# Financial Deepening in South Asian Countries: Major Determinants

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**Abstract**

**Purpose-** South Asian countries are in nascent stage of their financial deepening and launching the gradual steps for financial dimensions to gear up the overall financial system. The present study accounts for the financial innovation carried out in south Asian countries in past two decades and measures the financial deepening for different periods. The study also identifies the structural shift in financial systems of these economies and underlines the thrust areas for advancement of financial deepening.

**Design/methodology/approach-** The study exploited principal component analysis (PCA) for a dataset of South Asian Countries viz. Bangladesh, India, Sri Lanka & Pakistan, over the period 1988-2012.

**Findings-** It is found that India financial system has shown consistent growth over the period of time, but got affected in the global financial crisis, whereas Bangladesh financial system has been able to maintain robust growth after 2007. Pakistan saw a better development in beginning of twenty first century but got burst in the recent global financial crises. Sri Lanka has witnessed various ups and downs in its financial performance for the sample period. The financial markets based environment seems to have vibrant role in the overall financial development of India and Sri Lanka.

**Practical implications-** From the perspective of various dimensions of financial system, these economies are still in evolving stage in relation to developed countries. The status of financial system has potential to focus on the size, activity, efficiency and resource allocation pattern to further strengthen their systems.

**Originality/value-** The paper quantifies the financial deepening of the system in various dimensions over the period. This information may be quiet useful for the decision makers to understand the dynamics of financial development of sample economies and thereby devise the policies for next advancement.

Research Limitation: Present study has scope to extend the analysis for recent developments in financial markets viz. derivative markets and bond market.

JEL Classification: N35, N45, G10, G20

**Keywords:**

Financial sector, financial deepening, Principal Component Analysis, Financial Policy

## Introduction

The identification of key economic growth drivers has been a matter of concern for academicians and policymakers since last few decades. Existing literature has laid down various measures for growth trajectory such as investment, trade openness, labour productivity, etc. Meanwhile, it was contended that the deepened financial system is an important peripheral factor along-with primitive inputs for the economic growth. Schumpeter (1912) was among the few who highlighted the explicit role of financial sector in economic development. He described that financial intermediary especially bank facilitates in funding the most successful projects. Bagehot (1873) argued that a major difference between England and other poorer countries was the mobility of resources by the financial system through its network. It is also held that it is not only the saving rate of a nation that induces economic growth, but the ability to pool society's resources and allocating those savings toward the most productive ends. The role of financial development in economics growth has been attributed through capital accumulation (Greenwood and Jovanovich; 1990), acquiring information about the feasibility of investment projects (King and Levine, 1993), improvement in corporate governance (Bencivenga and Smith, 1993), Fundamentally the role of financial sector is to process the information and reduce risks and uncertainty associated with investment, and so guides the funds to invest in most productive assets and consequently enhances the economic growth. Moreover, enhanced financial development promotes financial stability and safeguards the economy from adverse shocks (IMF, May 2015).

The above studies primarily focused on the capital accumulation, screening firms, monitoring firms and corporate governance dimension of financial system. Besides, some of other studies focused on the liquidity risk that impediment the investment in productive assets as investors do not want to relinquish the control of their savings for long period. They prefer to make investment in most liquid assets which are relatively less productive. In this perspective, financial sector development provides an offset for investment between the illiquid and productive assets and so affects growth (Diamond & Dybvig, 1983). Greenwood and Smith (1996) highlighted the concept of exchange, specialization and innovation. They argued that financial arrangements facilitate transactions by lowering the transaction cost and provides greater specialization, thus affects the economic growth. Devereux and Smith (1994) demonstrated that stock market provide a vehicle for diversifying risk and thus influence growth by shifting investment into higher return projects. In brief, financial system plays a vibrant role in an economy via mobilizing saving, acquiring the information, monitoring managers & exerting corporate control, reducing risk and facilitating exchange (Levine, 1997). In a sectoral level study in 41 economies, role of finance in economic growth is identified to a certain level (Aizenman, Jinjarak, and Park. 2015).

The above cited studies along with many others suggest that we cannot ignore the role of financial sector while hashing out the policies related to the economic growth. In light of the observations and reasons given in the existing literature, the strengthening and deepened financial sector has become key concern for development of a country. Financial deepening has multi-fold dimensions viz. depth (size, and liquidity of market), ability of individual to access financial services and the efficiency of the institutions to provide financial services at low cost and with sustainable revenue, and the level of activity of the capital market (Anuli and Dennis, 2017). With multiple dimensions of financial development, mature economies have grounded the policy actions to diverse areas viz. banking, financial markets, pension funds and bond markets and have succeeded in bringing the financial development. However South Asian countries are in nascent stage of their financial deepening and launching the gradual steps for financial dimensions to gear up the overall financial system. The present study accounts for the financial innovation carried out in south Asian countries in past two decades and measures the financial deepening for different periods. Most of studies have tried to capture the finance-growth nexus however little attempt has been made to capture the inter-temporal shifts in financial system emanated through financial innovation.

South Asia has caught worldwide attention due to sustained growth rate of more than 5 percent for last decade, and emerged as a new growth pole in the world economy. It considers the sample of South Asian economies viz. Bangladesh, India, Pakistan and Sri Lanka. Hoskission et al. (2000) classified these countries as emerging economies of Asia. The study also identifies the structural shift in financial systems of these economies and underlines the thrust areas for advancement of financial deepening. It will serve the purpose of policy makers to understand the dynamics of financial system for next betterment of financial development. The study is organised as: firstly highlights the economic performance of select economies during past four decades; secondly discusses the methodology of the study; thirdly identifies the prominent factors for financial development and discusses the inter-temporal financial development. Finally the whole discussion of the study is concluded.

**Economic Performance of South Asian Countries**

The present section highlights the inter-temporal economic performance of South Asian economies embodied in the major economic fundamental indicators. The performance of past five decades ranging from 1960-2012 has been described. The sample period is classified into various sub periods to get better insight about the economic behavior of region economies. The performance of various economic indicators for these economies in descriptive form is exhibited in Table 1.1 and 1.2.

Bangladesh economy grew at the rate of around 5 percent during 1960-65. The economy recorded negative growth rate during 1971-75, might be the result of closed state intervention mechanism. Prompted by this lower growth, the economy undertook economic reforms in 1976 that facilitated it to achieve the stable growth rate of about 3-4 percent till mid-1990s. The economy has enabled consistent growth in fixed capital formation and savings however, their shares remain small in relation to GDP. In recent years it has maintained the average growth rate of more than 6 percent, and even per-capita GDP growth is also more than 5 percent which indicates the improvement in the living condition of the people. The country moved from the deficit current account to surplus account. On foreign investment front, the quantum is smaller but it has increased substantially in the recent years (Table 1.1).

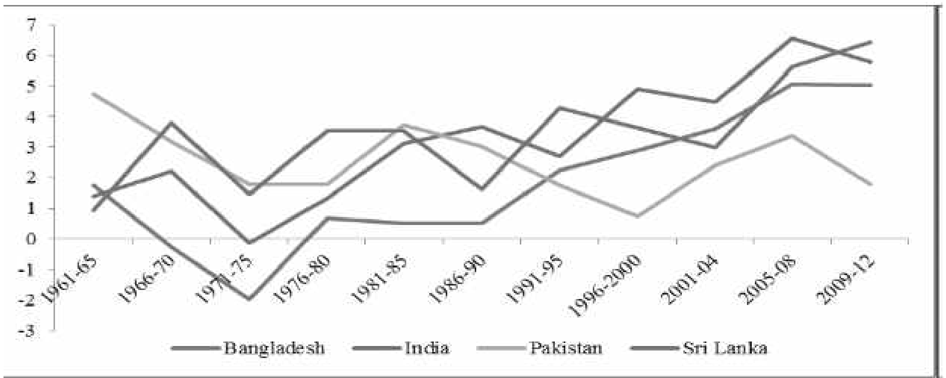
India is the largest economy of the region, and in recent past emerged as one of the leading economy of the world after China. Indian economy expanded narrowly with GDP growth rate of 3 to 4 percent during 1960-80. It has experienced improved growth after adopting market friendly economic reforms in 1991. These reforms were introduced in order to overcome the balance of payment crisis in **1990.**[i] The major reforms were targeted to make the system market friendly, and included fiscal reforms, domestic liberalization and opening-up the economy. After the structural adjustment programme of 1991, the economy accelerated from GDP growth rate of less than 5 percent to more than 6 percent and recorded higher than 8 percent growth in 2005-08. For the same time the per-capita growth rate has also been robust indicating a sign of well-being of the Indian people. The increasing trend of capital formation accelerated the growth trajectory (almost 9 percent) of the economy in recent years. In mid of 1990s, the economy also embarked on financial sector reforms in the form of deregulation of interest rates, freeing of pricing restriction on the new issue of stocks in the market, creating a healthy competition in banking sector by allowing private and foreign banks, etc. As part of reforms, restriction on banks regarding credit allocation and state interventions were abolished and capital account opened up. On investment front, India emerged as an important destination for the foreign investors. The FDI (percentage of GDP) has increased substantially from 0.14 percent in early 1990s to 2.14 percent during 2005-08 (Table 1.1). On external front India has continuously faced the challenge of deficit current account. The gap has narrowed prior to the global crisis but has again widened in 2009-12. In the recent environment, with large deficit coupled with the withdrawal of foreign capital amid lower confidence building, India is suffering from the huge depreciation of its currency, and Government of India is struggling hard to manage the same.

Pakistan had attained the growth rate of more than 7 percent during 1960-65, and has managed a sound growth for longer period till 1990 (Table 1.2). After this, the growth rate of the economy faced sluggishness and declined to 3.4 percent during 1996-2000. Pakistan undertook ambitious financial sector reforms in early 1990s, aimed to reduce the government intervention in the system, and in the process wide range of reforms launched in 2000. The fiscal adjustment, banking sector reforms and trade reforms were the part of major reforms. The economy has grown with 5.3 percent prior to the global financial crisis but reported lower growth after that crisis, meaning by that economy is well exposed with rest of the world. In terms of improvement in living condition of the people as proxied by per-capita growth, the economy could not perform very well. Even Pakistan has a challenge of lower level of its productive capacity as measured by gross fixed capital formation as percentage of GDP. Pakistan economy is getting significant amount of foreign investment that offsets the widened current account deficit and settles the overall balance of payment of the economy.

Sri-Lanka economy has been experiencing ups and down since 1960s. These variations in the economy might be associated with fluctuation in capital formation as well as performance of financial system. The economy has undergone with major economic reforms in 1977 that provided marginal gain to the growth of economy. Sri-Lanka was first to commence the financial sector reforms in the region in early 1980s. These reforms supported the economy to increase its growth. The economy is able to maintain the growth rate of more than 5 percent since last decade. Sri Lanka has been passing through a large current account deficit however attracted substantial foreign investment (Table 1.2).

South Asian economies showed upward trends in the per-capita GDP growth over the period of time except Pakistan. In early years of 1970, all the select economies reported decline in growth rate. India emerged as the highest growth achiever among South Asian economies (Figure 1). Economic reforms of 1991 provided a new path to the Indian economy and since then, it is growing with upward trend. Indian and Bangladesh economy were able to maintain its growth momentum amidst the Asian financial crisis whereas Sri-Lanka and Pakistan affected marginally.

**Figure 1 Per-capita GDP Growth Rates (%) of South Asian Economies**




Source: Authors' Compilation from WDI 2013.

## Methodology

**The methodology of the study is given as under:**

***Data and Resources***

The present study has tried to gauge the financial development of the south Asian economies by considering the various dimensions of finance in light of given literature. These dimensions of financial development are size of financial system, role of intermediaries and financial markets, allocation pattern of resources, etc. The size of financial intermediaries is quantified through liquid liabilities as percentage of GDP (M3). The functioning of financial system is proxied through the deposit banks domestic credit as percentage of total assets (BANK) The allocation pattern has been measured through the ratio of credit allocated to private enterprises to total domestic credit (PRIVATE); credit provided to private enterprises as percentage of GDP (PRIVY) and bank credit to private sector (BCRDT). The selection of these parameters is grounded on existing literature (King & Levine, 1993; Levine, 1997; Beck *et al.*, 1999).

The above stated indicators are suitable to understand the financial intermediaries' dimensions. However, financial markets 'performance is equally important as it plays vital role in risk diversification, amelioration of liquidity risk without affecting the financing needs of promising projects. The role of financial market is measured through the size, activity and efficiency. The market size is quantified through market capitalization as share of GDP (MC) (Levine & Zervos, 1998), activities are reflected through value of domestic equities traded on domestic exchange to the GDP income (STVR) is utilized (Kunt & Levine, 1999) and to gauge the market efficiency value of trades of domestic equities on domestic exchanges as a share of the value of domestic equity or market capitalization (TR) is considered.

***Data Sources***

The study is based on secondary data extracted from international sources such as World Development Indicators, International Monetary Fund publications, Asian Development Bank publications (e.g. Key Indicators for Asia and Pacific 2013). **The consistent data for different dimensions of financial development are available from 1988 onwards for these south Asian economies.**

***Method of Analysis***

The study utilized principal component analysis method to present the multiple dimensions of financial development into single dimension. The PCA utilizes the variations among the variables to construct the composite score without losing much information. The brief procedure of principal component is given as under:

First requirement is that variables which meant for analysis should be standardized. They are standardized as:

$$Z_{it} = (Y_{it} - E(Y_i))/SDY_i \qquad (1)$$

Where $Y_{it}$ = base series, $E(Y_i)$ = mean of $Y_{it}$, $SDY_i$ = standard deviation of $Y_i$

The principal component would be the linear combinations of individual financial development indicators. The details of the research method are given in the Fritz (1984).

After the identification of appropriate components which explain about 80 percent of data variance, the computed score of PCA for financial development is transformed for its mean value of 100 using the method developed by

George (1980) Fritz (1984) considered this methodology as superior for quantifying the financial deepening. The index is computed after considering the due weightage of each financial indicator.

### Financial Deepening in South Asian Economies

Based on above mentioned technique, results of financial deepening for individual country are presented as follows:

#### Bangladesh

Bangladesh economy had broadly relied on institutional environment in early 1990s as the size and activity of financial markets were very small. The market capitalization as percentage of GDP (MC) and stock traded value ratio (STVR) had been less than 2 percent for each during 1988-92 and even could not secure the double digit value of these variables till 2007 (Table 2). The average figures of these variables had been around 7 percent and 5 percent respectively during 1998-2012. For the same period, the size of institutional environment had been almost half of the Gross Domestic Product (GDP). The commercial banks had also involved actively in the credit creation process as reflected in their assets' proportionate of total banking assets, which ranging between 80 to 90 percent for the sample period. The results also suggest that the role of commercial banks has increased over the period of time, however the size of the institutional environment is not large enough and needs further expansion. The resource allocation has improved as domestic credit to private sector (percentage of GDP) and credit provided by banking sector has continuously increased. The impact of financial crisis of 1997-98 can be observed in the decline in the value of private credit as percentage of total credit. It has made little bit ambiguity in the resource allocation pattern as credit to private sector (percent of GDP) increased but credit to private sector (percent of total credit) has fallen (Table 2). This observation indicates the struggling of private sector in sharing banking sector resources. All the select financial indicators have shown a surge in the recent years amidst the global financial disturbance.

An attempt is also made for variable wise presentation of financial indicators for all the select economies (Table 3). In terms of performance of financial markets, it is found that India holds better development in size, activity and efficiency compared to the level of Bangladesh, Pakistan and Sri Lanka. Similarly, India attained higher level in financial institutional environment. But Bangladesh has outperformed in terms of the growth of financial indicators particularly in resource allocation over the period of time. Sri Lanka is giving a well competition to India in terms of private credit allocation out of the total credit.

To get the aggregate view of various dimensions of the financial development, the PCA is utilized to convert them into single composite index. The results in Table 4 indicate that three factors derived from eight variables explain almost 90 percent behaviour of the financial development of Bangladesh. So they may be used as representative of financial development. These factors are further summarized into single construct using the above discussed method. In the combined score, variables BANK, PRIVATE and market capitalization (MC) hold more weights in the financial deepening. The composite index had attained the value of 83.2 in 1988 and with continuous surge it reached to the value of 101.6 in 1995 **(Table 5).**[ii] The economy experienced a dip in the financial performance during the Asian financial crisis. After 2003, the system has shown a continuous surge and reached to highest level of 124.8 in 2010 and maintained its momentum in the financial shocks period of the world economies. It reflects the positive sign of development in financial system of the economy. The average value of the index accelerated to higher side after the Asian financial crisis. It may be inferenced that the economy has learned meaningful lessons from the crisis and accordingly put the things in place for financial development.

#### India

Indian financial system had been characterized by institutional environment in early 1990s. For this period, market-based system was on lower side in terms of size and liquidity, while the banking system was comparatively well developed. After the launching of key economic reforms in 1991, financial markets could show their significant position in the financial system. The same is confirmed with the increased value of activity and efficiency indicators in the beginning of 21st century (Table 2). The performance in terms of its turnover ratio and stock traded value ratio reached at highest level of 307 and 107 respectively in 2000. The size of financial market attained its highest value in 2007 as the MC ratio rose to 146. On institutional environment front, India reported consistent growth in terms of participation of commercial banks, size of financial institutions and activity of institutions. The value for liquid liabilities as percentage of GDP increased from 44 in 1988-92 to 80 in 2008-12. The figures in Table 2 also suggest an improvement in resource allocation as credit provided to private sector has been doubled from 1988-92 to 2008-12.

Based on eigen value criteria of factor analysis technique, two factors are selected and utilized to compute the financial deepening index. These factors jointly explain 90 percent of total variance. Different variables have different weights based on their importance. TR and STVR variables from the financial market front, and commercial bank participation (BANK) from institutional side, hold the highest weights (Table 4). It indicates that the financial markets' liquidity and efficiency, and commercial banks' participation play a crucial role for deepened financial system in India. The computed index highlights that the financial deepening had been low in early 90s, but had shown upward movement till 2000. The economy was able to maintain the same level of financial development amid the Asian financial crisis. This growth performance was mainly contributed by surprising performance of market-based system specifically for improvement in the liquidity and efficiency of the market. Indian financial system was affected by the slowdown of 2001 as the index value declined to 105 in 2001 from its level of 119 in 2000. After that India enjoyed a period of high economic growth (around 8 percent) along with the consistent surge in financial development. But with the existence of global financial crisis, particularly after the sovereign debt crisis Indian financial system reported downward trend. Despite the strong financial disturbances in the world economy in the recent past, Indian financial system could mark for higher than the average value of index (100) with greater stability. It indicates the robustness of Indian financial system.

**Pakistan**

The Pakistan financial system was weighted more by institutions in early 1990s as evidenced from relatively lower size of financial market which was observed about 10 percent of GDP, and the activity indicator found as 1 percent during 1988-92 (Table 2). Since 2003, the Pakistan economy had witnessed a sharp surge in the role of financial market. The turnover ratio had increased from less than 10 percent in early 1990s to remarkably 329 percent during 2003-07. The figures of market efficiency indicator observed for higher side, but with relatively smaller size of the market. The Pakistan financial system had been relatively occupied by financial institutions throughout the sample period. Various indicators of institutional based system had shown improvement over the period except marginal decline in the Asian financial crisis period. On resource allocation front, the financial system is lacking as domestic credit to private sector is about one fourth of GDP. The ratio of private credit to total credit had been hovering around 50 percent. It indicates that there is much allocation of resources to the public sector. Extending credit to public sector instead of private sector gives fewer incentives to the financial intermediaries to acquire information and monitor managers. It raises the question of effective functioning of financial system. More interestingly, most of the financial indicators showed substantial decline in their values for the period 2008-12 compared to the level of 2003-07. It states the more exposure of Pakistan financial system with rest of the world economies.

In the composite score of financial development, around 90 percent of communality variance is contributed by two factors where MC, liquid liabilities and PRIVY are having weights of more than 3 for each one (Table 4). It reflects that size of financial system and funnelling of credit to private sector are enhancing the overall financial development. The variables having lowest weights are TR (-1.5) and banking sector credit (0.9). The overall financial deepening index stood more than 90 in 1988, but suffered decline for next two years (Table 5). In the following years some positive sign noticed with the index value and moved to level of 104.6 in 1997. But the Asian financial crisis affected the financial performance as the index value declined continuously thereafter and reached to 82.7 in 2001. After 2001 the things became more favorable for the financial system as the index value moved to its level of 127 in 2007. Again, the index values declined substantially and reached to less than 90 in 2012. It can be well stated that Pakistan's financial system is found for more prone to the financial shocks. From the weights of different financial indicators in financial deepening index, it may be inferenced that institutional environment has played relatively more role in the overall development in financial system of the country. The resource allocation indicators suggest that there is enough space for their improvement to accelerate the financial system.

**Sri Lanka**

In light of given parameters of financial development, it is stated that Sri Lanka's financial system had been small in terms of size for the sample period. Financial market was smaller in size with around 15-16 percent of the GDP. The liquidity of the market was also very low as it was less than 1 percent of the GDP during late 1980s (Table 2). With the smaller size and activity of financial market, efficiency also remained a serious concern. In mid-1990s some positive sign of development in financial market was observed but the financial crisis affected the market adversely. After the crisis, marginal growth was noticed in the economies' financial market but the size, efficiency and liquidity are still at lower side. The values of financial market indicators had not changed much throughout the sample period as the size of market is still one fourth of the GDP and activity is less than 5 percent of GDP. Compared to financial market, institutional environment appeared to be the key contributor to satisfy the financing needs of business houses. During 1990s, about 15 percent of GDP was allocated to private sector. Out of the total credit, private sector received a significant part (around two fifths) for the same period. Over the period of time, credit allocated to the private sector enjoyed some improvement but it is questionable as around only one third of the GDP goes into the hands of private sector in the form of financial assistance. The role of deposit money banks are significant in the financial system of the economy however, financial institutions other than banks are still dominating. Since 1990s, most of the institutional environment showed consistent growth except the global financial crisis period. But the major concern lies in the form of lower size, activity and efficiency of Lankan financial system. In light of given indicators, it may be stated that financial system has wider scope to expand in various dimension including resource allocation.

To measure the financial deepening, three factors are identified based on eigen value criteria explaining 89 percent variance of the communality. Among these factors, financial market-based variables are getting relatively more weights than the institutional-based variables. The respective weights for TR, STVR and M3 are 10.0, 6.4 and 6.2. Two variables occupy the negative weights i.e. bank credit (-7.3) and privy (-2.9), due to imbalance with the other indicators. Based on combined weights, it can be hailed that financial markets' indicators strengthen the overall financial system. The practical exposure of Lanka in terms of size and activity of financial markets is very limited. It offers a superb opportunity for Lankan economy to widen the financial market along with activity to enhance the overall financial development. On the ground of financial intermediaries, economy should strike a balance with the other indicators of financial development. At aggregate level, Sri Lanka's financial deepening had been far less than its average level in late 1980s as the index was lower than 75 (Table 5). In early years of 1990s, the economy realized positive developments in its financial system, but the system moved with ups and down. In the Asian financial crisis years, the system could manage its rhythm, but showed a sharp dip in 2000. Again financial system became more deepen during early years of 21st century but its performance got affected in 2006. Passing with a dip in the global financial crisis period, system recovered in 2010 but again halted in 2012. Overall, Sri Lanka handled smartly its financial performance in Asian economic shocks of 1997 and 2001, but could not manage well during the global financial crisis period. The index value is relatively more weighted by market-based system and hence active policies related to the development of financial markets may enhance the overall financial development of the economy.

## Conclusion

It is found that financial institutions occupied the major role in financial system in the earlier 1990s for South Asian economies. The experiences of developed countries presented the facts that, when an economy moves towards development, the financial markets begin to play relatively active role in the financial system. The South Asian economies are also exhibiting the similar type of economic phenomenon. The financial systems of all the sample economies are smaller in depth. Some of the economies of the region like Bangladesh and Sri Lanka have least role of financial markets in the system. Moreover, due to background of centralized system, the allocation role of financial system still need to be enhanced as less resources are mobilized towards private sector. Based on combined score of different indicators of financial development, it can be inferenced that market-based indicators are boosting the overall financial development in India and Sri Lanka. In Bangladesh and Pakistan, financial system is attended by both types of environments. India financial system has shown much consistent growth over the period of time, but got affected in the global financial crisis whereas Bangladesh financial system has been able to maintain robust growth after 2007. Pakistan saw a better development in beginning of twenty first century but got exposed with the recent crises. Sri Lanka is observed for various ups and downs in its financial performance for the sample period.

The financial system has emerged as one of the strongest medium of expressing the economic interest in modern economic system. These economies of South Asian region are now in the process of modernising their systems through further reforms in the form of structural adjustment programme. The trends in the financial performance indicators suggest that the role of financial system in the overall economic activities has increased in recent years. From the perspective of various dimension of financial system, these economies are still in evolving stage in relation to developed countries. The status of financial system has potential to focus on the size, activity, efficiency and resource allocation pattern to further strengthen their system. The favourable condition for these economies is that of enjoying the luxury of experiences of developed countries to introduce financial innovation in their system. These innovations lead to increase in savings and can accumulate capital, which is the key determinant of economic growth.

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**Table 1.1: Economic Performance of South Asian Countries**

| Year | GDP Per-capita* (Growth %) | GDP* (Growth %) | GDS[1] | GFCF[1] | CAB[1] | FDI[1] |
|---|---|---|---|---|---|---|
| **Bangladesh** | | | | | | |
| 1961-65 | 1.75 | 4.72 | 8.52 | - | - | - |
| 1966-70 | -0.28 | 2.85 | 8.48 | - | - | - |
| 1971-75 | -1.99 | -0.18 | 2.34 | - | - | 0.02 |
| 1976-80 | 0.69 | 3.22 | 1.46 | 14.50 | -3.00 | 0.03 |
| 1981-85 | 0.50 | 3.24 | 6.28 | 16.55 | -2.50 | 0.02 |
| 1986-90 | 0.50 | 3.20 | 9.20 | 16.41 | -2.10 | 0.00 |
| 1991-95 | 2.25 | 4.60 | 11.98 | 17.52 | 0.10 | 0.02 |
| 1996-2000 | 2.89 | 5.01 | 14.63 | 20.73 | -0.90 | 0.24 |
| 2001-04 | 3.61 | 5.30 | 17.90 | 23.42 | 0.00 | 0.40 |
| 2005-08 | 5.07 | 6.30 | 17.44 | 24.46 | 1.01 | 1.17 |
| 2009-12 | 5.04 | 6.21 | 16.65 | 24.85 | 1.98 | 0.92 |
| 1961-2012 | 1.74 | 3.99 | 10.23 | 20.30 | 1.43 | 0.28 |
| **India** | | | | | | |
| 1961-65 | 1.40 | 3.49 | 13.90 | 14.31 | - | - |
| 1966-70 | 2.19 | 4.42 | 13.87 | 14.22 | - | - |
| 1971-75 | -0.14 | 2.15 | 16.24 | 14.49 | - | - |
| 1976-80 | 1.32 | 3.71 | 18.75 | 16.93 | -0.20 | 0.00 |
| 1981-85 | 3.11 | 5.47 | 18.46 | 19.03 | 0.60 | 0.03 |
| 1986-90 | 3.67 | 5.91 | 21.86 | 21.74 | -1.30 | 0.06 |
| 1991-95 | 2.68 | 4.70 | 22.75 | 22.55 | -2.10 | 0.14 |
| 1996-2000 | 4.90 | 6.76 | 23.21 | 23.72 | -1.20 | 0.62 |
| 2001-04 | 4.49 | 6.16 | 26.26 | 25.55 | -1.10 | 0.92 |
| 2005-08 | 6.56 | 8.06 | 32.18 | 31.72 | -1.35 | 2.14 |
| 2009-12 | 5.78 | 7.15 | 30.11 | 30.92 | -2.73 | 1.96 |
| 1961-2012 | 3.13 | 5.16 | 21.32 | 21.08 | -1.94 | 0.62 |

Source: Authors'Compilation from WDI and IFS, * Constant 2005 US$, "1" Percent of GDP (Current US$), Note: - Data Unavailable, GDP: Gross Domestic Product, GFCF: Gross Fixed Capital Formation, GDS: Gross Domestic Saving, CAB: Current Account Balance, FDI: Foreign Direct Investment net Inflows.

**Table 1.2: Economic Performance of South Asian Countries**

| Year | GDP Per-capita* (Growth %) | GDP* (Growth %) | GDS[1] | GFCF[1] | CAB[1] | FDI[1] |
|---|---|---|---|---|---|---|
| **Pakistan** | | | | | | |
| 1961-65 | 4.72 | 7.43 | - | 19.23 | - | - |
| 1966-70 | 3.17 | 5.98 | 9.91 | 15.60 | - | - |
| 1971-75 | 1.79 | 4.65 | 8.85 | 12.91 | - | 0.08 |
| 1976-80 | 1.79 | 5.02 | 7.45 | 16.91 | -0.20 | 0.17 |
| 1981-85 | 3.73 | 7.30 | 7.37 | 17.01 | 0.60 | 0.23 |
| 1986-90 | 3.01 | 6.43 | 9.26 | 16.95 | -1.30 | 0.43 |
| 1991-95 | 1.76 | 4.54 | 15.42 | 18.13 | -2.10 | 0.67 |
| 1996-2000 | 0.75 | 3.41 | 14.83 | 15.95 | -1.20 | 1.09 |
| 2001-04 | 2.40 | 4.36 | 16.85 | 15.26 | -1.10 | 0.86 |
| 2005-08 | 3.36 | 5.28 | 13.95 | 19.85 | -5.98 | 3.15 |
| 2009-12 | 1.77 | 3.57 | 8.18 | 13.24 | -1.30 | 0.89 |
| 1961-2012 | 2.55 | 5.29 | 11.25 | 16.48 | -3.64 | 0.78 |
| **Sri Lanka** | | | | | | |
| 1961-65 | 0.94 | 3.40 | 12.94 | 12.90 | - | - |
| 1966-70 | 3.80 | 6.25 | 12.30 | 15.86 | - | - |
| 1971-75 | 1.47 | 3.13 | 13.47 | 14.60 | -2.90 | 0.01 |
| 1976-80 | 3.53 | 5.32 | 13.83 | 17.64 | -4.40 | 0.28 |
| 1981-85 | 3.55 | 5.12 | 13.68 | 28.80 | -7.50 | 0.96 |
| 1986-90 | 1.63 | 3.17 | 12.20 | 22.91 | -5.30 | 0.55 |
| 1991-95 | 4.29 | 5.58 | 14.67 | 23.97 | -5.50 | 1.13 |
| 1996-2000 | 3.62 | 4.94 | 17.31 | 25.25 | -3.80 | 1.30 |
| 2001-04 | 2.98 | 3.45 | 15.70 | 21.19 | -1.60 | 1.14 |
| 2005-08 | 5.62 | 6.66 | 16.58 | 24.56 | -5.46 | 1.63 |
| 2009-12 | 6.42 | 6.55 | 17.53 | 25.58 | -3.49 | 1.18 |
| 1961-2012 | 3.39 | 4.83 | 14.62 | 21.92 | -4.62 | 0.88 |

Source: Authors'Compilation from WDI and IFS

**Table 2: Financial Development Indicators for South Asian Countries (Average Values)**

| Year | MC[1] | TR | STVR[1] | M3[1] | PRIVY[1] | Bank Credit[1] | BANK | PRIVATE |
|---|---|---|---|---|---|---|---|---|
| **Bangladesh** | | | | | | | | |
| 1988-92 | 1.3 | 1.8 | 0.0 | 23.6 | 15.7 | 21.7 | 82.7 | 67.6 |
| 1993-97 | 4.6 | 13.7 | 0.7 | 28.6 | 19.4 | 25.5 | 88.9 | 71.1 |
| 1998-2002 | 2.3 | 68.0 | 1.6 | 38.3 | 25.9 | 38.9 | 86.3 | 66.2 |
| 2003-07 | 6.0 | 42.3 | 2.5 | 55.6 | 33.9 | 54.6 | 88.9 | 62.1 |
| 2008-12 | 13.6 | 126.5 | 13.9 | 65.9 | 45.2 | 65.1 | 91.0 | 69.4 |
| **India** | | | | | | | | |
| 1988-92 | 13.7 | 55.4 | 6.4 | 43.8 | 24.6 | 49.9 | 66.7 | 49.4 |
| 1993-97 | 33.7 | 54.2 | 16.7 | 45.8 | 23.0 | 45.2 | 75.2 | 50.9 |
| 1998-2002 | 28.6 | 196.4 | 58.1 | 55.9 | 27.3 | 50.9 | 84.0 | 53.5 |
| 2003-07 | 79.7 | 104.4 | 61.5 | 68.2 | 38.8 | 58.7 | 96.0 | 66.0 |
| 2008-12 | 71.3 | 78.2 | 60.1 | 80.0 | 49.4 | 72.1 | 95.1 | 69.0 |
| **Pakistan** | | | | | | | | |
| 1988-92 | 10.5 | 9.7 | 1.0 | 40.9 | 24.3 | 52.5 | 62.7 | 46.3 |
| 1993-97 | 19.2 | 48.5 | 8.6 | 46.5 | 24.4 | 52.8 | 68.1 | 46.3 |
| 1998-2002 | 9.9 | 299.4 | 29.2 | 43.6 | 23.3 | 43.5 | 66.7 | 54.2 |
| 2003-07 | 35.2 | 329.6 | 90.7 | 49.3 | 28.1 | 44.3 | 80.4 | 66.7 |
| 2008-12 | 18.2 | 59.0 | 13.0 | 41.1 | 21.9 | 47.2 | 91.2 | 46.1 |
| **Sri Lanka** | | | | | | | | |
| 1988-92 | 12.1 | 4.8 | 0.6 | 37.5 | 15.9 | 37.7 | 58.7 | 41.2 |
| 1993-97 | 18.3 | 15.5 | 2.9 | 44.5 | 22.2 | 36.3 | 81.5 | 59.4 |
| 1998-2002 | 9.2 | 14.4 | 1.4 | 46.6 | 28.5 | 41.4 | 87.7 | 69.3 |
| 2003-07 | 21.3 | 21.0 | 3.6 | 44.0 | 31.9 | 44.0 | 90.9 | 72.6 |
| 2008-12 | 26.3 | 17.9 | 4.5 | 37.0 | 28.4 | 43.5 | 92.2 | 65.9 |

Source: Authors' Compilation from WDI and IFS, Note: "1" Percentage of GDP, MC: Market Capitalization, TR: Turnover ratio, STVR: Stock Traded Value Ratio, M3: Liquid Liabilities, PRIVY: Credit to private enterprises as percentage of GDP, BANK: Commercial banks credit as percentage of total credit, Bank credit: credit generated by banks to private sector, PRIVATE: Credit to private sector as percentage of total credit.

**Table 3: Variable Wise Financial Indicators for South Asian Countries (Average Values)**

| Variable | Country | 1988-92 | 1993-97 | 1998-2002 | 2003-07 | 2008-12 |
|---|---|---|---|---|---|---|
| Market Capitalization | Bangladesh | 1.3 | 4.6 | 2.3 | 6.0 | 13.6 |
| | India | 13.7 | 33.7 | 28.6 | 79.7 | 71.3 |
| | Pakistan | 10.5 | 19.2 | 9.9 | 35.2 | 18.2 |
| | Sri Lanka | 12.1 | 18.3 | 9.2 | 21.3 | 26.3 |
| Turnover Ratio | Bangladesh | 1.8 | 13.7 | 68.0 | 42.3 | 126.5 |
| | India | 55.4 | 54.2 | 196.4 | 104.4 | 78.2 |
| | Pakistan | 9.7 | 48.5 | 299.4 | 329.6 | 59.0 |
| | Sri Lanka | 4.8 | 15.5 | 14.4 | 21.0 | 17.9 |
| Stocks Traded Value Ratio | Bangladesh | 0.0 | 0.7 | 1.6 | 2.5 | 13.9 |
| | India | 6.4 | 16.7 | 58.1 | 61.5 | 60.1 |
| | Pakistan | 1.0 | 8.6 | 29.2 | 90.7 | 13.0 |
| | Sri Lanka | 0.6 | 2.9 | 1.4 | 3.6 | 4.5 |
| Liquid Liabilities | Bangladesh | 23.6 | 28.6 | 38.3 | 55.6 | 65.9 |
| | India | 43.8 | 45.8 | 55.9 | 68.2 | 80.0 |
| | Pakistan | 40.9 | 46.5 | 43.6 | 49.3 | 41.1 |
| | Sri Lanka | 37.5 | 44.5 | 46.6 | 44.0 | 37.0 |
| Domestic Credit Private Sector | Bangladesh | 15.7 | 19.4 | 25.9 | 33.9 | 45.2 |
| | India | 24.6 | 23.0 | 27.3 | 38.8 | 49.4 |
| | Pakistan | 24.3 | 24.4 | 23.3 | 28.1 | 21.9 |
| | Sri Lanka | 15.9 | 22.2 | 28.5 | 31.9 | 28.4 |
| Domestic Credit Private Sector by Banking sector | Bangladesh | 21.7 | 25.5 | 38.9 | 54.6 | 65.1 |
| | India | 49.9 | 45.2 | 50.9 | 58.7 | 72.1 |
| | Pakistan | 52.5 | 52.8 | 43.5 | 44.3 | 47.2 |
| | Sri Lanka | 37.7 | 36.3 | 41.4 | 44.0 | 43.5 |
| BANK | Bangladesh | 82.7 | 88.9 | 86.3 | 88.9 | 91.0 |
| | India | 66.7 | 75.2 | 84.0 | 96.0 | 95.1 |
| | Pakistan | 62.7 | 68.1 | 66.7 | 80.4 | 91.2 |
| | Sri Lanka | 58.7 | 81.5 | 87.7 | 90.9 | 92.2 |
| PRIVATE | Bangladesh | 67.6 | 71.1 | 66.2 | 62.1 | 69.4 |
| | India | 49.4 | 50.9 | 53.5 | 66.0 | 69.0 |
| | Pakistan | 46.3 | 46.3 | 54.2 | 66.7 | 46.1 |
| | Sri Lanka | 41.2 | 59.4 | 69.3 | 72.6 | 65.9 |

Source: Authors'Compilation from WDI and IFS.

**Table 4: Combined Score of Individual Financial Variables for South Asian Countries**

| Country/Factor | MC[1] | TR | STVR[1] | M3[1] | PRIVY[1] | Bank Credit[1] | BANK | PRIVATE | Eigen values (EV) | EV Proportion | Proportion of Communality |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Bangladesh** | | | | | | | | | | | |
| Factor 1 | 0.84 | 0.78 | 0.91 | 0.96 | 0.98 | 0.95 | 0.66 | -0.08 | 5.37 | 73.62 | 0.63 |
| Factor 2 | 0.28 | 0.15 | 0.30 | -0.26 | -0.06 | -0.26 | 0.02 | 0.98 | 1.29 | 17.71 | 0.16 |
| Factor 3 | 0.05 | -0.33 | -0.17 | 0.01 | -0.05 | -0.06 | 0.70 | 0.06 | 0.63 | 8.67 | 0.11 |
| Combined Weight | 2.78 | -0.18 | 1.54 | 1.34 | 1.53 | 0.87 | 6.04 | 2.75 | 7.30 | 100 | 0.89 |
| **India** | | | | | | | | | | | |
| Factor 1 | 0.84 | 0.17 | 0.77 | 0.98 | 0.96 | 0.89 | 0.93 | 0.97 | 5.80 | 79.84 | 0.72 |
| Factor 2 | -0.13 | 0.97 | 0.59 | -0.06 | -0.23 | -0.25 | 0.16 | -0.15 | 1.46 | 20.16 | 0.18 |
| Combined Weight | 1.22 | 4.00 | 3.79 | 1.79 | 1.09 | 0.86 | 2.50 | 1.42 | 7.26 | 100 | 0.91 |
| **Pakistan** | | | | | | | | | | | |
| Factor 1 | 0.72 | 0.76 | 0.96 | 0.75 | 0.67 | -0.42 | 0.30 | 0.94 | 4.17 | 58.24 | 0.52 |
| Factor 2 | 0.23 | -0.43 | -0.08 | 0.50 | 0.64 | 0.88 | -0.39 | -0.09 | 1.84 | 25.76 | 0.23 |
| Factor 3 | 0.51 | -0.40 | -0.02 | 0.04 | -0.15 | 0.09 | 0.81 | -0.19 | 1.15 | 16.00 | 0.14 |
| Combined Weight | 4.27 | -1.48 | 1.65 | 3.43 | 2.98 | 2.48 | 2.45 | 0.88 | 7.16 | 100 | 0.89 |
| **Sri Lanka** | | | | | | | | | | | |
| Factor 1 | 0.29 | 0.55 | 0.47 | 0.41 | 0.91 | 0.61 | 0.95 | 0.87 | 3.63 | 51.14 | 0.45 |
| Factor 2 | 0.85 | 0.60 | 0.85 | -0.44 | -0.35 | -0.30 | 0.02 | -0.36 | 2.34 | 32.91 | 0.29 |
| Factor 3 | -0.25 | 0.46 | 0.02 | 0.72 | -0.19 | -0.56 | 0.03 | 0.00 | 1.13 | 15.96 | 0.14 |
| Combined Weight | 2.95 | 10.03 | 6.39 | 6.18 | -2.91 | -7.25 | 2.10 | -0.82 | 7.11 | 100 | 0.89 |

Source: Authors' Computation, 1 Percentage of GDP

**Table 5: Financial Deepening Index for South Asian Countries**

| Year | Bangladesh | India | Pakistan | Sri Lanka |
|---|---|---|---|---|
| 1988 | 83.2 | 83.1 | 95.1 | 58.6 |
| 1989 | 78.7 | 84.9 | 90.2 | 66.2 |
| 1990 | 82.0 | 84.2 | 89.3 | 74.8 |
| 1991 | 87.4 | 83.5 | 91.1 | 104.5 |
| 1992 | 90.6 | 83.8 | 98.6 | 89.6 |
| 1993 | 98.2 | 83.7 | 104.1 | 126.1 |
| 1994 | 101.2 | 85.1 | 103.4 | 143.1 |
| 1995 | 101.6 | 83.6 | 97.9 | 94.2 |
| 1996 | 100.2 | 90.0 | 102.9 | 90.5 |
| 1997 | 100.2 | 95.5 | 104.6 | 108.0 |
| 1998 | 97.8 | 95.2 | 99.3 | 104.7 |
| 1999 | 93.1 | 104.5 | 95.2 | 98.9 |
| 2000 | 94.8 | 119.0 | 82.3 | 87.2 |
| 2001 | 89.2 | 105.3 | 82.7 | 90.1 |
| 2002 | 95.9 | 104.9 | 91.6 | 106.5 |
| 2003 | 100.4 | 106.1 | 102.6 | 136.5 |
| 2004 | 104.8 | 107.2 | 113.8 | 110.2 |
| 2005 | 99.6 | 108.1 | 121.6 | 113.8 |
| 2006 | 98.0 | 112.4 | 117.9 | 94.3 |
| 2007 | 105.3 | 118.3 | 127.4 | 89.1 |
| 2008 | 109.5 | 115.5 | 111.5 | 87.4 |
| 2009 | 116.6 | 117.7 | 101.1 | 95.9 |
| 2010 | 124.8 | 112.9 | 98.8 | 126.7 |
| 2011 | 123.0 | 107.4 | 88.7 | 122.5 |
| 2012 | 123.8 | 108.3 | 88.4 | 80.4 |
| **Average Financial Deepening Index** | | | | |
| 1988-1992 | 84.4 | 83.9 | 92.9 | 78.8 |
| 1993-1997 | 100.3 | 87.6 | 102.6 | 112.4 |
| 1998-2002 | 94.1 | 105.8 | 90.2 | 97.5 |
| 2003-2007 | 101.6 | 110.4 | 116.7 | 108.8 |
| 2008-2012 | 119.5 | 112.3 | 97.7 | 102.6 |

Source: Authors' Computation

## Endnotes:

[i] The crisis was so severe that the foreign exchange reserves in the economy reached to the lowest level (equivalent to one week import capacity). It was heightened by the high inflation and huge fiscal deficit.

[ii] The index value is presumed to be zero activity and 100 at mean activity. With the data standardized, the index value is assumed to be 0 at 6σ and 100 at mean activity.