FISCAL DEVELOPMENT SCENARIO: EVIDENCE FROM SAARC COUNTRIES

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ABSTARCT

This study has focused mainly on investigating the relationship between fiscal development and economic growth in SAARC countries. This study has considered government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (representing fiscal development) as independent variables. Economic growth is considered as the dependent variable. This study has finalized 8 SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) to testify the relationship between variables mentioned above. Secondary source (official website of state bank of Pakistan and theGlobalEconomy.com) is used for data collection regarding study variables from the period of 2002 – 2021 (20 years). A sample of 160 observations is finalized to represent the SAARC countries. Collected data is then analyzed through statistical instruments such as correlation and regression by using Strata software. Based on the findings, it is concluded that government spending, gross fixed capital formation, real interest rate, labor force, and physical capital has significant impact on economic growth in SAARC countries. Findings of this study have proved that change in fiscal development brings a definite change in economic growth in SAARC countries.

Key Words: Fiscal Development, Government Spending, Gross Fixed Capital Formation, Real Interest Rate, Labor Force, Physical Capital, Economic Growth, etc.

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Chapter 1

INTRODUCTION

1.1 Background of the Study

Fiscal policy in a country acts as a tool by which the government or central bank attains a lot of objectives oriented towards the growth and constancy of the economy. When it comes to the scenario of Pakistan, financial sector stability and fiscal policy management are the two-major purpose of State Bank of Pakistan (SBP) (Ahmed et al., 2020). With the evolution in economic dynamics of Pakistan, the process of preparing and implementing fiscal policy has certainly changed which has resulted in improving of theoretical and empirical understanding of fiscal policy throughout the world (Saud et al., 2019). State Bank of Pakistan is focusing highly over bringing stability within the economic conditions of the country through handling the issue of inflation which is a major threat to economic stability throughout the year. Fiscal policy refers to an instrument of economic development that can have major impacts on income distribution and poverty through taxes, public borrowings and public expenditures (Nasir et al., 2019). A tight fiscal policy tends to play a major role in increasing of interest rate, as increase in interest rate due to tight fiscal policy lays a foundation for reduced inflation which enables fiscal policy to bring a sudden advancement within the economic growth and stability (Asongu & Odhiambo, 2020).

In developing or developed economies, money supply is considered as one of the biggest reasons to influence economic growth. Higher inflation is having negative impact on the growth rates of a country (Faria-e-Castro, 2021). There has been a noticeable decline within the economic development because of high inflation, as increase in inflation also increases the poverty amongst people of a country. Controlling of demands of businessmen and households regarding certain goods and services helps regulatory authorities in keeping the prices of such products and services stable (Gaspar et al., 2019). Controlling of money supply by the regulatory authorities of a country are considered as the process of developing and implementing financial policy, as such authorities show active participation in keeping the interest rate and inflation rate stable to maintain the stability within the economic conditions of a country (Chugunov & Makohon, 2019). Amount which banks need to keep in their vaults and increase within the amounts of

interest rates are handled through various actions to maintain the stability within economic conditions (Onafowora & Owoye, 2019).

Economic growth is defined as simultaneous increase within the quantity of goods and services in each country. Economic growth is measured through various methods, as increase within the real per capita income of a country certainly gives an indication of increase in economic growth (Asteriou & Spanos, 2019). Increased productive capacity of an economy is shown by a growing economy produces goods and services in each successive period. Inequalities within income distribution are reduced and standard of living of individuals is improved through the economic growth (Sepehrdoust & Ghorbanseresht, 2019). Similar to rest of the world, Pakistan government is working on adopting two types of public policies carrying out the goals of equality in income distribution and allocation of resources. Both policies adopted by Pakistani government are monetary policy and fiscal policy (Nasir et al., 2019). Pakistani government is always relying over the fiscal policy for the accomplishing of certain economic objective within the economy including relatively stable general price level, balance of payment equilibrium, economic growth and development, employment, etc. Excess demand condition within the economy determines the price level for short run, as it is highly dependent over the demand and supply level of real money balances (Ahmed et al., 2020).

Fiscal policy has been the tool used by the governments and regulatory authorities to control the money supply within an economy for achieving economic growth and stability (Botev et al., 2019). There has been strong debate about the rate of inflation having its significant impact over the rate of growth. Therefore, regulatory authorities are more interested in controlling the prices of goods and services to decrease the chances of inflation. Behavior of the financial sector is mostly influenced by the government actions taken towards developing and implicating the fiscal policy (Cox & McCubbins, 2019). Developed economies all over the world are having well-developed money and financial markets which helps them in implementation of their fiscal policies in an effective manner. Movement of numerous variables within the financial sector is influenced by a deliberate change in monetary variables (Beramendi et al., 2019). Change in fiscal policy determines direction of economy of the country. For limitation of inflation, credit in economy, and increase in money, fiscal policy is to be designed by any country (Chugunov et al., 2021).

Failure of Bretton Woods System has caused significant movement in global markets. However, magnitude of fluctuations in macroeconomics variables has been intensified as a result of significant movement within financial markets (Eren et al., 2019). The study of Gaspar et al. (2019) has explained economic growth as an illustration of macroeconomic volatility. Whereas, several empirical studies have explained that theoretical models of economic growth are influenced by riddles and oddities. For instance, Campos et al. (2019) has highlighted that there exists no significant relationship between macroeconomic variables and economic growth, as it develops a conflict with theoretical models helping in prediction of economic growth, as economic growth only increases with the increase of variability of the underlying fundamentals. Market practitioners, policymakers, and academicians are focusing highly over studying the concept of economic growth because of their prime interest in the concept and significant association amongst economic growth and other financial or economic variables (Pigato, 2019).

With respect to developing regions, financial institutions are highly effective in developed regions (Eren et al., 2019). Effectiveness of financial institutions in developed regions is primarily due to controlled inflation, higher foreign direct investment, better exchange rates, and lower interest rates, as these aspects are helping developed regions in promotion of economic growth for long run (Sobiech, 2019). For instance, East Asia is experiencing better economic growth in comparison to South Asia based on the factors mentioned above. Various types of financial institutions are required by different countries for the promotion of long run economic growth (Asongu & Odhiambo, 2020). Economic growth could be measured by any country engaged within international business. A country's currency is depreciated due to increased political risk. The relationship is much better and there are freely floating exchange rates where market players have the freedom to respond to political risk through purchasing the currency of the country having better economies and selling the currency of the country having unstable economies (Cox & McCubbins, 2019).

Despite of the detailed explanation of macroeconomic variables, they are very much criticized by academicians and practitioners, as they consider the understanding of macroeconomic variables and their role in impacting economic growth as very hard (Campos et al., 2019). Academicians have criticized theoretical models provided for relationship between macroeconomic variables and economic growth, as academicians have claimed that handling of economic growth and

bringing stability within the country is not possible by handling macroeconomic variables, as there are several macroeconomic factors (such as physical capital and labor force) which are more important in terms of impacting economic growth in comparison to other factors (Sepehrdoust & Ghorbanseresht, 2019). In addition, some of the researchers have even suggested that international investment and international aid are not considered by research studies in the past while defining economic growth which restricts the concept and does not clearly related it with the macroeconomic variables (Gaspar et al., 2019). While discussing the aspect of economic growth, inflation and exchange rate are considered as most effective macroeconomic variables. There are more chances of higher economic growth by a country which has lower inflation rate and better exchange rate. For a state to be economically stable, providing foreign investors with investment opportunities is also ranked as an effective macroeconomic variable (Asteriou & Spanos, 2019).

1.2 Theoretical Background

Researchers have performed numerous studies regarding economic growth due to which there is significant literature on economic growth. Through multiple channels, economic growth within the country could be improved. Amongst these channels, controlled government spending and improved fixed capital formation are main ones (Onafowora & Owoye, 2019). Several research studies (such as Faria-e-Castro, 2021; Botev et al., 2019; Sobiech, 2019) have shown that fiscal policy factors have a positive impact on international trade, growth, employment, and investment. There has been no theoretical framework highlighting the relationship between fiscal policy variables and economic growth. A bourgeoning literature regarding country-growth nexus has provided a conceptual framework in which the influence of government expenditure on economic growth has been discussed. Researchers all over the world have consensus while defining institutions such as social, political, legal, and economic organization of a country are fundamental determinants of cross-country differences within financial developments and economic performance (Beramendi et al., 2019). This negative relationship has been expanded by Chugunov et al. (2021) to macroeconomic volatility, as macroeconomic volatility is defined as volatility of growth rate of output per worker.

Economic growth involves the variables which provide information about the economic position of a country. Economic development variables show that how strong is a country in economic

terms. A country is having strong economic position tend to experience less inflation and better exchange rate. However, percentage change in GDP and GDP of a country are understood through studying norms and rules of a country (Chugunov & Makohon, 2019). Economic growth and factors affecting it can be calculated through proper guidelines. For instance, a country having strong economic position gives an indication of it being a developed country and involved in following of proper norms, guidelines, and rules (Saud et al., 2019). Other countries will certainly trade with such country because of its strong financial position showing that there will be less chances of risk. Institutional theory is defined as the theory which exhibits that each organization or country has established rules, norms, and guidelines wither informal or formal assisting them in staying aware of the risk which they could experience. Such countries are also having the knowledge regarding the consequences of not fulfilling the guidelines or rules (Gaspar et al., 2019).

1.3 Research Gap

Many studies identify that the economic growth is the most important challenge for a developing country. According to Pigato (2019), to face the major challenge of economic growth, developing countries are still lacking effective handling of fiscal policy variables. As Asongu & Odhiambo (2020) proposed that economic growth is influenced by factors common to both the macro and bank specific. During the time from 2006 to 2018, they analyzed 8 developing countries to explore the aspects (such as taxation and government spending) and their impact on economic growth. Prior research (such as Faria-e-Castro, 2021; Cox & McCubbins, 2019) has examined the relationship between economic growth and government spending using unbalanced panel data from six developing countries. The outcome of their study has shown government spending to be the determinant of economic growth. Similarly, Botev et al. (2019) have argued that government spending is a major macroeconomic element which adversely affects economic efficiency of a country. Their study concentrated on how government spending affects economic efficiency in Pakistan. Meanwhile, lack of empirical evidence concerning the relationship between fiscal policy and economic growth in developing countries has been an important reason based on which this study is conducted. Hence, this study aims to assess the relationship between fiscal policy and economic growth in SAARC countries.

1.4 Research Questions

Following are the research questions of this study:

1. What is the impact of government expenditure on economic growth in SAARC countries?

2. What is the impact of gross fixed capital formation on economic growth in SAARC countries?

3. What is the impact of real interest rate on economic growth in SAARC countries?

4. What is the impact of labor force on economic growth in SAARC countries?

5. What is the impact of physical capital on economic growth in SAARC countries?

1.5 Objectives of the Study

Based on research problem, this study aims:

- To assess the impact of government expenditure on economic growth in SAARC countries.
- To investigate the impact of gross fixed capital formation on economic growth in SAARC countries.
- To identify the impact of real interest rate on economic growth in SAARC countries.
- To inspect the impact of labor force on economic growth in SAARC countries.
- To explore the impact of physical capital on economic growth in SAARC countries.

1.6 Research Significance

This study focuses on investigating the impact of fiscal policy development on economic growth in SAARC countries.

1.6.1 Theoretical Significance

This study significantly contributes towards understanding the impact that fiscal policy variables have over economic growth. It is imperative to develop such a framework which provides assistance towards understanding how economic growth is influenced by fiscal policy variables. This study proves very effective for research students, as it assists them towards increasing their knowledge regarding how economic growth could be improved with the help of government expenditure, gross fixed capital formation, real interest rate, labor force, and physical capital (fiscal policy variables). In addition, this study provides necessary assistance to the finance

students in better understanding of the relationship between fiscal policy variables and economic growth. Furthermore, this research contributes to financial management field in theory and operations.

1.6.2 Practical Significance

This study certainly assists business firms all over the country in identifying how significantly fiscal policy variables (government expenditure, gross fixed capital formation, real interest rate, labor force, and physical capital) impact the economic growth. This study proves highly significant in helping finance analysts and policymakers in understanding the literature and certainly provides necessary information to the investors of Pakistan regarding major fiscal policy factors plays a role in affecting economic growth. The significance of the relationship between economic growth and fiscal policy variables in business world has become more and more significant in last few decades. In addition to that, it is important for the business firms and investors (both domestic and foreign) to understand the role of fiscal policy variables towards having an impact on economic growth. Finance students, research students, trade analysts, market researchers, and economists show high interest in studying about the influential relationship between economic growth and fiscal policy variables, as this study proves highly beneficial for such stakeholders in enhancing their knowledge and understanding about the influence that macroeconomic variables (government expenditure, gross fixed capital formation, real interest rate, labor force, and physical capital) has over the economic growth of Pakistan.

Chapter Summary

This chapter has started with contextual background including fiscal policy variables followed by background in relation to economic growth. In addition, this chapter has also involved the gap analysis based on which research study has been performed and the objective of conducting this study. Afterwards, it has also included research gap, research questions, and research objectives. Finally, this chapter has concluded with significance of the research study.

Chapter 2

LITERATURE REVIEW

2.1 Economic Growth

Economic growth is defined as increase within inflation-adjusted market value of the goods and services manufactured within a country in certain time period. Economic growth has been measured by percentage increase within real GDP, labor force, or fixed capital formation. Economic growth involves expansion and establishment of markets, instruments, and institutions for supporting their growth and investment processes (Singh et al., 2019). Economic growth includes elimination of market distortions through fulfilling the functions of financial system in most appropriate manner. It is also considered as the improvement within financial markets based on the quality and size of financial markets (Saidi & Omri, 2020). In simple words, economic growth refers to the improvements within easing of exchange of goods and services, pooling and mobilization of savings, management of risk, diversification, trading, exerting corporate governance, monitoring firms, allocating capital, and producing information regarding possible investments. These functions tend to have a positive impact over the technological innovations, investment decisions, savings, etc. (Charfeddine & Kahia, 2019).

Economic growth is achieved as a result of improvements within the financial sector composed of financial markets, financial instruments, and financial institutions, along with the legal and regulatory framework permitting transactions to be made by extending credit (ClientEarth Communications, 2020). Generally, overcoming the costs incurred within a financial system is considered as economic growth or economic development. Costs can be reduced or controlled via making transactions, enforcing contracts, and acquiring information resulted within emergence of intermediaries, markets, and contracts (Alper & Oguz, 2016). Several kinds and combination amongst transaction, enforcement, and information costs, in association with various tax, regulatory, and legal systems have encouraged different intermediaries, markets, and contracts throughout the countries. Economic development or economic growth can be achieved successfully through five key functions of economic system including easing the exchange of goods and services, pooling and mobilizing savings, management and diversification of risks, monitoring investments and exerting corporate governance after the provision of finance, and

acquiring information regarding the possible investments and allocating capital (Nematollahi et al., 2016).

Inflation is a factor through which economic growth and development could be measured, as inflation is defined as the measurement of rate increases within the price index. Inflation rate is considered as the percentage increase within the price level over time. Inflation rate is used for measuring of monetary instability which influences the economic stability and growth along with economic performance through its detrimental impacts (Shukla et al., 2017). In business terms, inflation is increase within the prices of goods, commodities, and services, offered to the customers. Inflation tends to have a significant impact over the entire economy. Inflation is not influencing the prices of goods, commodities, and services only, but it is also influencing the government and corporate bond yields, mortgages, borrowing money, the cost of doing business, cost of living, and other facet of an economy (United Nations Development Programme, 2016). Sometimes, inflation results in helping the economy to recover, whereas most of the times, inflation is having negative impact over the economy. With the rapid increase within inflation, economy can destroy or suffer significantly. Contrary to that, controlled inflation is used as a successful tactic for the prosperity or recovery of economy (Soava et al., 2018).

Economy grows and prospers with controlled inflation. It is very difficult to assess the impact of inflation on economic recovery with complete accuracy. The assessment is easier to be done on the basis of inflation rate, as the assessment varies significantly with the variation in inflation rate (Kahia et al., 2019). Another factor playing a pivot role in measuring economic growth is money supply. Money supply has been recognized as total value of monetary assets a country is occupying in a certain time period. Money is defined in various terms, but standard definition of money has been the circulation of currency and demand deposits (Luqman et al., 2019). Country’s central bank or the government has the responsibility of publishing or recording money supply data. There have been significant changes within the money supply when it comes to private and public sectors due to the changes within exchange rates, inflation, and price levels within business cycle. Quantity theory of money is considered as the most appropriate theory for showcasing the relationship amongst prices and money (Asian Development Bank, 2020).

Economic growth is also measured with the help of exchange rate, as exchange rate is also defined as value of the currency of a country with respect to the value of currency of any other

country. Foreign exchange market is responsible primarily for determining the exchange rates, as certain exchange rates are offered to currency sellers and buyers throughout the world for the trading of currency (Kumar et al., 2010). Exchange rate is also referred by the forward exchange rate, as it has been traded or quoted today for the payment or delivery over a certain future date. Within retail currency exchange market, money dealers mostly quote distinguished selling and buying rates (Salem & Kinab, 2015). Selling rate has been the rate at which people sell their currency, whereas buying rate is the rate at which people are buying foreign currency. Exchange rate plays an important role within an economic growth, as fluctuations within the exchange rate tend to have an influencing impact over the economic growth (United Nations Climate Change, 2016). Economic strength is shown mostly by the strong exchange rate, as strong exchange rate is mostly recognized as the symbol of national pride.

2.2 Government Expenditure and Economic Growth

All government consumption, investment, and transfer payments are included in government spending or expenditure. Government final consumption expenditure is defined as government purchases of goods and services for immediate use to directly meet the individual or collective needs of the community under national income accounting (Asteriou & Spanos, 2019). Government investment refers to the procurement of products and services by the government that will provide future advantages, such as infrastructure investment or research funding (government gross capital formation). These two forms of government expenditure, final consumption and gross capital creation, together make up one of the most important components of GDP (Sepehrdoust & Ghorbanseresht, 2019). Taxes, custom charges, the sale or leasing of natural resources and different fees such as admission fees or licensing fees can all be used to fund government expenditures. When governments borrow money, they are required to pay interest on the borrowed funds, which can result in government debt (Cox & McCubbins, 2019). Government expenditure changes are a key component of fiscal policy intended to keep the macroeconomic business cycle stable (Faria-e-Castro, 2021).

Government expenditure may be a valuable instrument for governments in terms of economic policy. The use of government spending and/or taxation as a method to affect an economy is known as fiscal policy. Expansionary fiscal policy and contractionary fiscal policy are the two forms of fiscal policy (Asongu & Odhiambo, 2020). Expansionary fiscal policy is defined as an

increase in government expenditure or a reduction in taxation, whereas contractionary fiscal policy is defined as a reduction in government spending or an increase in taxes. Governments can utilize expansionary fiscal policy to stimulate the economy during a downturn. Increases in government expenditure, for example, immediately enhance demand for products and services, which can assist boost production and employment (Nasir et al., 2019). Governments, on the other hand, can utilize contractionary fiscal policy to calm down the economy during a boom. Reduced government expenditure can assist to keep inflation under control. In the short run, during economic downturns, government expenditure can be adjusted either by automatic stabilization or discretionary stabilization. Automatic stabilization occur when current policies adjust government spending or taxation in response to economic shifts without the need for new legislation (Campos et al., 2019).

Unemployment insurance, which offers cash help to jobless people, is a prime example of an automatic stabilizer. When a government responds to changes in the economy by changing government spending or taxes, this is known as discretionary stabilization. For example, as a result of the recession, a government may opt to raise government expenditure (Botev et al., 2019). To make adjustments to federal expenditure under discretionary stabilization, the government must adopt a new law. One of the earliest economists to call for government deficit spending as part of a fiscal policy response to a recession was John Maynard Keynes. Greater government spending, according to Keynesian economics, improves aggregate demand and consumption, resulting in increased production and a speedier recovery from recessions (Saud et al., 2019). Classical economists, on the other hand, think that greater government expenditure exacerbates an economic downturn by diverting resources from the productive private sector to the unproductive public sector (Eren et al., 2019). Given the findings of previous research studies, this study posits following hypothesis:

H1: Government expenditure has significant impact on economic growth in SAARC countries.

2.3 Gross Fixed Capital Formation and Economic Growth

Gross fixed capital formation (GFCF) includes improvement of land, purchases of equipment, machinery and plant, construction of railways and roads, and improvement of industrial

buildings, commercial buildings, private residential dwellings, hospitals, offices, and schools (Onafowora & Owoye, 2019). GFCF consists of improvement of infrastructure, transportation, office supplies, and machinery. GFCF is purchasing of equipment, buildings, machinery, and other aspects required having smoothed running or managing of production processes in the country. Countries that are looking towards improving their economy mostly invest heavily within the fixed capital formation. For instance, a country looking to become a developed country has to make several investments by improving machinery, equipment, infrastructure, etc. (Beramendi et al., 2019). The investment made by developing countries within fixed capital formation helps them in bringing stability within the economy. For a certain country, economic growth is measured as a result of gross fixed capital formation. It has been obvious that it is very difficult for a country to gain economic growth without improving gross fixed capital formation (Chugunov et al., 2021).

Gross fixed capital formation has been a driving force which is having its impact over the economic growth in the form of per capita output and growing aggregate. Capital accumulation model has shown that there are several variables based on which capital accumulation is relaying significantly including population growth rate, how much capital depreciates over time, and how much output is saved (Ahmed et al., 2020). Capital accumulation is mostly declines due to increased depreciation of gross fixed capital formation and population rate. Contrary to that, the increase within the investments for improving gross fixed capital formation has certainly resulted in having a positive impact over the higher output per worker and capital growth (Gaspar et al., 2019). Gross fixed capital formation is one of the important aspects which help in improving economic growth via capital accumulation model. Trade-offs that society is willing to make has been showing the economic and capital growth of a developing economy through capital accumulation model. Investments made within the GFCF help both developing and developed economies in bringing stability to the economies (Sobiech, 2019).

A society is making choices amongst opportunity cost of consuming versus opportunity cost of investing, as future economic growth and stability of the country is highly dependent over the investments made within the GFCF (Pigato, 2019). Since the monetary framework was initially started, there are many links between gross fixed capital formation, labor and power generation. At first, this relationship is more straightforward; you need a certain amount of seeds and spoons

to provide the benefits of the product. Over time, these connections have become more complex, as the variety of GFCF has expanded and the amount of labor available to a country has risen significantly (Chugunov & Makohon, 2019). The development of Solow began to appear in the 1950s to show part of this unpredictability through natural conditions revealing the key drivers of economic growth. Solow's developmental display contains two basic conditions that can be inferred for different conditions. The main condition for the development of Solow is the generation work which is a combination of expressing fixed capital formation and labor for the benefit of a country (Gaspar et al., 2019).

An important contribution of the model is that it quantifies the development of estimates. Now one can measure the impact of fixed labor formation on GDP. Fixed capital formation is focused mostly by open economies offering above-average growth prospects and a skilled workforce in comparison to tightly regulated economies. Fixed capital formation is not about the capital investment only, as it involves technology and provisions of management as well (Saud et al., 2019). Within developed countries, the impact of fixed capital formation over the economic growth has been explained by the researchers through substantial literature. Fixed capital accumulation highly influences the economic growth and financial stability within the country (Eren et al., 2019). Research studies performed in the past have highlighted the factors that play vital role in improving economic growth. Ineffective resistance to economic shocks within the financial system and key financial markets is shown by the countries who have not invested sufficiently in fixed capital formation aspect. Lack of developing or underdeveloped countries to cope with the external impairment, distortion, or crisis situation is mainly due to lack of sound fixed capital formation. The understanding and improving of fixed control formation is very important because it tend to have a severe impact over the economy (Asongu & Odhiambo, 2020). For providing concrete evidence regarding relationship between gross fixed capital formation and economic growth, present study put forwards the following hypothesis:

H2: Gross fixed capital formation has significant impact on economic growth in SAARC countries.

2.4 Real Interest Rate and Economic Growth

Country's central bank or the government has the responsibility of setting interest rate. There have been significant changes within the interest rates when it comes to private and public

sectors due to the changes within exchange rates, inflation, and price levels within business cycle (Asteriou & Spanos, 2019). Quantity theory of money is considered as the most appropriate theory for showcasing the relationship amongst prices and money. Researchers in the past have provided strong evidence regarding the positive association amongst long-term price inflation and interest rate. For example, in countries such as Zimbabwe, there has been a rapid increase within the prices (hyperinflation) recorded due to significant increase within the interest rate (Sepehrdoust & Ghorbanseresht, 2019). Developing economies have been working on controlling the inflation through bringing resilience within their interest rate. Some heterodox economists have provided strong arguments regarding the positive circulation of interest rate are proving highly significant within the economic growth of a country (Cox & McCubbins, 2019). Meanwhile, the limited interest rate is having a negative impact over the county's economic growth (Sobiech, 2019).

The literature has shown that there is a dynamic impact that economic growth has due to interest rate. Within developing economies, studies have provided necessary evidence regarding the influential relationship amongst economic growth and interest rate, as results have been mixed (Faria-e-Castro, 2021). Several researchers have explained that there exists a strong association amongst economic growth and interest rate, whereas very few researchers have also found that there is an insignificant relationship amongst economic performance and interest rate. In accordance to the study of Campos et al. (2019), empirical analysis has been done for explaining the association amongst growth rate and interest rate. This research study has used vector error correction model (VECM) model to explain the relationship between economic growth and interest rate. According to the study of Botev et al. (2019), economic growth is influenced significantly by the interest rate, as Autoregressive Distribution Lag (ARDL) model is used to identify the relationship in the period 1995-2013 for Authorized Economic Operators (AEO) open region. The findings of this study have shown that economic growth is positively correlated with interest rate.

Onafowora & Owoye (2019) survey Nigeria's money supply and currency development from the period of 1920 to 2006 by using the erroneous rectification show. Their study shows that interest rate is closely related to development. Another check focused on interest rate, inflation and economic development. They found positive and noteworthy links between interest rate and

economic growth somewhere in 1975 and 2008 and used ARDL certification. Nasir et al. (2019) show the impact of Nigeria's expansion of interest rate and economic development from 1987 to 2010. They used ARDL to show that their findings indicate that interest rate and national output are closely related. Gaspar et al. (2019) explored the observational test between Pakistan's interest rate, government use, yield and cost from 1977 to 2007. The study found that the interest rate has a great impact on financial development. The study of Beramendi et al. (2019) has linked the interest rate to the total national production of Romania. This has been demonstrated by the years of Engle-Granger and ARIMA. They found that the interest rate and the country's total output are in a comfortable relationship.

Chugunov et al. (2021) used co-integration proofs to study Singapore's projected currency, unforeseen currency and yield varieties from 1971 to 1972. They found that interest rate and production were co-integrated. Chugunov & Makohon (2019) also studied the impact of Sri Lanka's interest rate on currency during the period 1959-2013 using a multivariate econometric variable. It is found that interest rate has a positive impact on financial development. However, few studies have found measurable immaterial and negative effects between interest rate and economic growth. Gaspar et al. (2019) explored Ghana's budgetary progress and financial development from 1971 to 2010, using a comprehensively revised Common Least Squares (FMOLS). They found that monetary advances (calculating money supply) undermined economic growth. Several other studies have proven these results. A survey of Ahmed et al. (2020) explored the effects of inflation on the financial development of Nigeria from 1973 to 2013, using VECM. Their findings suggest that the expansion of money supply and premiums is contrary to monetary development. The study of Pigato (2019) has shown the positive impact of interest rate on Pakistan's GDP within 2000 and 2011, using financial indicators, and they found that impact of material and negative interest rate on financial development. Given the findings of previous research studies, this study posits following hypothesis:

H3: Real interest rate has significant impact on economic growth in SAARC countries.

2.5 Labor Force and Economic Growth

Labor force is defined as number of people which are employed as well as the number of people which are not employed (unemployed) and willing to have an employment. Labor force is not

including people who do not have employment and even they are not looking for one. For example, labor force does not involve students, retirees, and stay-at-home moms (Nasir et al., 2019). Labor force does not even include people who have given up hope due to locating of a job and show no interest in getting one. Labor force is only composed of people who are looking for a job, willing to work, and available for employment. Labor force is measured through the number of people who are willing to get a job instead of people who are adults and can do a job (Asteriou & Spanos, 2019). During or after recession, the pool of labor force further shrinks which is always a worrying sign for economic growth of a country. Labor force gives a clear indication of real unemployment rate which highlights people who are willing to do a job but does not have any along with the people who can do a job but show no interest in getting it (Eren et al., 2019).

Rate of economic expansion of a country depends on the growth within labor force. For last five decades or so, there has been increasing labor force which is resulting in enhancing potential rate of expansion within the U.S. economy. After 2001, potential real GDP growth is increased by average of just 1.1 percentage points due to increase within the labor force, as it has helped in identifying that the growth in economic parameters due to labor force is declining with the passage of time (Asongu & Odhiambo, 2020). Within last few years, there has been only 0.9 percentage point increase within potential real GDP growth due to increase in labor force, as baby boomers age into retirement have been the key drivers of such decline within the positive impact of higher labor force in economic growth and GDP (Cox & McCubbins, 2019). In accordance to the study of Sepehrdoust & Ghorbanseresht (2019), there has been an influential relationship measured between economic growth, labor force, and population. The increase in population is having an inverse impact over the labor force and ultimately decreasing the growth rate.

The real unemployment rate is estimated for all the unemployed, whether or not they are no longer the workforce. The US Bureau of Labor Statistics estimates labor. It gives a monthly work report and also gives the country’s current unemployment rate (Botev et al., 2019). In 2017, there were 153 million people in the workforce. It is the fourth largest workforce on the planet after China, India and the European Union. More than half (53.1%) are male and 46.9% are female. The middle-aged is 42.2 years old. The middleman reveals to you the idea that most

of the general population is younger and half younger. Among them, 5.1 million people are young people between the ages of 16 and 19. Another 9.2 million people are more mature than 65 people. The rest are working long-term at the age of 20-64. Social insurance is the largest business, accounting for 14% of the workforce. Retail transactions are straightforward, putting 11% of the workforce into work. The assembly utilization rate is 11% and the training utilization rate is 9%. Professional and skilled management used 8%, while accommodation used 7% (Faria-e-Castro, 2021).

Labor force participation rate refers to the number of individuals who can be filled as a percentage of the total population. As women entered the labor market, this ratio expanded somewhere in 1960 and 2000. It reached a peak of 67.3%. The withdrawal in 2001 dropped it to 66%. By 2015, the currency emergency in 2008 fell to 62.6%. This decline should mean that the labor supply is declining. Fewer experts should be able to consult higher wages. Under no circumstances did it happen (Onafowora & Owoye, 2019). On the contrary, as the normal wage level continues, the pay gap widens. When the profession is redistributed, the experts can't compete. They also can't compete with the robot. The organization believes that replacing capital equipment is more financially intelligent than contracting more workers (Campos et al., 2019). Profitability is the measure of labor products and businesses. It is created by specific labor volumes and fixed capital measures. The more they do, the more efficient they are. Organizations seek ways to increase efficiency because it expands the benefits. High efficiency prevails. This is valid for individual experts, organizations or countries (Sobiech, 2019). For providing concrete evidence regarding relationship between labor force and economic growth, present study put forwards the following hypothesis:

H4: Labor force has significant impact on economic growth in SAARC countries.

2.6 Physical Capital and Economic Growth

Physical capital is amongst the three major factors of production explained within the economic theory. Physical capital consists of manmade goods assisting the process of production e.g. computers, transportation, office supplies, and machinery (Saud et al., 2019). Physical capital is including manmade goods enabling the process of production like equipment, buildings, machinery, and other goods required to have smooth running or managing or production process. Companies that are starting their business activities mostly invest heavily within the physical

capital to manufacture the products or to offer services to the customers. For instance, a company starting its manufacturing business has to make several investments by purchasing machinery, equipment, factory etc. to start the process of manufacturing products or delivering services to the customers (Beramendi et al., 2019). With the investments made by existing firms within physical capital helps them in reducing the probability of new entrants entering the business industry with their products and services. In a certain industry, level of diversification is measured by the diversification of physical capital. It has been obvious that opening of a new manufacturing plant is very difficult as compare to starting of new business firm when it comes to investing within the physical capital (Chugunov et al., 2021).

Physical capital has been a driving force which is having its impact over the economic growth in the form of per capita output and growing aggregate. Capital accumulation model has shown that there are several variables based on which capital accumulation is relaying significantly including population growth rate, how much capital depreciates over time, and how much output is saved (Gaspar et al., 2019). Capital accumulation is mostly declines due to increased depreciation of physical capital and population rate. Contrary to that, the increase within the investments for acquiring physical capital has certainly resulted in having a positive impact over the higher output per worker and capital growth (Ahmed et al., 2020). Physical capital is one of the most significant monetary policy aspects in helping people towards understanding economic growth via capital accumulation model. Trade-offs society is willing to make has been showing the economic and capital growth of a developing economy through capital accumulation model (Pigato, 2019). Investments made within the physical capital help both developing and developed economies in having the economic growth and stability. A society is making choices amongst opportunity cost of consuming versus opportunity cost of investing, as future economic growth and stability of the country is highly dependent over the investments made within the physical capital (Chugunov & Makohon, 2019).

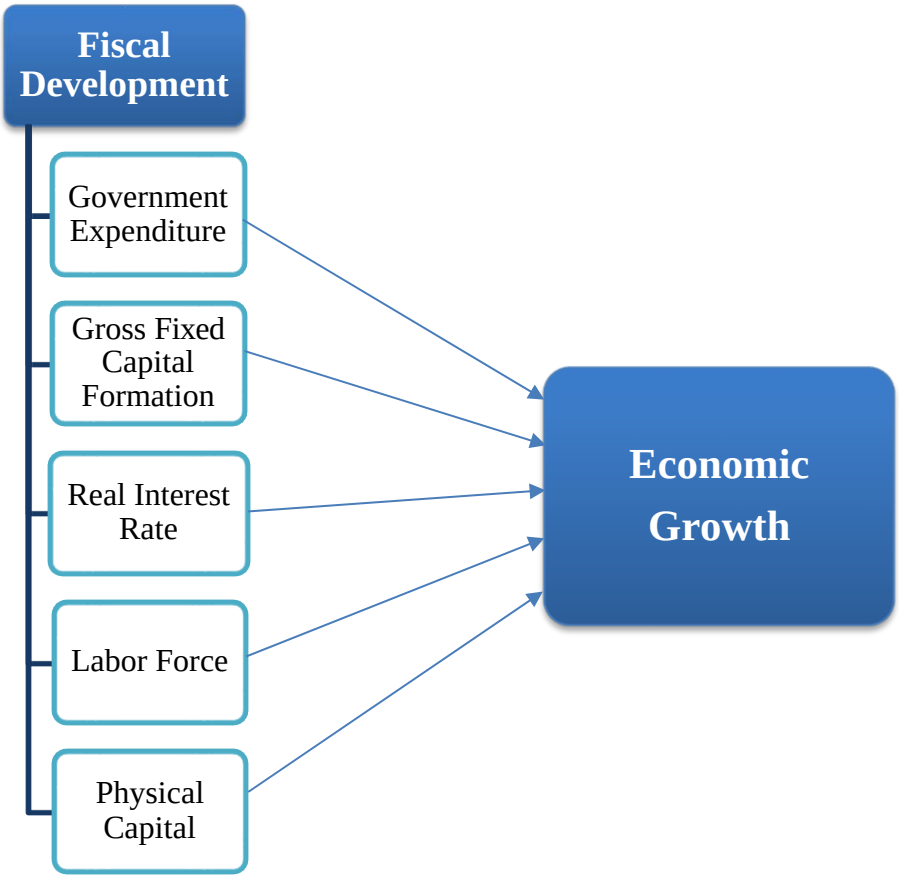
Since the monetary framework was initially started, there are many links between physical capital, labor and power generation. At first, this relationship is more straightforward; you need a certain amount of seeds and spoons to provide the benefits of the product. Over time, these connections have become more complex, as the variety of physical capital has expanded and the amount of labor available to a country has risen significantly (Nasir et al., 2019). The

development of Solow began to appear in the 1950s to show part of this unpredictability through natural conditions revealing the key drivers of financial development. Solow's developmental display contains two basic conditions that can be inferred for different conditions. The main condition for the development of Solow is the generation work which is a combination of expressing capital and labor for the benefit of a country (Gaspar et al., 2019). A country works together to create a product that requires workers and those experts to need tools to skillfully complete their work. Although it is natural, once it contains different factors affecting production, this relationship will be withdrawn from ease. Human capital, innovation and integrated factor profitability also bear the work of yield (Asteriou & Spanos, 2019).

The per capita variety reveals that each expert's output depends on the capital of each worker which motivates people to understand the way the country develops. A country can develop this model by accumulating factors expanding physical capital or by increasing labor. In any case, it is only necessary to establish a total return level while reducing per capita income (Sepehrdoust & Ghorbanseresht, 2019). The model shows that when labor is expanded without capital development, psychologists rely on each worker's capital to obtain the benefits of each professional. This is consistent, if you have more experts with similar device measurements, as each worker is less efficient due to the use of fewer tools. Expanding capital will provide each expert with more tools to enable them to provide more tools (Asongu & Odhiambo, 2020). Capital plays a fundamental role in financial development and is the focus of the test under the second condition of Solow model capital collection (Botev et al., 2019). Given the findings of previous research studies, this study posits following hypothesis:

H5: Physical capital has significant impact on economic growth in SAARC countries.

2.7 Theoretical Framework



Chapter Summary

This chapter has provided review of the relevant literature on the constructs of government spending, gross fixed capital formation, real interest rate, labor force, physical capital, economic growth and the relationship between them. Reviewing of literature is followed by the theoretical framework based on the fiscal development underlying the influence on economic growth. The diagrammatic illustration of the theoretical framework is then presented that shows the measures of the constructs of fiscal determinant before linking them to economic growth. The hypothesized relationships between the variables are also stated alongside for empirical testing in proceeding sections of this thesis.

Chapter 3

RESEARCH METHODOLOGY

Introduction

This chapter includes methodology used for assessing the role of fiscal development in economic growth of SAARC countries. This chapter has highlighted research methodology used for collecting and analyzing data. It also highlights unit of analysis, population frame, sample size, data collection, data analysis, etc., to assess the relationship between fiscal development and economic growth.

3.1 Research Design

Research design is defined as the blue print used to collect, measure, and analyze data to draw a conclusion (Mackey & Gass, 2015). Qualitative, quantitative, and mixed methodology are different kinds of methodologies which a research can use while conducting a research study. Qualitative methodology is defined as a type of methodology in which subject's emotions and feelings are assessed. Meanwhile, quantitative methodology is defined as a type of methodology in which statistical differences among variables are studied. However, mixed methodology is defined as a type of methodology which not only investigates subject's emotions, but also studies statistical differences among variables (Kumar, 2019). Qualitative methodology is used in present research because secondary data is used to investigate the statistical relationship among fiscal development and economic growth.

3.2 Research Variables

Two types of variables are used in present study. Government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (representing fiscal development) are considered as independent variables. Meanwhile, economic growth is used as dependent variable, to investigate their relationship in SAARC countries.

3.3 Type of Study

Correlational is the type of investigation for present study, as this study focuses on assessing the correlation between fiscal development and economic growth.

3.4 Time Horizon

Present study is a longitudinal study because it involves observation of data from a population at different points in time.

3.5 Research Interference

Role of the researcher is mandatory. In present study, data is collected by the researcher through secondary sources. Calculations through statistical tests are made to identify the relationship between variables of this study. Conclusions are drawn and suggestions are made by the researcher at the end of present research.

3.6 Unit of Analysis

Unit of analysis for this study are the SAARC countries.

3.7 Population

Population refers to people, events, or things associated with interest that researcher is keen on investigating (Kumar, 2019). For this study, researcher considers SAARC countries as targeted population area.

3.8 Sample Size

A research study cannot be completed without using an optimal sample, as sample size has significant importance for effective representation of the population (targeted audience). A sample of 8 SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) with 160 observations is finalized. As a sample; panel data of government spending, gross fixed capital formation, real interest rate, labor force, physical capital, and economic growth from the period of 2002 – 2021 is collected in order to explore the relationship between variables of the study. Data regarding government spending, gross fixed capital formation, real interest rate, labor force, physical capital, and economic growth is collected by using official websites of state bank of Pakistan and theGlobalEconomy.com. In this study, data of last twenty years is taken because it is not possible to include more data for analysis purpose within limited span of time allotted for completion of this research.

3.9 Data Collection Method

Present study has collected data from secondary data sources. As a sample; data of government spending, gross fixed capital formation, real interest rate, labor force, physical capital, and economic growth for the last twenty years (from the period of 2002 to 2021) is collected for assessing their relationship in SAARC countries.

3.9.1 Data Selection

Data is selected with intense care, as data regarding the variables of this study is selected within the limited time frame available to complete data collection process in an appropriate manner. Data regarding fiscal development and economic growth is selected from the period of 2002 – 2021 (20 years) to identify the significant relationship between variables of the study.

3.9.2 Source of Data Collection

Data of government spending, gross fixed capital formation, real interest rate, labor force, physical capital, and economic growth from the period of 2002 – 2021 is taken from the official website of state bank of Pakistan and theGlobalEconomy.com.

3.10 Data Analysis Techniques

Data collection is followed by data analysis (based on several statistical tests) to test the hypotheses of this study. Unbalanced data of government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (independent variables) and economic growth (dependent variable) for twenty years is balanced by taking average. Relationship between fiscal development and economic growth is calculated using Strata Software on annual basis. Strata software is used for proceeding data analysis and identifying the extent and direction of relationship between fiscal development and economic growth in SAARC countries.

3.11 Analytical Model

3.11.1 Panel Data Analysis

Panel estimation technique is used for assessing the relationship between fiscal development and economic growth. Panel data technique dominates time series and cross-sectional techniques.

Domination of panel data is mainly due to its usefulness in terms of low co linearity amongst the variables. Panel data estimation technique is such a technique which is providing more space, as several tests of robustness could be performed. Furthermore, this technique provides generalizable results in situations where there is need of assessing relationship amongst variables. Hence, use of panel data technique is preferred in comparison to cross-sectional and time series techniques to perform an effective research.

3.11.2 Descriptive Statistics

Mean, standard deviation, minimum and maximum values are depicted through descriptive statistics and 160 observations are studied for specific variables from 2002 – 2021.

3.11.3 Correlation Analysis

Correlation analysis refers to the statistical test which assesses the relationship between two or more variables. In correlation analysis, magnitude and direction of relationship between two or more variables is assessed.

3.11.4 Regression Analysis

Regression analysis refers to the statistical test which assesses the magnitude of relationship between two or more variables.

3.12 Research Model

Analysis model used in this study is as follows:

$$EG = \beta_o + \beta 1\ (GS_{it}) + \beta 2\ (GFCF_{it}) + \beta 3\ (RIR_{it}) + \beta 4\ (LF_{it}) + \beta 5\ (PC_{it}) + E_{it}$$

Where:

- EG = Economic Growth
- GS = Government Spending
- GFCF = Gross Fixed Capital Formation
- RIR = Real Interest Rate
- LF = Labor Force

- PC = Physical Capital

Chapter 4

DATA ANALYSIS AND FINDINGS

Introduction

On the basis of data collected, data analysis is done with the help of Strata Software by using statistical tests (descriptive statistics, correlation, and regression analysis).

4.1 Data Analysis

4.1.1 Descriptive Statistics

Descriptive Statistics

	EG	GS	GFCF	RIR	LF	PC
Mean	0.481	0.0631	0.511	0.064	0.0165	0.039
Median	0.176	0.015	0.141	0.0521	0.003	0.031
Max	9.650	7.353	43.509	3.160	1.061	0.646
Min	0.025	0.919	5.955	0.774	0.976	0.000
Std. Dev.	0.486	0.594	0.564	0.286	0.145	0.064
Obser.	160	160	160	160	160	160

Descriptive statistics of all variables that are used in this study have been given above. It consists of 160 observations associated with 8 SAARC countries with the period of 20 years (2002 – 2021). In descriptive analysis, mean, median, max, min and std. dev. values are included. Starting with the variable of economic growth, it has the mean of 48.1 percent with 48.6 percent of standard deviation. This suggests that economic growth as a result of fiscal development

(government spending, gross fixed capital formation, real interest rate, labor force, and physical capital) is influenced by 48.1 percent. Similarly, government spending has the mean of 6.3 percent with 59.4 percent of standard deviation. This suggests that government spending is influencing economic growth with the mean of 6.3 percent. Gross fixed capital formation has the mean of 51.1 percent with 56.4 percent of standard deviation. This suggests that gross fixed capital formation is influencing economic growth with the mean of 51.1 percent. However, real interest rate has the mean of 6.4 percent with 28.6 percent of standard deviation. This suggests that real interest rate is influencing economic growth with the mean of 28.6 percent.

Furthermore, labor force has the mean of 1.7 percent with 14.5 percent of standard deviation. This suggests that labor force is influencing economic growth with the mean of 1.7 percent. Similarly, physical capital has the mean of 3.9 percent with 6.4 percent of standard deviation. This suggests that physical capital is influencing economic growth with the mean of 3.9 percent. The highest mean value of gross fixed capital formation (51.1 percent) shows that gross fixed capital formation is such an aspect of fiscal development which is having the highest influence over economic growth. Physical capital has the lowest influence on economic growth due to its lowest mean value 3.9 percent.

4.1.2 Correlation Analysis

The term “correlation” refers to determining the link between two or more variables. When there is a significant association between two or more variables, correlation is considered high. When there is a weak association between two or more variables, however, correlation is considered low. Meanwhile, moderate correlation is defined as a moderate strength of association between two or more variables. The range of correlation coefficients is -1 to +1. Pearson r is used to examine the connection between the study’s variables.

Correlation Analysis

	GS	GFCF	RIR	LF	PC	EG
GS	1.0000					
GFCF	-0.0897	1.0000				
RIR	-0.0516	0.0624	1.0000			
LF	-0.0081	0.0216	0.0335	1.0000		
PC	-0.3369	0.0539	0.0808	0.0581	1.0000	
EG	0.1781	0.3618	0.3197	0.2128	0.1791	1.0000

The results show that there is a weakly significant association between government spending and economic growth with a magnitude of .178 and in a positive direction. Gross fixed capital formation and economic growth have a moderately significant association with a magnitude of .362 and in a positive direction. Similarly, there is a moderately significant association between real interest rate and economic growth with a magnitude of .320 and in a positive direction. Labor force and economic growth have a weakly significant relationship with a magnitude of .213 and in a positive direction. Physical capital and economic growth have a weakly significant association with a magnitude of .179 and in a positive direction.

4.1.3 Regression Analysis

A link between dependent and independent variables, as well as the magnitude of that relationship, is referred to as regression.

Regression Analysis

Variable	Coefficient	Std. Error	t-statistic	Prob.
GS	0.152202	0.062182	2.447681	0.0152
GFCF	1.280632	0.524898	2.439771	0.0155
RIR	0.075383	0.110774	2.680512	0.0196
LF	0.365638	0.292628	3.249500	0.0329
PC	1.791503	0.544853	2.288047	0.0012

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.742179	Mean dependent var	1.571292
Adjusted R-squared	0.672859	S.D. dependent var	1.486665
S.E. of regression	0.850316	Akaike info criterion	2.701377
Sum squared resid	153.2840	Schwarz criterion	3.474372
Log likelihood	-306.6859	Hannan-Quinn criter.	3.011778
F-statistic	10.70660	Durbin-Watson stat	1.948779
Prob (F-statistic)	0.000000		

a) Predictors (Constant): Government Spending, Gross Fixed Capital Formation, Real Interest Rate, Labor Force, Physical Capital

b) Dependent Variable: Economic Growth

Regression analysis shows that p value of government spending is 0.0152 which is less than 0.05 indicating that government spending significantly affects economic growth. Similarly, p value of

gross fixed capital formation is 0.0155 which is less than 0.05 indicating that gross fixed capital formation affects economic growth. Whereas, p value of real interest rate is 0.0196 which is less than 0.05 indicating that real interest rate affects economic growth. However, p value of labor force is 0.0329 which is less than 0.05 indicating that labor force affects economic growth. In addition, p value of physical capital is 0.0012 which is less than 0.05 indicating that physical capital affects economic growth.

4.2 Data Findings

Hypothesis 1 'Government spending has significant impact on economic growth in SAARC countries' is proved in regression analysis. In regression analysis, it is proved that there exists a significant relationship between government spending and economic growth, which accepts H_1. The significant relationship between government spending and economic growth explains that government spending is responsible for influencing economic growth.

Hypothesis 2 'Gross fixed capital formation has significant impact on economic growth in SAARC countries' is proved in regression analysis. In regression analysis, it is proved that there exists a significant relationship between gross fixed capital formation and economic growth, which accepts H_2. The significant relationship between gross fixed capital formation and economic growth explains that gross fixed capital formation is responsible for influencing economic growth.

Hypothesis 3 'Real interest rate has significant impact on economic growth in SAARC countries' is proved in regression analysis. In regression analysis, it is proved that there exists a significant relationship between real interest rate and economic growth, which accepts H_3. The significant relationship between real interest rate and economic growth explains that real interest rate is responsible for influencing economic growth.

Hypothesis 4 'Labor force has significant impact on economic growth in SAARC countries' is proved in regression analysis. In regression analysis, it is proved that there exists a significant relationship between labor force and economic growth, which accepts H_4. The significant relationship between labor force and economic growth explains that labor force is responsible for influencing economic growth.

Hypothesis 5 'Physical capital has significant impact on economic growth in SAARC countries' is proved in regression analysis. In regression analysis, it is proved that there exists a significant relationship between physical capital and economic growth, which accepts H_5. The significant relationship between physical capital and economic growth explains that physical capital is responsible for influencing economic growth.

Summary of Data Findings

Hypothesis	Statement	Accepted/Rejected
H1	Government spending has significant impact on economic growth in SAARC countries.	Accepted
H2	Gross fixed capital formation has significant impact on economic growth in SAARC countries.	Accepted
H3	Real interest rate has significant impact on economic growth in SAARC countries.	Accepted
H4	Labor force has significant impact on economic growth in SAARC countries.	Accepted
H5	Physical capital has significant impact on economic growth in SAARC countries.	Accepted

Chapter 5

CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study has focused on investigating the relationship between fiscal development and economic growth in SAARC countries. In this study, government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (representing fiscal development) are considered as independent variables. Economic growth is considered as the dependent variable. In addition, 8 SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) are chosen for investigating the relationship between variables mentioned above. To explore the relationship, data regarding variables of this study is collected from official websites of state bank of Pakistan and theGlobalEconomy.com from the period of 2002 – 2021 (20 years). To test the acceptance and rejection of hypotheses of this study, a scale of significance level having the range allowed till 5% is set. Hypotheses of the study (H_1, H_2, H_3, H_4, and H_5) are accepted or rejected on the basis of scale of significance level set. As significance level of government spending, gross fixed capital formation, real interest rate, labor force, and physical capital for economic growth is less than 0.05. So, H_1, H_2, H_3, H_4, and H_5 are accepted and proved significant. Therefore, it is proved that fiscal development (government spending, gross fixed capital formation, real interest rate, labor force, and physical capital) has significant impact on economic growth in SAARC countries.

5.2 Conclusion

This study has the prime aim of identifying the impact of fiscal development (government spending, gross fixed capital formation, real interest rate, labor force, and physical capital) on economic growth in SAARC countries To collect data, secondary source (official websites of state bank of Pakistan and theGlobalEconomy.com) are used. For analysis purpose, descriptive statistics, correlation, and regression analysis are used to find the relationship between government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (independent variables) and economic growth (dependent variable). To testify the relationship between variables, government spending, gross fixed capital formation, real interest rate, labor force, and physical capital are empirically tested with economic growth (dependent

variable) and found weakly significant correlation between them. Whereas, regression analysis has revealed a significant relationship between government spending, gross fixed capital formation, real interest rate, labor force, and physical capital (independent variables) and economic growth (dependent variable). Based on the findings, it is concluded that fiscal development has significant impact on economic growth in SAARC countries. Findings reveal that change in fiscal development brings a definite change in economic growth in SAARC countries.

5.3 Research Limitations

The term “limitation” refers to a restriction that a researcher encounters when conducting research. The researcher encounters just a few restrictions in this study, such as a limited time period, limited sample size, etc., while exploring the correlation among fiscal development and economic growth in SAARC countries. The time range available for doing this study is extremely limited, since more time is required to accomplish this research than is accessible. If additional time is available, a more extensive study (involving data before 2002) might be conducted. However, the researcher should be given more time to collect data relevant to SAARC countries before 2002. Additionally, sample size is another constraint. A sample of 20 years (having 160 observations) to represent SAARC countries is insufficient. For performing a complete research with greater representation of SAARC countries, the sample size might be increased to 30 years (having 240 observations) or more. Finally, most of scholars and researchers have performed panel data research and neglected to perform time-series data research on this literature topic, which is another limitation.

5.4 Recommendations & Future Research

This study has addressed majority of the aspects, yet minor improvements might be done to make it even more effective and reliable. Minor improvements to the time period, sector, sample size, research nature, etc., can be made. The time duration might be extended in order to help the researcher in performing a suitable research. A suitable time period provided to the researcher may aid in the collection of data relevant to SAARC countries before 2002. Extended time period could give an option to the researcher to collect data from years (which are not included in the study) during data collection process. Involving additional years in data collection process

will help in expanding the sample size, which will improve the validity and reliability of the data collected and analyzed. Furthermore, this study has focused on the SAARC countries, although any region of the world (other than SAARC countries) might be utilized to collect data and analyze relationship between variables of the study. Furthermore, if the researcher is given a longer time period to complete a research study, the sample size can be expanded. Finally, rather than doing panel data research, time-series data research might be used to analyze the correlation between variables of the study.

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