Determinants of Balance of Payment: A Financial Perspective of the Economy of Pakistan

Zill-i-Jannat[*], Sajjad Ahmad[†]

Abstract

Pakistan is facing the problem of balance of payment since 1970. The core objective of this research work is to analyze the effect of various determinants of BOP in Pakistan over 1971 to 2022. The ARDL testing approach used for estimation. The results reveal that M1, inflation and economic growth rate are the uppermost negatively influential determinants of BOP. Results also show the direct positive correlation between BOP and foreign debt. The interest rate negatively affects the BOP in the lengthy period but its impact is positive in the near run. Furthermore, a huge part of the national income is transferred abroad to meet the obligations towards foreign countries. These findings suggest that the country should not depend only on foreign debt; rather there should be uniformity between macroeconomic and domestic economic policies of the country. The empirical findings suggest that such economic policies are required which can control the rate of inflation and foreign debt in the country. This will bring stability which ultimately leads to improve the issue of BOP in Pakistan.

Keywords: money supply, economic growth, inflation rate, foreign debt, interest rate

Introduction

The BOP is a statement that analytically summarizes the economic-transactions of a country with globe (Akpansung, 2013). Similarly, the BOP account captures the value of products and services, capital schedules, including FDI, and other things that come in and out of country (Carbaugh, 2008). Furthermore, the BOP is very important record of the financial transactions and it exhibits a status symbol of a nation and its economy (Jeon, 2009). The current, capital and financial accounts are three main parts of BOP. The current account is equal to the balance of trade. The other two accounts include capital transfer, sale and purchases of intangible assets (Câmara et al., 2001). The BOP describes the history of foreign transactions of the country (Sujianto, 2020). It communicates the economic position (Jadhav, 2020). It provides information about demand and supply of commodities, services, and money. The structure of the reporting country imports, exports and labor market are also signified by the BOP (Tijani, 2014). BOP demonstrates the performance of

[*]Ph.D. in Management Science, Department of Management Sciences, Sarhad University of Sciences & IT, Peshawar. Email: afridi99_fwbl@yahoo.com

[†] Finance Controller, Royal Grand, Luxury Hotel Suites, Sharjah, Email: sajjad.cpa19@yahoo.com

economy both at the domestic and international level. The national enterprises of the country are vulnerable to external shocks (Ocampo, 2016). An uneven BOP shows that a country is not able to retain a required balance between the investment and short period consumption (Mittal, 2018). Similarly, sustained instability in BOP has a negative impact on economic development and stability in prices (The Bank Of Uganda, 2003). Therefore, the government must prioritize BOP management as a fundamental goal of economic policy. It is practically difficult to sustain a constant favorable BOP for a longer period of time. However, a persistent BOP deficit for consecutive 20 years and above is very challenging for a country. The situation becomes difficult when there is constant growth in the deficit of BOP (Sultani & Faisal, 2022).

Pakistan had a constant BOP deficit since its independence for a variety of reasons. Pakistan exports basic items with insecure markets and earning a little amount of foreign cash. In contrast, the country imports modern equipment and machines required for development plans. Pakistan's exports mostly consist of agriculture products. Mostly, the weather and natural circumstances are not favorable (Rehman & Rashid, 2006). Except for a few years, the overall situation of Pakistan's BOP has always been in deficit. The current account deficit was 3.28 billion dollars in 1996-1997. During the period of 1997-1998, it was reduced to 1.92 and 1.14 billion dollars in 1997-1998 and 1999-2000 respectively. Pakistan had a good BOP status from 2002 to 2004. However, due to increased machinery and oil import costs, among other factors, it has fallen back into the red zone. BOP remained in surplus due to a current account surplus in 2007, 2009, 2010, 2014, and 2015 (Rasheed et al., 2019). During 2008, the deficit of BOP was very high and has been met by borrowing $11 billion from the IMF (Umer et al., 2010).

Many researchers tried to investigate the true determinants of BOP by using the data of individuals' countries of globe, and group of countries, included Pakistan. Like, Rasheed et al. (2019) discovered an indirect link in the context of economy of Pakistan between tourism and the BOP deficit. The deficit in balance of commerce, fiscal balance and effective exchange rate all had a positive and substantial relationship with the BOP deficit. Sultani and Faisal (2023), found that exchange rate *(later on ER)* and FDI are the key factors of Afghanistan's BOP. In the case of Pakistan, like, Shah and Majeed (2014), found that GDP, and ER has negative, while M1 has positive effect on BOP. Similarly, focused on the economic factors of Pakistan, Fatima and Sahibzada (2012) indicated that inflation, FDI, GDP, and exchange rate have negative relationship with BOP. Likewise, Ali (2011) found that net foreign-assets, inflation, and exchange-rate has encouraging, while, the supply of money and domestic-credit has adverse

impact on BOP, but the rate of interest has no effect on BOP of Pakistan. Therefore, this study examines the main determinants of BOP. Because, this study used the combination money supply, economic growth, inflation rate, foreign debt, and interest rate as determinants of BOP, which is not used by prior studies in the case of Pakistan. Furthermore, no updated study is available in the case of Pakistan that focused on the current data set and ARDL model.

The historical data trend shows that most of the times Pakistan has been a balance of payment problem. This arises many questions about the economic conditions and the causes of persistent imbalance in BOP. The IMF and the World Bank have been emphasizing that Pakistan should stabilize the issue of BOP. The methods for correcting deficits in balance of payments are the same as those available to other developed countries. However, the problems of developing countries including present special features. The policies are always formulated to control the imbalance of BOP. This study differs from past studies for several reasons. First, the empirical literature highlights the different determinants of BOP by using diverse approaches. Every approach is based on its own set of determinants and ignores the factors of other approaches. Unlike those studies, an attempt been made to analyze all the important macroeconomic variables which determine the movements on the overall BOP accounts of the country. Second, this study is based on the current data. Lastly, the important statistical techniques used for data analysis. This study will contribute by giving direction to the policymakers that how they can control the issue of BOP to boosts up economic activities in the country.

Literature Review

A very limited literature is available to show the link between BOP and macroeconomic determinants. The monetary approached in the context of BOP was discussed by different researchers such as (Alexander, 1952; Hume, 2005; Mundell, 1968 ; Johnson, 1977). According to their theory, BOP is a monetary phenomenon and it should be analyzed regarding to the changes of money supply (Bussiere, 2013). Similarly, the analysis of BOP there are three principal approaches namely elasticity, absorption and monetary. The first two approaches related to devaluation and its effects on BOP which can temporarily improve it and cannot sustain on its own. To retain this improvement it should be supported by suitable domestic monetary policy (Guitian, 1973). Furthermore, the conclusions were drawn that the usage of funds for the imports and for the investment in foreign countries recorded as deficit items in India (Rana & Khurana, 2011). In the background of Pakistan, it was documented that

inverse relationship was found between imports, money supply and exchange rate. While, the real effective exchange and income has positive impact on imports (Felipe et al., 2010). Moreover, Duasa (2004), argued that in Malaysia M1 has negative and income a positive link to trade balance. Similarly, in the Ghana Lucy et al. (2015), investigated that growth in income worsened the trade balance for a shorter period. Moreover, Eita and Gaomab II (2012), studied the factors of BOP in Namibia. It was found that increase in interest rate and GDP have a positive impact on BOP. When there is increase in interest rate, there will be capital inflow and improve BOP in the long run. However, Imoughele and Ismaila (2015), found that inflation has negative impact on BOP.

Chowdhury (2013), revealed that when there is increase in the supply of money then there is increase in the spending of money by the people. Purchasing imported foreign good will increases the capital outflow and cause deficit in the BOP of the country. Moreover, Rashidin et al. (2017), examined the causes of BOP in India, Pakistan, and Bangladesh. The main factors were import, export, consumption, manufacturing, capital goods, oil prices, balance of trade, exchange rate and BOP. Different relationship was observed in all three countries. In other two economies the results were not significant. Similarly, Cecchetti et al. (2011) reported that debt accumulation promotes economic growth and at the same time the risk of recession also increases. While public sector debt provides liquidity to private sector and also ensure smooth consumption across generations.

Batool et al. (2015) found that the real exchange rate and fiscal balance has negative and GDP has positive influence on BOP. Furthermore, for the longer period of time the impact of interest rate and M1 on BOP is negative. Similarly, Alp and Genc (2015) empirical findings revealed a favorable and substantial association between tourism and the DCAB in Turkey. Furthermore, Zhang (2016), focused on the issue of balance sheet expansion in China. The study analyzed that from the last several decades the expansion of BOP played a crucial role in China's economic growth. Moreover, Rasheed et al. (2019) found that the tourism has indirect while real exchange rate, and fiscal balances has positive effect on BOP in the case Pakistan by using data set 1976-2015 and ARDL technique for estimation. Similarly, Jayme (2020) found that the positive cointegration among the economic growth and exports growth in Brazil in the period 1955-98, using vector error correction (VEC) techniques for estimation.

Guvenen et al. (2022) demonstrated that how the shifting of offshore profit by US multinational corporations affected the various major economic indicators in the US. Profits moved out of the US increased quickly from 1990-2010 and then began to decline. From 1982 to 2016, 38 percent of income linked to US-FDI. They discovered that controlling

for profit shifting reduced the trade-deficit and lowers the return on FDI. The productivity growth rate increases and labor's share of income decreases in the late 1990s and early 2000s. Similarly, Stievany and Jalunggono (2022) study the impact of exports, capital creation, and government expenditure on Indonesian economic development. They analyzed data from 1989-2018 using the ECM (Error Correction approach) approach. They discovered that while exports and imports have a major impact on economic development, inflation has no impact on economic growth. Furthmore, From 1980 to 2020, Ali (2022) found that the amount of corruption has a favorable and considerable, while, financial globalization a detrimental and severe impact on Pakistan's financial reliance. According to the anticipated results, the unemployment rate and BOP have a positive and considerable influence on Pakistan's financial reliance. Morover, Sultani and Faisal (2023) analyzed quarterly data of Afghanistan from 2004 Q2 to 2020 Q4 by using the VECM and the Johansen co-integration test. They discovered that balance of trade, ER and FDI are key drivers of Afghanistan's BOP.

The prior available literature studied the factors of BOP with Adsorption, Monetary or Elasticity approaches. There is small number of studies that are based on general approach. Therefore, based on the general approach this study used a combination of different determinants and check their effect on BOP in the context of Pakistan and minimize this gap.

Data and Empirical Methodology

The time series data collected from authenticated websites of State Bank of Pakistan and publications of government organizations. The period covered is from 1971 to 2022. Table 1 shows the details of the study variables. There is one dependent and five explanatory variables.

Table 1*:*
Description of Variables

SNO	Variables	Notation	Explanation
1	Balance of Payment	BOP	Current account balance (% of GDP)
2	Money Supply	M1	Broad money growth (annual %)
3	Economic Growth	EGR	GDP growth (annual %)
4	Inflation Rate	INF	Inflation, consumer prices (annual %)

5	Foreign Debt	FD	External debt stocks (% of GNI)
6	Interest Rate	INR	Lending interest rate (%)

Source: World Development Indicators (2023).

Model Specification

The modified empirical model used to capture the behavior of the selected variables. The same model was used by (Khan et al. 2022; Rehman et al. 2018 ; Rehman et al. 2020, Rehman et al. 2020 ; Batool et al. 2015).

$$BOP_t = a_0 + a_1 M1_t + a_2 EGR_t + a_3 INF_t + a_4 FD_t + a_5 INR_t + \mu_t \quad (1)$$

Note: Where α's are the short run and μ_t is error term.

Econometric strategy

The main objective of the study is to find out the relationship between the BOP and the independent factors by using the ARDL model. It is good for estimating the time series data. Based on the ADF test results, this study used the ARDL approach. There are two stages in this approach. In the first one, F-statistics used to test the long-run relationship between variables. The coefficients of long and short run relationships examined in the second stage. The following unrestricted ECM model is used.

$$\Delta BOT_t = \alpha_0 + \sum_{i=1}^{n} \alpha_{1i} \Delta BOT_{t-i} + \sum_{i=0}^{n} \alpha_{2i} \Delta M1_{t-i} + \sum_{i=0}^{n} \alpha_{3i} \Delta EGR_{t-i} + \sum_{i=0}^{n} \alpha_{4i} \Delta INF_{t-i} + \sum_{i=0}^{n} \alpha_{5i} \Delta FD_{t-i} + \sum_{i=0}^{n} \alpha_{6i} \Delta INR_{t-i} + \gamma_1 M1_t + \gamma_2 EGR_t + \gamma_3 INF_t + \gamma_4 FD_t + \gamma_5 INR_t + \mu_t \quad (2)$$

On the lagged level variables of model 1 and 2, Joint significance F-test applied. There are two critical bounds of tabulated F-statistics. I (0) is the lower and I (1) is the upper bound. If the calculated value of F-statistics is greater than upper-bound. This shows the existence of the long-period link among the variables. Likewise, there is no long term link when it is less than lower bound. Finally, the result will be inconclusive, if the calculated value is between two bounds. To find out the coefficients of these variables by using the ARDL model.

$$BOT_t = \alpha_0 + \sum_{i=1}^{n} \alpha_{1i} BOT_{t-i} + \sum_{i=0}^{n} \alpha_{2i} M1_{t-i} + \sum_{i=0}^{n} \alpha_{3i} EGR_{t-i} + \sum_{i=0}^{n} \alpha_{4i} INF_{t-i} + \sum_{i=0}^{n} \alpha_{5i} FD_{t-i} + \sum_{i=0}^{n} \alpha_{6i} INR_{t-i} + \mu_t \quad (3)$$

Data Analysis and Discussion

Unit Root Tests Results

It is mandatory to check stationarity belongings of the data. The unit root tests namely ADF test which is one of the widely used test developed by Dickey and Fuller (1979) applied to check the stationarity of data. The results of the unit root test are given in table 2. There is the mixed order of integration. The variables BOP, M1, EGR, INF and FD are stationary at level and zero-degree order of integration. The INR has 1st-degree order of integration.

Table 2

Panel Unit Root Test Results

Variables	LLC Test (P-value)		ADF-Fisher Test (P-value)		
	At Level	At 1st Diff	At Level	At 1st Diff	Decision
BOP	-2.038** (0.0208)	-	4.858** (0.0058)		I(0)
M1	-1.638** (0.0368)	-	1.858* (0.0207)		I(0)
EGR	-1.705*** (0.0541)		1.858* (0.0207)		I(0)
INF	-2.747* (0.0030)		1.858** (0.0207)		I(0)
FD	3.971* (0.000)		1.858* (0.0207)		I(0)
INR	-0.4862 (0.3081)	-O.447* (0.0057)	0.761 (0.981)	-1.193** (0.052)	I(1)

Note: P-value inside the () parentheses and *, **, and *** indicate the significance level at 1%, 5%, and 10% respectively.

Bound Test Results

The test is used to examine the long-standing association between the variables. In the null hypothesis, all long-period coefficients are equal to zero.

Table 3

Bound Test Result

Variables	F-Statistics	Critical Value I(0) and I(1)	Probability	Co-Integration
Determinants of BOP	16.781*	I(0)=3.735, I(1)=4.245	0 .0000	Co-integration exist

Note: *,**,&*** stated the significance level at 1%, 5%, & 10% respectively.

The results of Bound test are given in table 3. The value of F-statistic value is 16.781, which is more than I (1) =4.267 at 5%. By using the ARDL model, the results of the study have shown that the selected independent variables have a significant impact on BOP. The diagnostic test results are given in table 4.

Table 4
Diagnostic Tests

Null Hypothesis (H_0)	Test	Test Value (p-value)	Decision
The residuals series is normally distributed.	Jarque- Bera	0.7152 (0.612)	Sustain H_0
There is no serial correlation.	BG Serial Correlation	2.6352 (0.312)	-do-
The variance is homoscedastic.	Breusch-Pagan-Godfrey	0.5617 (0.4381)	-do-
The variance is homoscedastic.	Harvey	0.8462 (0.473)	-do-
There is no specification error in the model.	Ramsey RESET	0.413 (0.436)	-do-

Estimation and Discussion

In table-5, the ARDL results are given. The values of the long run coefficients have shown that all the five variables are the main factors of BOP

Table 5 ARDL Model Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long Run Coefficients				
$M1_{it}$	-0.4621**	0.2574	-2.6074	0.0131
EGR_{it}	-0.4197**	0.2033	-2.0643	0.0461
INF_{it}	-0.3315*	0.1094	4.2174	0.0002
FD_{it}	0.0778*	0.0216	-3.6077	0.0009
INR_{it}	-0.0439	0.0623	-0.7046	0.4855
C	16.778*	3.5181	4.7692	0.0000
Short Run Coefficients				
ECM_{it}	-0.5728*	0.0957	-5.9864	0.0001
$D(M1_{it})$	-0.4410***	0.0804	-1.7534	0.0905

$D(EGR_{it})$	-0.3503***	0.1313	-1.9059	0.0670
$D(INF_{it})$	-0.3979***	0.0347	1.9535	0.0608
$D(FD_{it})$	0.0219*	0.0079	-2.7824	0.0096
$D(INR_{it})$	0.0315***	0.0181	1.7416	0.0926

Note: *,**,&*** stated the significance level at 1%, 5%, & 10% respectively.

The Coefficient value of M1 is -0.4621. It shows money supply bring a change of 0.4621 million in BOP. In the short run the impact is 0.4410 million. The impact is negative in both runs. The results are supported by (Goldfajn 1996; Mussa 2019). The EGR has a negative and statistically substantial consequence on BOP in both runs. The one percent change in EGR will decrease the BOP by 41.97 and 35.03 percent respectively. The results suggested that in a country there is a need to manage the negative link between economic growth rate and BOP. The results of the past studies have shown that maintaining equilibrium in the BOP supported the economic growth in the country (Chaudhary & Shabbir, 2004 ; McCombie & Roberts, 2002 ; Farhi & Tirole, 2012). The link between INF and BOP is adverse and noteworthy in both runs. If there is one percent increase in inflation, it will decrease the BOP by 33.15% in long run. This impact is 39.79% in the short period. The similar results were given by the studies of (Javid et al.2010; Adamu & Itsede 2010). The FD has shown a direct correlation between BOP and foreign debt. If there in one percent increase in FD, it will increase BOP by 7.78 percent in the long and 2.19% in short-period. The similar results are given by Ubom et al. (2015). The INR has a negative and statistically significant impact on BOP in the long run. This impact is positive and significant in the short run. If there is one percent increase in INR will decrease the BOP by 4.39 % in the long period and increase it by 3.15% in the short period. The similar results were given by (Moreno-Brid 2003; Lahiri & Végh 2003). The value of ECM is -0.5728 and p- value is 0.0001. It means the required speed of adjustment is 57.28% from short to long run equilibrium.

Conclusion and Recommendations

To achieve the desired objective, this study employs the ARDL techniques for estimation and used data set from 1971-2022, which collected from World Development Indicators (2023) and official website of State Bank of Pakistan. This study found that money supply, GDP growth, inflation rate has negative, while, foreign debt has positive effect on BOP. However, interest rate has positive impact in the short run. For the longer period of time no relationship is observed. Therefore, this study

concluded that in the context of Pakistan, money supply, GDP growth, inflation rate and foreign debt are the important factors of BOP. The impact of money supply is negative in both runs and its sustainable growth is required for the improvement of BOP issue. Further, this research study also recommended to manage the negative relationship between economic growth rate of the country and BOP. These issues are directly responsible for the crisis of BOP. Here, the government promoting the import-led growth strategy by borrowing from abroad. The purpose is to finance large scale infrastructure projects without any reciprocal benefits by the countries from which the persistence machinery is being imported. Hence, it is suggested to start the import substitutable industries. To facilitate the economic growth, it is indorsed to utilize the local human and physical resources to decline the import expenditure.

Implications of the Study

- The State Bank of Pakistan should take important steps to control the money supply.
- Interest rate should be reduced because low interest rate encourages both internal and external investors.
- Economic policies of the country focused on controlling foreign debt and inflation in the country.
- The exchange rate should be stabilized to control the issue of BOP and finally the overall economy of the country will improve.

Directions for Future Research

- To analyse the main determinates of BOP in the other developing countries.

References

Adamu, P. A., & Itsede, O. C. (2010). Balance of payments adjustment: The West African monetary zone experience. *Journal of Monetary and Economic Integration, 10*(2), 100-116.

Akpansung, A. O. (2013). A review of empirical literature on balance of payments as a monetary phenomenon. *Journal of Emerging Trends in Economics and Management Sciences, 4*(2), 124-132.

Alexander, S. S. (1952). Effects of a Devaluation on a Trade Balance. *Staff Papers-International Monetary Fund, 2*(2), 263-278.

Ali, A. (2022). Determining Pakistan's Financial Dependency: The Role of Financial Globalization and Corruption. *Munich Personal*

RePEc Archive (MPRA)(116097), 1-40. doi: https://mpra.ub.uni-muenchen.de/116097/1/MPRA_paper_116097.pdf

Ali, G. (2011). Pakistan's Balance of Payments as a Monetary Phenomenon:(Econometric Evidence). *Journal of Managerial Sciences, 5*(2), 168-178.

Alp, E. A., & Genc, E. G. (2015). The relation between current account deficit and tourism: The case of Turkey. *International Journal of Economics and Financial Issues, 5*(2), 448-453.

Batool, S. A., Memood, T., & Jadoon, A. K. (2015). What determines balance of payments: A case of Pakistan. *Sukkur IBA Journal of Management and Business, 2*(1), 47-70.

Bussiere, M. (2013). Balance of payment crises in emerging markets: how early were the 'early'warning signals? *Applied Economics, 45*(12), 1601-1623.

Câmara, A., Vernengo, M., Rochon, L., & Vernengo, M. (2001). The German balance of payment school and the Latin American neo-structuralists. *Credit, Interest Rates and the Open Economy, Cheltenham, Edward Elgar*, 143-159.

Carbaugh, R. J. (2008). *International economics* (13th ed.). United States of America: South-Western Cengage Learning, Retrieved from https://wyamaka.files.wordpress.com/2019/08/international-economics_30.pdf.

Cecchetti, S. G., Mohanty, M. S., & Zampolli, F. (2011). The real effects of debt. *BIS Working Papers, 352*(1), 1-34.

Chaudhary, M. A., & Shabbir, G. (2004). Macroeconomic Impacts of Monetary Variables on Pakistan's Foreign Sector. *The Lahore Journal of Economics, 9*(1), 63-84.

Chowdhury, R. (2013). Bangladesh's Balance of Payments: an Econometric Analysis. *European Academic Research, 1*(4), 337-350.

Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American statistical association, 74*(366a), 427-431.

Duasa, J. B. (2004). The Malaysian balance of payments: keynesian approach versus monetary approach. *Gombak, Selangor: International Islamic University Malaysia, , 1*(37), 20-35.

Eita, J. H., & Gaomab II, M. H. (2012). Macroeconomic determinants of balance of payments in Namibia. *International Journal of Business and Management, 7*(3), 173-184.

Farhi, E., & Tirole, J. (2012). Bubbly liquidity. *The review of economic studies, 79*(2), 678-706.

Fatima, N., & Sahibzada, S. A. (2012). An empirical analysis of factors affecting work life balance among university teachers: the case of Pakistan. *Journal of International Academic Research, 12*(1), 16-29.

Felipe, J., McCombie, J. S., & Naqvi, K. (2010). Is Pakistan's growth rate balance-of-payments constrained? Policies and implications for development and growth. *Oxford Development Studies, 38*(4), 477-496.

Goldfajn, I. (1996). *Balance of payment crises and capital flows: the role of liquidity*.

Guitian, M. (1973). Credit versus Money as an Instrument of Control. *Staff Papers, 20*(3), 785-800.

Guvenen, F., Mataloni Jr, R. J., Rassier, D. G., & Ruhl, K. J. (2022). Offshore profit shifting and aggregate measurement: Balance of payments, foreign investment, productivity, and the labor share. *American Economic Review, 112*(6), 1848-1884.

Hume, D. (2005). On the balance of trade *Gold standard in theory & history* (pp. 31-37): Routledge.

Imoughele, L. E., & Ismaila, M. (2015). Monetary policy and balance of payments stability in Nigeria. *International Journal of Academic Research in Public Policy and Governance, 2*(1), 1-15.

Jadhav, B. R. (2020). Direction Of India's Balance Of Payment Position. *CMAs' INDUSTRY BULLETIN*, 10-13. doi: https://icmai.in/upload/Institute/Updates/CMA_Industry_Bulletin300420.pdf#page=10

Javid, A. Y., Javid, M., Arif, U., & Sabir, M. (2010). Fiscal Policy and Current Account Dynamics in the Case of Pakistan [with Comments]. *The Pakistan Development Review, 21*(1), 577-592.

Jayme, J. F. G. (2020). Balance-of-payments-constrained economic growth in Brazil. *Brazilian Journal of Political Economy, 23*(1), 63-86. doi: https://doi.org/10.1590/0101-31572004-0708

Jeon, Y. (2009). Balance-of-payment constrained growth: the case of China, 1979–2002. *International Review of Applied Economics, 23*(2), 135-146.

Johnson, H. G. (1977). The monetary approach to balance of payments theory and policy: Explanation and policy implications. *Economica, 44*(175), 217-229.

Khan, F., Noor, S., Rehman, Z. U., & Rahman, G. (2022). Does Schooling Contribute to Economic Growth? A Comparative Study in Pakistan and Afghanistan. *Pakistan Journal of Social Sciences, 42*(3), 535-545.

Lahiri, A., & Végh, C. A. (2003). Delaying the inevitable: interest rate defense and balance of payments crises. *Journal of Political Economy, 111*(2), 404-424.

Lucy, A., Sunday, R. J., & Pacific, Y. K. T. (2015). Exchange rate and trade balance in Ghana: testing the validity of the Marshall-Lerner condition. *International Journal of Development and Emerging Economics, 3*(2), 38-52.

McCombie, J. S., & Roberts, M. (2002). The role of the balance of payments in economic growth. *The economics of demand-led growth, 10*(2), 87-114.

Moreno-Brid, J. C. (2003). Capital flows, interest payments and the balance-of-payments constrained growth model: A theoretical and empirical analysis. *Metroeconomica, 54*(2-3), 346-365.

Mundell, R. A. (1968). The nature of policy choices. *International Economics*. doi: https://www.jstor.org/stable/2231046

Mussa, M. (2019). The exchange rate, the balance of payments and monetary and fiscal policy under a regime of controlled floating *Flexible Exchange Rates and Stabilization Policy* (pp. 97-116): Routledge.

Ocampo, J. A. (2016). Macroeconomics and Development, Balance-of-Payments Dominance: Implications for Macroeconomic Policy. In M. Damill, M. Rapetti & G. Rozenwurcel (Eds.), *Roberto Frenkel and the Economics of Latin America* (pp. 211-228): Columbia University Press, Retrieved from https://doi.org/10.7312/dami17508-012

Rana, K. S., & Khurana, D. (2011). Comparative Analysis of Balance of Payments: Indian Perspective. *International Journal of Transformations in Business Management, 1, 1*, 1-10.

Rasheed, R., Meo, M. S., Awan, R. U., & Ahmed, F. (2019). The impact of tourism on deficit in balance of payments of Pakistan: an application of bounds testing approach to cointegration. *Asia Pacific Journal of Tourism Research, 24*(4), 325-332. doi: 10.1080/10941665.2018.1564345

Rashidin, M. S., Ullah, I., & Jehangir, M. (2017). The influence of balance of payments and balance of trade on exchange rate in developing countries of Asia: A case study of Bangladesh, Pakistan and India. *Sonargaon University Journal, 1*(2).

Rehman, H. u., & Rashid, H. A. (2006). The balance of payment problem in developing countries, especially in Pakistan. *The Journal of Commerce, 1*(1), 31-52.

Rehman, Z. U., Khan, M. A., & Tariq, M. (2020a). Government Expenditure Composition and Economic Growth: Empirical

Evidence from Pakistan. *Journal of Managerial Sciences, 14*(1), 54-64.

Rehman, Z. U., Khan, M. A., & Tariq, M. (2020b). Indirect taxation and economic growth relationship: empirical evidence from Asian countries. *Pa istan Journal of Humanities & Social Sciences Research, 3*(1), 131-144.

Rehman, Z. U., Tariq, M., & Khan, M. A. (2018). The Role of Human Capital in Economic Development in the Selected Central Asian Countries. *Dialogue (Pakistan), 13*(3), 235-244. doi: https://www.qurtuba.edu.pk/thedialogue/The%20Dialogue/13_3/01-235-244,ZiaMarwat.pdf

Shah, A., & Majeed, M. T. (2014). Real exchange rate and trade balance in Pakistan: An ARDL co-integration approach. doi: https://mpra.ub.uni-muenchen.de/57674/1/MPRA_paper_57674.pdf

Stievany, G. M., & Jalunggono, G. (2022). Analysis Of The Effect Of Inflation, Exports And Imports On Indonesia's Economic Growth. *Journal of Management, Accounting, General Finance and International Economic Issues, 1*(3), 1-14.

Sujianto, A. E. (2020). Macroeconomic factors and balance of payment: Evidence from Indonesia. *Industrial Engineering & Management Systems, 19*(1), 266-272.

Sultani, A. H., & Faisal, U. (2022). Determinants of Balance of Payments: A Comparative Review of Developing and Least Developed Countries. *International Journal of Research and Analytical Reviews, 9*(2), 18-36. doi: https://ijrar.org/papers/IJRAR22B1003.pdf

Sultani, A. H., & Faisal, U. (2023). The impact of macroeconomic indicators on the balance of payments: Empirical evidence from Afghanistan. *Annals of Financial Economics, 18*(02), 1-29. doi: https://doi.org/10.1142/S2010495222500324

The Bank Of Uganda. (2003). Policy Application of Balance of Payment and IIP Statistics: Sixteenth Meeting of the IMF Committee on Balance of Payments Statistics, 1-5 Washington D.C.: The Bank Of Uganda,.

Tijani, J. O. (2014). Empirical analysis of balance of payment adjustment mechanisms: Monetary channel in Nigeria, 1970–2010. *Mediterranean Journal of Social Sciences, 5*(14), 67-76.

Ubom, U. B., Ubom, A. U., & Williams, A. J. (2015). Economic Integration, Trade Balances and Socioeconomic Development in Nigeria. *Global Journal of Management and Business Research: C Finance, 15*(3), 1-10.

Umer, M., Muhammad, S. D., Abro, A. A., Sheikh, Q., & Ghazali, A. (2010). The balance of payments as a monetary phenomenon: Econometric Evidence from Pakistan. *International Research Journal of Finance and Economics, 38*(5), 123-154.

World Development Indicators (WDI). (2023). The World Bank. doi: https://databank.worldbank.org/source/world-development-indicators#

Zhang, X. (2016). The new round of civil law codification in China. *U. Bologna L. Rev., 1*(10), 106-126.