to deposits, and around 27% have access to mobile banking. Mobile banking had a net effect of 10.81% on inclusive finance, deduced from the fact that intensity of access to financial services with mobile banking was about 53% (Table 5) and without mobile banking it was around 43% (Khalily et al. 2015). Only around 9% of households had access to bank credit, with a marginally higher share in the rural credit market. Such low penetration of banks is due to concentration of banks' activities in urban areas and with nonpoor households. Considering all types of insurance, access to insurance is relatively low—only around 13% of households have access to the insurance market. Due to high fees, the need for collateral, and lack of financial literacy, the formal market is not easily accessible.

Table 5: Intensity of Access of Households to Financial Services by Market Type, 2005–2014
(%)

	Bank Credit	Bank Savings	Access to Formal Financial Market			Access to Micro Financial Market			Aggregate Access to Banks and MFIs (net of overlapping)
			Insurance	Mobile Banking	Aggregate Formal Finance	Micro Credit	Micro Savings	Aggregate Access to Microfinance	
National	8.95	31.5	12.61	26.87	53.38	40.1	45.83	46.91	75.12
Rural	9.34	29.18	11.99	25.11	50.88	40.31	46.19	47.34	73.58
Urban	7.62	39.5	14.54	35.54	62.03	39.4	44.58	45.43	80.46
Nonpoor	10.72	38.52	13.64	30.88	60.36	39.39	44.56	45.72	78.87
Poor	4.26	13.52	10.05	18.92	35.71	42.63	49.65	50.57	65.92

MFIs = microfinance institutions.

Note: Formal finance includes credit, deposits, mobile banking, and insurance. Poor households were defined based on the upper poverty line, which was constructed using food and nonfood expenditures.

Source: Khalily et al. (2015).

Access to microfinance services has always been higher than access to the formal sector because of the characteristics and wider network of MFIs. Around 47% of households accessed microfinance services in 2014 (around 48% in rural areas and around 46% in urban areas). Access to credit is a prerequisite for inclusive growth. MFIs in Bangladesh, with their network and technology, provide financial services to both poor households and nonpoor households, those at the margin of poverty in particular.

When considering the combined effects of banks and MFIs, the state of inclusive finance in Bangladesh appears to be very healthy, with three out of every four households enjoying access to financial services. Intensity of access is higher in urban areas, where four out of five households have access to financial services; access is marginally lower in rural areas. Nevertheless, a significant proportion of poor households remain outside the formal and microfinance markets and this needs to be carefully examined.

Intensity of access to financial services in terms of share of households is relatively high, but quite a significant share of the adult population (those aged 18 or over) is left out, with only about 39% enjoying access to financial services (Table-6). Around 39% of the adult population has access to financial services, including mobile banking in formal and microfinance markets. This percentage would be higher if intensity of access to financial services by adults is measured using a time series panel data set. Almost 44% of the urban adult individuals have access to financial services and, as can be expected, this is lower in rural areas. Although there has been a significant expansion of financial services to poor adult individuals, almost two-thirds of them remain outside the reach of financial markets.

Table 6: Intensity of Access of Adult Population to Financial Services in Bangladesh

	Bank Credit	Bank Savings	Insurance	Mobile Banking	Aggregate Formal Finance	Micro Credit	Micro Savings	Aggregate Micro-finance	Aggregate Inclusive Finance
National	3.11	13.55	4.20	13.07	26.17	14.40	16.37	17.17	39.23
Rural	3.21	12.13	3.92	12.22	24.65	14.35	16.39	17.19	37.88
Urban	2.76	18.53	5.2	16.07	31.49	14.58	16.3	17.11	43.98
Nonpoor	3.65	16.47	4.54	14.53	29.67	13.86	15.59	16.40	41.57
Poor	1.54	5.34	3.36	9.28	16.53	16.25	18.82	19.59	32.98

Source: Khalily et al. (2015).

Over the past 5 years, mobile banking has gained momentum, and is becoming an increasingly important part of inclusive finance. A little over 13% of the adult population has access to mobile banking, and it can be expected that use of this service is higher in urban areas and among the nonpoor households. Intensity of access to formal finance increases to 26% with the inclusion of mobile banking compared with 17% without mobile banking. MFIs have a share of 17% of the adult population. This is quite a remarkable achievement considering the fact that they operate among the targeted poor households. It has an equal share in urban and rural areas. However, the aggregate share of adult population with access to either the banking or the microfinance sector (net of multiple access to both markets) was around 40% (Khalily et al. 2015).

The above results reveal that some 60% of the adult population is left out. This implies that banks and MFIs have yet to penetrate at the individual level. According to Khalily et al. (2015), who identified gender behavior in the exclusion of financial services, female individuals are more often excluded from the formal financial market, whereas male individuals are more often excluded from the microfinance market. In the microfinance market, around 90% of clients are female. The relatively less educated are also typically excluded from the formal finance market and they have greater access to the microfinance market. Lower-income individuals are less well represented

in the formal finance market. The behavior of formal financial institutions is in line with expectations, as they are more inclined to operate in urban areas and among higher-income households. In contrast, MFIs appear to be more effective in terms of inclusive finance and inclusive growth as they cater for the needs of the households and individuals left out of the formal financial markets.

The household survey data is different from the Global Financial Development (GFD) data for Bangladesh for several reasons. To understand it, we need to understand the type of information that is provided in both the Institute of Microfinance household-level inclusive finance survey and the GFD data. The GFD data includes bank-level information of the bank deposit and credit accounts. Therefore, it has some limitations, the most important being its inherent weakness in terms of providing information on intensity of access to financial services, net of multiple deposit accounts of individuals. As a result, demographic penetration is overestimated. Not everybody will have an individual account at a given point in time, but what is important is whether every household is covered by the financial network. Such information cannot be deduced from the GFD data. Finally, the data provide little information for policy guidance from the perspective of who are excluded and where to expand financial services. Such limitations can be removed through some costly household-level data. But despite limitations, at least the GFD data over time provides useful information on the trends.

As can be seen in Table 7 and as argued above, intensity of access to financial services based on GFD data gives a higher estimate for Bangladesh. At the end of 2013, about 93% of the adult population had deposit accounts in the banking and microfinance sector. But the actual scenario is different. The Institute of Microfinance survey showed that it would be 39%. The difference is due to the fact that GFD data for Bangladesh do not account for multiple deposit accounts. Intensity of access to credit is quite comparable because most individual borrowers have a single loan. But what is important is the share of households with access to financial services, which is quite high in Bangladesh.

Table 7: Intensity of Access to Financial Services

	Intensity of Access as % of			
	Households to Financial Services	Adult Population to Deposit Services	Borrowers in Bank Credit Market	Adult Population to Bank and MFI Credit
The GFF Data, 2013	n.a.	92.8	8.83	17.9
The InM Inclusive Finance Survey 2013	75	39	8.29	17.07

MFI = microfinance institution, n.a. = not available, InM = Institute of Microfinance.

Source: Khalily et al. (2015).

5. FINANCIAL LITERACY IN BANGLADESH

Due to asymmetric information between consumers and financial institutions, the financial market is weak. Consumers are unable to access an appropriate set of services at the right price and are unable to make prudent investment decisions. Moreover, they are not fully aware of their rights and responsibilities, the financial risks involved, and any other relevant information. The problem of asymmetric information and the inaccessibility of financial services can be resolved through boosting financial literacy. It has received increased attention from policy makers and academics following the global financial crisis of 2008.

Financial literacy, as defined by the Organisation for Economic Co-operation and Development (OECD), is the combination of an understanding of financial products and concepts by consumers and investors, and their ability to understand financial risks and opportunities, so that they are able to make informed choices, know where to go for help, and take further effective steps to improve their financial welfare (Miller et al. 2009). Financially literate individuals are able to prepare household budgets and allocate resources efficiently, plan for savings, and formulate strategic investment decisions (Greenspan 2002). Therefore, financial literacy should improve the financial behavior of individuals, firms, and households (Hilgert, Hogarth, and Beverly 2003; Van Rooij, Lusardu, and Alessie 2007).

5.1 Financial Literacy Policy

Bangladesh has no national policy on financial literacy, but Bangladesh Bank has a policy statement on financial literacy (www.bb.org.bd/finedu), which says it strives to ensure that people have access to all financial products and information on banks and nonbank financial institutions. It stresses the need for disseminating financial information to help people make informed financial decisions. Furthermore, it encourages all banks to develop targeted financial products for school children, poor households, and old people. As a part of Bangladesh Bank's programs for increasing financial inclusion and improving financial literacy, school banking has been introduced; targeted credit programs have been formulated for the poor and farm households; the Taka 10 bank account scheme has been implemented; and there has been dissemination of sensitive financial information via the print and electronic media. These programs may have contributed to a higher intensity of access to financial services, but they may not necessarily have made the clients more financially literate and better able to make informed decisions. As has been evident from our brief review, both supply- and demand-side factors contribute to informed decisions and access to financial services.

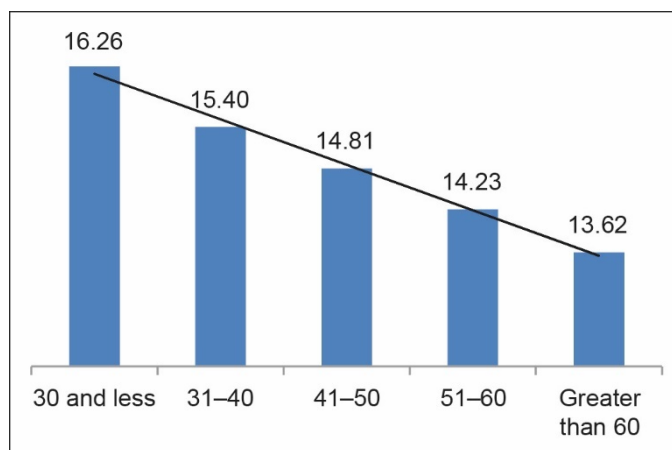
5.2 Empirical Evidence on Financial Literacy in Bangladesh

There has been growing evidence that individuals or households are better off being financially literate as they are able to minimize financial risks. But not all individuals across the globe have substantial financial knowledge (Banks et al. 2007, 2009; Cole, Sampson, and Zia 2011; Courchane and Zorn 2013; Jappelli and Padula 2013; Lusardi and Michelle 2009). Despite the importance of financial literacy, there have not been any major attempts to assess the extent of financial literacy and its impacts on inclusive finance in Bangladesh. Khalily and Miah (2015) carried out a major study on assessing financial literacy as a part of the national survey on access to financial services in Bangladesh.

The survey included a section on assessing financial literacy. It focused on three aspects—bank-related knowledge, mathematical knowledge, and an understanding of inflation and discounting. Section contained 38 questions covering these three dimensions of financial knowledge. Most of the questions were related to bank knowledge, and inflation-related knowledge and mathematics-related knowledge were covered by five questions each. Each question was assigned one point and, in line with the passing marks in general examinations in Bangladesh, 40% was considered to be the minimum passing score. Khalily and Miah (2015) reported that the average score was 15.2 out of a total score of 38, and only 38.5% of the test participants had obtained passing marks.

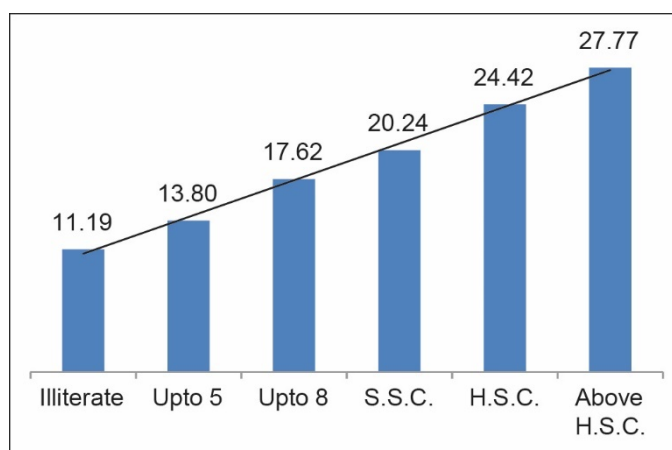
Several studies (Lusardi and Tufano 2008; Worthington 2004; Monticone 2010) showed that employment type, income, and occupation can be important factors determining levels of financial literacy. White-collar workers, professionals, and business owners are more likely to have higher financial knowledge. Evidence in Bangladesh does corroborate the earlier findings that financial literacy is inversely related to age and positively with education. According to Khalily and Miah (2015), professionals and people in business and services have greater financial knowledge. They also showed that total literacy scores gradually decline as age increases (Figure 8).

Figure 8: Total Score (Mean) by Age



Source: Khalily and Miah (2015).

Figure 9: Total Score (Mean) by Education



Upto 5 = up to grade 5; Upto 8 = up to grade 8; S.S.C. = Secondary School Certificate (equivalent to completing 10 years of schooling); H.S.C. = Higher School Certificate (equivalent to completing 12 years of schooling); Above H.S.C. = more than 12 years of schooling completed.

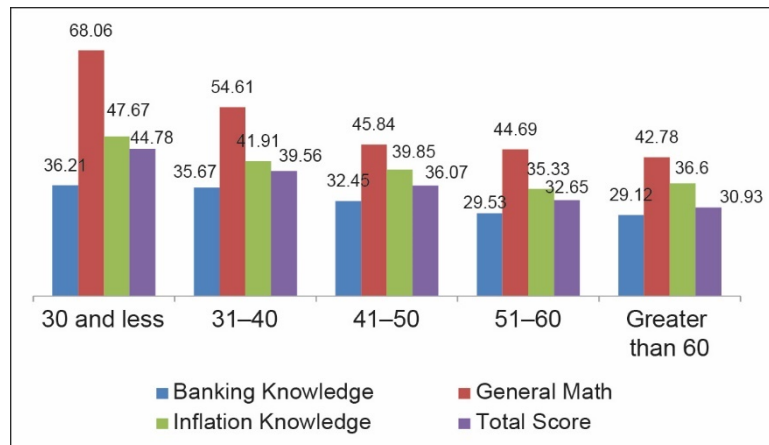
Source: Khalily and Miah (2015).

This is consistent with other empirical findings that showed that people aged around 60 or over are less likely to be financially knowledgeable. On the other hand, gender-based analysis revealed that there was a gender gap in financial literacy. For cultural reasons and because of their more limited involvement in professional activities in Bangladesh, females are less likely to be involved in investment and personal finance unless the household head is female. They also showed a linear relationship between education and the financial knowledge of respondents (Figure 9). Respondents with

more than a college degree (above H.S.C.) had scored above 70% compared with 30% for respondents with no formal education.

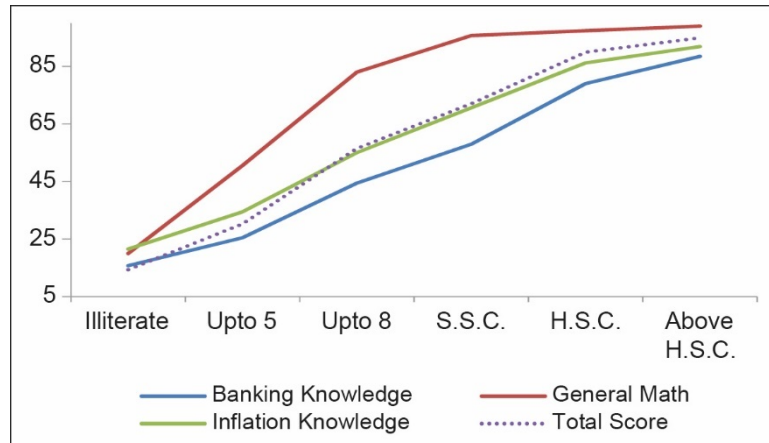
But not all respondents obtained the minimum passing marks. The results are inversely related with age and positively with education and the occupations. Mathematics-related knowledge is more pronounced among the younger group; more than 68% of these people aged 30 or less, and in contrast, 42% of the individuals aged 60 and over had obtained passing marks (Figure 10).

Figure 10: Share Passed (40%) by Age



Source: Khalily and Miah (2015).

Figure 11: Share Passed (40%) by Education



Upto 5 = up to grade 5; Upto 8 = up to grade 8; S.S.C. = Secondary School Certificate (equivalent to completing 10 years of schooling); H.S.C. = Higher School Certificate (equivalent to completing 12 years of schooling); Above H.S.C. = more than 12 years of schooling completed.

Source: Khalily and Miah (2015).

Similarly, more than 90% of respondents with college education or higher have sufficient mathematical knowledge (Figure 11). But banking-related knowledge, or inflation-related knowledge, is quite low among respondents, regardless of age; only a little over one-third of the respondents obtained the minimum passing marks. However, it increases with an increase in years of schooling. This could be because as people get more educated they are likely to be more exposed to financial services, as they tend to have white-collar jobs and higher incomes. A similar trend is observed in case of inflation- and discount-related questions. This evidence supports the hypothesis of

Campbell (2006) that households with higher education levels would face less information asymmetry and are more active in financial markets. A higher share of respondents in business, professional, and service occupations had passed the financial literacy test.

The econometric results, as derived in Khalily and Miah (2015), support the causalities described above. Age appears to have no effect on banking-related knowledge, but is inversely and significantly correlated with scores in general math, inflation or discounting, and the total score obtained. Education has a strong effect on bank-related knowledge, inflation-related knowledge, and general mathematics. Gender is a highly significant determinant of financial literacy. Being male is likely to result in higher scores as they deal with and are perhaps more exposed to financial matters on a day-to-day basis. Urban residents are more financially literate than the rural dwellers.

6. IMPACT OF FINANCIAL LITERACY ON FINANCIAL INCLUSION IN BANGLADESH

Evaluating the impact of financial literacy on inclusive finance is generally tricky as it is determined by individual characteristics. Moreover, access to finance is also determined by supply-side factors. Findings in the literature have been mixed. There had been no empirical study on the impact of financial knowledge on inclusive finance in Bangladesh until that conducted by Khalily and Miah (2015), who assessed this impact in their paper. They derived the estimates using two different models, the functional specification of which is as follows:

$$ATFIN = f(Finknow, regionchar) \quad (1)$$

$$ATFIN = f(Finknow, Indivchar, HHchar, regionchar) \quad (2)$$

where, *ATFIN* is access to finance and *Finknow* is financial knowledge. *Regionchar* is regional characteristics and controls for regional heterogeneity. *Indivchar* refers to individual characteristics that include education and age variables. *HHchar* includes household characteristics like literacy rate of the family, and education and age of the household head. These two models were specified and tested for possible correlation between financial knowledge and individual and household characteristics. Therefore, validity of the possible impact of financial literacy as specified in eq. (1) is derived if there is no change in sign of the coefficients of the financial literacy-related variables in eq. (2), which controls for individual, household, and regional level heterogeneity.

To analyze the impact of financial literacy on financial inclusion, they used the logit regression technique with access to savings, credit, and any financial service in any market as dependent variables defined as dummy variables (one for access and zero otherwise) and different categories of scores as explanatory variables are estimated. The results are reported in Table 8.

Table 8: Logit Regression on Financial Inclusion with Difference Financial Scores

Variable	Model-1			Model-2		
	Access to Savings	Access to Credit	Access to any Market	Access to Savings	Access to Credit	Access to any Market
Bank-related knowledge	0.157*** (0.00714)	0.0592*** (0.00609)	0.176*** (0.00860)	0.151*** (0.00906)	0.0532*** (0.00856)	0.153*** (0.00955)
Math-related knowledge	0.0448** (0.0175)	-0.0821*** (0.0164)	0.0232 (0.0209)	0.0951*** (0.0279)	0.0246 (0.0268)	0.0334 (0.0284)
Inflation-related knowledge	-0.0201 (0.0212)	-0.0423** (0.0196)	0.0768*** (0.0252)	0.0172 (0.0281)	-0.000615 (0.0275)	0.129*** (0.0289)
Constant	-1.132*** (0.251)	-1.209*** (0.230)	-0.940*** (0.278)	-3.675*** (0.419)	-2.522*** (0.412)	-2.342*** (0.421)

Note: Coefficients of other parameters in Model 2 are not reported here. *** refers to significant at $\alpha=0.01$ level and ** to significant at $\alpha=0.05$ level.

Source: Khalily and Miah (2015).

The results clearly demonstrate that financial literacy does have a positive impact on access to finance. Bank-related knowledge has a consistent and positive impact on inclusive finance. No significant change was observed. Based on the consistent estimate, it can be argued that a one-point increase in bank-related knowledge increases the probability of access to savings by 0.15 and increases the probability of access to credit by 0.05. Mathematics-related knowledge has a positive effect on access to savings. Inflation-related knowledge has a positive impact on access to finance in any financial market, but not specifically on access to savings or credit. But in another estimate, Khalily and Miah (2015) showed that overall financial literacy improves access to financial services.

In brief, the results suggest that the general level of financial literacy is average. But financial knowledge positively influences inclusive finance. This warrants a specific approach to financial literacy.

These findings are useful for policy making as they reveal that enhancing financial literacy may have a direct impact on aggregate access to financial services, savings, and credit, i.e., financial inclusion. In fact, the findings suggest there should be greater focus on literacy related to banking. They also reveal what should be the target groups, i.e., the groups most vulnerable to financial illiteracy: females, elderly people, people without higher education, people living in rural regions, and those in occupations such as labor and non-income-generating activities. Hence, these groups are also most vulnerable to financial exclusion. Therefore, first policies should be drafted or modified to increase financial knowledge, e.g., through training programs. These policies should be targeted at rural areas, females, laborers, less educated people, and other groups vulnerable to financial exclusion. It is imperative to raise financial literacy among these vulnerable groups to improve access to financial services in Bangladesh.

7. FINANCIAL REGULATION

In Bangladesh, two groups of institutions operate in financial markets—banks of all types and nature are part of the first group of institutions and MFIs are part of another group of institutions. Two regulatory agencies regulate these two groups of institutions: Bangladesh Bank, the central bank, regulates the behavior of banks and nonbank financial institutions; the Microcredit Regulatory Agency (MRA) regulates MFIs. While these two regulatory agencies regulate to ensure the financial health of the institutions

as well as their financial stability, through their regulatory policies they also promote inclusive finance for inclusive growth. Bangladesh Bank was established under the Bangladesh Bank Order 1972 after Bangladesh became an independent state in 1971. The Microcredit Regulatory Authority was established under the Microcredit Regulatory Authority Act 2006.

Regulations for Inclusive Finance and Growth

Banks in Bangladesh have generally been risk averse in expanding their branch networks and financing preferential sectors like SMEs and agriculture in rural financial markets. Bangladesh Bank has intervened with regulatory policy measures to expand financial services for promoting inclusive growth through inclusive finance. The interventions include progressive branch policy, refinancing policy, Taka 10 policy, and mobile banking policy for promoting preferential sectors and inclusive growth in Bangladesh.

Branch Policy: During the past 40 years, Bangladesh Bank had to force banks several times to expand their branch network in rural areas and to provide finances to preferential or “unbankable” populations in rural areas. In 1977–1978, it enforced a “two-for-one” branch policy under which banks were forced to operate two rural branches for one urban branch, which resulted in a comparatively fast expansion of rural branches. This proliferation of rural branches resulted in a near doubling of their number from 1978 to 1981 (from 857 to 1,527) (Khalily, Meyer, and Hushak 1987). In 2010, in order to expand banking services further, Bangladesh Bank enforced a “one-for-two” branch policy under which banks were required to open one branch outside the capital city, Dhaka, for every two branches in Dhaka. And in 2011, Bangladesh Bank implemented a “one-for-one” branch policy under which private banks are required to open one rural bank branch for every urban branch. The circular was amended in December 2011 in favor of a “four-for-one” policy—four rural branches for one urban branch, with branches outside municipality or city corporation areas recognized as rural branches. The branch policies have led to an expansion of banking services, particularly in rural areas, contributing to an increase in the intensity of inclusive finance and an increase in rural deposits.

Refinancing Policy: Financing agricultural and preferential sectors requires special treatment as banks consider such financing to be risky. Refinancing policy facilitates promoting agricultural and preferential sector financing. Under this policy, loans are refinanced at subsidized rates. Several refinancing schemes are available for the banks particularly for the BKB. The major schemes are agro-based refinance, SME refinancing, home loan refinance, women entrepreneurship under SME finance, green refinancing scheme, etc. Bangladesh Bank refinances credit given under these schemes at subsidized rates.⁶

Taka 10 Account:⁷ Bangladesh Bank has taken numerous initiatives to deepen financial inclusion, and one such measure is the introduction of the Taka 10 account. The basic objective of the Taka 10 account is to provide subsidy and grants to farmers

⁶ Agro-based refinance is offered for financing farming and development of agriculture-related enterprises. Tk5 billion had been disbursed under this scheme by the end of June 2014, against 1,897 enterprises on a revolving basis. The central bank allocated Tk6.0 billion to support small enterprises in Bangladesh, which was eventually extended to banks and financial institutions at bank rate against their financing of small entrepreneurs. An amount of Tk20.0 billion (including a women’s fund) had been refinanced to 22 banks and 22 financial institutions until the end of June 2014 to support 22,321 enterprises. At least 15% of the SME credit is reserved for women entrepreneurs and provided to them at a preferential interest rate.

⁷ Taka 10 is equivalent to \$0.14.

and beneficiaries of social safety net programs. In 2010, Bangladesh Bank introduced this special account to be opened with any government-owned commercial or specialized banks. The scheme has resulted in an increase in inclusive finance. In a recent paper, Khalily et al. (2015) showed that around 6% of households and around 7% of rural households have Taka 10 accounts. Concentration of Taka 10 account holders varies by region. As expected, farmers had a larger share, with just over 16% of farmers holding this special account. According to the survey, around 2% of the adult population aged 15 and over can access Taka 10 accounts. A recent estimate, as reported by Bangladesh Bank, shows that by the end of June 2014, 14 million individuals had opened a Taka 10 account compared with 13.2 million at the end of June 2013. However, many of these accounts may not be active until the account-holders receive subsidies and grants on regular basis.

Mobile Banking: In the past few years, financial innovations, particularly mobile banking, have gained ground in developing countries. This reduces transaction cost for both service-providing and service-receiving agents. It enables households, individuals, and firms to access formal financial services in inaccessible areas. Mobile banking now appears to be the most popular payment mechanism and means of transferring funds, particularly among internal migrants. Most banks in Bangladesh have been providing mobile banking services and now around 35% of households in urban areas and 25% of households in rural areas use mobile banking.

School Banking: Bangladesh Bank introduced a “School Banking” program for students, to develop their saving habits and build awareness of financial services through banks. This is not a new scheme. In the 1960s it had been a quite popular program, which after independence had ceased to exist in practice. As part of the strategy of expanding inclusive finance in Bangladesh following the global financial crisis, the program was reintroduced in 2010. The guidelines for the banks were formulated in 2013 and by the end of 2014 some 0.85 million school banking accounts, with net deposits of Tk7.17 million, had been opened. Therefore, the program has contributed to increasing inclusive finance.

8. REGULATION OF MICROFINANCE INSTITUTIONS

Except for Grameen Bank, all MFIs had been self-regulated until 2006. Most of these organizations started as voluntary organizations and were managed largely with quasi-formal structures. Whatever regulatory and governance-related changes had taken place in MFIs prior to 2006 had been at the behest of Palli Karma Sahayak Foundation (PKSF). PKSF, a wholesale lending agency, not only provides financial support to its partner MFIs, but also strengthens operation and governance of these MFIs through policy measures. Nevertheless, the MFIs were self-regulated and could pose a threat to financial stability.

In 2006, the Government of Bangladesh established the Microcredit Regulatory Authority (MRA) to regulate NGO–MFIs. With the licensing of NGO–MFIs, these institutions have become part of the formal financial system and are required to comply with regulatory rules and regulations. The MRA regulates the behavior of MFIs through off-site and on-site monitoring and a set of rules and regulations. As per the licensing rules,⁸ MFIs with minimum loans outstanding of Tk4 million (\$50,000) or a minimum of 1,000 borrowers can get a license (Khalily, Khaleque, and Badruddoza 2014). MFIs are

⁸ Not all operating MFIs have been able to comply with licensing requirements. The MRA has recently granted permission to MFIs with startup cash capital of Tk1 million (\$12,500) to operate in the microcredit market, so they can comply with the licensing requirements in 3 years.

now monitored and regulated by MRA regulations 2010. The MRA made several policy decisions—it imposed a ceiling of 27% on the lending interest rate and a floor of 6% on the deposit interest, it restricted the term of the chair of the governing body to two consecutive terms, and it reduced fee deductions from loans. But the most important one was requiring all licensed MFIs to maintain cash liquidity at 15% of total net deposits and maintain 10% of the surplus as reserve. It should be noted that NGO–MFIs in Bangladesh are not equity-based institutions. Grameen Bank is regarded as a microfinance bank, established by the Grameen Bank Ordinance 1983. Operationally, the bank is independent and its governing board makes policy decisions, but Bangladesh Bank monitors the behavior of Grameen Bank. International NGO–MFIs are required to be registered with the NGO Affairs Bureau and licensed by the MRA.

One of the necessary conditions for ensuring financial stability and effecting monetary policy is linkage between the MRA and Bangladesh Bank. Formal linkage between these two regulatory bodies is through the governor of Bangladesh Bank, who is the chairperson of the board of directors of MRA. The executive vice chair of the MRA operates with policy guidelines from the governor. However, the senior officials of Bangladesh Bank working on deputation at MRA have been effective in establishing more effective operational rules.

In a recent study, Khalily, Khaleque, and Badruddoza (2014) showed that regulation has a positive impact on the cost efficiency of the licensed MFIs. In another study, Latif, Hasan, and Khaleque (2013) showed that regulation has increased the confidence of clients and licensed MFIs. Most importantly, regulation has made the microfinance sector formal.

9. REGULATION OF INSURANCE COMPANIES AND COOPERATIVES

The weakest part of the regulatory regime in Bangladesh is the regulatory body tasked with overseeing the insurance companies. There are 77 insurance companies in the country, of which 46 are general insurance companies. These companies are regulated under the Insurance Companies Act 2010 and the Insurance Development and Regulatory Authority (IDRA) Bangladesh Ordinance 2010. Prior to 2010, there was no regulatory entity to regulate the behavior of insurance companies. The IDRA has so far not been very effective due to its limited organizational infrastructure and enforcement mechanism, resistance from the insurance companies, and political interventions. The authority, with the support of the government, has gradually become more effective at implementing its rules and regulations. Weak regulatory regime has not been affecting claims settlement and reinsurance of assured risks. Cooperative societies are regulated under the Cooperatives Act by the government Department of Cooperatives. There is no separate entity for regulating the behavior of cooperatives. Since these cooperatives provide financial services, they should be regulated by an entity like the MRA.

10. CONCLUSION

Financial deepening and inclusive finance in Bangladesh have expanded over the past 10 years. Both financial institutions and MFIs have contributed to higher intensity of inclusive finance. But the roles of these groups of institutions are different. Banks are more present in urban areas and among the relatively more literate as well as

high-income households. Indeed, one of the crucial policies that have contributed to higher intensity of inclusive finance through the banking sector is branch policy. Innovation, like mobile banking, has facilitated transfer of funds and payment services, and in turn has increased inclusive finance. MFIs have a dominant position in inclusive finance, particularly in rural areas. Regarding access of the adult population to financial services, our analysis showed that the intensity of inclusive finance is still low. But given the fact that around 75% of households in Bangladesh have access to finance, the intensity of inclusive finance will continue to increase through appropriate financial policies and innovations.

Higher intensity of access to finance may not necessarily lead to inclusive growth until opportunities are created. Inclusive finance should lead to financing firms and enterprises for inclusive growth. Our analysis showed that access to bank credit is relatively low. Indeed, banks with large loan sizes are able to influence growth but are not able to create opportunities for all those who will need services. MFIs play a greater role because of their wider network and financial services at the doorsteps of their clients. Consequently, more opportunities for investment, at least for the low-income and poor households, are created. Such opportunities have also been extended to micro and small enterprises through lateral entry to the microfinance market. As a result, MFIs are more likely to play a greater role in inclusive growth.

Expanded financial services of banks and MFIs will largely influence growth. Bangladesh Bank has responded proactively to regulating the behavior of banks to promote inclusive finance. It has brought more individuals into the banking network through its aggressive branch and Taka 10 policies. MFIs are no longer self-regulated; they are regulated by the MRA. Over the past 5 years, the MRA has formulated effective sets of rules and regulations to regulate the behavior of MFIs. More are to follow as MFIs venture into providing large loans to micro and small enterprises. The weakest regulatory regime is that for the insurance sector. IDRA has yet to become fully effective as a regulatory agency because of its limited infrastructure and low level of enforcement, the influence of insurance companies, and political interventions, but it is moving gradually in the right direction.

These findings lead us to a very important point regarding inclusion and outreach. Education levels and levels of financial literacy are the major determinants of financial inclusion in any country. We found that, in Bangladesh, the level of financial literacy is low, which has an impact on inclusive finance. The experience of banks and MFIs show that people in general can be made financially literate to a significant extent through supply-side interventions; MFIs appear to be more effective in inculcating financial knowledge among uneducated or less educated low-income clients. Efforts have been more focused on introducing financial products for financial inclusion. What is missing is the financial knowledge for investment decisions and about risk-minimizing instruments. This should be given serious consideration in a country like Bangladesh. Prudent and sound investment decisions often do not ensure greater ability of investors to cope with covariate shocks. The absence of an insurance market or a lack of insurance knowledge may be costly for them. In Bangladesh, most households and individuals do not have access to insurance.

Information technology is making headway in Bangladesh banking. During the past 5 years, mobile banking has quickly become popular because of its comparative advantages, including low-cost services. But an appropriate policy is required for maximizing the benefits of such information technology and also for ensuring security of funds in the remote areas.

Finally, to increase financial inclusion and inclusive growth there should be a complementary relationship between financial institutions (both public and private banks) and MFIs. It is not in banks' interest to provide services in every corner of Bangladesh as it is contrary to their profit maximization objective. Banks operate from their branches and MFIs operate at the doorsteps of their (potential) clients. Consequently, the transaction cost of accessing financial services in MFIs is lower than in banks. In such a situation, a principal-agent approach can create a win-win partnership between banks and MFIs to provide financial services in every corner of the country. The other policy that may have a positive effect on inclusive finance and inclusive growth is the "up-streaming" (from microcredit to micro and small enterprise credit) of MFIs in Bangladesh. But this needs to be carefully approached so that the existing focus on low-income households is not lost.

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