Chapter 8
Summary, Main Conclusions and Policy Implications

South Asian region, comprising of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka is the home of 1.54 billion people in the fiscal 2008. In the fiscal 1981, GDP per capita of the region was US$ 259, which increased to US$ 1421.6 in the fiscal 2008. According to the World Bank, 70% of the South Asian population and about 75% of South Asia's poor live in rural areas and most of them rely on agriculture for their livelihood. The South Asian region is tremendously diverse in terms of country size, economic and social development, geography, political system, language and culture. Along with the largest economy in the South Asian region, India is the dominant political power and the largest country covering around three-fourth of the land area of the subcontinent.

South Asian economies are passing through the transitional phase and facing the hurdles in the form of shortage of capital, limited technology, and inadequacy of institutions necessary for fostering rapid economic development. Due to the Savings-Investment gap, Export-Import gap, and Technological gap, these economies are unable to mobilise the required capital for the economic development. Therefore, to achieve the goals of development, these economies look for foreign capital in the form of loans and grants through inter-governmental flows (bilateral flows), foreign assistance through institutions (IFIs), foreign equity capital through capital market transactions and Foreign Direct Investments (FDI). Along with this, in the late 70s and throughout 80s, the South Asian economies witnessed a perceptible trend towards the economic reforms in the form of deregulation, privatisation, financial sector reforms and export-oriented trade policy reforms to raise the pace of economic development. Sri Lanka was the leader in initiating economic reforms in fiscal 1977, followed by Bangladesh in fiscal 1980, Nepal in fiscal 1985, Pakistan in fiscal 1988 and India in fiscal 1991. In the present study, an attempt has been made to examine the role of IFIs in the

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1 Regional Cooperation Strategy and Program, South Asia (2006-08), ADB. Pg.01.
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economic development of South Asian economies for the period 1981-2008 which includes the era of economic reforms also. The major objectives of the study are outlined as follows:

i) Examine the extent of assistance provided by IFIs in the South Asian Region from 1981-2008,
ii) Examine the nature of assistance provided by IFIs in the South Asian Region from 1981-2008,
iii) Scrutinise the pattern of sectoral assistance by IFIs in the South Asian Region from 1981-2008,
iv) Analyse the role of IFIs in the economic development of the selected South Asian countries, individually as well as at the regional level,
v) Analyse the role of IFIs assistance in the Indian economy for the period 1981-2008,
vi) Suggest required policy implications for making assistance more development oriented in the South Asian region, particularly in India.

8.1. Summary

The study is organised in eight chapters as follows:

Chapter 1 defines the term economic development, the importance and formation of IFIs along with the introduction of South Asian region. Chapter 2 covers various theoretical as well as empirical studies regarding the relationship between the foreign capital/ IFIs and economic development. Chapter 3 covers the details about the sources from where data has been collected and explanation of the methodology adopted for finding the role of IFIs in the economic development of South Asian economies. Chapter 4 covers the economic and social profile of South Asian economies since fiscal 1981. In Chapter 5 the extent, nature and pattern of lending operations of IFIs in the South Asian economies individually, as well as at the regional level are highlighted. Chapter 6 conducts a statistical exploration to analyse the role of IFIs at the South Asian level. Chapter 7 covers the statistical analysis of the role of IFIs in the selected sectors of Indian economy. Chapter 8 provides the brief summary of the study, major conclusions and policy implications.
The present study is a longitudinal study, using secondary data for a period of twenty-eight years (1981-2008) for five countries namely Bangladesh, India, Nepal, Pakistan, and Sri Lanka. The economies of Afghanistan, Bhutan and Maldives have not been considered because of the non-availability of data for these economies for the period 1981-2008. The study period has been further divided into two phases namely Pre-reform and Post-reform period. The term economic reforms broadly indicate the necessary structural adjustments to external events to create a more competitive environment, as a mean to improve the productivity and efficiency in the economy. It involves the reduction of country’s spending to the level parallel to its income and reducing its fiscal deficit along with market-oriented structural changes in order to make the economy more efficient and flexible. Choice of the period is undertaken on the basis of Pre and Post-reform, initiated by the South Asian economies in the last quarter of the 20th century. The cut off period for reforms for the individual country is considered with respect to the year in which these reforms were initiated by the individual economy. Development Index (D.I.) for selected South Asian economies (as a measure of economic development) has been constructed by collecting data from World Bank data bank. The obtained data was deflated with GDP deflator-2000. Further, in case of the missing value of any variable for any year it has been computed by finding respective variable’s annual growth rate. The relevant data has been collected from various secondary sources namely World Bank Data Catalog, World Debt Tables (Global Development Finance), Report on currency and finance by Reserve Bank of India (RBI), National Accounts Statistics (NAS) by Central Statistical Organisation (CSO), and Ministry of Human Resources and Development (MHRD). Furthermore, the e-sources of World Bank, Asian Development Bank, Ministry of Finance (MoF), National Accounts Statistics (NAS) have been consulted extensively from time to time. Data relating to IFIs’ disbursement in the various sectors of Indian economy for the period 1981-2008 were collected from the report on “Currency and Finance” and “External Assistance Brochure” of Ministry of Finance, Government of India.

To analyse the role of IFIs in the South Asian region, the panel data technique has been used. To check the presence of unit-root in panel data, Levin
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Lin and Chu (LC) and Im. Persaran and Shin (IPS) test statistics have been used. After testing the presence of unit-root, the panel data ARDL model is specified as below has been used

\[ y_t = \alpha_0 + \sum_{m=1}^{M} \phi_m y_{t-m} + \sum_{k=1}^{K} \beta_k x_{t-k} + u_t \] (8.1)

Given that, the model is dynamic in nature, we have used Arellano-Bond one-step estimation procedure. Using the estimates of panel data ARDL regression model (8.1), the long-run estimates have been obtained as:

\[ y_t = \frac{\alpha_0}{1-\sum_{m=1}^{M} \phi_m} + \frac{\sum_{k=1}^{K} \beta_k x_{t-k}}{1-\sum_{m=1}^{M} \phi_m} + \frac{U_t}{1-\sum_{m=1}^{M} \phi_m} \] (8.2)

Using the estimated values of error term \( \cdot V_n \cdot \), the following error correction mechanism has been executed for evaluating the short-run validity of policy variables affecting the development of South Asian economies. The following model has been executed for the same purpose

\[ \Delta y_t = \alpha + \sum_{i=1}^{K} \delta_i \Delta x_{i-1} + \alpha' e_{t-1} + \epsilon_t \] (8.3)

Where, \( \cdot \delta_i \cdot \) represents the short-run influence of each \( (k^{th}) \) explanatory variable on development of South Asian economies. The term \( \cdot \alpha' \cdot \) is the error correction term, also known as the convergence parameter. A negative and significant value of \( \cdot \alpha' \cdot \) will ensure convergence towards long-run equilibrium in \( \cdot 1/\alpha' \cdot \).

To check the presence of long-run relationship between the role of IFIs and the indicators of economic development of individual South Asian economies, the cointegration methodology has been used. Furthermore, to check the presence of unit-root in the time-series data, Augmented Dicky Fuller (ADF) test statistics has been used. To deal with the problem of unit root/non stationarity in the time-series data, Auto Regresive Distributed Lag (ARDL) cointegration technique has been
used to estimate the long-run relationship. The long-run estimates using ARDL procedure has been specified as under

$$\ln y_t = C'_0 + \beta'_t \ln X_t + \varepsilon_t$$  \hspace{1cm} (8.4)

Furthermore, following model has been estimated to analyse the impact of Pre-and Post reform elasticites

$$\ln y_t = C'_0 + \beta'_t \ln X_t + C'_1 D_t + \varphi' [D_t \ln X_t] + \varepsilon'_t$$  \hspace{1cm} (8.5)

where, \(D_t = \begin{cases} 1: & \text{for } t \geq t^* \\ 0: & \text{Otherwise} \end{cases}\)

Where \(t^*\) is the year of implementation of economic reforms process by the country under evaluation. From model (8.5), coefficients \(C'_0\) and \(\beta'_t\) are the pre-reforms parameter estimates whereas, \((C'_0 + C'_1)\) provides the Post-reform measure of intercept and \((\beta'_t + \varphi')\) provides the Post-reform measure of elasticities. The usual \(t\)-statistics has been utilised to check the significance of Pre-reform parameters, whereas, Wald \(F\)-statistics has been used to check the joint significance of \((C'_0 + C'_1)\) and \((\beta'_t + \varphi')\).

The present work also makes an endeavour to analyse the role of IFIs in the sectoral growth of Indian economy. India has been the founder member of the Bretton Woods sisters i.e. the World Bank and the IMF and also of the ADB. Till 2008, on the cumulative basis, India is the largest borrower of the World Bank lending (Table 5.3 and Table 5.4) and the 4th largest borrower of the ADB lending (Table 5.7). Over the years, both the World Bank and the ADB have increased their involvement in India by raising the lending and by diversifying it further in the different sectors of the economy. Both the World Bank and the ADB have provided lending by keeping in view India’s five-year plans priorities for the economic development of India. Hence, to check the presence of long-run relationship between the indicators of IFIs assistance and sectoral growth of Indian economy, the cointegration methodology has been used. For this, the presence of unit root has been examined using Augmented Dicky Fuller (ADF) test statistics. After testing for the presence of unit root, ARDL cointegration has been used. The optimal lag length for the ARDL cointegration technique is decided by the
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Schwartz Bayesian Criterion (SBC). The long-run model estimates are found by using ARDL procedure specified, below.

\[
\ln y_t = C_0 + \beta \ln X_t + \epsilon_t
\]  
(8.6)

However, the model (8.6) is incapable to bifurcate the long-run and short-run elasticities. One way to derive the long-run and short-run elasticities is, to estimate ARDL for two sub-periods separately. However, separate estimation may lead to the loss of huge degree of freedom. Thus, following model has been estimated to evaluate Pre-and Post-reform elasticities.

\[
\ln y_t = C_0' + \beta' X_t + C_1 D_t + \phi [D_t \ln X_t] + \epsilon_t
\]  
(8.7)

Where \( t^* \) is the year of reforms. From model (8.7), coefficients \( C_0' \) and \( \beta' \) are the Pre-reform parameter estimates whereas, \( (C_0 + C_1) \) provides the Post-reform measure of intercept and \( (\beta' + \phi') \) provides the Post reform measure of elasticities. The usual \( t \)-statistics has been utilised to check the significance of Pre-reform parameters, whereas, Wald \( F \)-statistics has been used to check the joint significant of \( (C_0 + C_1) \) and \( (\beta' + \phi') \).

Finally, to find out whether the model converges to its long-run equilibrium path, the short-term dynamic parameters in the Error correction Model (ECM) associated with the long-run estimates are estimated as below.

\[
\Delta y_t = a_0 + \sum_{i=1}^{\phi} \phi \Delta y_{t-i} + \sum_{i=1}^{\delta} \delta \Delta X_{t-i} + \alpha \epsilon_{t-1} + \epsilon_t
\]  
(8.8)

Where \( \phi, \delta \) are the short-term dynamic coefficients, \( \alpha \) is the speed of adjustment, and \( \epsilon_{t-1} \) is the residual of cointegration relationship and also represents the error correction term.

8.2 Main Conclusions

The term economic development is very comprehensive. It implies comprehensive changes in the socio-economic structure of a country. Viewed in this sense, economic development involves a steady decline in agriculture share in the GNP and continuous increase in shares of Industries, Trade, Banking and Construction Services. In the light of above concept and from the developmental profile of South Asian economies (Chapter 4), one can perceive that the region’s
economic and social profile shows the mix outcome of various economic and social indicators. South Asian region has shown a remarkable annual GDP growth rate of around 5.7% in 80s to 5.6% during 90s and to 7.0% during 2000s. This rapid growth in GDP has been the instrument in raising the standard of living by raising the per-capita GDP from 3.3% annually during 80s to 4.8% during 2000s. Per capita income in the region ranged from a low of US$ 405 in the Afghanistan, to a high of US$ 4760 in the Maldives. South Asia recorded an average annual growth rate of population at less than 2% since fiscal 2004, which was growing at more than 2% annually up to fiscal 2003. In the fiscal 2008, South Asian region's population was 1.54 billion and GDP was US$ 1524.7 billion. Moreover, Gross Domestic Saving ratio as % of GDP had increased from 11.3% during 80s to 17.9% in 90s and finally to 21.7% during 2000s and Gross Domestic Investment as % of GDP for the same phase had increased from 19.7% to 24.9% and to 29.1%.

On having a look at the sectoral structure of GDP one can observe that almost all the economies of the region were in the modern structural set up with more than 80% share of the non-agriculture sector in the GDP for fiscal 2008 from 65% in fiscal 1980. Furthermore, in terms of GDP growth rate, region has recorded an impressive growth rate of 7% during 2000-08. In terms of HDI ranking, the picture is still gloomy as only Maldives could manage to get a rank below 100. Furthermore, the picture of infrastructure in the region is quite gloomy. On the basis of available data, Bhutan was having the lowest roads' total network of 8100 kms road in fiscal 2003 followed by Nepal (17300 kms during fiscal 2004), while India was at the top with 3316500 kms road network in fiscal 2007. Bangladesh was having the lowest number (2) of motor vehicles per 1000 people in fiscal 2007, followed by, Nepal (5) and Pakistan (11). Sri Lanka was having the lowest rail lines route of 1463 kms, followed by Bangladesh (2835 kms), India was at the top in terms of the rail lines' route in the region. The status of energy production was also insufficient, with just 0.3 billion kilowatt of electricity production in Maldives, followed by 4.5 billion kilowatt in Bhutan and maximum of 803.4 billion kilowatt in India, in fiscal 2007. Finally, in terms of achievements of MDGs, the region has made varied improvement. Starting with Goal 1, the

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employment to the population ratio of the region was 55.3 in fiscal 1991, which has reached to 58.1 in fiscal 2008. Goal 2 has shown good achievements as the net enrollment ratio was above 80% for all the economies except Nepal and Pakistan. Regarding Goal 3, it has been found that all the economies except Afghanistan had achieved gender equality at primary and secondary level education. Even Goal 4 has shown good improvement as the number of deaths per 1000 live birth of children is decreasing in all the economies except Afghanistan. Goal 5 and 6 again show a gloomy picture, as still maternal death rates were very high in many economies of the region, with Afghanistan as much as 1800 MMR. In addition, the HIV prevalence was quite high in the region along with the death rate associated to tuberculosis. Regarding ensuring environmental sustainability (Goal 7), the region has shown a very slow progress when compared with fiscal 1990 data (Table 3.36). Lastly, Goal 8 has shown an improvement, as the debt service as a percentage of export of goods and services has increased in fiscal 2008 when compared with fiscal 1990 for all the economies except for Maldives and Nepal.

The IFIs namely World Bank and ADB share the common mission of removal of poverty in their member countries. Ever since the foundation of IFIs, South Asian region has been the major borrower, and over the period the lending volume as well as the share is continuously increasing. On the cumulative basis up to fiscal 2008, three South Asian economies namely India, Pakistan and Bangladesh were among the top 10 borrowers of IDA, while India was the 3rd largest borrower of IBRD. Overall, World Bank has two South Asian economies (India and Pakistan) among the top ten borrowers. Total lending by World Bank to South Asian region has registered a CGR of 2% for fiscal 1981-2008 (Table 5.1).

Looking sectorwise, over the period 1981-2008, the share of Agriculture sector, Industry & Trade and Transportation & Communication has fallen while the share the share of Education, Energy and Mining, and Health & Other social services sector has increased over the same time (Table 5.2b). Over the period, a new sector, Law, Justice and Public Administration has started receiving lending.

In case of ADB lending operations, South Asia has received the maximum lending of US$ 38591.2 million (39.10% of the total amount up to fiscal 2008) among all the regions up to fiscal 2008, as shown in Table 1.4. The total lending of ADB to South Asian region has registered a CGR of 8.9% for the fiscal 1981-2008 (Table 5.6a). The lending pattern of ADB has undergone a remarkable
change between fiscal 1981 to fiscal 2008. Looking sectorwise, over the period the share of Agriculture sector, Energy, Finance, has fallen while the share of Transport and Communication sector, Industry and Trade sector have increased over the same time (Table 5.2b). With the passage of time, new sectors like Law, Economic Management & Public Policy, Water sanitation and Supply have started receiving lending from ADB’s lending to South Asia (Table 5.6b). Further, working with Economic and Social Commision for Asia and Pacific and the UNDP, ADB prepares and publishes the MDGs progress report covering the achievements and direction of the member countries towards MDGs.

On observing the sectoral lending pattern of the World Bank as well as of the ADB during the study period, it is found that in the beginning, (fiscal 1981), Agriculture sector had been the top priority for both the institutions followed by Energy sector. Steadily, over the time, the top priority for both the institutions has changed to the Energy and Transportation & Communication sectors along with a new sector Law, Economic management and Public policy (LEP) in case of ADB and Law, Justice and Public administration (LJP) in case of World Bank lending. Thus, it seems as if there was nothing new in the Asian Development Bank and it has been simply supplementing the resources of World Bank to its member countries but with more insight knowledge into the Asian region, which is just next to the Sub-Saharan Africa in terms of poverty.

IMF provides resources to member countries experiencing the temporary Balance of Payments problems. It was created along with the World Bank. IMF’s primary purpose is to ensure the stability of International Monetary System of exchange rates and international payments that enables countries to buy goods & services from each other, which is essential for sustainable economic growth and living standards. Since fiscal 1999, IMF has started subsidised lending to the poor members to cure their deep-rooted Balance of Payment problems, with the objective of sustained poverty reduction growth. It is worth mentioning here that in no way IMF lends to its member countries to build their physical infrastructure, diversify their export or other sectors or to develop better education and health care systems.

By using the panel data ARDL cointegration, the overall conclusion that emerges from the study of the role of IFIs in the economic development of South Asian region is that, at the regional level, among all the IFIs, only ADB has...
raised, so as South Asian economies may achieve the deadline. Unfortunately, so far, only two of the eight MDGs have been met by the South Asian economies. To act as a catalyst in the economic development of South Asia, it is hereby suggested that the IFIs should direct major part of their funds towards the achievement of MDGs.

iii) The South Asian region is well endowed with minerals and with fuel resources for energy developments. Still there is a massive untapped potential for hydroelectric resources for power generation in Bangladesh, India, Pakistan, Nepal and Sri Lanka. Looking at the future needs of the region, IFIs must provide more assistance for the development of hydroelectric power projects in the South Asian region.

iv) Apart from being poor, South Asian region is vulnerable to natural disasters like earthquakes, Tsunamis and floods. The prominent economies vulnerable to these disasters are Bangladesh, Maldives, Pakistan and Sri Lanka. For example, loss to the Sri Lankan economy due to Tsunami in fiscal 2004 was calculated to be 7.37% of Sri Lanka’s GDP of that year. The earthquake in Pakistan in fiscal 2005 resulted in losses amounting to 5.16% of its GDP. 12.07% of Bangladesh’s GDP in fiscal 2004 has been lost due to flood and 63.68% of Maldives’s GDP due to Tsunami in fiscal 2004. The impact of a natural disaster is particularly strong in this region mainly because of region’s high population density. Moreover, as these losses are not insured in the financial market, IFIs should increase the allocation for such special funds that are already in existence and create more of such funds, especially for South Asia.

v) Even though inflation is a worldwide phenomenon, but its intensity is very high for this region, which is the home to half the world’s poor. Hence, IFIs should re-start commodity-based assistance for basic goods so as to control the unprecedented increase in the cost of living well on time and thus lowering the intensity of rising cost of living for poor people of the region.

vi) To relieve the debt of their poor member countries, both World Bank and IMF work jointly under Multitranche Debt Relief Initiative (MDRI). The

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debt relief to the South Asian economies should be increased, so as to increase the availability of the funds for the region’s economies for the development purpose.

vii) Further as per World Bank research, the measures of good governance include accountability, effectiveness, rule of law and low corruption. The United Nations Development Programme published a report in April 2000, which focused on good governance in poor countries as a key to economic development. The report concludes that, “Without good governance, reliance on trickle down economic development and a host of other strategies will not work.” Examples of good governance leading to economic development and poverty reduction include Thailand, Taiwan, Malaysia and South Korean economies. On observing the governmental functioning of the South Asian economies, it is found that, almost all the South Asian economies face endemic corruption, social exclusion and inefficient / non pro-people bureaucracies, which hinder all programmes of development. Thus, IFIs should further increase the share of Law Economic management & Public administration sector so as to form a government also known as the ‘Development State’, having the will and authority to create and maintain policies that lead to long-term development of South Asian economies.

viii) Lending operation of IFIs should be supplemented with more of non-lending activities like providing research, analysis and technical assistance as a contribution towards development. These services aim to assist member governments in their adoption of better programmes, policies and reforms that can lead to greater economic growth and poverty reduction. IFIs prepare reports on key issues, policy notes, conducts workshops and conferences in which senior government representatives, researchers and NGOs are invited. This non-lending assistance provides a base for forming suitable and effective policies by the member country’s governments. Hence, in the future, along with lending operations, IFIs should expand the non-lending activities so as to provide the guidance to the member countries to frame the pro-developmental policies.

ix) On looking at the Saving–Investment ratio at the regional level, it is observed that the Saving–Investment ratio is increasing over the years but