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The Role of Religious Faith in Financial Exclusion: An Analysis of Financial Deepening in India

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Abstract

Financial inclusion may be thought of at two levels: having a bank account, reflecting access to banks and financial literacy; and financial deepening, as reflected in operating interest-bearing deposit or loan accounts. As a sizable proportion of the Muslims in the country subscribes to the belief that *'Riba is Haram'*, such religious prohibition to subscribe to interest-bearing banking products may lead to exclusion from financial deepening. While many countries have overcome this deficiency by hosting Islamic banking in their conventional banking systems, India is an exception. The objective of this paper is to examine the prevalence of financial exclusion owing to religious faith in India. A careful analysis of district-level data on deposit accounts, and population census data on urbanization and religious composition, suggests exclusion of Muslims from financial deepening. Regression analysis confirms that faith-based financial exclusion is significant in many states of India. A few private initiatives of recent years to offer interest-free banking services have attracted a large clientele, indicating unmet demand. The lack of a policy response means denying financial inclusion for large segments of population.

JEL: G21. G51, G53, G59

Key Words: Islamic Banking, Interest-free Banking, Conventional Banking, Financial Exclusion, Financial Deepening, Religious Faith, Urbanization, Deposit Accounts.

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I. Introduction

Financial inclusion is a cherished goal of any economy, both as a moral imperative as well as for economic efficiency. It is generally agreed that India has made rapid progress in financial inclusion. Recent advances in inclusion are attributed to Pradhan Mantri Jan Dhan Yojana and digital finance following demonetization. One of the widely adopted definitions of financial inclusion in India, attributed to Reserve Bank of India (RBI), runs as follows: '[the] process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups in particular, at affordable cost in a fair and transparent manner by regulated mainstream institutional players' (Chakrabarty, 2013, p.2.). The model adopted for achieving this goal of financial inclusion is a bank-led system, with commercial banks, co-operative banks, banking correspondents, SHGs and so on being part of it.

There are three dimensions to financial inclusion as may be elicited from the definition given above: (i) access to financial services; (ii) the deepening of financial services for those who have access to minimal services; and (iii) greater financial literacy so that who are offered financial products can make informed choices. In this formulation, access is a function of both supply of services and basic financial literacy. Deepening of financial services is built on minimal access and greater literacy of financial products. Whichever definition is taken, financial inclusion refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products. Confining here to banking products, financial inclusion broadens the resource base of the financial system by developing a culture of saving among large segments of the population and protects their financial wealth. It also mitigates the exploitation of vulnerable sections by usurious money lenders, by facilitating easy access to formal credit. If a person has a bank account but does not deposit money or borrow despite having the economic means of doing so, then it will be interpreted as lack of financial literacy. This understanding excludes the possibility of a financially literate person not depositing or borrowing money because their religion prohibits receiving interest.

The fundamental principle governing banking is interest. Depositors receive interest on their savings and borrowers pay interest on their loans. The banks' sustainability depends on the interest spread and the security of their loans. Hence, financial inclusion works for those willing to pay and receive interest. Naturally a question arises: if certain population groups do not have faith in interest, or if interest payment is against their system of beliefs, what happens to financial inclusion of such groups? Are the financial products such as deposits and loans of banks appropriate for them? If they are not appropriate, then do certain population groups get excluded? There is a hint of such exclusion in the report by Raghuram G. Rajan, 'Certain faiths prohibit the use of financial instruments that pay interest. The non-availability of interest-free banking products results in some Indians, including those in the economically disadvantaged strata of society, not being able to access banking products and services due to reasons of faith' (Planning Commission, 2008, p.72). We have found little discussion of this issue in the economic literature on financial inclusion in India.

In the light of the above, the issue of financial inclusion needs to be framed as a two- step process. Access to services and financial literacy, as reflected in a person having an account and carrying out receipt and payment, transfer of money and using instruments like pay order or demand draft, may be considered first-level inclusion. Utilizing interest-bearing deposit and loan services is definitely a reflection of deepening of financial services and greater financial literacy. But not utilizing such services cannot be interpreted as solely due to lack of financial literacy. It could be because of two other reasons. One, there is an institutional bias in not providing financial services to areas dominated by certain communities. Two, it could be a reflection of certain communities, subscribing to a religious faith of not paying or receiving interest, not utilizing deposit and loan services because the financial system offers only interest-bearing instruments. The design of the system does not allow for other types of financial instruments. Those having faith in other modes are then excluded by design.

Population groups that ideologically oppose interest are pervasive across the globe. Financial systems have evolved to meet the needs of such population groups in many economies. Interest-free banking or Islamic banking institutions fall into this category. Islamic banking is common in Islamic countries; many others have also begun opening Islamic 'windows' in conventional banking, offering *shariat*-compliant financial instruments. India is not one of them.

In India, some private initiatives have been taken in Islamic banking. Can these initiatives meet the needs of the excluded population groups? Can they be considered as an alternative to the banks? This paper seeks to address some of these issues. The first objective of the paper is to assess the magnitude of access to basic financial services, among some large Indian states. The second objective is to examine the magnitude of exclusion from financial deepening of population groups owing to their religious faith. Financial deepening has two dimensions, namely savings and loan services, and the factors relevant to each are different. This paper confines itself to the savings dimension of financial deepening. The third objective is to explore alternative institutions of financial inclusion. A narrative of interest-free banking in some of the leading economies is provided to show their success as an alternative to conventional banking. The limited Indian experience with interest-free banking is analysed to see whether it could be adopted in India more extensively.

The paper is organized in nine sections, including the introduction. Section two discusses interest-free banking: its principles, products, and spread in the Middle East and some other leading economies. Section three elaborates on the data and methods used in this paper. Section four takes up the coverage of bank accounts among the households in the Indian states. Section five analyses financial deepening in the urbanized Indian state of Kerala, with higher prevalence of international migration. Section six examines the magnitude of faith-based financial exclusion in some other Indian states. Section seven presents regression results of deposit accounts on urbanization and proportion of Muslims. Section eight describes the experience of an interest-free banking institution, namely Sanghamam Multi-State Co-operative Credit Society, in deposit mobilization and credit disbursal. Section nine states our conclusions.

II. The Spread of Interest-free Banking

Interest-free banking or Islamic banking is a system in accordance with the *shariat* (Islamic law or jurisprudence) that prohibits paying any fee for renting of money for specific periods of time ("*riba"*). It also prohibits any sort of investment in businesses that are considered *haram* or against the principles of Islam. *Riba* or interest under Islamic law basically means anything in 'excess' – the investor should not make an undue profit from the hard work of any other person. A system of reasonable profit, where the investor takes a risk that is well calculated, is permitted. Over the years various products have evolved under Islamic banking, such as *Mudharbah* (profit sharing), *Musharaka* (joint venture – both parties share everything equally), *Murabaha* (cost + profit), *Ijara* (letting of lease) and so on. The modern Islamic banks have developed financial instruments conforming to *Shariah* principles (Rao 2016). They cover all the major categories of conventional banking such as deposit, lending, trade finance, and treasury. There is, however, some variation across regions and countries in the specificity of the financial instruments. For instance, project financing under loan products based on *Musharaka* and *Murabaha* are popular in Middle East, South Africa, and Indonesia, but are considered risky in Malaysia (Oracle Financial Services, 2017).

The most important development in Islamic banking history is the establishment of the Islamic Development Bank (IDB) in 1975. The IDB was established as an international financial institution by representatives of member countries of the Organization of the Islamic Conference (OIC) (23 members in 1975, rising to 57 by 2014). The IDB's main objective is to promote economic and social development in the Muslim world following the principles of Shariáh, and it has been a significant financier and promoter of an array of Islamic banking and finance initiatives since its formation (Abedifar et al., 2014). By the end of the 1970s, several Islamic banks had been established in the Muslim world, e.g., in Dubai (1975), the Faisal Islamic Bank of Sudan (1977), and the Bahrain Islamic Bank (1979). Oil wealth played a crucial role in building these banks. The burgeoning surplus as oil prices inched north, and a post-oil vision of the economy, both boosted Islamic banking.

Many countries have also begun opening Islamic 'windows' in conventional banking, offering *shariat*-compliant financial instruments. Malaysia and the Kingdom of Bahrain are two interesting examples. Malaysia, as a colony, was dominated by foreign banks. After gaining independence in 1957, the country did not introduce the Islamic banks immediately. Two legislations, one in 1983 and another in 1989, facilitated the co-existence of Islamic banks alongside the conventional banking sector. Bahrain chose to occupy a leading position as an international financial centre, which necessitated the development of conventional banking structure. Into this system were brought Islamic banks. The experiences of these two countries prove that Islamic banking systems can co-exist with the conventional system.

The United States, United Kingdom, Germany and others have opened Islamic banking windows in their financial system. The beginning of interest-free banking in the UK could be traced to 2003. In less than five years, it became a prominent financial player in the UK financial market. The UK was the first non-Islamic country to permit a *shariat*-compliant bank called the Islamic Bank of Britain in 2005. Many conventional banks, such as HSBC and Lloyds TSB, have also started offering Islamic financial products (Aldohni, 2008). The US has American Finance House La Riba, a *riba*-free institution. In 2017, there were 505 Islamic banks globally, including 207 Islamic banking windows with an asset base of USD 1.72 trillion (GIFR, 2019).

In the UK, Islamic banking got a boost largely because of the unique position of London as a major centre of international trade and finance. London accounts for about 20% of all international bank lending, and more than 30% of all foreign exchange transactions in the world. The UK was eager to promote London as the global centre for Islamic finance. The growing wealth of Muslims in the country, and the danger of Islamic institutions working informally outside the regulatory frame, played an important part in this decision. This danger is enhanced when there is a sizable Muslim population who, for religious reasons, are reluctant to deal with conventional banks. It was reported that over three-quarters of British Muslims wanted banking services that fit with their faith (BBC News 2005). Having Islamic financial products under the supervision of official financial authorities could thus serve many purposes. In sub-Saharan Africa, it is observed that the introduction of Islamic banking spurred financial inclusion, which in turn helped in reducing poverty (Abdu, Musa, et.al, 2018).

In the Indian context, an early mention of faith-based financial exclusion in official circles was by the Sachar Committee in 2006. While this did not result in any government action, the Raghuram Rajan Committee in its report on The Finance Sector Reforms in 2008 suggested that interest-free banking should be promoted on a large scale to provide access to those who do not use conventional banking instruments. An Islamic banking 'window' will encourage many from the Muslim community to come forward and invest in *shariah*-compliant products; in particular, those in the economically disadvantaged strata of society will be able to access banking products and services (Planning Commission, 2009). But the same story of neglect persisted: Islamic banking continued to be misunderstood in India, seen as a religious charitable venture, restricted to the country's poverty-ridden and economically downtrodden members of the Muslim community. The development of Islamic Banks globally could not demolish this myth (Singh & Yadav 2013). Indian banking sector has kept away from introducing *shariah*-compliant products to meet the needs of observant Muslims.

Even though Islamic banks are yet to gain traction in India, some Non-Banking Financial Companies (NBFCs) following the principle of interest-free banking have begun functioning in Kerala. Prominent among them are Cheraman Financial Services Limited and Sanghamam Multi-State Credit Co-operative Society Limited, which have been functioning for close to 10 years. In 2017, the Halal Fayidah Co-operative Society came into being to cater to the needs of devout Muslims. In this paper, Sanghamam Multi-State Co-operative Credit Society Ltd. has been taken up for more detailed study.

III. Data and Methods

How do we examine the relationship between financial inclusion and religious faith? Our argument is that being Muslim and subscribing to the injunction that *'Riba is Haram'*, some Muslims do not deal with interest-bearing instruments in banking. Even while having a bank account and carrying out money transfer and such other functions, they do not deposit or borrow. In banking terminology, they do not open deposit or loan accounts. In a research strategy where primary data are collected from individuals, this would simply mean asking the question 'do you have a deposit/loan account?', and the answer would be equally straightforward. However, to identify such a trend using secondary data from diverse sources, the approach has to be different.

An assessment of financial inclusion or access to financial services and basic financial literacy is possible by using an indicator such as the proportion of population having bank/post office accounts. Having a bank account implies that basic access is present as the person concerned is literate about bank accounts. The latest round of National Family Health Survey (NFHS- 4, 2015-16) provides information on population, health, nutrition, and access to bank, etc. at the level of the states. Answer to the specific question 'whether the household has a post office/bank account' is used to arrive at the proportion of households having post office/bank account. Information is also available on the 'percentage of women having bank account which they themselves use'. This could be an indicator of financial inclusion of women.

The analysis of the relationship between financial deepening and religious faith requires a different approach, as data asking a direct question are not available. Financial deepening, that is having a bank account and operating deposit account, would be related to the level of economic activity, especially non-farm activities, education, gender, income, movement of population in search of employment (migration) and so on. As the level of income rises, the per capita deposit accounts are expected to rise. Similarly, as the level of economic activity goes up, the per capita deposit account would increase. As data on income or level of economic activity at the district level is not available, the best proxy would be the level of urbanization. As level of urbanization goes up, per capita deposit accounts are expected to rise, and the proportion of Muslims holding such accounts would fall. The relationship of interest to holding accounts would then require separating out the effects of these different factors on the population operating deposit accounts.

The paper is based on secondary data collected from diverse sources.

- Population data is drawn from Population Census 2011 publications. As our focus is mainly on variations across states, and among districts within states, rather than on the levels of population itself, the use of 2011 population data is not expected to affect our results.
- The source of data on number of deposit accounts is Reserve Bank of India (RBI). RBI publishes data on the number of scheduled commercial bank offices, number of deposit and loan accounts, and deposit and loan amounts at the level of districts on an annual basis. We have taken the data pertaining to March 2019.
- The Population Census provides information on the population numbers at district and sub-district levels by religion and by residence.
- While data on urbanization are available at the district level, such data are not available on migration at any level of disaggregation, and whatever data are available in the decennial population census are not very useful. However, there is one exception: data on international migration at the district level are available for the state of Kerala. The Kerala Migration Survey, carried out by the Centre for Development Studies every five years since 1998, provides information on the number of emigrants, return migrants, remittances and so on. The two datasets together can be used to arrive at per capita number of deposit accounts. These could be plotted against the percentage of Muslim population at the level of the districts within a state. The strength of the relationship could also be tested.

A related issue is that of the selection of districts: should we select all the districts within India or select districts within a few states? The vast inter-state variation in banking development, as also in per capita incomes and prevalence of poverty, requires us to restrict the analysis to a few states. The selection of states is explained in the following sections.

IV. Access to Financial Services

Any discussion of financial inclusion necessarily begins with a clear statement of exclusions, viewed as processes 'through which individuals or groups are wholly or partially excluded from full participation in the society in which they live' (Jalal,1998, quoted in Sen, 2000, pp. 26-27). Sen draws a clear distinction between active and passive exclusion. Relational exclusions may be brought about by a deliberate policy to exclude some people from some opportunities. Our opportunities and prospects depend crucially on what institutions exist, how they function, and how inclusionary they are (Sen, 2000). Thus, financial exclusion by institutions based on policy could be called active exclusion.

In the Indian context, the last 15 years have seen concerted efforts being made by the Reserve Bank of India and the Government of India to achieve financial inclusion. In 2014, Government of India initiated the National Mission for Financial Inclusion 'to provide universal banking services for every unbanked household, based on the guiding principles of banking the unbanked, securing the unsecured, funding the unfunded and serving the unserved and underserved' (Department of Financial Services, 2020, p. 278). As part of the Mission, banking service points have been expanded, and the strength of bank branches and ATMs has been augmented in all geographical areas, irrespective of demographic composition of such areas. In particular, there is no evidence of any deliberate policies or decisions to exclude minority communities from financial inclusion at an institutional level. In fact, the Strategy Paper of 2017 emphasises the need to ensure smooth flow of credit facilities to them. The Reserve Bank of India has furthered the cause by issuing a Master Circular in 2019 to all Scheduled Commercial Banks to that effect (Ibid., p. 288). This emphasis probably arises from the grudging acceptance of faith-based exclusion: 'Prevalence of certain value system and beliefs in some sections of the population results in lack of favourable attitudes towards formal financial services' (NSFI, 2017, p. 15). Thus, we believe there has not been any active exclusion in India.

The concerted efforts by the government have resulted in measurable progress in financial inclusion at the level of the states. The measure used for the assessment of financial inclusion is the proportion of households having a bank or post office account. Such an indicator reflects the access to financial services and basic financial literacy. It also looks at the proportion of women who have a bank account that they operate as a measure of financial inclusion of women.

Using the data from NFHS -4 for the year 2015-16, it is seen that the proportion of households having a bank account is uniformly high in all the Indian states. It is a remarkable achievement that India now provides financial access to almost all its population. The households are also financially literate as is evident from the large number of accounts opened. It is seen that the proportion is over 90% in 13 of the 21 states listed in Table 1. In another six states it is between 85 and 90%. Only in two states – Bihar and Assam – is the proportion below 85% (though Assam, at 83.6%, is nearly there).

Unlike the uniformly high access to financial services observed for the households across the Indian states, financial inclusion of women shows considerable regional variation. In the southern states along with Punjab, Rajasthan, Himachal Pradesh and Uttarakhand, more than 60% of Hindu women operate bank accounts on their own. Less than 50% of women operate bank accounts in Bihar, Jharkhand, Madhya Pradesh, Maharashtra and West Bengal, with the proportion falling in between in the rest of the states. Comparing women belonging to different religious groups, while the regional pattern holds, the proportion of Muslim women operating accounts is substantially lower than that of Hindu women, whereas there is hardly any difference between Hindu women and Christian women. While there is almost universal access to financial services for households, women are still excluded.

Does religion explain the variation in the proportion of households not having bank accounts among the states? A simple scatter plot of percentage of Muslim population in the state and the proportion of households having a bank account (Figure 1) suggests that there is hardly any relationship between the two. Irrespective of the proportion of Muslims in the total population, almost all the states report the proportion of households having bank accounts of between 87 and 97 percent. The exceptions are West Bengal, Assam, and Bihar, reporting higher proportion of Muslims and lower proportion of population having bank accounts. The lower proportion cannot entirely be attributed to the proportion of Muslims in the population, as the proportion of population in poverty is also high in these states, which is a confounding factor.

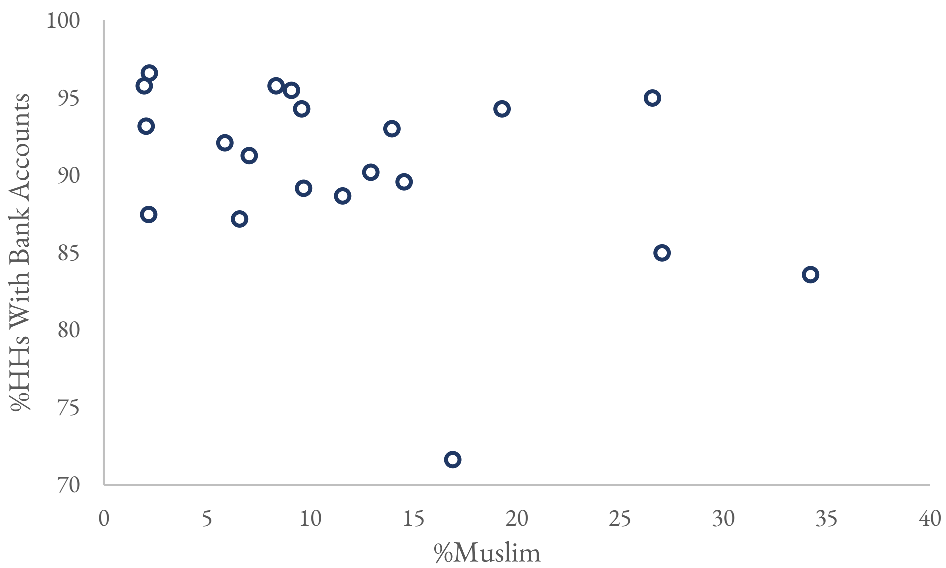
Table 1: Access to Financial Services in Indian States

State	%HHs with bank accounts	%Muslim in population	% Women who have a bank account that they operate		
			Hindu	Muslim	Christian
Andhra Pradesh	94.3	9.6	66.7	60.1	70.4
Assam	83.6	34.2	50	36.2	34.4
Bihar	71.7	16.9	27.5	21.5	—
Chhattisgarh	93.2	2.0	51.3	46.5	51.5
Goa	95.8	8.3	81.7	71.5	90
Gujarat	89.2	9.7	49	41.5	59.6
Haryana	91.3	7.0	48	16.4	—
Himachal Pradesh	96.6	2.2	69.3	—	—
Kerala	95	26.6	74.5	62.2	77.7
Jharkhand	89.6	14.5	46	42.7	53
Karnataka	90.2	12.9	59.9	55.7	67.3
Madhya Pradesh	87.2	6.6	37.5	32.6	—
Maharashtra	88.7	11.5	45.9	29.4	—
Odisha	87.5	2.2	56.3	50.4	55.6
Punjab	95.8	1.9	61.6	39	—
Rajasthan	95.5	9.1	59.5	41.7	—
Tamil Nadu	92.1	5.9	77	75.2	79
Uttar Pradesh	94.3	19.3	56.4	47.7	—
Uttarakhand	93	13.9	62.2	34.6	—
West Bengal	85	27.1	46.7	36	—

Source: National FHS-4; Census of India- 2011.

Note: '—' Indicates Estimates not available because of small sample size

Figure 1: Distribution of States by %Households with Bank Accounts and %Muslim Population, 2015-16



The data presented above refers to the year 2015-16. The last five years have seen concerted effort by the government to extend the Jan Dhan accounts to the eligible households as part of the national mission mentioned earlier. The data published by the Department of Financial Services, Government of India shows that 100% of the eligible households now have bank accounts; only in seven states do less than 0.25% of households still not have a Jan Dhan account (https://pmjdy.gov.in/statewise-statistics). The phenomenal expansion of Jan Dhan accounts has also led to 53.3% of all accounts being held by women as of 1 January 2020 (op. cit., p. 279).

It may be concluded that religion has not inhibited population groups from accessing basic financial services in India. Further there is hardly any evidence of institutional bias leading to non-provision of services in areas dominated by particular communities. The phenomenal expansion of the financial system over the decades following bank nationalization has borne fruit in recent years in delivering financial services to all segments of the population. But has providing access to basic financial services led to the utilization of them for saving and borrowing? That would be the sign of financial deepening, which is the engine of economic growth and income generation. These are taken up in the next few sections.

5. Exclusion from Financial Deepening in a Developed State

As regards financial deepening, the measure taken for analysis in this paper is deposit accounts. The data on deposit accounts available for the districts are taken to compute the per capita measures. It is expected that a developed state will report higher number of deposit accounts. If religious faith is a factor for not accessing deposit services, then the number of per capita deposit accounts will be moderated by the proportion of Muslims in the population. Further, if there is institutional bias in not providing services to minority communities, then it would get reflected in lower number of accounts not only in districts dominated by Muslims but in districts dominated by Christians as well. This section seeks to explore these relationships with reference to Kerala. In the Kerala context, urbanization and emigration are key factors of economic life which have a bearing on financial deepening.

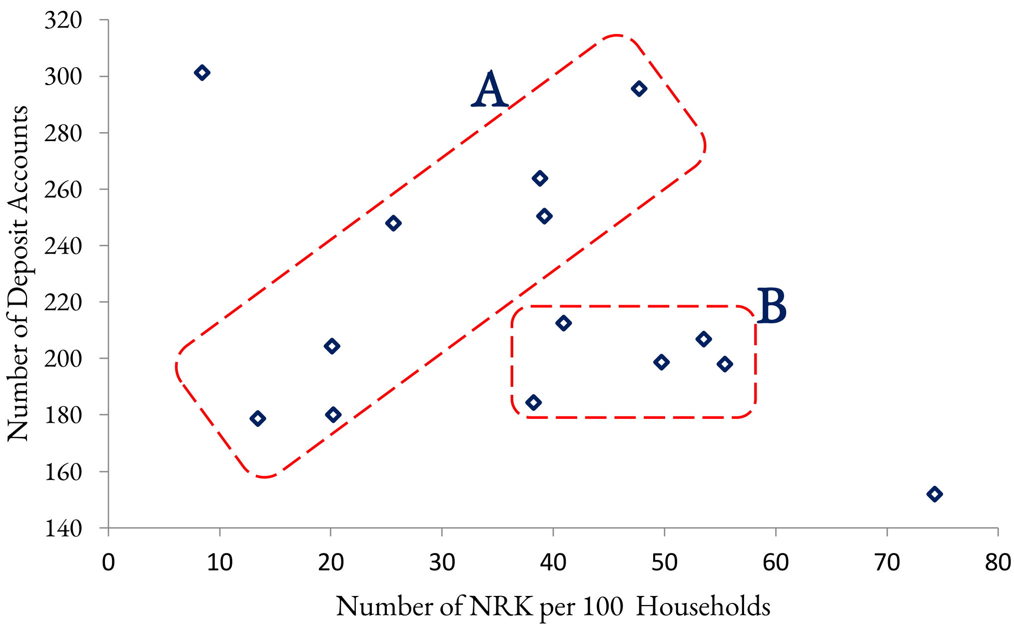
Kerala is one of the most urbanized states in India with 47.7% of the population living in urban areas. The level of urbanization varies from around 4% in Wayanad and Idukki districts to over 65% in Kannur, Kozhikode, Thrissur, and Ernakulam. Alapuzha and Thiruvananthapuram districts report more than 50% of the population living in urban areas. Urbanisation is an indicator of higher levels of economic activity followed by higher financial activity. A positive relation is expected between levels of urbanization and per capita deposit accounts across the districts. However, a scatter plot of urbanization and deposit accounts does not depict any clear relationship. Taking six districts with comparable levels of urbanization above 50%, it may be seen that the number of deposit accounts per 100 population varies from 184 to 301. Probing a little deeper and taking into consideration the proportion of Muslim population in these districts, it is observed that the number of deposit accounts falls as the proportion of Muslims in the population rises. So, the expected relationship between urbanization and deposit accounts is not seen because of the varying proportion of Muslims.

For a population of 3.48 crores in the state, the number of non-resident Keralites (emigrants and return migrants) was 34.17 lakh in 2018. That is around 10% of the population. Kerala reports 38.6 Non-Resident Keralites (NRK) per 100 households with considerable variation across the districts. Malappuram reports the highest at 74.3 and Ernakulam the lowest at 8.4. More than half the number of households in Kollam and Kannur districts has been exposed to international migration. Around 42% of the emigrants are Muslims and in terms of the rate per 100 households, it is 43 for Muslims, 28 for

Christians and 15 for Hindus. Studies have shown that income and asset holding among the NRK households are significantly higher than other population groups (Rajan and Zacharia, 2019).

The districts with higher proportion of NRKs are expected to have higher number of deposit accounts. However, a scatter plot of NRKs and deposit accounts does not depict any clear relationship (Figure 2). The lack of a clear relationship is owing to the interaction of two factors, namely urbanisation and the proportion of Muslim population. Taking the seven districts with relatively low levels of Muslim population, it is seen that as the number of NRKs increases the number of deposit accounts too increases (Panel A). With higher levels of Muslim population, as the number of NRKs increases the number of deposit accounts do not show an increase (Panel B). There are two districts which do not fall in either of the Panels, namely Ernakulam and Malappuram. Ernakulam has the lowest number of NRKs but is a major commercial centre and hence, has the highest number of deposit accounts. Malappuram on the other hand has the highest number of NRKs, is rapidly urbanizing but has the lowest number of deposit accounts. The district has the highest proportion of Muslims at 70%. This suggests that the proportion of Muslim population in a district has a dominant role in determining the number of deposit accounts.

Figure 2: Distribution of Districts by Deposit Accounts and NRKs, Kerala

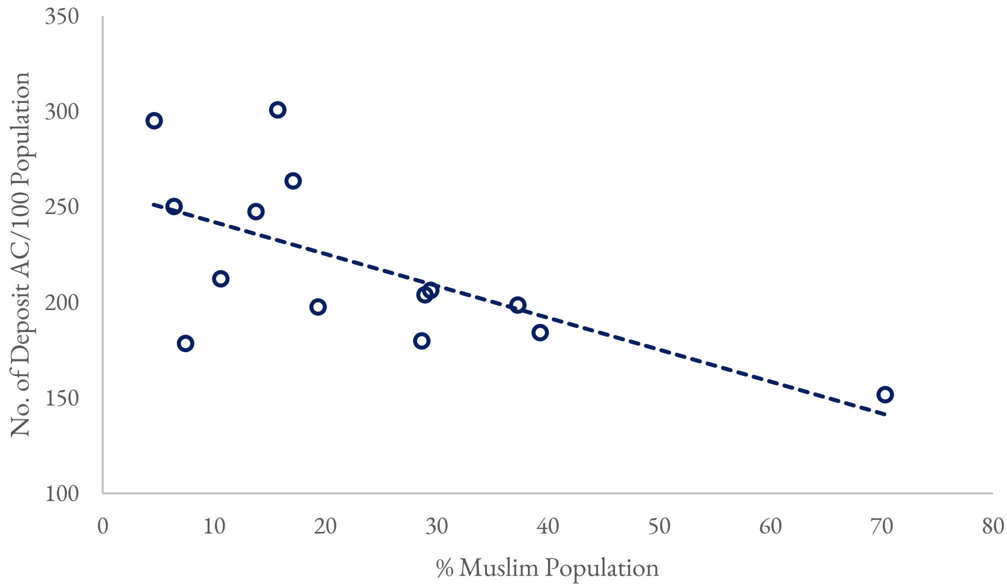


Source: dbie.rbi.org.in; Census of India- 2011; Rajan and Zacharia,2019

The discussion of the relationship between urbanization and financial deepening, and between the number of NRKs and deposit accounts, suggests that the proportion of Muslim population in the district is a crucial factor in financial deepening. In order to confirm the role of the proportion of Muslim population, the data on deposit accounts for the districts of Kerala are plotted against it in Figure 3. It may be seen that there is a strong relationship between the two. The number of deposit accounts per 100 population varies from 152 to over 300. 5 out of 8 districts where the proportion of Muslim population is below 20% f report more than 250 accounts per 100 population. For districts with Muslim population of 30 to 40%, the number of accounts drops to 200 and below. The district with 70% of Muslim population has the lowest number of deposit accounts. The relationship is too obvious to be missed.

However, to confirm that what we are seeing is faith-based exclusion, it is necessary to rule out the possibility of institutional bias.

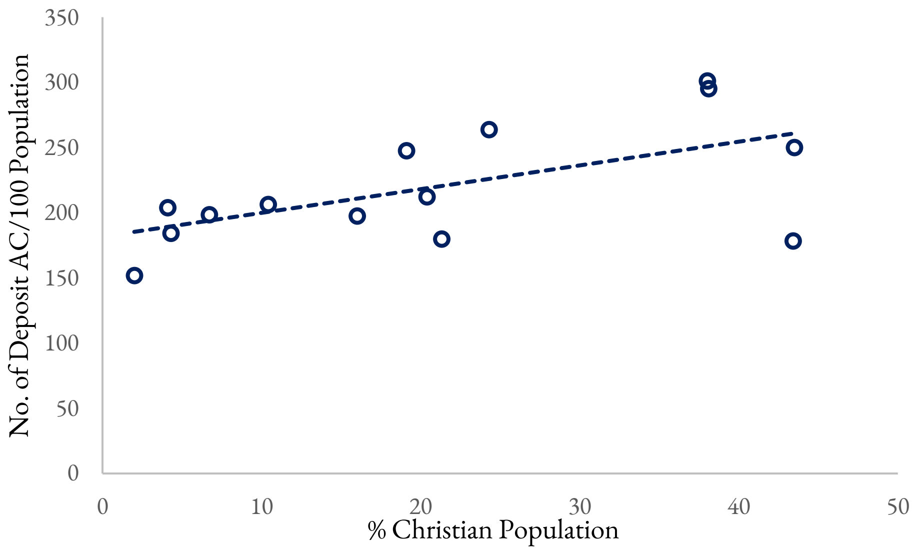
Figure 3: Distribution of Districts with Deposit Accounts and Muslim Population, Kerala



Source: dbie.rbi.org.in; Census of India- 2011

Kerala has another minority community, namely Christians, of considerable size (18%), distributed over the districts from 2% in Malappuram to 43.5% in Kottayam. A scatter similar to Figure 3 is plotted with percentage of Christian population in Figure 4. It is seen that the number of deposit accounts do not fall with the increase in the proportion of Christians in the population, if at all there is a mild positive relationship ruling out any institutional bias against the community.

Figure 4: Distribution of Districts with Deposit Accounts and Christian Population, Kerala



Source: dbie.rbi.org.in; Census of India- 2011

In a state with large remittance flows, the level of banking activity is expected to be high. Over 200 deposit accounts per 100 population in most of the districts reflects a vibrant banking sector in Kerala, but such vibrancy has eluded districts with higher prevalence of migrants, suggesting financial exclusion of certain population groups. It is also seen that such exclusion is not on account of any institutional bias. If financial exclusion is observed in a highly literate state like Kerala because of the belief '*Riba is Haram*' then is similar exclusion present in other Indian states with sizable Muslim population?

VI. Faith-based Exclusion in Select States

Indian states are characterized by varying proportion of Muslims in the population and their distribution across the districts within the state. In Odisha, Punjab, Chhattisgarh, and Himachal Pradesh, the proportion of Muslims in the population is very low. The states of Tamil Nadu, Karnataka, Gujarat, Madhya Pradesh have moderate proportion of Muslims; however, the variation across the districts is low. We confine our analysis to Maharashtra, Rajasthan, West Bengal, and Jharkhand, in addition to Kerala.

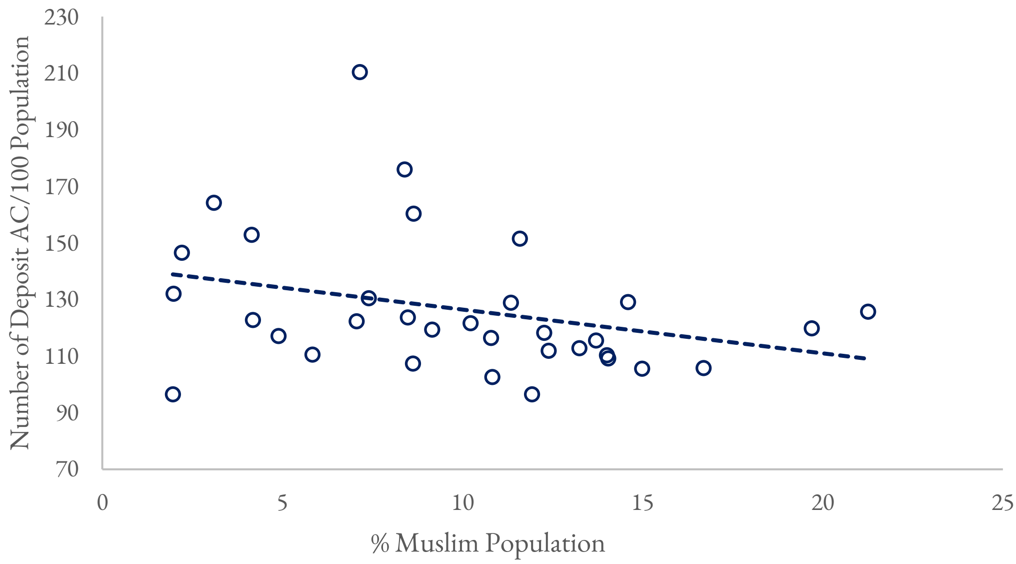
In Maharashtra the proportion of Muslim population is lower at 12% compared to 27% in Kerala. The inter district variation too is lower in Maharashtra, from 2% to 21% compared to 4% to 70% in Kerala. The number of deposit accounts per 100 households varies from 97 to 211, excluding the Mumbai and Mumbai suburban districts that report over 500 accounts. The scatter plot of deposit accounts and urbanization shows a positive relationship (Figure 5). But there is considerable variation in the number of accounts among the districts at any given level of urbanization. For instance, the 12 districts falling between 10 and 20% level of urbanization report 97 to 164 deposit accounts. Similar large variation in the number of deposit accounts from 106 to 161 is seen among the districts falling in the range of 20-30% urbanization. Most importantly, at the higher ends of urbanization (above 60%) the number of deposit accounts varies from 129 to 211. Such large variations at any level of urbanization suggest that other factors influence the number of accounts, including the proportion of Muslims.

Figure 5: Distribution of Districts with Deposit Accounts and Urban Population, Maharashtra

Source: dbie.rbi.org.in; Census of India- 2011

When the number of deposit accounts and Muslim population is plotted on a scatter an inverse relationship between the two may be seen (Figure 6). The relationship is slightly weaker because of confounding factors like urbanization. For a given proportion of Muslims in the population, there is considerable variation in the number of deposit accounts among the districts. The two scatter plots (Figures 5 & 6) suggest the need for considering the influence of urbanization and Muslim population together to explain the variation in deposit accounts across the districts, which would require going beyond scatter plot analysis to a multiple regression analysis.

Figure 6: Distribution of Districts with Deposit Accounts and Muslim Population, Maharashtra



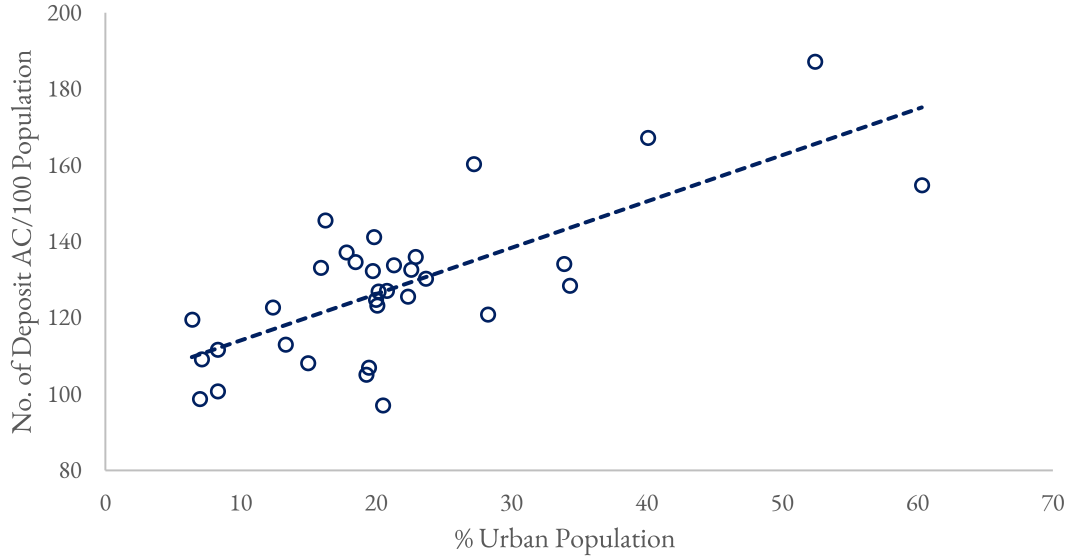
Source: dbie.rbi.org.in; Census of India- 2011

In Rajasthan, the scatter of levels of urbanization and number of deposit accounts (Figure 7) shows a strong positive relationship. At very low levels of urbanization the number of deposit accounts vary from 99 to 120. Above 30% urbanization the number of accounts stands between 128 and 187. Taking deposit accounts in relation to the proportion of Muslim population, we do not see a clear negative relationship observed in Kelara or Maharashtra. The reason for the absence of a clear relationship is the co-movement of level of urbanization and proportion of Muslim population, i.e., the less urbanized districts are also those with a higher proportion of Muslims.

In West Bengal, deposit accounts per 100 population show a mild positive relationship with urbanization. But it is seen that at each level of urbanization, on an average, the number of accounts is lower in districts where proportion of Muslims is higher. Thus, the selected states Kerala, Maharashtra, Rajasthan, West Bengal all show a positive relationship between urbanization and number of accounts as expected. The strength of the relationship is considerably moderated by the proportion of Muslims in the population. In all the states examined, a larger proportion of Muslims leads to a lower number of accounts per capita, suggesting that faith does play a role in financial deepening (or lack thereof).

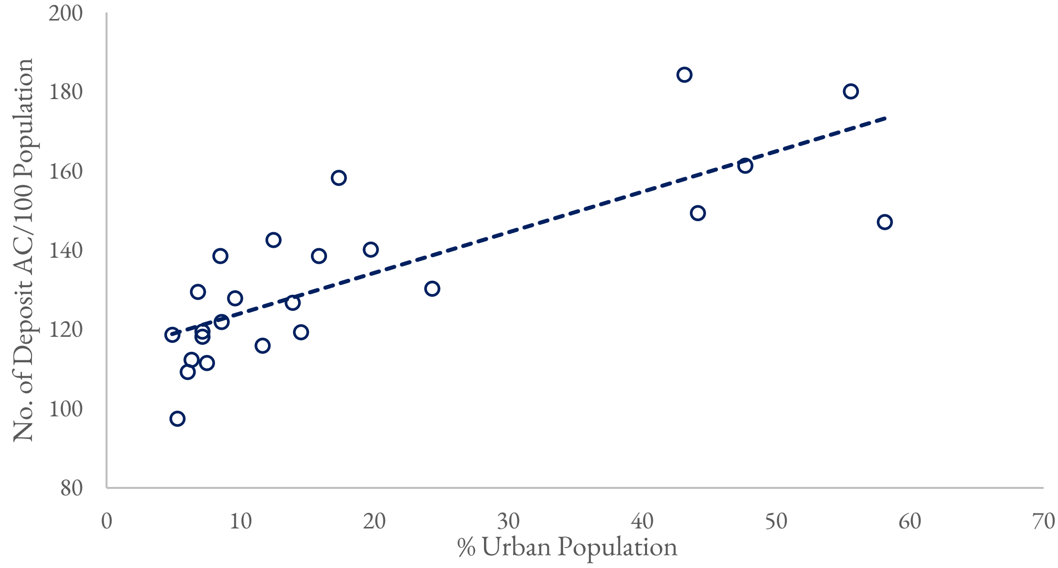
The data on deposit accounts and urbanization for Jharkhand plotted on a scatter (Figure 8) show the expected positive relationship. It is also seen that at any given level of urbanization the number of deposit accounts rise in inverse proportion to Muslim population, indicating faith-based exclusion.

Figure 7: Distribution of Districts with Deposit Accounts and Urban Population, Rajasthan



Source: dbie.rbi.org.in; Census of India- 2011

Figure 8: Distribution of Districts with Deposit Accounts and Urban Population, Jharkhand

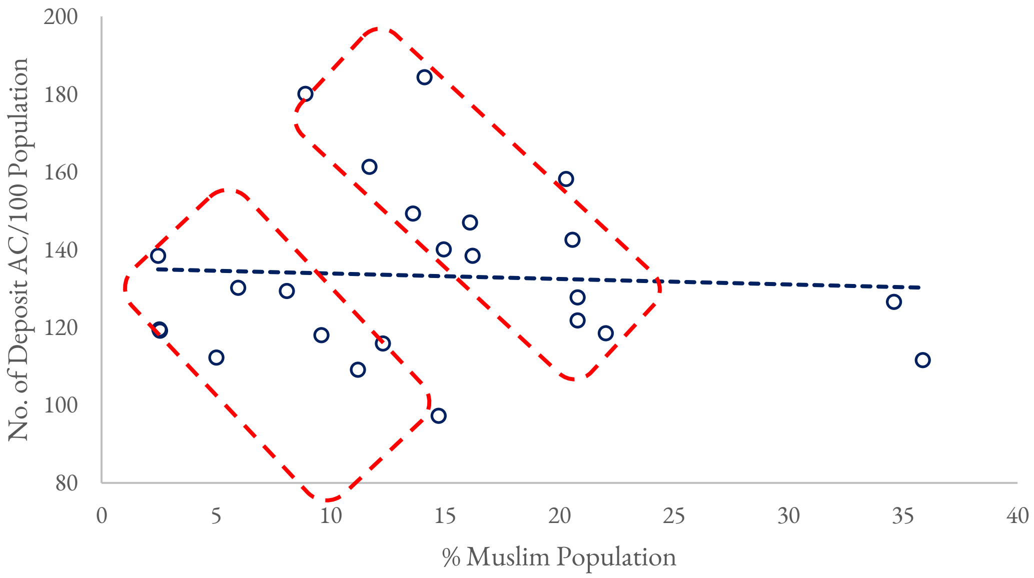


Source: dbie.rbi.org.in; Census of India- 2011

The percentage of Muslim population of the districts and number of deposit accounts per 100 populations for Jharkhand is shown in a scatter plot (Figure 9). Unlike the clear inverse relationship between the Muslim population and deposit accounts seen in Kerala, the trend line is almost parallel to the horizontal axis in Jharkhand. But a closer look suggested two clearly separated clusters both showing strong inverse relationships. Within groups of districts, as the proportion of Muslim population increases, the number of deposit accounts decreases.

The clusters are distinguished by levels of urbanization. In the lower cluster urbanization varies from 5 to 10%, with two exceptions. In the upper cluster it rises from 15 to 50% across the districts, with three exceptions. Corresponding to the level of urbanization, the number of deposit accounts too show a sharp jump. While in the lower cluster the deposit accounts range from less than 100 to 140, in the upper cluster it rises to around 120 to 180. There are two districts not falling in either of the clusters, both reporting highest proportion of Muslim population with low levels of urbanization and with fairly low number of accounts. As in the other four states, in Jharkhand too urbanization and proportion of Muslim population play a role in determining the number of deposit accounts. In order to test the strength of the two factors an appropriate multiple regression analysis is carried out.

Figure 9: Distribution of Districts by Number of Deposit A/Cs and % Muslim Population, Jharkhand



VII. The Strength of Faith – Based Exclusion

A search for the answer to the question whether faith-based prohibition of interest-bearing financial instruments is present led us to explore the relationship between number of deposit accounts and proportion of Muslims in the population. The search began by exploring the relationship between the proportion of non-resident Keralites and deposit accounts, and that between urbanization and deposit accounts. It was observed that while there are clear positive relationships, the proportion of Muslims in the population moderates them considerably. In successive steps, the relationship was explored for Maharashtra, Rajasthan, Jharkhand, and West Bengal. In order to go beyond exploration and confirm the strength of the relationship, we conduct a regression analysis.

We use a simple linear regression model, with deposit accounts per 100 population as the dependent variable (D). The two explanatory variables taken are level of urbanization (U) and the proportion of Muslim population (M). The regression equation is setup as follows, district being the unit of analysis.

$$D = b_0 + b_1 M + b_2 U + u$$

In this equation, urbanization is taken to capture the effect of income level and non-farm economic activity. The number of deposit accounts is expected to increase with the level of urbanization. Hence, b_2 is expected to have a positive sign. If Muslims do not deposit their savings (given the prohibition on *riba*), then the number of deposit accounts would be lower in the districts where the proportion of Muslims is higher. It is expected that the co-efficient of Muslim population (b_1) will be negative.

The result of the regression estimation is presented in Table 2. The model fits the data well in the states taken up for analysis as indicated by the R square and F values. The co-efficient of Muslim population has the expected negative sign except for Jharkhand. The co-efficients are also statistically significant in Kerala, Maharashtra and Rajasthan. Jharkhand and West Bengal behave differently because of the peculiar clustering of the districts around certain levels of urbanization. (The Jharkhand case was presented in Figure 9 above.) West Bengal too shows a similar clustering. The co-efficients of urbanization have the expected signs in all states and are statistically significant except for Kerala. Kerala shows a clustering of districts similar to Jharkhand.

Table 2: Results of Regression of Deposit on Muslim Population and Urbanization

State		Kerala	Maharashtra	Jharkhand	West Bengal	Rajasthan
No. of Observations		14	33	24	18	33
Intercept (b_o)		235.88	122.80	113.35	136.55	107.12
Muslim Population (M)		-1.85	-2.26	0.03	-0.20	-0.89
Urbanization (U)		0.66	0.89	1.02	0.66	1.32
R		0.73	0.63	0.80	0.60	0.76
R Square		0.53	0.40	0.63	0.36	0.58
F		6.26	9.85	18.25	4.24	20.31
Sig F		0.02	0.00	0.00	0.03	0.00
t - Stat	Muslim Population	-3.41	-3.09	0.10	-0.81	-1.83
	Urbanization	1.62	3.86	6.03	2.68	6.37
P - Value	Muslim Population	0.006	0.004	0.925	0.432	0.078
	Urbanization	0.135	0.001	0.000	0.017	0.000

Source: Computed from dbie.rbi.org.in; Census of India- 2011

The regression results establish that deposit accounts are strongly related to the level of urbanization. They clearly reflect the growth of number of deposit accounts with social and economic development. The statistically significant negative co-efficient of Muslim population confirms the prevalence of faith-based financial exclusion in India. It is likely to be present in the selected states of India, but regression results do not bring it out adequately because of the co-movement of urbanization and Muslim population in some states.

VIII. The Progress of an Interest-free Banking Institution

Sanghamam Multi-State Co-operative Credit Society Ltd (SMSCCSL) was established in 2012 at Kozhikode, Kerala. The Society has an authorized share capital of Rs. 50 crores and is working as an interest-free bank with seven branches in Kerala and Tamil Nadu, five of which were opened during 2013-14 and two in 2016. In the first year for which data is presented below (2014-15) it was functioning with five branches, 2630 members, and a share capital of Rs. 293.80 lakh. By 2018-19, the membership and the share capital have increased to 18,857 and Rs. 409.92 lakh respectively. The deposit growth during the period has been phenomenal, from Rs. 454 lakhs to Rs. 7931 lakhs, that is a 17-fold increase in just four years. The same time period also saw an 11-fold increase in loans, from Rs. 360 lakhs to Rs. 3942 lakhs, which is also very high (Table 3).

Table 3: Growth of Membership, Deposit and Loan of SMSCCSL

Year	B1	B2	B3	B4	B5	B6	B7	Total
				Number of Members				
2014-2015	252	498	273	259	1348	---	---	2630
2015-2016	415	791	444	321	2390	---	---	4361
2016-2017	1214	1046	732	395	3319	623	749	8078
2017-2018	1636	1511	2717	500	4307	955	1453	13079
2018-2019	1933	1942	4264	633	6495	1279	2311	18857
				Deposits (in Rs Lakh)				
2014-2015	18.61	84.84	45.12	2.33	302.83	---	---	453.73
2015-2016	39.83	316.07	77.79	30.94	566.74	---	---	1031.37
2016-2017	112.62	598.28	168.97	50.91	495.2	48.05	78.63	1552.66
2017-2018	173.19	969.74	319.82	130.01	2401.41	440.55	543.02	4977.74
2018-2019	171.83	1276.36	491.26	383.92	3867.48	689.59	1051.03	7931.47
				Loan (in Rs Lakh)				
2014-2015	21.28	56.96	29.47	16.43	236.07	---	---	360.21
2015-2016	37.79	265.75	70.61	30.66	424.19	---	---	829
2016-2017	81.63	597.37	167.25	26.39	460.79	44.45	92.93	1470.81
2017-2018	166.73	453.51	236.03	87.33	1188.58	165.93	256.18	2554.29
2018-2019	190.67	646.76	323.4	152.61	1981.56	223.83	422.81	3941.64

Source: Annual Reports of SMSCCSL, 2014-2019.
Note: B1- Vaniyambadi, B2 – Aluva, B3 – Kozhikode, B4 – Virudhunnagar, B5 – Erattupetta, B6 – Trichy, B7 – Kuttiady.

Among the seven branches of Sanghamam, Erattupetta has a pride of place, accounting for 51% of membership in the first year. This dominance has continued during the entire period. As regards the deposit amount, 67% of the total is accounted for by Erattupetta in the first year. With the opening of the new branches its share has come down but continues to be around half the total. A similar dominance is seen in loan disbursement, starting at 66% and falling to 50% towards 2019.

Erattupetta is a Muncipal town with a population of 35,000 (75% of whom are Muslims) in Kottayam district in Kerala. It is a major trade centre, well-connected with Tamil Nadu. It is possible that the trade in the town was being financed informally before the entry of Sanghamam. Since it met the demand of the trading class, the result was the phenomenal growth of deposits and loans of Sanghamam. As a membership society, it could respond to this demand in time. More importantly, the by-laws that govern the functioning of the society are drawn based on the principle of profit and loss sharing. The Society accepts deposits from and lends to persons of all religious affiliations. Loans above a certain minimum amount are secured by collaterals, and their use is strictly monitored. The agency function limits the geographical coverage of the Society. Despite these limitations, there are large number of people who subscribe to the alternative philosophy of banking.

The case of Sanghamam points to a large unmet demand for interest-free banking in various parts of India. Private initiatives such as Sanghamam could hardly meet this demand for two reasons. Firstly, there are not too many such enterprising private individuals. Secondly, the request for opening additional branches by Sanghamam submitted in 2017 has not been responded to favourably by the central government (Annual Report SMSCCSL, 2017-2018). Introducing some form of interest-free banking in the financial system seems to be the way forward.

IX. Conclusion

The paper set out with three objectives, namely, to assess basic financial inclusion, study the role of faith in financial deepening, and explore alternatives to conventional banking for the excluded. The specific context of the paper is that conventional banking is not in consonance with the value systems of a sizable proportion of the population of the country.

The detailed state-wise analysis showed that in Kerala, despite high levels of urbanization, migration and literacy, districts with higher proportion of Muslim population reported relatively lower number of deposit accounts per 100 population, suggesting faith-based exclusion from financial deepening. It was also seen that such exclusion was not based on institutional bias. Similar financial exclusion could be observed in Maharashtra and Rajasthan with different proportions of Muslims in the population and considerable variation across the districts. Jharkhand and West Bengal, with higher proportion of Muslims in the population, do not reveal lower number of accounts in the districts with higher proportion of Muslims. Part of the reason for such a behaviour is the clustering of districts, with hardly any variation within clusters and large variation between clusters. Thus, faith-based exclusion from financial deepening is a reality across multiple states in India.

The example of Sanghamam confirms that when an alternative to conventional banking is offered, the adoption is immediate and expansion is large, suggesting that the excluded have been provided instruments that they find acceptable to use. The success of private initiatives to fulfil this need is severely limited, because the necessary government support may not be forthcoming. As financial inclusion is a moral imperative and is essential for economic efficiency, exclusion of a community has no justification. The country has to learn from the experience of the United Kingdom, Malaysia, and others, and host interest-free banking window in the financial system. The danger of not doing so is that large financial resources may flow into unregulated informal channels, while simultaneously denying finances to those who need it the most.

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