



Presence of Debt Overhung Effect in Pakistan: Empirical Evidence with ARDL Model

Danish Baig ¹, Ghulam Muhammad Qamri ², Adil Hassan Khan ³, Qasim Raza Khan ⁴, Aqsa Akbar ⁵

¹ Scholar, Department of Economics, University of Sargodha, Sargodha, Punjab, Pakistan. Email: dbaig797@gmail.com

² Faculty, Department of Economics, University of Sargodha, Sargodha, Punjab, Pakistan. Email: gmqammar@hotmail.com

³ Scholar, Department of Economics, University of Sargodha, Sargodha, Punjab, Pakistan. Email: aaddiillhassan@gmail.com

⁴ Faculty, Department of Management Sciences, COMSATS University Islamabad, Lahore Campus, Pakistan. Email: qasi.raza@gmail.com

⁵ Faculty, Department of Management Sciences, COMSATS University Islamabad, Lahore Campus, Pakistan. Email: aqsaakbar@cuilahore.edu.com

ARTICLE INFO

Article History:

Received: December 11, 2023
Revised: March 10, 2024
Accepted: March 13, 2024
Available Online: March 14, 2024

Keywords:

Economic Growth
External Debt
Debt Overhung Effect
Debt Service
Exports
ARDL

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

Many developing nations, including Pakistan, have struggled with the challenge of maintaining debt sustainability due to insufficient revenue generation to meet economic crises. The primary aim of this study is to find how external debt, debt servicing, and exports influence the economic growth of Pakistan, utilizing data from 2000 to 2020. Augmented Dickey-Fuller test (ADF) is applied to evade spurious regression, revealing that debt servicing is stationary at level. In contrast, GDP, external debt, and exports are stationary at their first difference. For this reason, the ARDL model has been used to find the long-run and short-run interdependence among external debt, debt servicing, exports, and GDP. The empirical findings of this study revealed a negative and significant impact of external debt on Gross Domestic Product (GDP), supported by the "Debt Overhung Effect". Conversely, debt servicing has a positive but statistically insignificant impact on GDP. Exports have a positive and significant impact on GDP growth. Moreover, to confirm the long-term stability of our model Cumulative Sum of Recursive Residual (CUSUM) and CUSUM of square have been used. This research contributes novel insights to the work conducted by other researchers, shedding light on the intricate relationship among external debt, debt servicing, exports, and GDP growth of Pakistan. Additionally, by estimating the effect of exports on GDP, valuable insights into the country's debt repayment capacity are provided. Export earnings constitute a primary source of foreign currency inflow.

© 2024 The Authors, Published by iRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

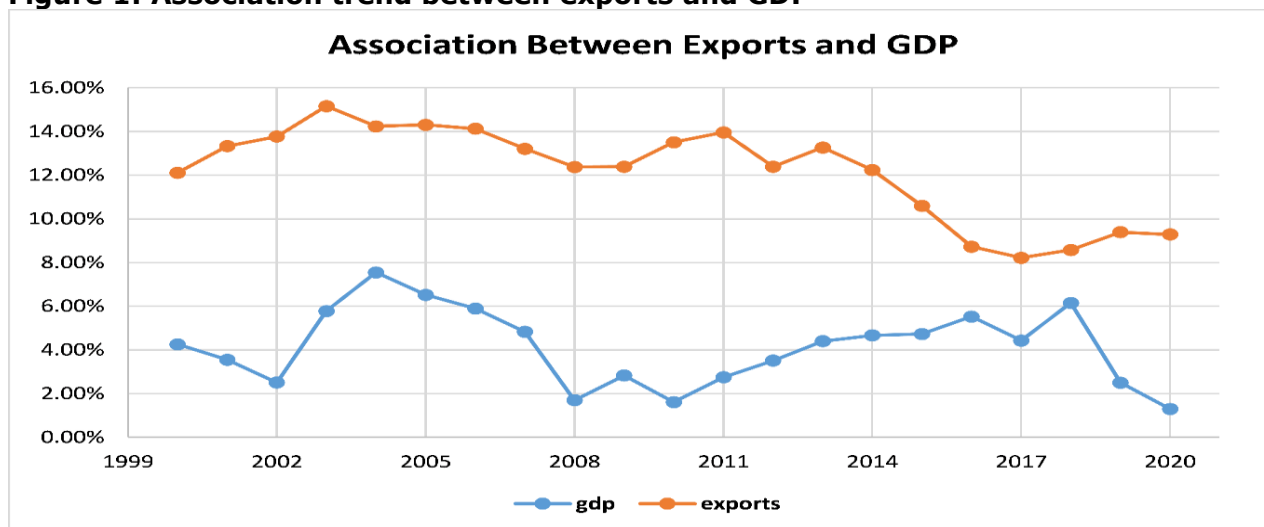
Corresponding Author's Email: gmqammar@hotmail.com

1. Introduction

The government takes domestic and external loans to reduce the savings-investment gap. But in the case of developing nations usually economic data provide contradicting results due to many reasons including lack of proper timely implementation, donor-based strategies, large current account deficit (mainly due to exports of raw materials at low prices as compared to expensive imports), lower export earnings, inefficient exchange rate adjustments, inefficient tax collection system, and investments in projects of low economic outcome. So we conclude that these political and financial factors are the main cause of developing countries' high debt burden. As previously stated, analysis of economic data has proved that high indebtedness is one of the main reasons for slowing down the rate of economic growth in the case of developing countries (Mohsin, Ullah, Iqbal, Iqbal, & Taghizadeh-Hesary, 2021). Usually, it discourages some, as lenders impose restrictions and policy reforms taken by the government that can boost economic development. Abrar-ul-haq, Shah, and Ghulam (2016); Kanwal, Ahmad, Hafeez, and Qamri

(2020); Qamri, Haq, and Akram (2015); Shoukat, Abdullah, Rafique, and Qamri (2023) explain the demographic dynamics of Pakistan with its challenges. This economic challenge is being experienced by all the low-income countries as they face almost identical economic situations, mainly due to heavy external debt. Several such findings are also being cited in the literature review of this study.

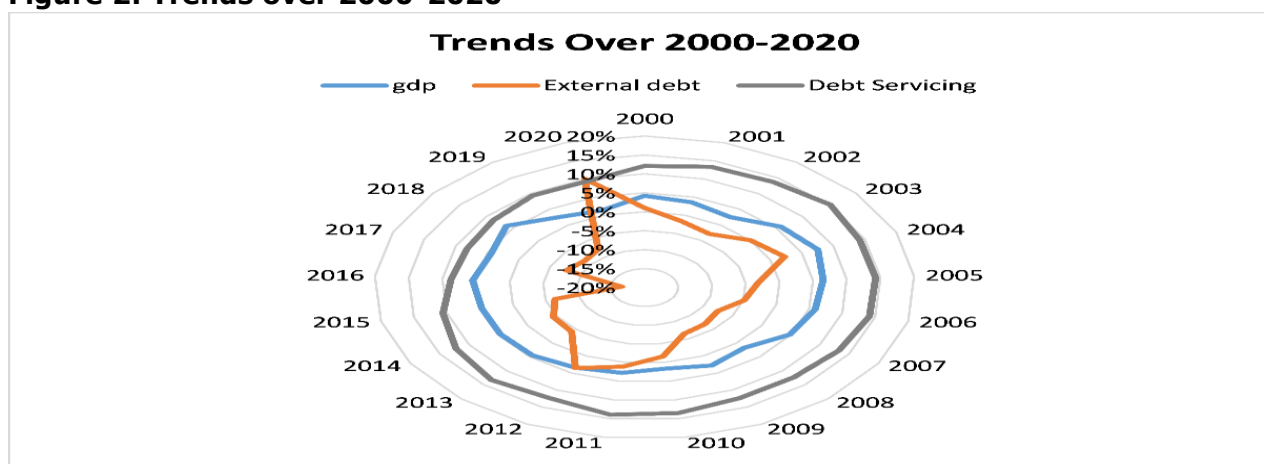
Figure 1: Association trend between exports and GDP



Pakistan has been facing high debt burden problems in the form of domestic and external debt. External debt is rising at a rapid rate without adding any sufficient contribution to production. In this study we have discussed only external debt as servicing of external debt is a huge problem for any developing economy mainly due to exchange rate fluctuations. Pakistan has not been able to manage its debt obligations due to a weaker economic position and other various reasons which have been mentioned earlier. Pakistan has been facing Debt sustainability issues for decades, as it is not able to fulfill its debt obligations without foreign and domestic financial help. This economic situation gets into a position where the government has to reallocate the resources of the country to manage our current and future debt obligations. This situation has negative impacts on investment projects, developmental programs, and poverty reduction schemes. Hence, the reduction of resources further weakens the economy.

The external debt of Pakistan has been rising at a rapid rate. The principal aim of this analysis is to explore the short-term and more importantly the everlasting influence of external debt on the GDP growth of Pakistan. It explains that how external debt, debt servicing, and exports effect the economic growth of Pakistan. Augmented Dickey-Fuller test (ADF) is applied to avoid spurious regression, showing that debt servicing is stationary at level. The study revealed a negative and significant impact of external debt on Gross Domestic Product (GDP), supported by the "Debt Overhung Effect."

Figure 2: Trends over 2000-2020



The organization of this study is of the following order: the next section deals with the previous literature to find the gap in past research followed by section 3 which elucidates the theoretical framework. In section 4, the empirical results and their interpretation are discussed which is followed by section 5, which covers the conclusion of this comprehensive study and inclusive of policy suggestions.

2. Literature Review

A number of researchers have looked into how Pakistan's external and domestic debt affects its economy's growth. For instance, Ehsan, Nazir, Nurunnabi, Raza Khan, Tahir, and Ahmed (2018); Malik, Hayat, and Hayat (2010) studied the connection between Pakistan's GDP growth and external debt for the period 1972 to 2005 by using time series econometric methods. His analysis indicates the presence of a strong inverse and statistically significant relationship between economic growth and external debt. Additionally, findings from this research indicate that the servicing of debt exerts a positive and statistically significant effect on GDP growth in the context of Pakistan. (Karim & Khan, 2023) emphasized that public debt doesn't seem to have a lasting impact on Pakistan's GDP. In simpler terms, it suggests that the money the government owes, domestically and internationally, doesn't significantly affect the country's ability to grow economically. Haider, Raza, Jameel, and Pervaiz (2019); Siddique, Ullah, and Haq (2017) assessed the impact of Pakistan's leaping foreign debt crisis on the country's economy. The outcomes of this study showed that while foreign debt has a considerable and negative impact on GDP growth, trade, and human capital are two factors that can contribute to economic growth. As per Awan and Qasim (2020), imports, debt services, external debt, and population growth rate, all these factors have an inverse relation to the GDP growth of Pakistan. However increase in exports, gross capital formation, and participation of the employed labor force can boost economic growth. Ahmed and Shakur (2011); Khan, Xinshu, Qamri, and Nawaz (2023) argued that while other macroeconomic factors influence GDP growth, the long-term interdependence of the economy's growth on public debt implies that external debt is the most key component responsible for the slower rate of growth in case of Pakistan.

Mohsin et al. (2021) analyzed the dependence between economic growth and foreign debt in the case of Pakistan. In the long term, this research revealed a negative impact of external debt on GDP growth. However, there is a unidirectional causal interdependence between GDP and external debt. Atique and Malik (2012); Jafri, Liu, Usman, and Khan (2021) conducted different studies to understand the fluctuations in the GDP growth of Pakistan by estimating the cumulative influence of Debt. Findings from this study suggest that economic growth is negatively affected as the Public Debt rises. According to the empirics of this research, foreign indebtedness has stronger inverse relationship with economic growth as compared to domestic liabilities. According to Rais and Anwar (2012), the economic growth of Pakistan is inversely related to both domestic and external liabilities. Increasing domestic debt boosts consumption expenditure. In the case of Pakistan, the rising domestic debt burden reduces investment. Akram (2011) estimated that in case of long run economic growth of Pakistan is affected inversely by the increasing external liabilities. In Pakistan, the interdependence between debt servicing and exports is relatively small. It demonstrates that, while the external debt crowding-out effect is small, the debt overhang hypothesis appears to have been considerable in Pakistan (Shah, Yan, Khan, Khurram, & Khan, 2021). Domestic debt impacts economic growth both positively and negatively. However, macroeconomic stability and financial market deregulation are required for favorable impacts to predominate (Khan, 2023). Domestic debt's adverse impacts outweigh its positive impacts due to Pakistan's economic vulnerabilities in these areas. Furthermore, in the short run, the findings of this study indicated a negative and statistically significant relationship between GDP and external debt. Moreover, also in the short run, the proportion of debt service to exports demonstrates an adverse relation with per capita GDP, while domestic debt exhibits a marginal effect on long-term GDP per capita (Nawaz, Ahmad, Hussain, & Bhatti, 2020; Nawaz, Hussain, & Hussain, 2021; Shittu, Hassan, & Nawaz, 2018).

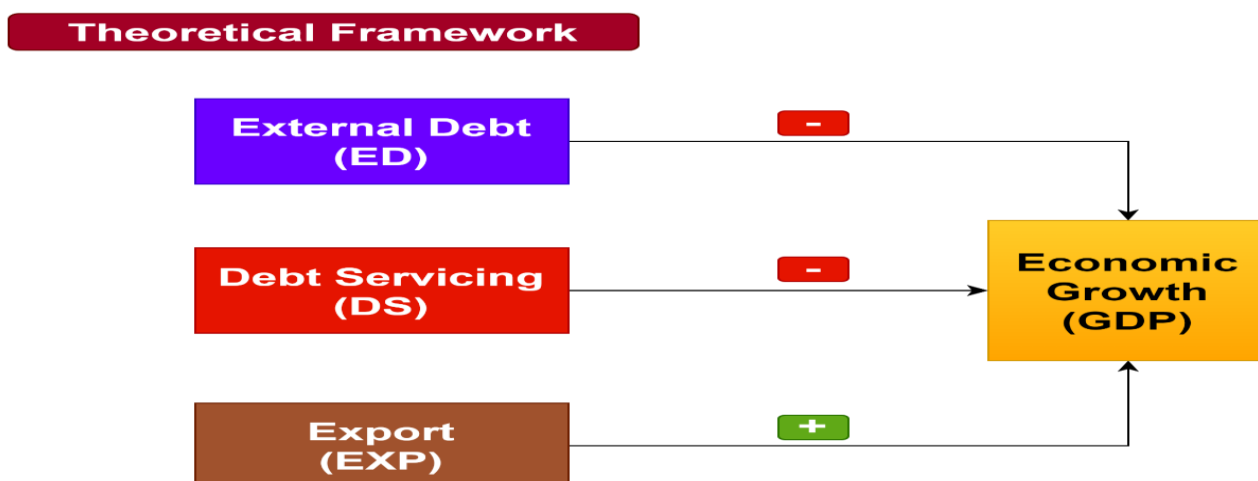
Ali and Mustafa (2012) studied the effects of foreign liabilities on the economic growth of Pakistan from 1970 to 2010, taking into account the Yearly education expenditures, external debt, and amount of capital. As per this study's results, an increase in external debt is another good reason for the crawling economic growth rate. In contrast, Capital affects economic growth positively. Labor had a negative impact on economic expansion. Short-term outcomes also revealed the significance of capital formation and human capital in rising national GDP. Kumar, Bhutto, Mangrio, and Kalhoro (2019) intended to examine the implications

of external debt and currency fluctuations on domestic consumption in Pakistan from 1980 to 2014. The results of the Bound Test show that a long-term correlation is present between external debt, income, domestic consumption, rate of interest, and currency fluctuations. Lending rates and currency rates have a positive impact on domestic consumption; nevertheless, currency fluctuations and foreign debt have short- and long-term impacts. Furthermore, the cointegration coefficient of ECM is negative, indicating that it takes at least six months to move toward long-term equilibrium. Mahmood, Rauf, and Ahmad (2009) analyzed debt sustainability in the case of Pakistan. According to the empirical findings of their analysis, the problem of public debt sustainability was primarily caused by underlying current account and fiscal deficits. The ratios of public and external debt remained below acceptable bounds throughout the 1970s and the 2000s. Based on debt sustainability variables, the results show that, while the fundamental criterion for debt sustainability is met, the sufficient condition is not fulfilled during the entire period, except for a short period in the first half of the 2000s. Siddiqui and Malik (2001) researched the interconnection of external debt and the GDP growth in case of South Asia. They concluded that cross-border trade has a beneficial and considerable impact on the overall economy. The results show that as population growth grows, productivity decreases. Surprisingly, external debt has a considerable positive impact on GDP growth in South Asia. Senadza, Fiagbe, and Quartey (2017) intended to estimate how economic conditions in SSA from 1990 to 2013 was affected by their external debt taken during the same period. Given the escalating amounts of foreign debt in many African countries, this research examines how rising external debt affects their economy in the Sub-Saharan Africa region. Considering data from 39 nations, the empirics suggest that external debt exhibits a negative impact on SSA's GDP.

3. Theoretical Framework

As per economic theory, both industrialized and emerging economies should be capable of increasing their economic growth up to a certain threshold of debt. The economic literature employs the Liquidity Constraint Hypothesis and Debt Overhang Theory to shed light on the interconnection between debt and economic growth (Cohen, 1997; Krugman, 1988; Sachs, 1988).

Figure 3: Theoretical Framework



3.1. Liquidity Constraint Hypothesis

Liquidity Constraint Hypothesis (LCH) examines how nations borrow money and provides insights into the limitations and issues they encounter while looking for funding from abroad. Put more simply, it offers an idea through which we can see how nations, like people, struggle with financial constraints.

3.1.1. Understanding Liquidity Constraint Hypothesis

According to the Liquidity Constraint Hypothesis, a nation may run into problems when trying to borrow money for development or to deal with economic issues, much as an individual with few immediate resources may find it difficult to make major investments. Fulfillment of national economic goals frequently need financial support, and nations look for external funding sources in the same way that people do when they approach banks for loans. The liquidity

constraint hypothesis, however, raises the possibility that, for a variety of reasons, these nations might not always have unrestricted access to financial markets.

3.1.2. Factors Affecting Limitations on Liquidity

The ability of a nation to obtain external finance is directly associated with its income levels, just as an individual's ability to borrow is determined by their income. It may be difficult for lower-income nations to obtain loans in favorable conditions, which would limit their possibilities for development.

3.1.3. Credit Worthiness

The world economic situation also affects a nation's ability to borrow money. Lenders may become more circumspect during uncertain economic times, which could result in increased liquidity constraints for borrowing countries.

3.1.4. Policy Framework

Governmental policies affect the financial choices of individuals. Similarly, economic policies of a nation influence its ability to borrow money. Transparent government and sound fiscal management increase a country's credibility and it can result in the alleviation of liquidity restrictions.

3.2. Consequences and Difficulties

The Liquidity Constraint Theory makes it clear that both individuals and governments frequently struggle with similar financial issues. Due to low credit scores or expensive borrowing, they may find it difficult to obtain financing, which would restrict their capacity to make investments in social programs or vital infrastructure. They might find it more difficult to fulfill their financial responsibilities during recessions or other economic downturns, which would force them to make difficult choices about how best to utilize their limited resources.

3.3. Debt Overhang Theory

A debt overhang occurs when an organization has taken enough debt that it is unable to take on new debt to fund its additional projects. This includes companies that produce a profit big enough to gradually cut down on debt. Since any profits from new projects would only accrue to existing debt holders, an entity with a debt overhang would have little motive or ability to try to climb out of its current financial hole, which works to discourage current investment. An entity is said to be under a debt overhang when it has too much debt and cannot borrow additional funds. Because of the heavy load, any profits are directly used to settle outstanding debt rather than to finance new investment initiatives, increasing the chances of default. Generally speaking, the possibility of bearing financial losses makes shareholders hesitant to support fresh stock issuances. Sovereign governments are likewise subject to debt overhangs. In these instances, the phrase describes a circumstance in which a country's debt excels in its ability to pay it back in the future. This can result from economic underemployment or an output gap that is continually filled with more credit. An excessive amount of debt can result in slower growth and lower living standards due to lower funding for vital services like healthcare, education, and infrastructure.

Debt overhangs have a variety of negative effects on balance sheets and profitability, which can cause hardship to different businesses. They may force businesses and nations to postpone additional expenditures and/or investments. They might cause people to underinvest. Debt overhangs can impede growth, which makes recovery more challenging. There are numerous approaches to escaping a debt trap. Companies may become insolvent or bankrupt; debt can be repurchased and converted into equity; debt can be canceled by debtors, who can enroll in programs that allow creditors to erase all or a portion of their obligations. When a company's current debt is being paid off with a larger share of its profits or cash flow, it might become trapped in a debt overhang. The only way to close this growing shortfall is by taking on more debt, which simply makes a company's load heavier.

4. Data and Methodology

This primary goal of this study is to examine the impacts of Pakistan's external debt on its GDP growth for the period 2000 to 2020. Sources of data are presented below.

Table 1

Variables	Data Sources
GDP	World Development Indicators
Debt Service	World Development Indicators
External Debt	Macro Trends
Exports	Macro Trends

The Augmented Dickey-Fuller test (ADF) has been employed to solve the non-stationarity problem. This test is conducted at both level and at first difference. A co-integration test like the Johnson test can be used if all of the time series have same order of integration. If all the time series are integrated across different orders, an appropriate test, such as the Auto Regressive Distributive Lag Model (ARDL) can be used to determine the long-run relationships among our variables. The model has the following form:

$$GDP = \beta_0 + \beta_1 \cdot ed + \beta_2 \cdot ds + \beta_3 \cdot exp + \varepsilon_i$$

In this model, exp is used to show exports, ds is used for debt servicing, ed is the external debt, and GDP is the gross domestic product. Every variable is regressed on constant as well as on-trend and constant while applying the ADF test. The Schwartz Information Criteria (SIC) is preferred to determine the ideal lag length for the ADF test. Some of the series come out to be stationary at their level and others are stationary at their first difference so, The ARDL technique is used to assess each independent variable's statistical relationship with the dependent variable (GDP).

5. Empirical Results and Interpretation

5.1. Unit Root Test

We first check the stationarity to avoid the problem of non-stationarity. To achieve this, the Augmented Dickey-Fuller Test (ADF) is applied at both intercept and trend and intercept. By examining the results of ADF at a 5% significance level, it is found that the variables of our model have a non-identical degree of integration. Debt Servicing is stationary at level. GDP, exports, and external debt are stationary at their first difference. These results of ADF are presented below.

Table 2: ADF test results at Level

Variables	Intercept	Trend and Intercept	Conclusion
GDP	-2.55	-2.85	-
ED	1.78	-1.46	-
DS	3.11 (s)	1.43	I(0)
EXP	-0.54	-2.58	-

Table 3: ADF test results at 1st Difference

Variables	Intercept	Trend and Intercept	Conclusion
GDP	-4.36 (s)	-4.39	I(1)
ED	-2.74	-3.78 (s)	I(1)
DS	-1.39	-10.11	-
EXP	-3.63 (s)	-3.53	I(1)

As all the time series do not have a similar order of integration, which suggests that the ARDL Bound test for cointegration is prioritized to examine the statistical relationship among our variables of concern,

5.2. Lag Length Selection

After analyzing the results of the unit root test, we need to find a suitable lag length for the cointegration technique. Multiple criteria are available to find the appropriate lag length. Through VAR model the results of different criteria for Lag selection estimation are below.

Table 4: Lag Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-501.78301709409	NA	3.00e+19	56.19822	56.39608	56.22550
1	-438.7631552656241	91.03007*	1.71e+17	50.97368	51.96299	51.11010
2	-416.1157867838124	22.64737	1.14e+17	50.23509	52.01583	50.48063

3	-384.8599542967451	17.36435	6.47e+16*	48.53999*	51.11218*	48.89466*
---	--------------------	----------	-----------	-----------	-----------	-----------

Based on the results of HQ, SC, and AIC, the optimal lag length for the cointegration technique is 3. This study will use 3 as our optimal lag for the ARDL Model.

5.3. Cointegration Analysis

Wald-F-statistics is analyzed to check long-run cointegration. In case the critical value of the upper bound is smaller than the value of F-statistics then we conclude that there is cointegration in the long run, but if the value of F-statistics is smaller than the critical value of the lower bound then the null hypothesis, which is no long run Cointegration is accepted, so there will be no long run cointegration. In our estimates, the value of F-statistics is greater than the critical value of upper bound (at a significance level of 5%) for all the independent variables when they were normalized.

Table 5: Results from the bound test of cointegration

Variables	F-statistics	cointegration	Variables
LNGDP	6.95	yes	LNGDP
LNED	9.72	yes	LNED
LNDS	5.09	yes	LNDS
LNEXP	8.91	yes	LNEXP

Constant: Unrestricted constant and no trend

These findings suggest that there is a long-run cointegration because the numerical value of the F-statistic 6.95 at the 5% significance level is greater than the upper bound of the F-statistics. There is long-run cointegration so, the null hypothesis that there is no long-run cointegration is not accepted in all other specifications (taking each independent variable as a dependent variable) when the remaining variables under consideration are normalized. This is because the values of all estimated F-statistics are greater than the upper bound of the F-statistic value. As there is cointegration, we will find the impact of independent variables on Gross Domestic Product (GDP) both in the short and long run.

5.4. Short run estimates (ECM)

Table 6

Variables	Coefficient	Std. Errors	T- statistics	Probabilities
D(LNGDP(-1))	0.64	0.22	2.82	0.066
D(LNED)	-6.38	1.25	-5.07	0.001
D(LNDS)	-0.22	0.22	-0.96	0.403
D(LNEXP)	2.46	0.77	3.19	0.040
CointEq(-1)*	-0.86	0.19	-4.52	0.03
R ²	0.95	F-statistics		12.08
Adj R	0.87	Prob(f-stat)		0.003

The interdependence between GDP and each of the independent variables is displayed in the above table. The adjusted R² value is 0.87 which means that 87% of the fluctuations in GDP can be explained by the independent variables i.e. DS, Exp, and ED. Given that the ECM value is -0.86, it means that if the system deviates from the equilibrium relationship between the independent and dependent variable, it will adjust by a speed of approximately 86%. Keep in mind that the sign of the coefficient is negative, which implies a stable ECM. In a nutshell, long-term equilibrium can be achieved since the ECM coefficient is negative and statistically significant.

5.5. Long run estimates (Bounds Test)

Table 7: Empirical Findings of the ARDL Model

Variables	Coefficients	Std. error	T- statistics	Prob
ED	-1.64	0.29	-5.56	0.01
DS	-0.29	0.67	-0.44	0.68
EXP	3.86	1.82	-2.12	0.02

The results from ARDL model analysis presented in Table-06 offer key insights into the long-term relationships among external debt, debt servicing, exports, and GDP growth. Particularly, external debt coefficient -1.64 is revealing its negative effect on GDP growth; Our findings are similar to previous research by Atique and Malik (2012); Hussain, Khan, Khan, Khalid, Kiran, and Hussain (2017); Malik, Hayat, and Hayat (2010); Sajjad and KHAN (2018), they also highlighted the negative impacts high external debt burdens on economic growth. Debt servicing has a negative, though insignificant, long-term impact on economic growth since its

coefficient is negative. The negative and insignificant relation of debt servicing on GDP is consistent with the studies of Akram (2011) but is inconsistent with the results of (Malik, Hayat, & Hayat, 2010; Ud-Din, Khan, & Tariq, 2020). Exports have an even stronger and statistically significant influence on GDP growth; their positive coefficient of 3.86 was statistically significant with an associated probability of 0.02. This indicates that increasing exports leads to significant long-term increases in GDP growth; it aligns with the previous research conducted by Bashir, Iqbal, and Nasim (2015); Ismail, Zaman, Atif, Jadoon, and Seemab (2009) that how exports are essential for economic growth; it contradicted with the findings of Abbas (2012), he noted the different contextual factors influencing this relationship between exports and GDP growth. In short, the results of ARDL model provide a comprehensive view of the long-term impacts of external debt, debt servicing and exports on GDP growth. These findings can assist policymakers in formulating strategies to manage external debt levels effectively while improving export competitiveness and encouraging sustainable economic development.

5.6. Tests for Stability

To check the stability of our model in the long run, we applied the CUSUM and COSUMQ stability tests. The results of both tests are presented below.

Figure 4: CUSUM PLOT

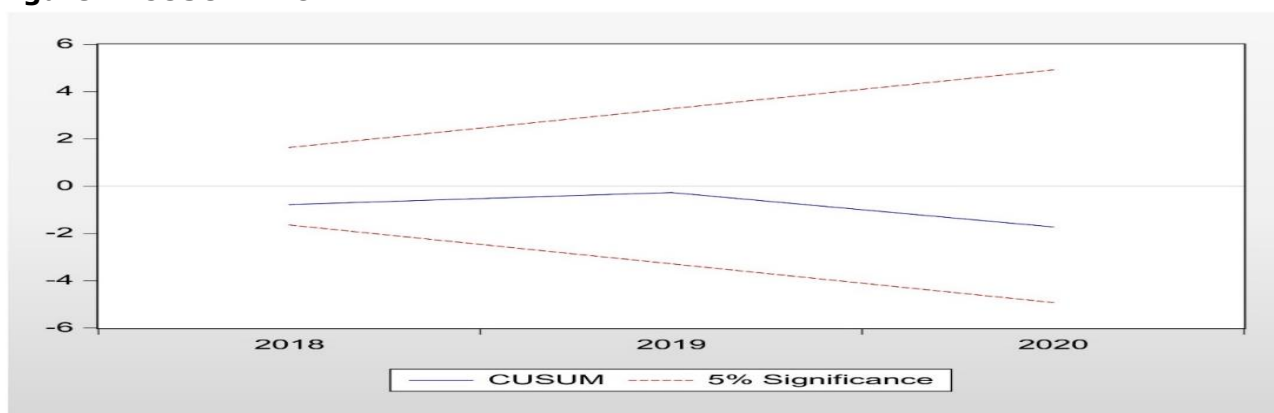
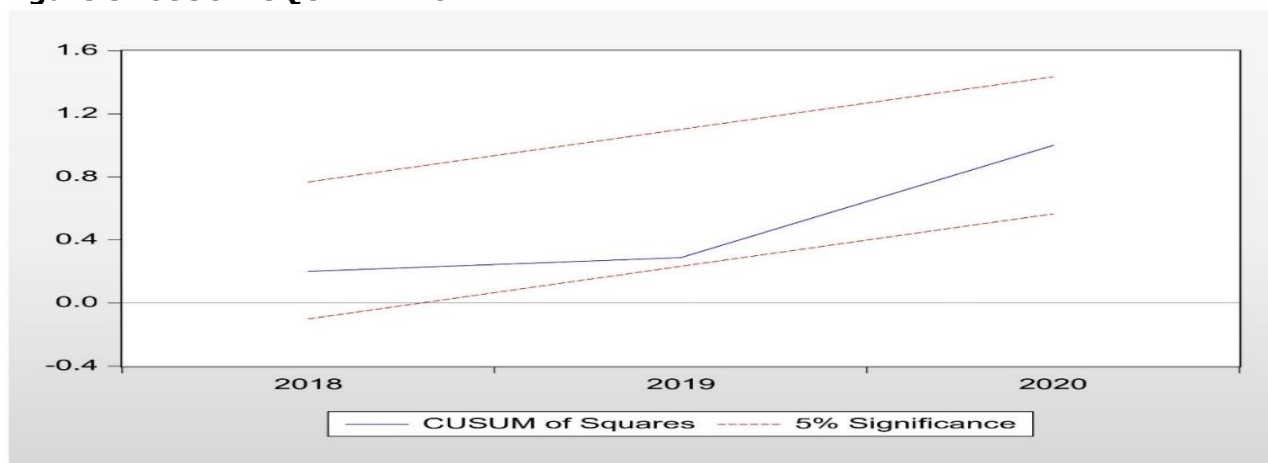


Figure 5: CUSUM SQUARE PLOT



As evident from the CUSUM and CUSUM Square plots our model is stable in the long run because the graph of both tests lies within the critical boundaries plotted at a 5% significance level which confirming the stability of the model.

6. Conclusion and Policy Recommendations

Pakistan has been facing high debt burden issues in the form of domestic and external debt. External debt is increasing at rapidly without addition of any adequate role in production .This study analyze the impact of external debt on the economic growth of Pakistan for the period 2000 to 2020. The regression estimations employed the ARDL cointegration technique to check short and long-run dynamics. The short-run relationships between factors are estimated using

the Error Correction Method (ECM). To confirm the stability of our model CUSUM and CUSUMQ stability tests are applied. The empirical findings of this study signify that, in the case of Pakistan, external debt has a negative and considerable long-term influence on economic growth. This is because, despite their enormous quantity, these external debt resources have not been utilized appropriately, and as a result, they have not significantly impacted the growth of Pakistan's economy. Instead, it has been the primary reason behind for slowing down the rate of economic growth. Pakistan, as a developing nation, heavily relies on external aid to bridge the savings-investment gap. This disparity is substantial, given that over half of the country's earnings are allocated to servicing debt obligations. The outstanding public debt in Pakistan has surpassed the Gross Domestic Product (GDP), resulting in a lower income per capita compared to individual indebtedness. This mounting public debt is a consequence of inherent structural weaknesses in both the domestic economy and the external account. Within the domestic market, the government employs various instruments to mobilize funds for financing budget deficits, each with distinct terms and conditions in terms of availability, costs, and maturity periods.

The current aid influx needs to be strategically directed towards the production sector, steering clear of indulgences for political figures and ministers. It is imperative to safeguard these funds from corruption, ensuring honest utilization in critical areas such as education, health, and industrial production. Pakistan predominantly secures loans from the International Monetary Fund (IMF). However, recent research indicates that countries aspiring for economic growth should refrain from engaging in IMF loan programs. Such programs fail to enhance expectations regarding the economic health of a nation. In light of these findings, it becomes crucial for Pakistan to reconsider involvement in IMF programs and explore alternative borrowing avenues offering more favorable terms and conditions. One of the solutions to this alarming debt situation Pakistan is undergoing is to increase our export earnings. The government should formulate policies to aid large and small exporters and provide them with more ease of access during their international transactions and production process. Due to political instability and various other disturbances, Pakistan has somehow lost the confidence of local and international investors. Policies should be made to gain the confidence of varied investors so that Pakistan can reduce its trade and current account deficit in the future.

References

- Abbas, S. (2012). Causality between exports and economic growth: Investigating suitable trade policy for Pakistan. *Eurasian Journal of Business and Economics*, 5, 91-98.
- Abrar-ul-haq, M., Shah, S. W. A., & Ghulam, M. Q. (2016). POVERTY PROFILE AND CORRELATES OF POVERTY IN PAKISTAN: EVIDENCE FROM DISTRICT VEHARI. *Science International*, 28(1).
- Ahmed, M., & Shakur, M. (2011). Debt (a real hurdle in the economic growth of Pakistan): A time series analysis. *African Journal of Business Management*, 5(28), 11532.
- Akram, N. (2011). Impact of Public Debt on the economic growth of Pakistan. *The Pakistan Development Review*, 599-615.
- Ali, R., & Mustafa, U. (2012). External debt accumulation and its impact on economic growth in Pakistan. *The Pakistan Development Review*, 79-95.
- Atique, R., & Malik, K. (2012). Impact of domestic and external debt on the economic growth of Pakistan. *World Applied Sciences Journal*, 20(1), 120-129.
- Awan, A. G., & Qasim, H. (2020). The impact of external debt on Economic Growth of Pakistan. *Global Journal of Management, Social Sciences and Humanities*, 6(1), 30-61. doi:<https://orcid.org/0000-0001-5767-6229>
- Bashir, D. F., Iqbal, M., & Nasim, I. (2015). Exports-led growth hypothesis: The econometric evidence from Pakistan. *Canadian Social Science*, 11(7).
- Cohen, D. (1997). *Growth and external debt: A new perspective on the African and Latin American tragedies* (Vol. 9715): Citeseer.
- Ehsan, S., Nazir, M. S., Nurunnabi, M., Raza Khan, Q., Tahir, S., & Ahmed, I. (2018). A multimethod approach to assess and measure corporate social responsibility disclosure and practices in a developing economy. *Sustainability*, 10(8), 2955. doi:<https://doi.org/10.3390/su10082955>
- Haider, M. A., Raza, Q., Jameel, S., & Pervaiz, K. (2019). A comparative study of operational efficiency of Pakistani and Malaysian Islamic banks: Data envelopment analysis approach. *Asian Economic and Financial Review*, 9(5), 559. doi:<https://doi.org/10.18488/journal.aefr.2019.95.559.580>

- Hussain, I., Khan, Z., Khan, M. I., Khalid, S., Kiran, A., & Hussain, T. (2017). Long run and short run relationship among gross domestic saving, net bilateral foreign aid, external debt and economic growth in Pakistan. *Dynamics of Economics*, 1(1), 1-7. doi:<https://doi.org/10.20448/journal.524/2017.1.1/524.1.1.7>
- Ismail, A., Zaman, K., Atif, R. M., Jadoon, A., & Seemab, R. (2009). The Role of Exports, Inflation and Investment on Economic Growth in Pakistan. *International of Economy*, 1(1), 1-9.
- Jafri, M. A. H., Liu, H., Usman, A., & Khan, Q. R. (2021). Re-evaluating the asymmetric conventional energy and renewable energy consumption-economic growth nexus for Pakistan. *Environmental Science and Pollution Research*, 28, 37435-37447. doi:<https://doi.org/10.1007/s11356-021-13131-1>
- Kanwal, W., Ahmad, H. R., Hafeez, H. A., & Qamri, G. M. (2020). Determinants of voluntary and involuntary underemployment in Pakistan. *Empirical Economic Review*, 3(1), 59-84.
- Karim, F., & Khan, H. (2023). ECONOMIC IMPACT OF PUBLIC DEBT ON ECONOMIC GROWTH IN ASIAN COUNTRIES. *INTERNATIONAL JOURNAL OF HUMAN AND SOCIETY*, 3(4), 01-25.
- Khan, Q. R. (2023). From industrialization to dehumanization: understanding the deriving forces of environment and implications for sustainable development. *Environmental Science and Pollution Research*, 30(59), 123396-123411. doi:<https://doi.org/10.1007/s11356-023-30983-x>
- Khan, Q. R., Xinshu, M., Qamri, G. M., & Nawaz, A. (2023). From COVID to conflict: Understanding the deriving forces of environment and implications for natural resources. *Resources Policy*, 83, 103700. doi:<https://doi.org/10.1016/j.resourpol.2023.103700>
- Krugman, P. (1988). Financing vs. forgiving a debt overhang. *Journal of development Economics*, 29(3), 253-268. doi:[https://doi.org/10.1016/0304-3878\(88\)90044-2](https://doi.org/10.1016/0304-3878(88)90044-2)
- Kumar, A., Bhutto, N. A., Mangrio, K. A., & Kalhor, M. R. (2019). Impact of external debt and exchange rate volatility on domestic consumption. New evidence from Pakistan. *Cogent Economics & Finance*. doi:<https://doi.org/10.1080/23322039.2019.1568656>
- Mahmood, T., Rauf, S. A., & Ahmad, H. K. (2009). Public and external debt sustainability in Pakistan (1970s—2000s). *Pakistan Economic and Social Review*, 243-267.
- Malik, S., Hayat, M. K., & Hayat, M. U. (2010). External debt and economic growth: Empirical evidence from Pakistan. *International Research Journal of Finance and Economics*, 44(44), 1450-2887.
- Mohsin, M., Ullah, H., Iqbal, N., Iqbal, W., & Taghizadeh-Hesary, F. (2021). How external debt led to economic growth in South Asia: A policy perspective analysis from quantile regression. *Economic Analysis and Policy*, 72, 423-437. doi:<https://doi.org/10.1016/j.eap.2021.09.012>
- Nawaz, M. A., Ahmad, T. I., Hussain, M. S., & Bhatti, M. A. (2020). How Energy Use, Financial Development and Economic Growth Affect Carbon Dioxide Emissions in Selected Association of South East Asian Nations? *Paradigms(S1)*, 159-164. doi:<https://doi.org/10.24312/20000123>
- Nawaz, M. A., Hussain, M. S., & Hussain, A. (2021). The effects of green financial development on economic growth in Pakistan. *iRASD Journal of Economics*, 3(3), 281-292-281-292. doi:<https://doi.org/10.52131/joe.2021.0303.0044>
- Qamri, G. M., Haq, M. A. U., & Akram, F. (2015). The impact of inflation on stock prices: Evidence from Pakistan. *Microeconomics and Macroeconomics*, 3(4), 83-88. doi:<https://doi.org/10.5923/j.m2economics.20150304.01>
- Rais, S. I., & Anwar, T. (2012). Public debt and economic growth in Pakistan: A time series analysis from 1972 to 2010. *Academic research international*, 2(1), 535.
- Sachs, J. (1988). RThe Debt Overhang of Developing Countries. by Ronald Findlay, Guillermo Calvo, Pentti J. Kouri, and Jorge Braga de Macedo, Basil Blackwell (Oxford: 1989).
- Sajjad, I., & KHAN, D. M. A. (2018). Investigating the impact of external debt on economic growth: a case study of Pakistan. *Journal of Business & Tourism*, 4(2), 41-51. doi:<https://doi.org/10.34260/jbt.v4i2.160>
- Senadza, B., Fiagbe, K., & Quartey, P. (2017). The effect of external debt on economic growth in Sub-Saharan Africa. *International Journal of Business and Economic Sciences Applied Research (IJBESAR)*, 11(1).
- Shah, A. M., Yan, X., Khan, S., Khurram, W., & Khan, Q. R. (2021). A multi-modal approach to predict the strength of doctor-patient relationships. *Multimedia Tools and Applications*, 80, 23207-23240. doi:<https://doi.org/10.1007/s11042-020-09596-w>

- Shittu, W. O., Hassan, S., & Nawaz, M. A. (2018). The nexus between external debt, corruption and economic growth: evidence from five SSA countries. *African Journal of Economic and Management Studies*, 9(3), 319-334. doi:<https://doi.org/10.1108/AJEMS-07-2017-0171>
- Shoukat, A., Abdullah, M., Rafique, M., & Qamri, G. M. (2023). Exploring the Link between Globalization and Inflation: Evidence from Pakistan. *Journal of Policy Research*, 9(2), 155-161. doi:<https://doi.org/10.5281/zenodo.8075043>
- Siddique, H. M., Ullah, K., & Haq, I. (2017). External debt and economic growth nexus in Pakistan. *International Journal of Economics and Empirical Research*, 5(2), 73-77.
- Siddiqui, R., & Malik, A. (2001). Debt and economic growth in South Asia. *The Pakistan Development Review*, 677-688.
- Ud-Din, M., Khan, M. A., & Tariq, M. (2020). External debt-blessing or curse: Empirical evidence from Pakistan. *International Journal of Economics and Financial Issues*, 10(4), 235.