



Governance, Institutions, and Macroeconomic External Stability: Insights from South Asia

Zahra Aslam¹, Talah Numan Khan², Tanvir Ahmed³

¹ Ph.D. Scholar, Department of Economics, Forman Christian College (A Chartered University)-Lahore, Pakistan.
Email: 255073547@formanite.fccollege.edu.pk

² Associate Professor, Department of Economics, Forman Christian College (A Chartered University)-Lahore, Pakistan. Email: talahkhan@fccollege.edu.pk

³ Professor, Department of Economics, Forman Christian College (A Chartered University)-Lahore, Pakistan.
Email: tanvirahmed@fccollege.edu.pk

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ABSTRACT

Balance of payments (BOP) dynamics have become significant in recent times due to increased trade integration, external borrowing, and investment. Many South Asian nations often experience balance of payments (BOP) pressures due to trade shortfalls, reliance on imports, and variations in foreign exchange revenues. The objective of this study is to examine the impact of institutional quality on balance of payments (BOP). The four South Asian nations are selected for this analysis, i.e., Bangladesh, Sri Lanka, India, and Pakistan. The time period of this study is from 1996 to 2023. The predicted variable of this study is the balance of payments, while the set of explanatory variables are control of corruption, government effectiveness, voice and accountability, and political stability. Data on all macroeconomic variables are taken from the World Development Indicators. To account for unobserved heterogeneity across nations, the study uses a fixed effects regression model as a method of estimation. The Hausman test is used to select between the fixed-effect and random-effects models. The findings show that both real interest rates and inflation have a major impact on the Balance of Payments (BOP), with real interest rates having a positive effect on the balance of payments and inflation having a negative one. Notably, the analysis shows that the Balance of Payments (BOP) is significantly shaped by the management of corruption, political stability, government efficacy, and voice and accountability. However, the study reveals a negative correlation between Balance of Payments (BOP) and government effectiveness as well as voice and accountability, indicating that stronger governance structures and more political freedom may be linked to external imbalances in these nations. This analysis recommended that Central banks in these nations ought to give priority to measures that keep prices stable and control inflation. Because high inflation reduces competitiveness and raises demand for imports, it hurts the

Balance of Payments (BOP). Inflationary pressures can be lessened by measures meant to manage exchange rate volatility, manage government spending, and tighten monetary policy. In order to improve political stability, government efficacy, and corruption control, governments should prioritize improving the quality of their institutions.

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Corresponding Author's Email: 255073547@formanite.fccollege.edu.pk

1. Introduction

The Balance of Payments (BOP) contributes significantly to shaping the overall economic stability of an economy. The foreign sector has become an increasingly important basis of macroeconomic shocks for South Asian economies. In recent years, economies like India, Pakistan, Bangladesh, and Sri Lanka have practiced long-term balance of payments burden, which is driven by increasing import reliance, external debt requirements, and fluctuation in capital flows. These problems have increased concerns about the sustainability of external loans and macroeconomic stability in the South Asia region. Despite many strategies, South Asian economies continue to experience frequent external imbalances that limit economic growth and financial stability. However, exploring the key factors of balance of payments in the South Asia region has become a hot issue for both researchers and policymakers. The Balance of Payments (BOP) offers a comprehensive record or listing of all economic contacts involving a country and the international community during a specified period, typically a year. The records of all transactions (visible or non-visible) conducted between the nationals and foreign residents, including individuals, commercial establishments, and government bodies, are known as Balance of Payments (BOP). BOP is characterized into three major categories: the current account, the financial transaction account, and the capital transfer account. An economy experiences a surplus or gap in available funds as shown in the Balance of Payments (BOP) statement of that particular country. A country's BOP exhibits a surplus when its export exceeds that country's imports. In contrast, the BOP shortfall shows that imports exceed a country's exports.

An economist, J. M. Keynes, pointed out that if there is no trade balance between the two countries, the deficit economy is crushed by them so destructively. According to Amir and Mehmood (2012), when foreign direct investment enters export-oriented industries, it enhances the host country's exports, thereby stabilizing the country's BOP. Nonetheless, FDI inflows can raise the imports of a host nation since MNCs import capital and intermediary products that would aggravate the BOP of a host economy. There are 3 reasons the current account BOP is important. Firstly, assuming that the Balance of Payments (BOP) weakness is because of the long-term poor performance of the terms of trade, then this will affect actual production and employment levels in particular sectors of the economy. For example, one obvious case is importing penetration, which will deteriorate the Balance of Payments (BOP) even as it diverts revenue from domestic undertakings. In other words, the performance in overseas trading may indirectly affect real sector activities. Secondly, at a national level, it can be taken for granted that no country can grow in the future faster than its current account balance can sustain unless it can afford an ever-increasing stream of deficits. If the rate of output growth aligns with the Balance of Payments equilibrium but falls short of what could be achieved with available domestic resources like human labor and capital accumulation, then the real economy will experience a downturn. In the short term, a growing current account deficit might be funded through elevated interest rates, but this contributes to another reason why current account deficits are significant. High interest rates encourage saving and discourage investment in productive assets such as factories and machinery, which are crucial for long-term economic growth. Thus, a nation's current account balance is not

merely a matter of private transactions affecting resource allocation over time but also has wide-ranging impacts on society as a whole (McCombie & Thirlwall, 2016).

The empirical literature explored an important role of institutional qualities in shaping external sector effectiveness and macroeconomic stability in developing nations. Strong institutional dynamics, i.e., control of corruption, governance effectiveness, and rule of law, promote increasing current account equilibria and external stability across nations (Altayligil & Çetrez, 2020). Empirical findings from developing Asian nations indicate that institutional quality, along with macroeconomic determinants, significantly impact the external balances and the resilience of the current account (Safdar, Javid, & Sheraz, 2021). Furthermore, stronger institutional capabilities improve fiscal discipline and promote debt sustainability, which indirectly encourages stable external sector effectiveness in developing economies (Lee et al., 2023). Recent studies also support an increase in governance and institutional qualities that consolidate the financial systems and improve macroeconomic stability, leading to better external balance outcomes (Khan, Khan, & Zuojun, 2022). These results jointly showed that institutional quality is a main factor of external balance dynamics, mainly in developing nations, where governance structures significantly impact the economic performance. The economic condition of an economy mainly relies on its balance of payments status (Masdjojo, 2005). Developing countries have been facing an external problem called a deficit in the international balance of payments (Sujianto & Suryanto, 2018; WULANDARI et al., 2019). In developing nations, trade deficits mostly cause a shortfall in their balance of payments. A series of measures to balance the country's payments during a period of intense trade and economic expansion is needed (Ayentimi, 2013). On the other hand, these internal determinants include macroeconomic fundamentals characteristic of a country and domestic shocks (Fitri, 2014). Many contributing factors have been noted about changes in the Balance of Payments (BOP). One such factor is what we call the monetary approach to Balance of Payments (BOP), which originated from the works by Johnson (1972) and Mundell (1960). The cornerstone of this concept is perceiving the international BOP as a monetary instrument. It is significant for any nation to possess sufficient foreign exchange holdings. When countries accumulate large amounts of foreign reserves, they can keep their economies running smoothly and shore up growth.

Different schools of thought have periodically emerged regarding adjusting the balance of payments (BOP). The Classical framework (1800 – 1900) focused on the gold standard and highlighted price levels and interest rates. This theory was further advanced by economists Mundell and Johnson in the late 1960s and early 1970s. Mundell argued that the money market is more effective than the goods market in achieving external balance because it improves both the current and capital accounts of the BOP (Mundell, 1963). However, recent research has linked this idea to the domestic and foreign balance theories proposed by Meade and Tinbergen in the 1950s. The focus on MP and its impact on the overall BOP position, combined with the recognition that under perfect financial capital mobility, monetary authorities do not control the money supply in the short term, prompted Mundell and Johnson to formulate the advanced monetary strategy. Monetary policy plays a critical role in the evolution of the balance of payments (BOP). Under a floating exchange rate system, changes in the balance of payments (BOP) affect the exchange rate of the national currency, thereby influencing the country's overall macroeconomic performance. Hence, the balance of payments (BOP) trends serve as a significant indicator for guiding MP decisions. In contrast, intermediate exchange rate systems are more complex. In these types of systems, monetary authorities seek to maintain exchange rate stability and mitigate any short-term payment discrepancies. Alongside, they have to ensure that there is monetary stability in the long term, thereby requiring an alteration in monetary policy in order to mitigate these discrepancies (Summers, Hausmann, & Rojas-Suarez, 1996; Taylor, 2002). In such situations, the balance of payments (BOP) not only serves as an indicator but also becomes a target. This has been witnessed in developing nations in recent times, particularly in the

context of the global economic downturns faced in 2008-2009. For example, in the case of some of the CIS countries like Ukraine, Belarus, Tajikistan, Kyrgyzstan, and so on, these countries were driven to currencies depreciating in order to mitigate any negative payment balances.

In a country with a floating exchange rate regime, a disturbance in both the current and capital accounts would influence the exchange rate. Alongside, in a country with an intermediate exchange rate regime, the Central Bank would attempt to balance both the BOP and exchange rates. As a result, in a country with floating exchange rate regime or an intermediate exchange rate regime, balance of payment disequilibrium more closely related to exchange rate movements than in a country with an intermediate exchange rate regime, the combined effect of balance of payment in the current account and the exchange rate would differ from one another even in a situation where short run economic environment in these two types of the exchange rate system is the same. The capital account of the balance of payment plays a crucial role in a situation where there are financial liquidity and solvency problems (Calvo, 1996; Chung & Turnovsky, 2010). Under a floating exchange rate regime, BOP disequilibrium causes market mechanisms as a result of adjustments in interest rates. If monetarists intervene to attain a balance of payments (BOP) equilibrium, they can alleviate negative impacts from capital outflows by regulating interest rates. Higher interest rates in such conditions act as a dual purpose: a) a rise in domestic demand for liquid assets, and b) increasing debt servicing costs. Consequently, in economies with intermediate exchange rate regimes, these effects are less expected, predominantly during times of catastrophe (Ragmoun, 2023; Ragmoun & Ben-Salha, 2024).

1.1. Determinants of Balance of Payment

The Balance of Payments position of a particular economy will be determined by the economic interaction with the international market. Some of the determinants include trading interactions, foreign aid, foreign direct investments, foreign portfolio investments, political stability, and the level of stability of the internal macroeconomic variables like inflation rate, interest rate, and exchange rate predictability. Below is an analysis of some of the factors that influence the Balance of Payments position of a particular country:

1.1.1. Foreign Exchange Rates

According to Gali and Monacelli (2005), BOP adjustments may lead to variations in the exchange rate of the country with regard to other countries' currencies. On the other hand, variations in the strength of the currency may have an impact on the BOP position of the country. Two interrelated markets are involved; namely, the market for foreign financial operations and the market for the particular currency. Such a situation occurs under the free or floating exchange rates system. An appreciation of the country's currency results in a decline in the price of its exports in foreign terms. Consequently, there is an increase in the volume of exports when the elasticity of the demand for exports is high.

1.1.2. Interest Rates

Mundell (1963) asserts that differences in interest rates between a home country and other countries lead to capital mobility. The relationship between the balance of payments position and the international market is evident when considering the capital account. This account tracks the flow of money going into and out of the country. The main factor that influences the flow of money is the interest rate. The possible returns on real estate and stocks are a key factor in the capital market. A high interest rate in a country attracts investors from within and outside the country (Kenen, 1960). This attracts more capital to the country and lessens the outflow of funds to other countries in search of high returns. As capital inflows persist in the country, the supply of foreign exchange increases, and the demand for the domestic currency increases. This causes appreciation in the value of the domestic currency over time. This appreciation affects the exchange rate and balance of payments (BOP)

(Suranovic, 2012).

1.1.3. Inflation Rates

Melberg (1992) defines inflation as a persistent and pervasive increase in prices for goods and services in an economy. Price stability is said to prevail in an economy if prices are constant or increase at a slow and predictable rate. Inflation is said to prevail in an economy if prices increase faster than a predictable rate, causing a high cost of living. Monetarists, based on the Quantity Theory of Money (QTM), assert that prices are determined by the supply of money in an economy such that any change in the supply of money causes prices to change proportionately (Umaru & Zubairu, 2012).

1.1.4. . Public Borrowing and Debt

Public debt acts as a vital macro-economic indicator in building a country's reputation in the international market (Abbas, 2007). It plays a crucial role in affecting the inflows of foreign direct investments in a country. It refers to the total debt of a particular country, including both local and national governments' debt. It indicates the extent of public expenditure financed through debt rather than taxes (Makau, 2008). Debt may be of both short and long term and generally involves the sale of government securities. Government bonds are considered safe investments with guaranteed returns in the form of interest and principal amount. Treasury bills are sold in money markets to meet short-term financial requirements and are generally repaid after a specified time of 91 days, 182 days, and 364 days. Capital flight and balance of payment deficits are considered major factors of domestic debt (FISHER & WHITLEY, 2000).

1.1.5. Significance of the study

For a better comprehension of the historical background and the various possibilities of the balance of payments (BOP), its examination is important in the field of international economics. On the one hand, an examination of the causes of the balance of payments (BOP) discrepancy, including the fluctuation of exchange rates, the differences in the rate of inflation between the economic partners, and changes in the demand for exports, provides insight into the causes of the growth of the economies. These factors throw light on the dynamics of the terms of trade, the capital flows, and the economic equilibrium. Understanding the causes would help policymakers take appropriate corrective action and measures, which might be in the form of fiscal correction, trade policy correction, and exchange rate control, that would help in correcting these deficiencies and formulating sound strategies that would help in building sustainable economic growth. However, it is equally important to understand the implications of the imbalances in the balance of payments (BOP).

For instance, a country might be facing a problem of continuous deficits in standardized foreign exchange reserves, along with the devaluation of foreign currency and expensive credits; the consequences would affect the steadiness of a country's economy in the long term. On the other hand, a current account surplus may be evidence of good export performance, but on the other hand, it may lead to currency appreciation and a problem for the industry that relies on the export market. Moreover, the balance of payments (BOP) results impacts a country's ability to mobilize FDI and address external liability, both essential for economic progress and solvency. Based on the overall function of balance of payments (BOP), it has been seen that it serves importance not only as the diagnostic tool of the country's economic ailments but also as the template to construct the policies that are responsible for sustaining and developing the economy of a nation, bolstering its currency value and making the nation economically more resilient to the interferences of the global economy. Through the understanding of how the balance of payments (BOP) evolves, economists and other policymakers will be better positioned to make decisions that will lead to a more balanced economy among developed and developing nations, as well as the well-being of individuals in the global society.

1.2.6. Research Question

This paper aims to answer the following specific research questions:

In what ways does the quality metric impact the balance of payments scenario for SA nations?
Which ways allow for the intermediate mechanisms for this influence?

1.2.7. Objective of the Study

This study aims to examine the relationship between control of corruption, governmental efficiency, political stability, and legal governance on the balance of payments in various South Asian countries. Comparing and contrasting these impacts and their effect on the future stabilization of economies and trading activities of the region.

1.2.8. Hypotheses

H1: There is an association between inflation and BOP.

H2: There is a link between the real interest rate and the (BOP).

H3: There is a relationship between control of corruption and BOP.

H4: There is an association between government effectiveness and BOP.

H5: There is an association between voice and accountability and BOP.

H6: There is a relationship between political stability and BOP.

2. Literature Review

A literature review provides an extensive description of the present status of academic research on the subject. This helps in the comprehension of the surrounding context and historical background of the subject. A literature review helps in the identification of the areas where knowledge is lacking or needs to be explored. This identification of the deficiency is essential for the advancement of the subject and justifies the purpose of new research endeavors. By studying the literature on the subject of interest, researchers can better design their research and hypotheses. This will enable them to be more precise and pertinent. This will improve the quality of the research. Nwani and Island (2006) examined the main determinants affecting Nigeria's balance of payments (BOP) by using econometric technique like co-integration and ECM. The factors examined were terms of trade, inflation rate, trade balance, real GDP growth, foreign debt, and currency value. Their results revealed that all these factors, except the balance of payments itself, exhibited non-stationarity. The study illustrated that Nigeria's balance of payments (BOP) was co-integrated with these variables, suggesting that trade openness, external debt, exchange rate oscillations, and domestic inflation predominantly drove fluctuations in the balance of payments (BOP). To stabilize the balance of payments (BOP), Nwani and Island suggested reducing fiscal deficits, boosting local production through private investments, managing inflation, and regulating capital market integration.

Masdjojo (2005) argues that there is a positive correlation between income and the balance of payments. Assuming constancy in all other variables, a rise in income results in an improvement in the balance of payments (BOP). Changes in public income play a role in influencing the stability within the domestic monetary market, as increased income levels stimulate an increase in the demand for money. Furthermore, scholarly research emphasizes the importance of real GDP, a crucial factor that affects the balance of payments (BOP). In the short and long run, real GDP has a positive impact. Sujianto's research, published in 2020, analyzes the relationship between the balance of payments (BOP) in Indonesia and significant macroeconomic factors, such as national income, inflation, interest rates, and exchange rates. Using data from Statistics Indonesia and Bank Indonesia from 2010-2017, the research applied VECM to examine the immediate and long-term effects. All the macroeconomic factors have a significant long-term impact on the balance of payments in Indonesia. In addition, the balance of payments in Indonesia is positively influenced by interest rates and national income, and negatively influenced by inflation and exchange rates. Moreover, it was also established that

none of the macroeconomic factors has a short-term impact on the balance of payments in Indonesia.

The relationship between FDI and the balance of payments in developed and developing nations has been researched by a large number of authors. Wint and Williams (2002) proposed a model that measures the efficiency of a country in selling products in order to attract FDI and the determinants of FDI inflows. The model proves that the current account has a negligible impact on foreign direct investment (FDI) using a random sample of 36 developing nations. Amir and Mehmood (2012) examined the impact of foreign direct investments on the real imports and exports of Pakistan over a long period of time. According to the authors, FDI increases the exports and imports of a country, thereby increasing the balance of payments of a country. Petrovic and Gligoric (2010) examined the relationship between exchange rates and trade balance in Serbia with special emphasis on detecting the J-curve effect. The study revealed that the impact of exchange rate depreciation on trade balance in Serbia is positive in the long run, although in the short run, there is a J-curve effect. Both Johansen and autoregressive distributed lag methods were used to analyze the data. The results from these methods are consistent in that exchange rate depreciation has a positive impact on the trade balance in the long run. The use of an error correction model and impulse response functions from these methods showed that trade balance decreases initially after exchange rate depreciation and then increases, representing the J-curve. Mostafa (2019) employed the Johansen Cointegration method, VECM, and GC approach to investigate the causal relationship between foreign debt, balance of payments (BOP), and FDI in Bangladesh from 1980 to 2017. It was found that a significant long-run relationship exists between FDI and exogenous variables such as external debt and balance of payments (BOP). Specifically, external debt exhibited a substantial adverse influence on FDI in the long run, while displaying no significant impact in the short term. On the other hand, the balance of payments (BOP) showed a notable long- and short-term positive influence on FDI (Ahmed, Azhar, & Mohammad; Ahmed, Azhar, & Mohammad, 2024).

Lhamo (2023) examined the effects of Bhutan's decline in foreign exchange reserves on the social and economic fronts. The analysis showed that Bhutan's current trend of trade deficit would have an impact on its foreign reserves, leading to limitations on both non-essential and necessary goods to protect and deplete foreign reserves. As a substantial amount of essential commodities is imported from foreign countries, a complete ban on these products may lead to a social and economic crisis in terms of the sustenance of people. As per the findings of Sanghani (2022), a major problem of balance of payments is identified as the root cause of political and economic instability in Sri Lanka, which is represented by a decrease in foreign reserves, the country's debt default, and the absence of a government due to massive demonstrations. It was found that the COVID-19 epidemic had a negative effect on the country's tourism-based economy; thus, there was a decrease in foreign visits, affecting a vital source of foreign exchange. Political risk volatility/uncertainty is closely related to political stability as a field of study; it shows that political risk volatility/uncertainty is a dynamic field of study. In addition, the significance of maintaining the stability of the financial system is emphasized with particular attention to the impact of central bank independence on loan growth and financial stability (Tumanov, 2021). Additionally, the topic covered state governance, highlighting the robust political systems that can preserve and skillfully handle adversity. Equilibrium between various subsystems for democracy and long-term advancement (Blair & Fitz-Gerald, 2009). Finally, the literature on stabilization operations emphasizes the need to reduce instability in fragile nations to secure overall global and national security, with a focus on evidence-based evaluations and international collaboration (McCulloch, 2014).

2.1. Research Gap

The balance of payments (BOP) works as one of the most vital leading indicators of the condition of a country and enables the measurement of all financial relations between individuals of this state and the rest of the world. A literature review focusing on balance of payments (BOP) has mainly examined macroeconomic factors like exchange rate fluctuation, inflation, income distribution, interest rates, budgetary imbalances, loan liabilities, and growth. However, the effects of other quality measures, such as political anti-corruption, efficient government, political stability, or legal governance, have been explored only to a limited extent because of the lack of empirical research oriented to South Asian countries. Corruption can affect economic activities, and capital that is being brought into the country and that is taken out. It can be unfavorable to foreign investment, disturb balances of trade and have an impact on the stability of a currency.

However, it is still unclear how its insights apply to the balance of payments (BOP) dynamics in South Asia with greater specificity. It can therefore be argued that good governance has a central role in assisting in maintaining economic stability to facilitate the conditions necessary for trade and investment. There is a lack of extensive research on the relationship between governmental effectiveness and the movements of balance of payments (BOP) components, besides analyzing the various practical impacts on these findings. Yet, in South Asian nations, there is a gap in research that closely investigates how the balance of payments (BOP) performance is linked to the quality factor. Over the years, there has been no conclusive study that links quality metrics with the balance of payments (BOP) for this specific region, leaving questions on how these countries can overcome their difficulties or catch up to their opportunities unanswered.

3. Theoretical Framework

One potential explanation for the balance of payments (BOP) variability is the disparity between domestic income and spending. The absorption approach takes into consideration that the current account deficit, and its corresponding surplus, can be defined as the gap between domestic production and domestic consumption (absorption).

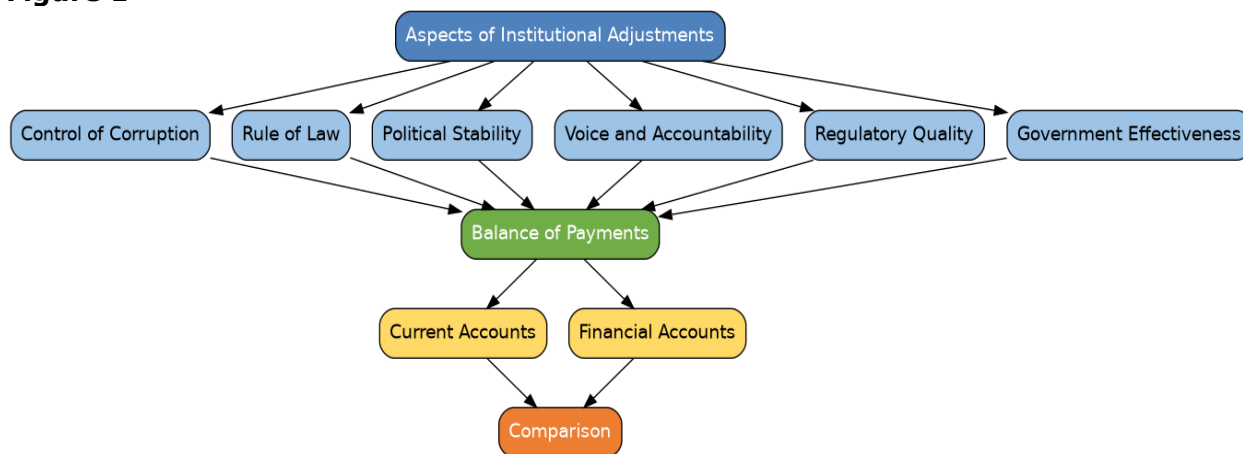
$$A = X - M - Y - A \quad (1)$$

The effects of devaluation on both income and absorption are crucial for understanding the absorption approach regarding the balance of payments. In case the domestic income is increased more than domestic absorption as a result of devaluation, then the current account surplus will increase. Machlup (1950) gave this effect in his article "Balance of Payments and the So-Called Dollar Shortage". He has stated that in special cases, when domestic absorption minus domestic income is increased because of devaluation, then the current account deficit will occur. Machlup (1950) explains that in case the economy is working below the full employment level, then there will be more exports than imports, but the effect of this situation on the country's national income is still unclear. This model can be evaluated on its partial elasticities of exports and imports, and also the data exchange rate with the balance of payments (BOP) currency devaluation adjustment. Exchange rate fluctuations have two direct effects on the balance of goods and services, as demonstrated by Thirlwall (2003). The rise in export volume (also known as the Volume effect) brought about by the exports increased price competitiveness, and the fall in import volume brought about by the devaluation affected imports' declining price competitiveness. The volume effect enhances the goods and services account. The price effect or devaluation causes imports to increase in value relative to domestic currency and exports to decrease in value relative to foreign currency. The price effect undoubtedly plays a role in the deterioration of the goods and services account.

The "New Institutional Economics" indicates that institutions like governance quality, rule of law, government effectiveness, and control of corruption play an important role in

determining economic outcomes by decreasing business costs and encouraging economic management (North, 1990). Strong institutions improve policy reliability, support market effectiveness, and boost economic stability, which leads to a significant impact on external sector performance. Institutional effectiveness impacts the balance of payments (BOP) through different channels. Good governance and regulatory quality encourage trade competitiveness and improve FDI inflows, which contribute to enhancements in the current and capital accounts (Acemoglu, Johnson, & Robinson, 2005). Correspondingly, effective institutions boost financial development and macroeconomic stability, as a result of supporting sustainable foreign balances (Rodrik, Subramanian, & Trebbi, 2004). In contrast, weak institutional dynamics may lead to policy ambiguity, capital flight, and inefficient funds allocation, which leads to worsening external imbalances. However, incorporating institutional theories with conventional balance of payments (BOP) contexts provides a more inclusive understanding of external sector dynamics, mostly in developing nations such as South Asia.

Figure 1



3.1. Data and Sources

All variables' data have been collected from 1996 to 2023. Data on macroeconomic variables such as Balance of Payments, inflation, and real interest rate are available from World Development Indicators. However, the data of institutional variables such as control of corruption, government effectiveness, voice and accountability, and political stability are from World Governance Indicators.

3.2. Empirical Model

The analytical model, derived from the literature, takes the following form.

$$BOP = f(INF, RINT, COC, GE, VC, PS) \quad (2)$$

The above equation states that inflation (INF), real interest rate (RINT), control of corruption (COC), government effectiveness (GE), voice and accountability (VC), and political stability (PS) can potentially determine balance of payments (BOP). As our study is panel data, we must consider both time and individual (country) effects in the econometric model, leading to the following equation:

$$BOP_{it} = \beta_0 + \beta_1 INF_{it} + \beta_2 RINT_{it} + \beta_3 COC_{it} + \beta_4 GE_{it} + \beta_5 VC_{it} + \beta_6 PS_{it} + \epsilon_{it} \quad (3)$$

Table 1

Symbol	Variable Description	Units Measurements	Data Source
BOP	Balance of payments of goods and services, which are traded abroad; in other words, the balance of resources as earlier referred to, is the difference between the export and import of goods and services of a country. It is calculated as the difference between the values of exported and imported goods and services.	% age of GDP	WDI
INF	Inflation as measured by the Consumer Price Index means the annual rate at which the price level changes for a selected basket of goods and services. It is calculated as the annual percentage change in the average price of the basket of goods and services selected. It may remain fixed or may vary depending on circumstances. Usually, inflation is measured using the Laspeyres price index formula.	Annual % age	WDI
RINT	The real interest rate refers to the lending interest rate adjusted for inflation. It is calculated using the inflation rate based on the GDP deflator. It reflects the true interest rate after adjusting for inflation. However, the lending rate conditions vary from one country to another.	% age	WDI
COC	The 'Control of Corruption' dimension is a gauge of the prevalence to which public authority is employed for private gain. It encompasses both grand-scale and petty corruption, as well as private	Estimate	WGI

PS	individual or elite group influence over government bodies. The dimension is measured as a standardized score, which ranges from -2.5 to +2.5. The 'Political Stability and Absence of Violence/Terrorism' dimension is a gauge of perceptions of the likelihood of political instability or politically motivated violence that may result in terrorist acts. The dimension is measured as a standardized score, which ranges from -2.5 to +2.5.	Estimate	WGI
GE	The 'Government Effectiveness' dimension is a gauge of perceptions of the quality of services that the government furnishes to the population. It also encompasses perceptions of the civil service's competence as well as its independence from political pressures. Additionally, it includes perceptions of the government's credibility as far as its commitment to policies is concerned. The dimension is measured as a standardized score, which ranges from -2.5 to +2.5.	Estimates	WGI
VC	Voice and Accountability is a measure of the views on the participation of the public in the choice of their government, the freedom of expression of the public, the freedom of association of the public, and the presence of an independent media. The result is presented	Estimates	WGI

as a standardized value
on a normal
distribution scale
ranging from about -2
to +2.

4. Results and Discussions

4.1. Cross sectional dependance

Using the Pesaran (2015) CD test, which is frequently employed for large panels, we first looked for the presence of cross-sectional dependence. The alternative of cross-unit dependence was compared to the null hypothesis of no cross-sectional dependence. A test statistic of 0.650 and a p-value of 0.515 from the Pesaran (2015) CD test showed compelling evidence of no cross-sectional dependence. This implies that there is no correlation between the error terms across cross-sectional units. We thus turn to the first generation.

Table 2: Unit Root Test

Variables	t-statistics	Probability	Decision
ΔBOP	-5.21	0.000	I (0)
INF	-4.327	0.000	I (0)
ΔRINT	-1.21	0.001	I (1)
COC	-2.01	0.022	I (0)
ΔGE	-0.86	0.003	I (0)
PS	-1.659	0.04	I (0)
ΔVC	-1.45	0.001	I (0)

The unit root test results, which showed that the panel data are stationary, suggest that we move forward with first-generation panel data methods. To take into consideration the individual heterogeneity across cross-sectional units, either fixed effects or random effects models will be used. These techniques are suitable for dealing with possible non-stationarity and guaranteeing reliable estimation when unit roots are present.

Table 3: Results of Fixed-Effect Regression Model

Variables	Coefficient	Standard error	Probability
INF	-0.2075	0.056	0.000***
RINT	0.0409	0.0525	0.04***
COC	26.91	7.74	0.001***
GE	-2.790	1.4695	0.047***
PS	1.3167	0.5645	0.023***
VC	-3.067	1.18	0.012***
Probability > F	0.000		
R-Square	0.94		

Table 4: Results of Random Effect Model

Variables	Coefficient	Standard error	Probability
INF	-0.2847	0.071	0.000***
RINT	-0.0068	0.07	0.925
COC	8.710	10.04	0.386
GE	-0.08	1.046	0.933
PS	3.07	0.7709	0.000***
VC	-0.2847	0.0718	0.442
Probability > F	0.00		
R-Square	0.86		

4.5. Hausman Test

By linking the consistency of the fixed effects and the random effects estimators, the Hausman test was used to find out the best approach for the analysis of the panel data. Due to the correlation between the regressors and the individual effects, the alternative hypothesis

argues that the fixed effects model is the best approach for the analysis. However, the null hypothesis of the Hausman test argues that the random effects model is reliable and effective. A chi-square value of 25.722 was obtained from the Hausman test. The p-value of 0.0003 is less than the standard 0.05 significance level. Hence, the null hypothesis is rejected. This implies that there is a significant correlation between the regressors and the individual effects in the panel data.

4.6. Modified Wald Test

We also applied a Wald test for checking if there was any heteroscedasticity in the panel data model. The Wald test is a test for checking if there is a difference in the variance between units in the data. For the robustness of the model, it is very important to check for heteroscedasticity, as it may lead to biased standard errors and inefficient estimates if not addressed properly. The Wald test's null hypothesis postulates that the error variance is consistent across cross-sectional units (i.e., homoscedasticity). According to the alternative theory, there is heteroscedasticity, which means that the error terms' variance varies among the panels. The Wald test for heteroscedasticity produced a p-value of 0.575 and a chi-square test statistic (4) of 2.90. There is no evidence of heteroscedasticity in the panel data model, so we do not reject the null hypothesis of homoscedasticity because the p-value is higher than the 5 percent significance level.

4.7. Wooldridge test

We used the Wooldridge test for autocorrelation to see if there was any autocorrelation in the error terms of our panel data model. Inefficient estimations and erroneous conclusions may result from autocorrelation, which is the correlation between residuals from one time period and residuals from another. For autocorrelation, the Wooldridge test yielded a test statistic of 2.56 and a p-value of 0.56. We conclude that there is no significant evidence of first-order autocorrelation in the error terms of our panel data model since the p-value is higher than the 0.05 significance level, but we do not reject the null hypothesis.

5. Discussion results of the fixed effect regression model

The results of the regression indicate that the Balance of Payments is significantly impacted negatively by inflation. First of all, the result indicates that keeping other things constant, a one percentage increase in inflation will lead to a decrease by 0.20 percent in the balance of payment, which may be caused by a decline in the competitiveness of global capital flows and trade. Secondly, one unit increase in real interest rate will lead to an increase of 0.040 in the balance of payment while other factors remain constant. Higher interest rates draw in foreign capital, which improves the current account balance. This finding implies that higher real interest rates are linked to improvements in the balance of payments. Thirdly, *ceptrius peribus*, one unit increase in control of corruption will lead to an increase by 26.91 in balance of payments, indicating that nations with better external balances typically have more robust institutions and less corruption. This may be due to the fact that investors have more trust in those countries where governance systems are more effective. Fourthly, with everything else remaining the same, an increase in government effectiveness of one unit will cause a decrease of 2.79 in the balance of payments. A stable political environment always results in a good balance of payments. Besides, with everything else remaining the same, an increase in political stability of one unit will cause an increase of 1.31 percent in the balance of payments. These results reveal that those countries with a more stable political environment have better balance of payments management skills. Voice and accountability have a negative impact on balance of payments in Bangladesh, India, Pakistan, and Sri Lanka. This result contradicts the conventional notion that more voice and better accountability are associated with better economic and governance performance. However, more political freedom could disrupt the policy environment and damage the external account in countries that have comparatively weaker institutions or are still consolidating their political systems.

6. Conclusion

The major factors that affect Balance of Payments (BOP) in Bangladesh, Sri Lanka, India, and Pakistan from 1996 to 2023 have been analyzed in this research paper. The research has found a complicated relationship between the external financial balance governance factors of Bangladesh, Sri Lanka, India, and Pakistan and their macroeconomic indicators. According to this research paper, it is found that the balance of payments is significantly damaged by inflation. It indicates that higher inflation results in lower global competitiveness. Real interest rates, on the other hand, have a positive impact, reinforcing that higher interest rates attract foreign capital inflows, which can improve the balance of payments. Another important aspect that was emphasized in the study was that the quality of institutions is very important in improving the balance of payments. Stability in politics and controlling corruption have been shown to have a positive impact, thus supporting that political environments with stable conditions improve investor confidence and hence improve the balance of payments. It has, however, also shown that there exists a negative correlation between BOP and government efficacy, and between voice and accountability. This suggests that while good governance and democracy are believed to have positive effects on economic growth, they can also result in policy and spending instability, thus temporarily worsening the balance of payments. It was concluded that improving South Asia's balance of payments requires that there be an optimal balance between stable governance, improving institutional quality, and controlling inflation. However, the major concern should be to improve macroeconomic stability, strengthen institutions, and promote policies that attract foreign investments without compromising the trade balance. The underlying factors that shape the relationship between external balance and governance, particularly in developing economies, are yet to be fully explored.

6.1. Limitations of the Study

The present research has some limitations that should be addressed in future research. Firstly, the present research is based on the relationship between institutional variables and balance of payments (BOP) in the chosen economies. However, this research does not take into account other significant macroeconomic variables. Future research can be carried out on this research topic by considering other variables such as financial development, exchange rate fluctuation, and terms of trade, along with the balance of payments (BOP). Secondly, the present research has used the conventional method of panel data estimation. Future research can be carried out on this research topic by using advanced econometric techniques, such as dynamic panel estimation methods, such as GMM, Panel ARDL, threshold estimation methods, etc. The larger the data set to be used, the more economies and data periods, the better it may help to obtain more insights into balance of payments (BOP) determinants.

6.2. Policy Recommendation

The conclusions from the study are in line with some policy recommendations for improving the balance of payments in Bangladesh, Sri Lanka, India, and Pakistan. These policy recommendations are based on the major issues identified in the analysis, and these issues are inflation, political stability, governance quality, and the management of the external economy. Central banks in these countries must take steps to keep prices stable and manage inflation. High levels of inflation would reduce the competitiveness and increase the demand for imports, thus affecting the balance of payments. Measures for managing inflation would be exchange rate volatility management, government spending management, and tightening the money supply. In order to enhance political stability, government efficacy, and corruption control, it is necessary that governments strive to enhance the quality of their institutions. In order to attract foreign investments as well as ensure economic stability, it is necessary that governance is open, efficient, and accountable.

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