



## Status and Trends in Financial Inclusion and Financial Stability: A Comparative Analysis of SAARC Countries

**B M Sajjad Hossain<sup>1</sup>, Nasrin Akhter<sup>2</sup>, Md. Taufiqul Islam<sup>3</sup>, Md. Abul Hasam<sup>4</sup>**

<sup>1,3</sup>Department of Social Science, American International University-Bangladesh

<sup>2,4</sup>Department of Humanities, Primeasia University, Dhaka, Bangladesh

Email: [bmsajjad@aiub.edu](mailto:bmsajjad@aiub.edu), [nasrin.akhter@primeasia.edu.bd](mailto:nasrin.akhter@primeasia.edu.bd), [taufiq@aiub.edu](mailto:taufiq@aiub.edu),

[abul.hasam@primeasia.edu.bd](mailto:abul.hasam@primeasia.edu.bd)

### **Abstract:**

*Financial Inclusion (FI) refers to the process of bringing more people under the coverage of formal financial sector/s. It is very common in developed countries over the decades. But with the development of science and technology, financial inclusion has been introduced and spread in many developing nations in recent times. Most of the South Asian Association for Regional Cooperation (SAARC) nations are still under the category of developing economies. Mostly financial inclusion has taken part in this region for the last two decades. This research conducted a comparative study among the different SAARC nations based on the achievement in financial inclusion. This paper attempted to identify the sequential position of those countries as they can evaluate them by comparing each other for further improvement and stability.*

### **Keywords:**

*financial inclusion; financial sector/s; SAARC countries; SAARC economy; FI index*

## I. Introduction

Financial inclusion aims to bring more people from all levels under the coverage of the formal (banking and non-banking) financial sector/s. Financial inclusion means providing affordable banking services to the vast segment of society whether they are poor or excluded (Chattopadhyay, 2011). It helps to develop the growth and development of the economy and reduce the poverty of a nation (Ellis, et. al, 2010). In recent times, many developing economies including SAARC nations have observed a great introduction of financial inclusion. Now, most emerging economies are highly dependent on it for their socio-economic development.

Earlier periods in the Indian subcontinent as well as the neighbors' zone were not the same as it is in today considering financial structure, system and inclusion, etc. The banking system and its practice in ancient Bengal were not large in scale and not well-organized too. Traditionally moneylenders, money-changers, village-merchants, and shopkeepers played vital roles in financial transactions. During Muslim rule in Bengal after 1200 AD, the local merchants and financiers appeared as banking agent/s. They were authorized to transfer money from one place to another which was called the 'hundi-system'. The village dwellers were brought into the circuit of the money economy in eighteenth century in Bengal by lending money with high interest. Those money lenders were locally called 'Sarrafa', an *Arabic* term that means banking-broker. The primary functions of the local *Sarrafs* were to test coins as it was necessary to determine the degree of purity of the coins issued from different mints of the country (Banglapedia, 2020). However, slowly the coin as well as the money system has been developed over the years in this zone and shaped as one of the most important elements in today's financial market in the form of capitalistic model.

Nowadays, the European Union (EU), Association of Southeast Asian Nations (ASEAN), and South Asian Association for Regional Cooperation (SAARC) all are in common regional platforms for their collective social, economic, cultural, and technical development. With an aim of the impetus for the social development of the member countries, those had been formed and later on issued the same currency (as regional currency) to have more financial inclusion at the regional level.

But the operating and transaction costs in rural areas are very high, and it may be solved by availing of modern banking facilities like internet banking, mobile banking, and ATMs (Ratti, 2012). Hence, all those issues need to be considered as financial inclusion has had more socio-economic development for many emerging economies during the last two decades.

This paper aims to investigate the real scenario of SAARC nations for financial inclusion. It was compared among the SAARC countries by financial inclusion index and two specific variables, as such- the number of bank account penetration and the number of automated teller machines (ATMs) established by the Banks.

## **II. Review of Literatures**

Financial inclusion strategies are aimed at increasing the number of people having bank accounts for bringing in their savings and investment in the formal financial system. It also stimulates the usage of formal and modern banking usage tools e.g. ATM, net banking, and mobile banking. Financial inclusion can be achieved easily if the adult population has easy access to financial services at an affordable cost. People with higher financial awareness have greater chances of getting better financial services by optimum utilization of their savings and investment (Chattopadhyay, 2011).

Getting any kind of service is naturally difficult in many developing nations in the world because of a lot of limitations. The SAARC countries are mostly developing in nature with a lot of socio-economic and political problems. In recent times, all those countries have tried to develop the development of their rural and remote area as part of master development projects. Annan (2003) remarked that people living on low incomes cannot access mainstream financial products such as bank accounts, low-cost credit, remittances and payment services, financial advisory services, insurance facilities, etc. It urged that the great challenge is to address the constraints that exclude people from full participation in the financial sector/s.

Kelkar (2010) stated that rural cooperative banks, micro-financial inclusion, and postal banking services played an important role in increasing the level of financial inclusion in developing nations. The rural banks have a greater role in bringing the people into the formal banking system and then utilizing their role positively for the faster development of the banking system, as well as the overall economy. In this way, the impact of monetary policy changes was implicitly reflected on the rural households as they were affected in terms of their savings and investment decisions (Kumar, 2013).

Bozkurt, *et. al.* (2018) conducted spatial regression and spatial panel data models that control for spatial interdependence. The results show that social, banking and political factors play an important role in the determination of change in financial inclusion. It also discussed financial inclusion convergence among the countries.

Anwar *et. al.* (2017) also conducted a paper to construct an index of financial inclusion (IFI) in South Asian countries. It concluded that, despite the growing recognition of financial inclusion across countries, the literature on measuring financial inclusion position among South Asian countries is still scanty. It reflected the comparative position of financial inclusion among the countries in South Asia based on an index of financial inclusion which had been calculated for six South Asian countries for the year of 2004 to 2015 using the data provided by a financial access survey by the International Monetary Fund (IMF) and Global Index (GI) database. The position of India and Bhutan are found at a satisfactory level but Pakistan and Afghanistan lag in financial inclusion due to a lack of usage of formal financial services by their country people compared to other South Asian countries.

There have been many studies that explain how financial inclusion is supported to grow a nation's economy that has already been developed. However, this paper has tried to compare SAARC countries with updated data and present the sequential order according to the achievement of those countries.

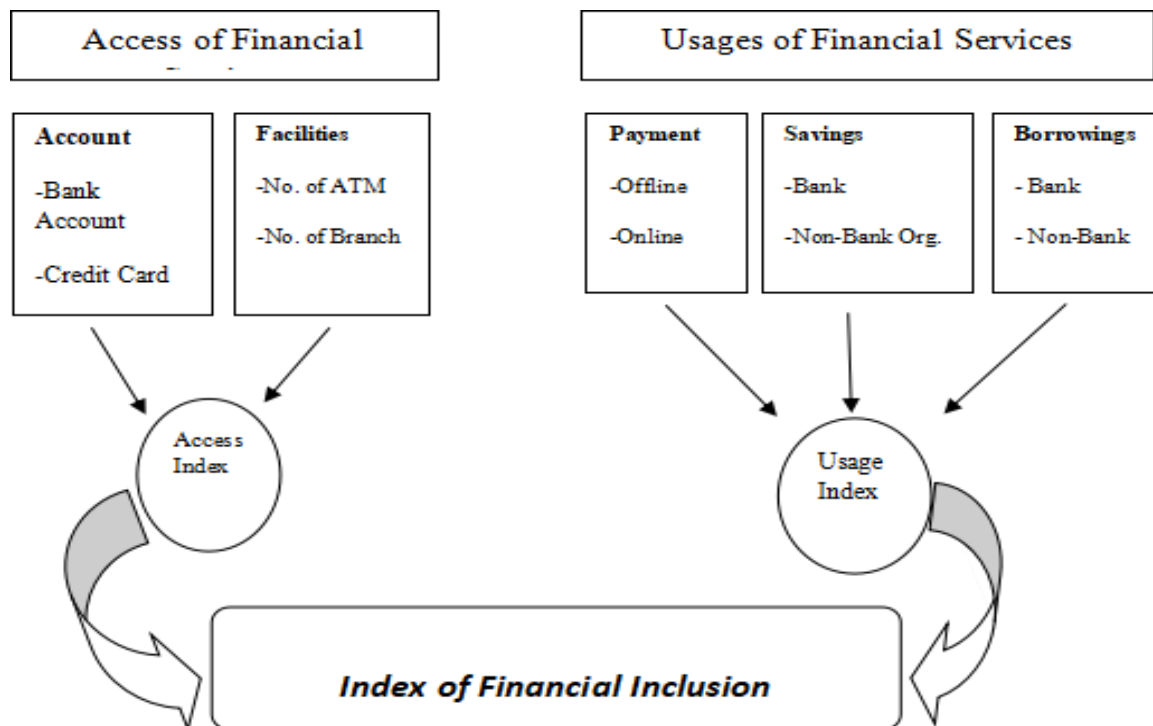
### **III. Research Methods**

This study has been carried on to analyze the ins and outs of financial inclusion in the context of SAARC nations. All data has been collected from secondary sources such as articles from journals, newspaper columns, annual reports published by international agencies, etc. A simple excel spreadsheet has been used to analyze and organize data for comparison of the different SAARC countries. The PCA (Principal Component Analysis) method has been used for financial inclusion (FI) index construction. Graphs are prepared for ease of presentation. It ranked the status of these regional nations in case of achievement/observation in financial inclusion based on the index and two other individual variables

### **IV. Results and Discussion**

Financial inclusion indicators can be used to help set national financial inclusion targets and monitor progress in reaching everyone. Hence, country-level data and diagnostic assessments inform the design and help sequence reforms, and the same data also helps the private sector improve the design and delivery of financial services. The main types of indicators to consider when measuring financial inclusion are- access indicators, usage indicators, quality measures, etc (WB, 2015).

However, Bozkurt, *et. al.* (2018) investigated the factors generating changes in the financial inclusion levels based on data from 120 countries between 2011 and 2014 and developed a simple formula to calculate the index of financial inclusion across countries (See Figure 1).



Source: Bozkurt, *et. al.* (2018)

**Figure 1.** The Process of Getting Index of Financial Inclusion

#### 4.1 Comparison Based on FI Index

There is no information available on the relative importance of any particular indicator; in much research, the PCA (Principal Component Analysis) method for index construction was preferred. Various researchers i.e. Hussain & Chakraborty, (2012); Lenka & Sharma, (2017); Murthy *et. al.*, (2014) have adopted a similar methodology in index construction.

As such:

$$FI = 0.702X_1 + 0.858X_2 + 0.709X_3 + 0.78X_4 + 0.597X_5 + 0.758X_6, \quad (3)$$

Where

$X_1$  = ATMs per 1,000 km<sup>2</sup>

$X_2$  = ATMs per 100,000 adults

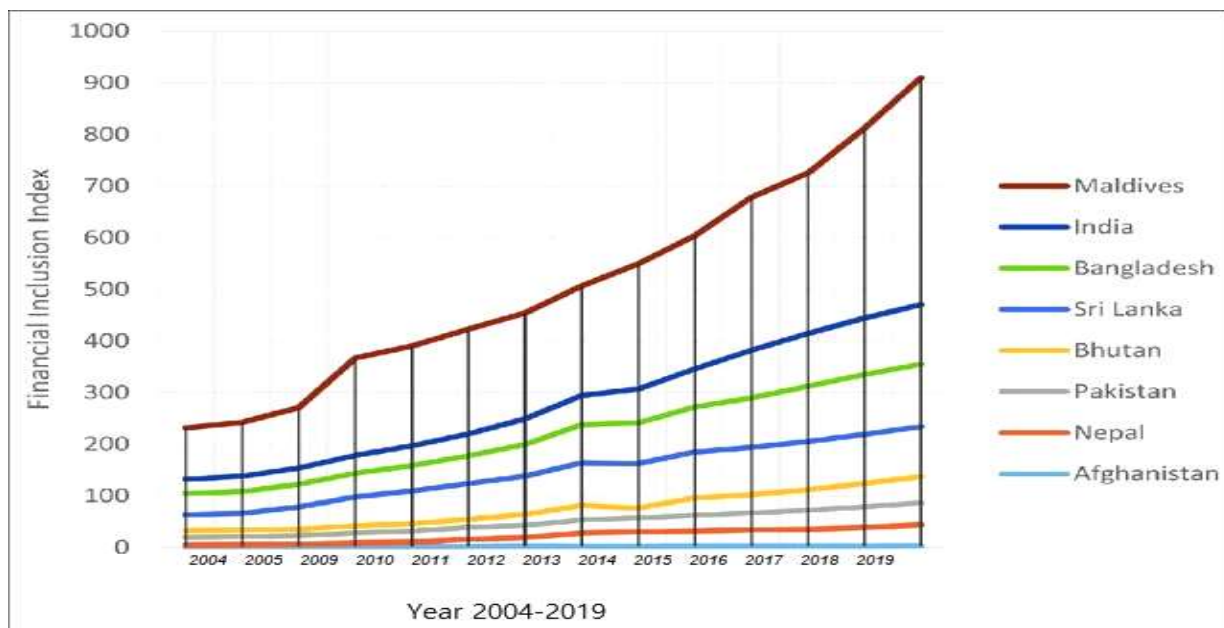
$X_3$  = Branches of commercial banks per 1,000 km<sup>2</sup>

$X_4$  = Branches of commercial banks per 100,000 adults

$X_5$  = Outstanding deposits with commercial banks as a percent of GDP

$X_6$  = Outstanding loans with commercial banks as a percent of GDP

In the above equation, FI is the financial inclusion index; coefficients are factor loadings of the first component and  $X_i$  represents variables representing indicators of financial inclusion. However, Singh (2020) has used the PCA method for the construction of a financial inclusion index using the selected indicators and presented the figure as follows-



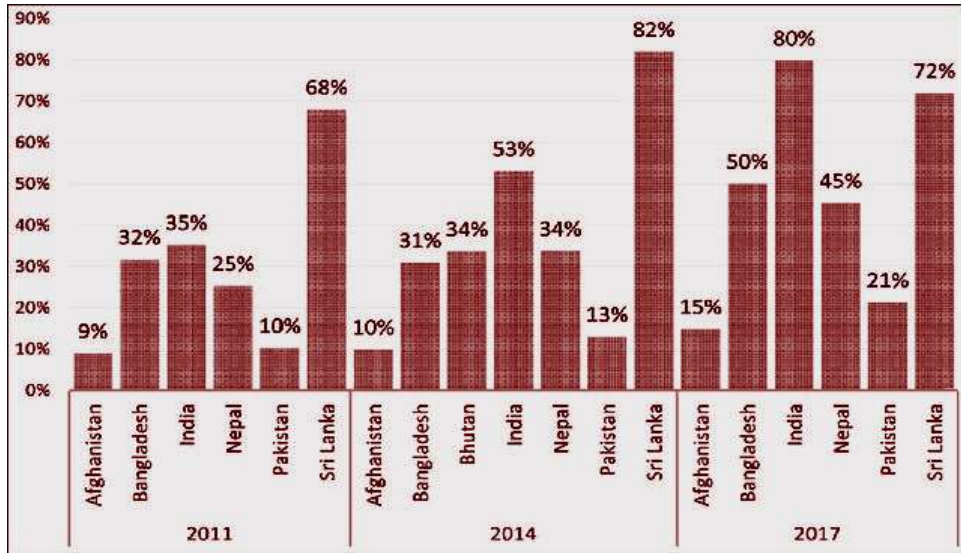
Source: Singh (2020) with authors' modifications

**Figure 2.** Estimation of FI Index in SAARC Countries (2004–2019)

Figure 2 has shown gradual improvement in the FI status of mostly SAARC countries. During the sample period 2004–17, among all those nations, the Maldives had the highest ranking in the FI index, whereas Afghanistan showed the lowest FI ranking. Bangladesh and India stand at numbers two and three, respectively. Since 2014, India and Bangladesh have shown significant improvement in their FI status as compared to other SAARC nations, while Nepal, Pakistan, and Afghanistan are the bottom three countries on the list.

#### 4.2 Comparison based on Bank Account Penetration

Financial inclusion is on the rise globally in multiple ways. The World Bank's Global Findex Database (2017) shows that 1.2 billion adults have obtained an account since 2011, including 515 million since 2014. Between 2014 and 2017, the share of adults with an account with a financial institution or through a mobile money service rose globally from 62 percent to 69 percent. In developing economies, the share rose from 54 percent to 63 percent. Yet, women in developing economies remain back to having a bank account compared to men even in this digital technology era (WB, 2017). A general comparison of bank account penetration (15 years+) people had conducted in the following figure-



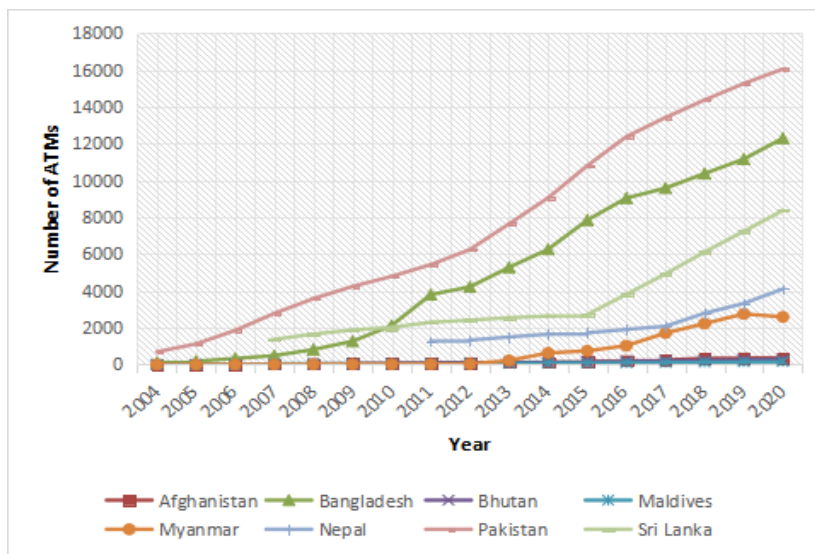
Source: Demircuc-Kunt *et. al.* (2018)

**Figure 3.** Number of Bank Account Penetration (Year 15+) in SAARC Countries

Figure 3 shows the percentage of account holders in SAARC countries in different years. In 2011, India was the second highest (35%) on the list, where Sri Lanka was in the first position (68%) and Bangladesh was third (32%). In 2014, Sri Lanka (82%) and India (53%) were in the first and second positions respectively. But Bangladesh (31%) lost its position, both Bhutan and Nepal jointly took the third position (34%). In the year 2017, India(80%) became the first position, Sri Lanka (72%) became the second position, and Bangladesh (50%) took the third position.

#### 4.3 Comparison based on Automated Teller Machines (ATMs) Setup

With science and technology development, human life becomes easier. Automated Teller Machine/s along with Cash Deposit facilities (the updated version of ATM) make banking convenient. A bank account holder may access his account via an ATM in both rural and urban areas forgetting the time frame as it is available 24/7 round the year. The ATMs setups in many SAARC countries during the last two decades have been raised a lot (See figure 4).

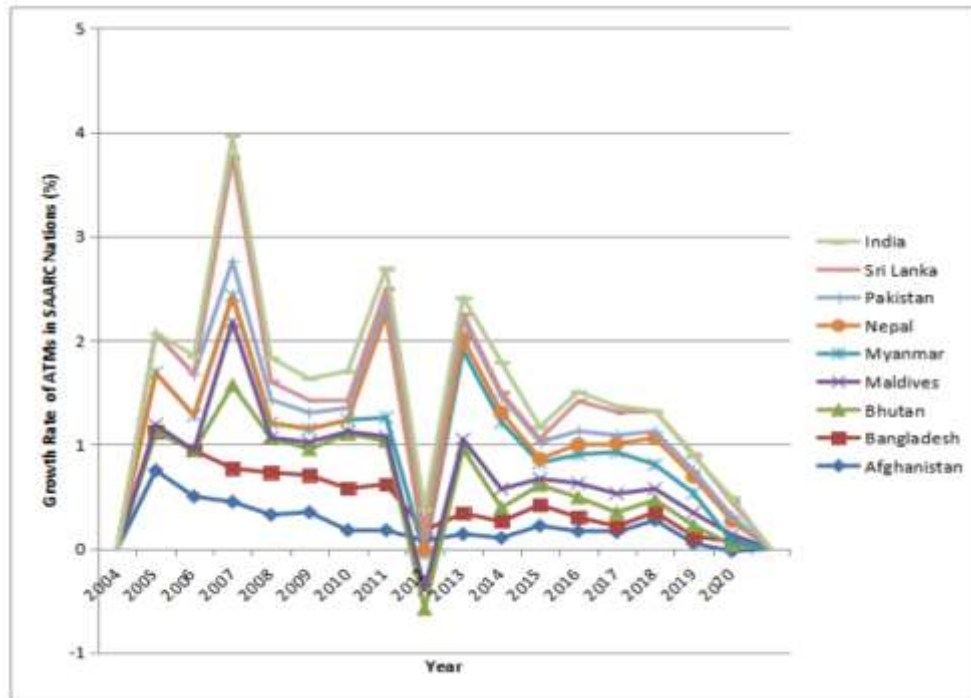


Source: IMF (2021)

**Figure 4.** Number of ATMs Setup in SAARC Countries (2004-2020)



Figure 4 shows Pakistan, Bangladesh, and Sri Lanka are first, second, and third in position respectively. This graph did not consider India because both the size of land and population is very large compared to other SAARC nations (See appendix 1). However, the growth rate of ATMs set up in India was also very high (See figure 5).



Source: IMF (2021)

**Figure 5.** Growth of ATMs among the SAARC Countries (2004-2020)

Figure 5 describes the growth rate of many SAARC nations including India. For the last two decades, mostly India, Sri Lanka and Pakistan stood in the top positions respectively with some fluctuations. Two main points are to be noted, i) after 2012, all SAARC nations had invested less amount compared to previous years to set up ATMs as the growth rate was found negative (up to -0.5). ii) All the banks of those countries had reduced plans to set up ATMs after the year 2018, and since the covid-19 pandemic started in 2020, the growth rate continued towards a negative trend.

## V. Conclusion

Financial inclusion is generally defined as ensuring access to formal financial services at an affordable cost fairly and transparently. It brings the rural people into the mainstream banking fold who did not have banking access. In addition, financial inclusion is a necessary condition for the sustainable and equitable growth of an economy (Chakravarty & Pal, 2013). Considering the FI status in SAARC countries, India, Bangladesh, Sri Lanka, and Pakistan are in the top positions while Bhutan, Nepal, Maldives, and Myanmar have in the back positions, and Afghanistan is always found as the lowest lower compared to other SAARC nations. As financial inclusion supports economic mobility, trade, commerce, e-business, and traditional business; there are lots of spaces and scopes for massive improvement of financial inclusion in all these countries. Nonetheless, further studies are required to prepare policy guidelines to fix up all those issues not only at the national level but also regional level as well.

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