

Post Crisis Structural Reforms and Goal of Economic Stability; Role of Banking Sector in SAARC Countries

Dr. Qazi Abdul Subhan¹, Waqas Munir Janjua¹, Dr. Shafiq-ur-Rehman² and Faiza Manzoor³

¹*Department of Management Studies, Bahria University, Islamabad, Pakistan*

²*National College of Business Administration, Lahore, Pakistan*

³*Department of Agriculture Economics & Management, Zhejiang University, China*

qazisubhan@bahria.edu.pk*

**Corresponding Author*

ABSTRACT

The post financial crisis decade (2007-2017) has brought drastic structural changes in the banking sector, like improved global prudential frameworks and enhanced supervision. Main rationale behind these changes is to regain financial stability and economic strength through stronger liquidity, capital safeguards, reducing government subsidies, and tax rationalization (Dudley, 2018). The present study analyzes post-crisis structural reforms in SAARC (South Asian Association of Regional Cooperation) countries and their subsequent effects on economic stability. This study also observes the role of the banking sector in achieving the goal of economic stability. Owing to quantitative data, positivist research philosophy has been used along with pertinent financial and economic variables. A set of panel data is developed, and the Fixed Effect Method has been used. The period of analysis covers 32 years (1989 to 2020). The main results favor long-term effects of structural reforms in achieving the goal of economic stability with a potential role of the financial sector in SAARC.

Keywords: Structural Reforms, Economic stability, Banking Sector, SAARC.

INTRODUCTION

Economic stability is the utmost objective of every emerging nation in the world. Economic stability consists of three main indicators; sustainable economic growth, price stability and employment generation. To achieve these objectives, there are prerequisites like basic infrastructure, sound financial system, political stability, consistent economic policies, institutional framework, and legal proclamation. The experience of the recent past global financial crisis has obligated the policymakers to contemplate regulatory and structural financial reforms to secure future financial markets

from such financial crisis (Buch & Dages, 2018). Many developed and developing countries have presented their structural reforms to improve the trends in banking business environments, development of market structures, and improve efficiency and stability of banking markets in their respective countries. In earlier research studies, the scholars have discussed regulatory reforms like in the studies of Abubakar & Gani, (2013), Caprio (2013). Still, a few research studies may have analyzed the effects of these reforms on the economic growth of the SAARC region.

The scope of the financial sector in economic growth has seen a shift over the previous few decades. It comprises two sub-sectors, the financial institutions and the banking sector, which play a significant role in providing financial services to the market (Sibindi & Bimha, 2014). In earlier research studies, different econometric models have been used to find the effect of banking sector growth on economic development. Many development economists believe that a better financial system is capable of facing global challenges to its economy effectively and found out positive influence of economic effect on the economic growth (Kilimani, 2009, Abubakar & Gani, 2013). Some economists argue that economic growth increases financial development (Liang & Teng, 2006).

The international organizations like Basel Committee on Banking Supervision (BCBS), which is responsible for systematic assistance on banking supervisory issues worldwide in the form of BASEL-III and provides structural reforms to enhance the standards of banking supervision. BASEL-III framework has identified main flaws in global financial sectors and concludes that there is an immense need to reform the existing financial structures after the global financial crisis (GFC). BASEL-III has identified three main areas in which post-financial crisis reforms must be completed for the world's sustainability of the banking sector.

Caprio (2013) has investigated financial regulations after the financial crisis and explored that it was one of the worst GFC in the world's economic history. He further discussed that USA and E.U. have realized that these countries must start stricter financial regulations and strong reinforcement of these regulations to restore their respective economies. The modern-day financial sector is intrinsically associated with multiple sectors of the economy due to the borrowing and lending of capital. Banks are more willing to issue credits than ever before, and investments can be made quickly, connecting every agent to banks and other financial institutions. Numerous reasons validate the systematic importance of the financial sector. Among these factors is the inherited interdependence between the financial firms (McCleskey, 2010).

The GFC of 2007-08 proved to be a significant setback for the banking sector, and it necessitated specific structural changes to the banking business. Banks worldwide revived their business strategies and business models to respond to the experience of crisis and post-crisis operating environment. Banks re-assessed their methods, including organizational structures, geographical presence, balance sheets, business growth plans. Banks have intensified their stakeholders' scrutiny and new technological advancements to other financial institutions and exerted competitive pressure.

The essential insight is how banks' behavior is conditioned with the scenario that how they foresee the constraints in their operating environment and opportunities, they come across. This variability in the conduct of banks is visible before the crisis and even after the crisis (Hindmoor, 2015). Financial development is measured in terms of the economic development index. Researchers have used different variables to measure the financial depth like stock market capitalization to GDP, liquid liability to GDP, private credit to GDP (King, 1993, King & Levine, 1993). The present study addresses the following research questions.

RESEARCH QUESTION

- What is the effect of post-crisis structural reforms in SAARC countries, and how have these reforms affected the region's economic development?
- What is the role of the banking sector in achieving the goals of economic development in the SAARC region?

STUDY OBJECTIVES

The objectives of the study are as under:

- To analyze the effects of post-crisis structural reforms in SAARC countries and their subsequent impact on the economic development of respective countries.
- To analyze the role of the banking sector in achieving the goals of economic stability in the SAARC region.

SIGNIFICANCE OF STUDY

The present study is significant because it finds the current status of economic stability of respective countries after structural reforms in different periods after the global financial crisis how the banking sector can play a significant role in achieving economic stability in the SAARC region. Secondly, if a country has successfully implemented the reforms, it may be a precedent for other SAARC countries to follow for amplifying economic activities in their respective countries. Ultimately, it may help reduce the ties

among developing countries and to create a conducive environment for better trade relations in SAARC Region

LITERATURE REVIEW

In this section, different perspectives of structural reforms have been discussed at global, regional, and individual levels. The detail of these vulnerabilities is explained in the following discussions.

GLOBAL PERSPECTIVE OF STRUCTURAL REFORMS

In a post-global financial crisis, policymakers have taken different measures at the global level to restore their respective economies. For instance, in OECD (Organization for Economic Co-operation and Development) countries, to stimulate the aggregate demand, the financial authorities worldwide have reduced the bank rates to disperse more loans to the investors. The governments in USA and Japan have decided to decrease the tax rates to facilitate the general public and tried their best to enhance the aggregate demand. OECD (2009) has conducted a study on economic policy reforms and ongoing economic growth and concluded that OECD countries must do following reforms to boost their short term and long-term economic growth:

- Introducing social development programs to improve existing infrastructures.
- To develop programs for improving technical skills in labor markets to amplify jobs and restore economic activities in the country.
- To make concrete reforms against anti-competitive product market regulations and reduce entry barriers for new entrants. In this regard, the banking sector's role is vital in disseminating loans to the investors properly to stimulate business activities in OECD countries.

The study has further explained that the recent past financial crisis (2007-2017) has serious repercussions on OECD countries and aggravated the gravity of the situation to slow down economic activities.

International Monetary Fund (IMF) has published the Global Financial Stability Report (2018). The report explains that regulatory frameworks have been increased, and the banking systems have become more assertive. Still, short-term risks have increased the susceptibilities of financial systems at the global level (Saad, & Anis, 2014). There has been total unrest in the world's political conditions in recent years. Two big economies, USA and China, are in real trade tensions. If these trade tensions escalate, then the economic situation may further worsen. Similarly, political and economic ties between the USA, Iran, Russia, and China are not creating a conducive environment for implementing macroprudential economic policies.

Franklin et al. (2012) have developed linkages between structural characteristics of the financial system and financial crisis. They explained that there is a significant short-term development reversal in the banking sector during a period of the financial crisis. The study has expressed two types of economies: market-based countries and bank-based countries. The emerging economies are bank-based countries, and due to these bases, they take more time to recover from the economic downturn after the financial crisis. The authors have concluded that there is an immense need to concentrate on a more diversified financial system in resolving the financial problem.

Tressel and Detragiache (2008) have discussed the effect of financial reforms on financial development. The authors have collected the data from 91 countries from 1973 to 2005. A dynamic Autoregressive lag distributed model has been used to make an empirical analysis. To estimate the model, GMM has been applied. The authors have developed the financial reforms index by using a normalized sum of five sub-indexes in the following areas; 1) credit control and reserve requirements sub-index, 2) interest rate controls, 3) entry barriers sub-index, 4) bank privatization sub-index, and lastly bank supervision sub-index. The higher score of indices reflects better supervisory control and better regulations for financial institutions.

The results of the study of Tressel and Detragiache (2008) have reflected that long run coefficient for reforms index are insignificant in advanced and developing countries. The study further explains that financial reforms would be only beneficial for the respective economies when effective prudential regulations and effective management of banks occur. The study has further admitted that an accurate effect of financial reforms on financial development is challenging to measure due to the multidimensional concept of structural reforms (Samargandi, 2013).

Veron (2014) has discussed G-20 Financial Reforms Agenda after five years. According to the report, it has been observed that the financial crisis 2007-08 was occurred due to the failure of public authorities in the USA and Europe. They did not adequately monitor systematic risk. To cope with this crisis, in Asian market, authorities have adopted macro-prudential policies and become less affected by crisis shocks (Stephan, 2017). Nevertheless, G-20 countries could not develop a comprehensive joint approach to address the financial crisis issues. This report reviewed economic reforms and their outcomes in G-20 countries. The effectiveness of these reforms has not been proved due to the non-establishment of adequate institutional infrastructures and inconsistent policy visions. There is a lack of initial implementation of reforms considered the prime agenda for restoring economic activities after the global financial crisis (Chen, 2013).

Zahonogo (2017) has analyzed the effects of trade openness on economic growth in Sub-Saharan African (SSA) countries. The author has used a dynamic growth model for empirical analysis based on the data collected from 42 SSA countries. The author has used pooled mean group estimation technique to ascertain the results. The main findings of his study indicate that the relationship between trade openness and economic growth is nonlinear for SSA, which means that there is no smooth trend in the relationship between trade openness and economic development. Generally, the National Income Identity equation depicts a positive relationship between trade openness and economics ($Y=C+I+G+(X-M)$). The author has suggested that SSA countries must focus on effective trade openness to amplify their economic growth, as evident from prior literature (Shahbaz, 2014).

Tekin (2012) has investigated potential Granger Causality among economic growth, exports, and foreign direct investment in the least developing countries, covering 1970 to 2009. The author has used SUR (Seemingly Unrelated Regression) Model and Wald test with country-specific bootstrap critical values. The study's main findings are that all causality relations among the prescribed variables are found unidirectional except for two countries, the Central African Republic and Liberia, where there is bidirectional causality. The author has further explained that, like prior studies (Roshan, 2007), the Export-Led Growth Hypothesis has been proved from the results of his research, which means that if a country wants to boost its economic growth, then it must concentrate on the promotion of its export volume. Similarly, there is positive nexus between exports and foreign direct investment. Still, in the case of LDCs, this nexus is weak due to minimal flow of FDI in the least developing countries.

SOUTH ASIAN PERSPECTIVE OF STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY

Rana and Chia (2015) have discussed structural reforms in South Asia. These reforms were remained ineffective due to two main reasons; unfavorable global economic environment and, secondly, slow pace of economic reforms. The authors have further argued that more emphasis has been given in earlier reforms in the 1980s and early 1990s on macroeconomic reforms like demand management policies; monetary, fiscal, and exchange rate policies. Less emphasis has been given to microeconomic reforms that may strengthen the respective countries' governance and institutions (Stephan, 2017). Generally, it is impossible to implement all the structural reforms within the stipulated time frame to attain specific objectives for developing respective economies (McKinnon, 1991). Due to the lack of institutional framework and political involvements, there is a high probability of failure of these structural reforms.

One of the main issues in South Asian countries is the non-implementation of structural reforms due to weak institutional framework, poor law and order situation, and social crimes, which results in a severe governance gap. One of the challenging tasks is implementing these microeconomic reforms due to lack of political consensus and deficiency in long-term vision. The overall economic situation in the South Asian region is satisfactory and considered the fastest growing region among other regions. India is leading in economic growth, followed by Bangladesh's economy, which has a 7.3 % economic growth rate during 2017-18. In Sri Lanka, Nepal and Pakistan, the economic growth rates range from 2.7 % to 4.0% during 2018-19 (World Bank, 2019). The next section mentions the post-financial crisis, structural reforms, and their effectiveness on economic stability.

STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY IN INDIA

India suffered indirectly from the GFC of 2007-08 due to its large economy. The Indian banks avoided the first phase of crisis due to the incumbent government's strong balance sheet and swift action. The second round has affected the Indian banking sector due to liquidity squeeze, resulting in shifting focus to domestic banks. The present government in India introduced the following measures to achieve sustainable economic growth (Ahluwalia, 2019).

- Reduce government deficit by 3% and continue fiscally prudent policy by 2020-2021.
- Liberal industrial policy to facilitate business activity with ease of doing business.
- Use of biometric identity system to achieve financial inclusion.

The financial sector reforms in India showed a positive impact on GDP growth in 15 years period from 2003-04 to 2017-2018, and it comes to 7.6%, which remained their best performance. Still, in 2019, the global pandemic COVID-19 has devastated the Indian economic and social performance. Financial inclusion is viewed in terms of its impact on poverty reduction in India. The percentage in poverty declined to 137 million, which is seemingly a dramatic reduction due to financial reforms. This sharp decline in poverty is attributed to increased per capita income. The government's timely policies have increased employment opportunities. The services and manufacturing sectors both offer huge potential for employment creation, thus adding to a more sustainable economic growth (Ahluwalia, 2019).

STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY IN PAKISTAN

Pakistan is one of the main economies in the SAARC Region and fulfills all prerequisites. The historical surveys about the economic growth of Pakistan indicate a lack of volatility and an erratic path on the implementation of reforms. The financial sector reforms in Pakistan started in consonance with IMF and World Bank in 1989. These reforms were aimed to reduce government intervention, increase the capacity of financial institutions and effectiveness of monetary policy and instill an atmosphere of competition among banks. The financial sector was given more control, and new private banks were allowed to take licenses and operate.

The significant financial sector reforms in Pakistan include:

- Interest rates liberalization.
- Reducing governmental controls on credit.
- Creation of a secondary market for government securities.
- Restructuring of state-owned banks.
- Improving supervision and prudential regulations of all financial institutions.

The banking sector of Pakistan has come across numerous changes in regulations and market dynamics over the last decade. These changes fostered by the State Bank of Pakistan (SBP) include structural changes leading to a more financially sound, service-oriented, competitive, and technologically advanced banking sector and its principal financial institutions. The nature, scope, and outreach of business activities of the financial institutions have been reshaped due to structural changes imposed by SBP. Therefore, SBP has developed specific guidelines on 'compliance risk management to address these gaps and align local banking procedures with international standards.

These reforms made the private sector the biggest owner of the financial sector in 2009. The share of state-owned banks reduced to 18.70% in 2009 as compared to 92.2% in 1990. The banking industry has shown significant growth due to corporate governance practices in the recent past. The rules governing credit allocation saw a fundamental shift due to the private sector leading the financial sector. This has reduced the fiscal deficit, and privatization of state-owned enterprises has freed resources for the private sector (Waheed, 2009). The government is also trying to reduce import levies to make export competitiveness (Ministry of Finance, 2019).

STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY IN SRI LANKA

Sri Lanka is an agricultural economy with abundant natural resources. Dunham and Kelegama (1997) have elaborated the structural changes in Sri Lanka in two phases; in the first phase, development policy has concentrated on imports substitution policies and economic growth from 1948 to 1976.

Extensive social welfare programs have been commenced during the first phase. These changes drastically impact human development, life expectancy, and high literacy rates. But expensive social development programs have restrained economic growth and the ability to invest in the industrial sector, aggravating the intensity of unemployment (Hemachandra, 2012). Sri Lanka has protected its economy from the adverse effects of a financial crisis with macro-prudential policies and adequate supervision of financial institutions. In Sri Lanka, local banks are not engaged in international transactions. The impact of the financial crisis has become minimal.

STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY IN BANGLADESH

Since its incarnation, Bangladesh has suffered largely due to fewer resources, poverty, natural calamities, and political instability. The economy of the country witnessed reforms as under:

- Reduce the fiscal and external deficit.
- Improved government savings and exports, private investment, and imports.
- Domestic deregulation and money supply.
- Financial liberalization.

All these parameters of reforms induced an increase in the economy, and all the sectors of the economy have participated effectively in achieving sustainable growth and making Bangladesh a rapidly growing economy of the SAARC region. The services, agriculture, and industry contributed equally, generated employment, and showed a significant increase in per capita income. The exports have also played their due role in fostering economic growth. Over the past two decades, the financial discipline has improved, and budgetary deficits have reduced significantly. The development surprised by Bangladesh in the region is primarily due to exports of their garment industry which have found buyers in developed countries (Wahiduddin, 2008).

STRUCTURAL REFORMS AND GOAL OF ECONOMIC STABILITY IN NEPAL

Nepal has started implementing the Structural Adjustment Program by IMF and World Bank in the mid-1980s. Still, despite being a part of this program, economic growth in Nepal remained on the lower side. This program made the financial and economic sector more volatile to unstable political conditions. Poverty, unemployment, and poor governance have withheld economic development. Privatizing state-owned enterprises has made Nepal the most liberalized country in the SAARC region. Per capita

income is low due to fewer exports and investments. Following structural reforms were introduced in SAP:

- Liberalization of the external account.
- Privatization of state-owned enterprises.
- Introduction of liberal trade policy and investments friendly regulations.
- Market-friendly policies and reducing tariffs on imports and exports.

The impact of these reforms was not substantial due to political instability. The trade policy allowed imports from China and India and undermined local industrial output. The agriculture sector remained the top contributor in its GDP despite shifting focus to the private sector, and a significant portion of employment is generated by agriculture. The broad money supply has shifted significantly in favor of the private sector. Inflation remained high and external debts continued to affect the balance of payments. Interest rates are lowest in the region, and real-time investment data is not validated by economic growth (Shrestha, 2010).

FINANCIAL SECTOR AND ECONOMIC PERFORMANCE

The competence and productivity of the financial sector are the most critical determinants of macroeconomic performance. This statement has been exhibited in the outcome of the Global Financial Crisis (GFC) of 2007-08 and the consequent Great Recession faced by many developing and developed countries. Similarly, continuous economic growth is the most distinct element of community living standards (Haldane, 2015). The empirical findings on the growth-finance relationship have increased post-crisis period.

The GFC authenticated that the relationship between finance and economic growth is multifaceted and keeps changing as GFC affected this region severely (Grochowska, Diaconescu, Margerit & Tomova, 2014). Therefore, the classical question arises as economic growth becomes a prevailing concern of our time (Cochrane, 2017) for the SAARC region. The same input of the financial sector to development remained unanswered and kept changing over the business cycle.

In order to develop a deep and concise understanding of the phenomenon, one should investigate the role of the financial sector in economic growth (Aghion & Howitt, 2009). The shockwave experienced in the aftermath of GFC to credit supply played a significant role in reducing GDP growth and increasing inflation. Financial intermediation played a significant role in transmitting shockwaves which initiate macroeconomic variations (Baharumshah, 2014).

FINANCIAL SECTOR AND DETERMINANTS OF ECONOMIC GROWTH

The facilitating role of financial sectors in the functioning of economies has always been deep-rooted due to its significance for the economy (Christopoulos, & Tsionas, (2004). The core question in this inquiry is whether the financial sector's performance is an essential factor of economic growth or just an outcome of development (Aghion & Howitt, 2009). If finance is related to growth, it is imperative to explore the instruments behind this relationship and the consequences for a macroeconomic policy. Available knowledge in this field is often overlooked or "inconvenient realities" are shown (Bailey & Elliot, 2013). The empirical studies support theoretical evidence of its contribution to long-term economic growth (Ang, 2008).

The financial sector includes the banking sector and other financial institutions that offer credit and investment. It is evident from previous studies that economic growth increases financial development (Liang & Teng, 2006). Other researchers argue that financial development led to economic development. Some studies found no long-term two-way associations between variables (Kilimani, 2009). Research on Bangladesh argued that monetary and financial variables do not participate fully in growth, notwithstanding the widespread financial development in the post-reform period (Kabir & Hoque, 2007). Hesse (2007) suggested that means of capital growth and productivity indirectly influence economic growth through financial development, whereas Levine (1998) has determined that physical capital accumulation, productivity growth, and per capita growth are positively related to banking development.

Ho and Odhiambo (2013) have conducted a study in Hong Kong to measure banking sector growth, and results have shown that this relationship depends upon the method used. In SAARC countries, economic growth is affected significantly by financial development through financial liberalization channels (Memon, 2011). A comparative analysis of Pakistan and China from 1960 to 2005 ascertains long-term association between both indicators.

Recent research studies have discussed the relationship between economic growth and the banking sector among 16 transition economies from Europe (Petkovski & Kjosevski, 2014). Their findings suggested that the ratio of quasi money (RQM) has a positive relationship with economic growth. Another study discovered that interest rate, domestic credit, and banking sector development positively relate to economic growth (Peter & Lyndon, 2014). Trade openness and liquid liabilities of commercial banks substantially affect economic development. Government expenditure, interest rate spread and credit to private sector offer substantial negative influence (Ghani, 2013). Another study claimed that growth is negatively related to bank deposits and credit provided to banks (Ayadi et al. 2014).

Model Specification

It is evident from the literature that a few research studies have been conducted on the SAARC region. This study intends to investigate the role of the banking sector in economic stability in SAARC countries, including Bangladesh, India, Bhutan, Pakistan, Nepal, and Sri Lanka, throughout 1989-2020. Various approaches have been used to determine the impact of banking sector development on the post-crisis regime's economic stability. The structural change theory supports the conceptual foundation for the present study. This theory concentrates on transforming domestic economic structures in the least developing economies to foster economic growth (Agbenyo, 2020). The present study also focuses on the structural reforms in the banking sector, which is one of the critical pillars that contribute to the economy.

This study uses Hausman Test and Fixed Effect Method (FEM) by using a panel of five SAARC countries (Hausman, 1978). The GDP growth rate per capita is used as the dependent variable, and independent variables include banking indicators and control variables. The banking indicators include Quasi Money (RQM) ratio as a percentage of GDP. The Ratio of Quasi Money (RQM) is used to measure the size of financial sector development, especially in emerging economies. The control variables are Gross Fixed Capital formation as a percent of GDP (INV), exports of goods and services (EXPT), government expenditures as a percent of GDP (G.V.), the annual percentage change in consumer price index (INF).

Purpose of control variables is to control other factors, affecting dependent variable. It includes inflation to explain monetary discipline (Petkovski & Kjosevski, 2014). Another control variable is export which helps to facilitate economic growth. General government final consumption expenditures are used as a control variable when describing economic growth as it has a negative impact on economic growth (King & Levine, 1993; Levine et al. 2000). Initial GDP in logarithm is used to get growth convergence effect in a regression model.

The model specification is as under:

$$GDPC_{it} = \beta_{0it} + \beta_1 RQM_{it} + \beta_2 GDPG_{it} + \beta_3 EXPT_{it} + \beta_4 INV_{it} + \beta_5 GV_{it} + \beta_6 INF_{it} + \delta_{it} \quad (1)$$

where,

GDPC GDP per capita

RQM is Ratio of Quasi Money

GDPG is Growth in Gross Domestic Product

EXPT is exports of goods and services

INV is Gross Fixed Capital Information as percent of GDP

GV is general government final consumption expenditures as percent of GDP

INF is consumer price index annual percentage change

δ is residual term

and $i=1, 2, 3, 4, 5$. And $t = 1, 2, \dots, 32$

VARIABLE MEASUREMENT

Prior researchers have used different proxies to find financial depth, such as stock market capitalization to GDP, liquid liability to GDP, and private credit to GDP. For example, some researchers studied the financial depth by using the credit to the private sector to GDP, credit to the private sector to total domestic credit, and liquidity liability to GDP (King & Levine, 1993). They have determined that different products for tangible and intangible investments announced for the private sector improved financial depth due to economic development. They have emphasized on necessary presence of the stock market in the financial system. It was found that if bond and stock markets are included in the financial system effectively, they expedite and aid the transfer of funds from banks to financial markets.

Furthermore, extraordinary funding to the private sector negatively affects economic growth and financial development (Gregorio & Guidotti, 1995). Numerous scholars explored the role of institutional improvement on the financial development of an economy (Clague, 1996). In addition (Beck, Kunt & Levine 2002) highlighted the role of institutions and political interferences on economic growth and financial development. It has also been explored that better institutional quality existed with GDP simultaneously. At least in the short-term, trade openness increases financial development and, more specifically, in lower-income countries using a panel of 90 countries over 1960- 99.

Quasi money to GDP and M2 to GDP ratios were used to calculate financial depth. They improved the economic development, and the availability of security deposit insurance schemes acted as a catalyst to control inflation, stabilize the financial sector, and increase real income (Cull, 1998). In order to find financial depth, seven financial intermediation ratios were used, and the outcome was correlated with the saving behavior of people (Christopoulos & Tsionas, 2004). A further study showed nonlinear relation between financial depth and inflation.

Additionally, literacy rates, investment rate, and per capita were also observed, augmenting financial development, whereas inflation was found to affect the economic development both in the short and long term (Goyal, et al., 2011). The study emphasized that limits on the currency exchange rate, well-managed credit flows, and prudent monetary policy could raise the

financial depth. At the same time, other researchers said that the financial needs of investors and savers must be aligned with financial products. There should be a focus on accessibility and efficiency to encourage economic development. In another research, principal component analysis was used to calculate the financial depth index using three indicators; liquid liabilities to GDP, commercial banks assets to central bank assets, and private credit to GDP. It concluded that institutional and structural setups are essential requirements of financial development.

DATA SOURCES

The data have been collected from World Bank publications; World Development Indicators (WDI), Pakistan Economic Outlook, Sri Lanka Economic Outlook, India World Economic Outlook (Various Issues), SAARC Secretariats, economic surveys of respective countries, Asian Development Bank publications. The data for economic variables like GDP per Capita, GDP growth rates, Inflation, and government expenditures have been collected from World Development Indicators. The data for financial variables have been collected from International Financial Statistics and Economic Outlooks of respective countries. The analysis period for this study is 32 years (1989 to 2020) for the selected countries of SAARC.

RESEARCH METHODOLOGY

For empirical results, quantitative research methodology has been used in the present study. To analyze the data, first of all, a set of panel data has been developed consisting of five cross-sections (five SAARC countries; India, Pakistan, Sri Lanka, Bangladesh, and Nepal). The main reason behind the selection of the 5 countries is the availability of information for these countries about said variables for specific time spans. Diagnostic Test like Correlogram has been applied to check the identification of data with the help of Autocorrelation Function (ACF) and Partial Autocorrelation Function (PACF). It has been observed that the data is stationary at the level. To check the effects of structural reforms on economic stability, time-variant dummy variables (DBD, DIND, DPAK, and DSL) for four countries (Bangladesh, India, Pakistan, and Sri Lanka) have been generated based on the study of Alesina, Ardagna, and Galasso (2010). Panel data estimation technique (Fixed Effects Method) has been used for empirical analysis because of the balanced panel. The results of the Fixed Effect Method are discussed in Table 3.1.

Table 3.1 Empirical Results of the Study

Dependent Variable: LOG(GDPC)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(EXPT)	0.008	0.003	2.021	0.047
LOG(GDPG)	0.624	0.015	40.359	0.000
LOG(GE)	0.006	0.006	1.004	0.318
LOG(INF)	-0.018	0.011	-1.613	0.111
LOG(INV)	0.001	0.006	0.251	0.802
LOG(RQM)	-0.200	0.031	-6.430	0.000
DBD	0.013	0.032	0.425	0.672
DIND	0.006	0.036	0.177	0.859
DPAK	0.353	0.125	2.817	0.006
DSL	0.008	0.065	0.135	0.892
C	1.673	0.124	13.48	0.000
R-squared	0.964	Mean dependent var		2.258
F-statistic	140.213	Durbin-Watson stat		1.554
Prob(F-statistic)	0.000			

In table 3.1, the empirical results of the present study have been shown. According to the table3.1, GDP Growth has a positive and significant impact on GDP per capita, which is a measure of economic growth. The T-Stat value of GDPG is 40.359, representing that growth in Gross Domestic Product has a highly significant and positive impact on GDP Per Capita. In other words, the countries must focus on increasing their respective GDPs to sustain their economic stability. Generally, through identity equation; $Y=C+I+G$, GDP has been measured. Suppose governments want to create economic stability in the country. In that case, it is indispensable to generate more economic activities in the post-financial crisis scenario by reducing the interest rate, better regulation, and supervision of financial institutions, as evident from developed economies. These results are consistent with the prior studies like Shahbaz, (2014), Ahluwalia, (2019) and Ayadi, (2014).

Another significant result is that the Ratio of Quasi Money (RQM) has a negative but significant effect on economic growth. Similarly, EXPT is a positive and considerable variable that impacts the economic growth of SAARC countries. There is an immense need to boost intra trade relations between the member countries to minimize the effects of the financial crisis. These results are consistent with prior studies like Zahonogo (2017) and Tekin (2012). These studies have a dominant view of trade's positive and significant impact on economic growth. Government expenditures and investment are the main components of the national income determination expenditure approach, which positively affect national income. Table 3.1 explains that these two variables positively affect GDPC as T. Stat of the estimated coefficient representing positive but insignificant due to non-

availability of sufficient funds for capital formation in developing countries. The pace of development has slowed down due to the global financial crisis. The structural reforms in India, Sri Lanka, and Bangladesh have protected their respective economies with macro-prudential policies, better regulations, and effective supervision of financial institutions. The inflation rate has a negative effect on economic growth. The present study results are also in favor of this negative relationship between these two variables.

In the present study, the structural reforms are measured through time consistent dummy variables. The results show that except for Pakistan, the coefficients of the dummy variables are insignificant, which means that all three countries have elastic economies. Post-crisis structural reforms do not have any significant impact on their economic growth. These countries have protected their economies with swift financial regulations and concurrent control and supervision on foreign exchange credit disbursements to minimize the effects of the U.S. financial crisis. As well as Pakistan's economy is concerned, it has taken a drastic impact of structural reforms due to slowdown in economic activities, high depreciation in its current, and IMF conditionalities. Briefly, the Pakistani government has to face tremendous challenges on economic, political, and financial fronts to sustain its economic stability.

In Pakistan, the banking sector is squeezing in terms of its transactions due to monetary and fiscal policies. For instance, the government has imposed direct and indirect taxes on the general public, which has hammered their real purchasing powers. It is a universal truth that taxes shrink the size of the economy, so overall national income growth has drastically affected and stood at 2.7 percent during the fiscal year 2018-19 (ESP, 2018-19), which is the lowest in the South Asian Region. Secondly, the State Bank of Pakistan has implemented a contractionary monetary policy and increased the bank rate from 6.5 percent to 12.25 percent during the first year of the present government of PTI, which has created another spell of inflationary pressure. Due to a decline in economic activities, the unemployment rate has increased, further declining aggregate demand and economic growth. Thirdly, the State Bank of Pakistan has depreciated local currency, which drastically impacts importable items. The government of Pakistan must have to restore the trust of businessmen to create a business environment.

CONCLUSION

The present study attempts to analyze the effects of post-crisis structural reforms on the economic stability of the SAARC region. In this regard, the role of the banking sector is also being investigated in respective economies. Based on prior studies, economic and financial variables have been selected to achieve these objectives. Secondary data sources are used to collect the information about respective variables regarding five countries; India,

Pakistan, Sri Lanka, Bangladesh and Nepal, in the SAARC region. A set of panel data has been formulated with five cross-sections. The period of analysis covers last 32 years (1989 to 2020). The estimation of the study has been conducted with Fixed Effect Method (FEM) due to balanced panel data. Positivist research philosophy has been applied in the present study.

The main results indicate that structural reforms are almost ineffective due to a lack of implementation of regulatory policies and financial infrastructure. The SAARC region has not been affected more due to the financial crisis. For instance, Bangladesh has limited its transactions with foreign banks and controlled credit disbursement in foreign exchange. The economy of Bangladesh receives the minimal effect of the Global Financial Crisis (GFC) due to consistency in their policies. Similarly, the Indian economy has a more stable financial structure, and it has resisted against GFC with effective structural reforms, which have protected the Indian economy.

Similarly, the Central Bank of Sri Lanka (CBSL) has taken revolutionary steps to revolve its economy with prudential policies, effective control, and supervision of financial institutions. To restore the economies from adverse effects of the financial crisis and prepare the respective economies for any future financial crisis, the respective governments must ponder adequate supervision of financial institutions, their regulation, and monitoring. To create a favorable business environment, all the countries should focus on peace, harmony, and coordination in bilateral trade. Future studies may be conducted on analyzing the intensity of structural reforms in regional blocks like E.U., South East Asian Countries, G-8 and G-20 countries.

REFERENCES

- Abubakar, A., & Gani, I.M., (2013). Impact of banking sector development on economic growth: another look at the evidence from Nigeria. *Journal of Business Management & Social Sciences Research*, 2 (4), 47-57.
- Agbenyo, J. S., (2020). The Structural Change Theory – An Analysis of Success and Failures of Technology. *International Journal of Research and Innovation in Social Science* |Vol.04, Issue I, January 2020|ISSN 2454-6186.
- Aghion, P., & Howitt, P. W., (2009). *The Economics of Growth*. Massachusetts Institute of Technology (MIT) Press, Cambridge, Massachusetts, London, England.
- Ahluwalia, M. S. (2019). *India's Economic Reforms: Achievements and Next Steps*. Asian Economic Policy Review.
- Alesina, A., Ardagna, S., & Galasso, V. (2010). *The Euro and Structural Reforms*. National Bureau of Economic Research (NBER Working

- Paper Series. The University of Chicago Press.: <http://www.nber.org/chapters/c11652>.
- Ang, J. B. (2008). A survey of recent development in the literature of finance and growth. *Journal of Economic Surveys*, 536-576.
- Ayadi, R. A. (2014). Financial development Bank efficiency and economic growth across the Mediterranean. *Economic and Social Development of The Southern and Eastern Mediterranean Countries*, 219-233.
- Baharumshah, S.-V. S. (2014). Inflation, inflation uncertainty and output growth: what does the data say for Malaysia? *Journal of Economic Studies*, Vol. 41 Issue, 370-386.
- Beck, T., Kunt, A.D., & Levine, R., (2002). Law, endowment and finance. *Journal of Financial Economics*, 37-81.
- Caprio. (2013). Financial regulation after the crisis: How did we get here, and how do we get out? LSE Financial Markets Group Special Paper Series.
- Chen, Chen, S. H. (2013). What determines bank productivity? International evidence on the impact of banking competition, bank regulation, and the global financial crisis. In *Global Banking, Financial Markets and Crises*. Emerald Group Publishing Limited, 14, 141-171.
- Christopoulos, D. K. & Tsionas, M., (2004). Financial development and economic growth: Evidence from panel unit root and cointegration tests. *Journal of Development Economics* 73 (1), 55-74.
- Clague, C. K. (1996). Property and contract rights in autocracies and democracies. *Journal of Economic Growth*, 1(2), 243-276.
- Cochrane, J. H. (2017). A new structure of U.S. Federal debt. *Economic Working Paper*. Hoover Institution, Sandford University.
- Buch, C., & Dages, B. G., (2018). Structural changes in banking after the crisis. Committee on the Global Financial System (CGFS) Papers. ISBN 978-92-9259-131-1.
- Dudley, W. C. (2018, June). Financial Stability. Reforming Culture and Behavior in the Financial Services Industry: Progress, Challenges, and the Next Generation of Leaders. Federal Reserve Bank of New York.
- Dunham, D., & Kelegama, S. (1997). Stabilization and Adjustment: A Second Look at the Sri Lankan Experience, 1977-93. *The Developing Economies*, 35(2), 166-184.
- Franklin, A., Gu, X. & Kowalewski, O., (2012). Financial Crisis, Structure and Reform. *Journal of Banking & Finance*. Volume 36, Issue 11. Pp: 2960-2973
- Goyal, Rishi and Marsh, Chris and Raman, Narayanan and Wang, Shengzu and Ahmed Hannan, Swarnali, Financial Deepening and International Monetary Stability (October 19, 2011). IMF Staff Discussion Note SDN/11/16.
- Gregorio, J. D and Guidotti, P. (1995). Financial development and economic growth. *World Bank Economic Review*. World Bank Economic Review. vol. 23,3, 433-448.

- Grochowska, A., Diaconescu, L. Margerit, A. & Tomova, R., (2014). Financing the recovery: The state of Europe's financial sector. ECFIN Economic Brief. European Commission.
- Hausman, J. A. (1978). Specification tests in Econometrics. *Econometrica*. Journal of Econometric Society. Vol. 46, No. 6 (Nov., 1978), pp. 1251-1271.
- Hemachandra, W., (2012). Financial Crises and Impacts of Recent Financial Crises on Sri Lanka. *Staff Studies*, 41(1), pp.1–40.
- Hesse (2007). Cooperative Banks and Financial Stability. IMF Working Paper. IMF.
- Kabir, S. and Hoque, H., (2007). Financial liberalization, financial development and economic growth: Evidence from Bangladesh. *Savings and Development*. 31.
- Khan, M.A. & Khan, S., (2007). Financial Sector Restructuring in Pakistan. *Lahore Journal of Economics*. DOI: 10.35536/lje.2007.v12.isp.a6.
- Kilimani, N. (2009). The link between financial development and economic growth in Uganda. Centre for Study of African Economies (CSAE) Conference, (pp. 22-24).
- King. (1993). Finance, Entrepreneurship and Growth: Theory and Evidence. *Journal of Monetary Economics*, 513-542.
- King R., & Levine. R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics*, 717-737.
- Liang, Q., and Teng J.-Z. (2006) Financial development and economic growth: Evidence from China, *China Economic Review*, 17(4), pp. 395–411.
- McKinnon, R., (1991). The Order of Economic Liberalization: Financial Control in Transition to Market Economy. Baltimore, Johns Hopkins University Press
- Memon, A. B. (2011). Financial development and economic growth in SAARC countries. CIIT Lahore.
- Ministry of Finance, G. o. P (2019). A roadmap for stability, Growth and Productive employment. Islamabad: Government of Pakistan.
- Peter, A. E. & Lyndon, M. P. (2014). Macroeconomic analysis of Banking sector development and economic growth in Nigeria. *International Journal of Economics, Commerce and Management*, 2 (1), 1-11.
- Petkovski, M., & Kjosovski, M. P. (2014). Does banking sector development promote economic growth? An empirical analysis for countries in Central and South Eastern Europe. *Economic Research-Ekonomska Istraživanja*, 55-66.
- Roshan, S. A. (2007). Export linkage to economic growth: evidence from Iran. *International Journal of Development Issues*, Vol. 6 Issue, 38-49.
- Rana, P. B.& Chia, W., (2015). Economic Policy Reforms in South Asia: An Overview and the Remaining Agenda. © S. Rajaratnam School of International Studies.

- Saad, M. & Anis, S., (2014). Pricing, Dynamics, and Determinants of Illiquidity Risks: International Evidence. Asian Finance Association (Asian F.A.) Conference Paper.
- Samargandi, N. F. (2013). Is the relationship between financial development and economic growth monotonic for middle-income countries? Economic and Finance Working Paper.
- Shahbaz, M. (2014). Exports, financial development and economic growth in Pakistan. *International Journal of Development Issues*, Vol. 13 Issue: 2, 155-170.
- Shrestha, P. K. (2010). *Structural Changes and Economic Growth in Nepal*. New School for Social Research, New York.
- Sibindi, A., & Bimha, A. (2014). Banking sector development and economic growth: evidence from Zimbabwe. *UNISA. Banks and Bank Systems*, Vol. 9, Issue 2.
- Stephan, F. (2017). Macroprudential policy – closing the financial stability gap". *Journal of Financial Regulation and Compliance*, Vol. 25 Issue: 4, 334-359.
- Tekin, R.B. (2012). Economic growth, exports and foreign direct investment in Least Developed Countries: A panel Granger causality analysis, *Economic Modelling*. Vol. 29, pp:868-878.
- Tressel, T., & Detragiache, E. (2008). Do financial sector reforms lead to financial development? Evidence from a new dataset. *Evidence from a New Dataset* (December 2008).
- Véron, Nicolas (2014): The G20 financial reform agenda after five years, *Bruegel Policy Contribution*, No. 2014/11, Bruegel, Brussels.
- Waheed, A. (2009). *Financial Sector Refoms and Economic Growth: A Time Series Data Analysis for Pakistan*. Institute of Developing Economies, Japan External Trade Organization.
- Wahiduddin Mahmud, S. A. (2008). *Economic Reforms, Growth, and Governance: The Political Economy Aspects of Bangladesh's Development Surprise*. Working Paper, No 22. Commission on Growth and Development.
- Zahonogo, P. (2016). Trade and economic growth in developing countries: Evidence from sub-Saharan Africa. *Journal of African Trade*, 3(1-2), 41-56.