Constraints on Economic Development in South Asia: Escalating External Debt and Diminishing Exports

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Abstract

Purpose
The article delves into the limitations of economic expansion in South Asia, with a particular focus on escalating external debt and dwindling exports in the area. It reviews the existing literature on the correlation between external debt, exports, and economic growth, taking note of the differing viewpoints on this subject. The study looks at how exports and external debt affect South Asia's economic growth, emphasizing the benefits of exports and the drawbacks of debt on GDP. To support economic growth in the area, policy alternatives include strengthening institutions, diversifying the export base, boosting regional trade, and luring foreign direct investment.

Method
The study employs the linear Autoregressive Distributed Lag (ARDL) methodology to analyze the effect of external debt and exports on economic growth in a panel of five South Asian nations comprising Pakistan, Bhutan, Bangladesh, India, and Nepal from 2002-2021.

Findings
The result analysis suggests exports has positive and significant impact on GDP whereas debt has negative and insignificant impact on GDP also the revenue used as proxy for financial development has positive impact.

Originality Value

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The paper underscores the significance of promoting regional trade, attracting foreign direct investment, fortifying institutions, and diversifying the export base as potential policy solutions to surmount these constraints and encourage economic growth in South Asia.

1.   Introduction

South Asian countries have a long and tumultuous history when it comes to dealing with external debt. Over the years, these nations have faced numerous obstacles in managing their debt burdens. For example, during the 1980s, many South Asian countries experienced a severe debt crisis. This crisis was caused by various factors, such as inelastic export structures, heavy import demands for developmental purposes, chronic trade balance deficits, diminishing foreign aid, and mounting debt burdens. As a result, countries like Brazil and Ecuador had to suspend debt payments when the required payments surpassed net exports (Adegbite et al., 2008; Mohamed, 2018; Onakoya & Ogunade, 2017; Shkolnik & Koilo, 2018). Consequently, much of the foreign debt was written off as bad debt by lending institutions. This crisis had severe consequences for the South Asian countries. These countries experienced economic deterioration, a decline in global trade, and substantial declines in export prices. These factors contributed to the severe debt crisis of the 1980s, which resulted in a net transfer of funds from Latin American countries to central countries of an estimated US$203 billion between 1982 and 1989, equivalent to 49 percent of their gross foreign debt as of the end of 1989.

While the external debt continues to increase and exports are declining, there is a growing focus on examining the impact of this phenomenon on economic growth, rather than simply analyzing the reasons for it. Researchers like Adegbite et al. (2008), Mohamed (2018), Onakoya and Ogunade (2017), and Shkolnik and Koilo (2018) have conducted studies to investigate the effect of rising external debt on economic growth, finding a range of effects. Some studies have shown that external debt can have a positive impact on economic growth when the funds are properly allocated to productive sectors. However, other studies have found that inefficient allocation of funds can result in a negative impact on economic growth. Thus, there is no consensus yet on the overall effect of growing external debt on the economy. In addition, studies have also been conducted on the relationship between exports and economic growth by researchers such as Federici and Marconi (2002), Fosu (1990), and Hameed et al. (2012). These studies generally indicate that declining exports can hinder economic growth, providing a clear consensus on the impact of declining exports on the economy. It is important to note that the results of these studies are based on American English and adhere strictly to its spelling, specific terms, and phrases.

However, the combination of external debt and export in a model to analyze economic growth in South Asian countries has not received sufficient attention, resulting in a gap that this study aims to fill. To achieve this objective, the linear Autoregressive Distributed Lag (ARDL) methodology is employed to determine the impact of both variables on economic growth. This method has been applied in previous country studies such as Liew and Balasubramaniam (2017) and Shin et al. (2014). This current study differs from the previous ones by investigating a panel of five South Asian countries, covering the period 2002–2021.

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The selected countries have been accumulating unsustainable levels of external debt, while also experiencing poor performance in export trade (International Development Association, 2018).

The rest of the paper is structured as follows. Section 2 reviews the literature on external debt export, and economic growth. Section 3 provides a descriptive analysis of external debt, export, and economic growth in South Asian countries. The model specification and the estimation techniques are presented in Section 4, the corresponding results being exposed in Section 5. Section 6 concludes the paper.

2.   Literature Review

2.1   External Debt and Economic Growth

The current empirical evidence on the relationship between external debt and economic growth is split between two opposing schools of thought. According to the first school, external debt can enhance economic growth, which is supported by several studies, including those conducted by Bakar and Hassan (2008), Chinaemerem and Anayochukwu (2013), Javed and Ahmet Sahinoz (2005), Jayaraman and Lau (2009), Moreira (2005), and others. These studies reveal a positive impact of external debt on economic growth, either in the short-run or long-run. On the other hand, researchers in the second school believe that external debt can impede economic growth, as borrowed funds are not efficiently allocated towards productive investments, but instead directed towards consumption. Several empirical investigations have found evidence in support of this view. For instance, studies by (Chowdhury, n.d.; Dogruel & Dogruel, 2007; Edo, 2002; Karagol, 2002; Maier, n.d.; Schclarek, n.d.; Vamvakidis, 2007) indicate that external debt levels tend to rise, negatively affecting investment and economic growth. This aligns with the rationale behind the International Monetary Fund (IMF) and World Bank's intervention and debt relief package, provided through the Highly Indebted Poor Countries (HIPC) program. Additionally, some studies have found that individual components of external debt can also have a detrimental effect on long-run economic growth. Moreover, the decline in economic growth can exacerbate the external debt situation of countries. A few studies explain the negative relationship, attributing it to the outflow of resources to pay off debt obligations and the reduction in capital inflows resulting from a lack of creditworthiness.

According to Cohen (1997), the poor economic growth in Latin America was attributed to the unfavorable external debt situation. (Vohra, 2001) also linked the debt overhang to the slow investment and economic growth in heavily indebted countries. These countries, which are rich in natural resources, may have over-borrowed during periods of economic boom. After the oil boom period, export revenue declined, leading to debt default and macroeconomic instability, particularly in oil-exporting countries (Nyambuu and Semmler, 2017). In a study of forty-four countries, Reinhart and Rogoff (2010) found that when external debt reached 60 percent of GDP, annual growth declined by about 2 percent. When external debt exceeded 60 percent of GDP, the economic growth rate declined drastically by about 50 percent. On the other hand, Smyth and Hsing (1995) examined the relationship between external debt and economic growth and discovered that external debt has a long-run stable inverse relationship with economic growth. The results also showed that debt ratios in these countries were

significantly higher than the optimal debt ratio, leading to a decline in economic growth. The optimal debt ratio is used to determine the level of excess debt and the probability of debt crisis. It is used to generate warning signals about excessive debt and the possibility of default.

While some researchers argue that external debt has only negative impacts on economic growth, others believe that it can have both positive and negative effects. Ijirshar et al. (2016) analyzed the connection between external debt and economic growth in Nigeria between 1981 and 2014. The results demonstrated that the debt stock had a positive influence on economic growth, while debt service had a negative impact on growth in both the short and long runs. This finding is supported by Adesola (2010), who studied the effect of external debt service on economic growth in Nigeria between 1981 and 2004. The study showed that debt service did not have a significant negative impact on economic growth in the short run, but it became negative in the long run. In a study conducted on South Africa and Nigeria, (Ayadi & Ayadi, n.d.) also showed that external debt initially had a positive impact on economic growth and then reversed to a negative impact. In a more comprehensive investigation of seventeen Asian countries, Lau and Kon (2014) found that external debt had a positive impact on economic growth in some countries and a negative impact in others. The study concluded that the relationship between external debt and economic growth depends on the debt management capacity of individual countries.

2.2   Export and Economic Growth

The performance of developing countries' economies depends on various factors, one of which is the export of primary commodities, which appears to play a significant role. The literature on this role primarily revolves around the causality issue. (Hameed et al., 2012) conducted a study on export-economic growth causality in Pakistan between 1960 and 2009, using the Granger causality test. The results showed a bi-directional causality between export and GDP, indicating that export is a key factor influencing economic growth. In another study, Kifayat Ullah et al. (2020) examined the causal relationship and exact impact of export on economic growth in Nigeria. The findings revealed long-run causality and a significant negative impact of export on economic growth. In Saudi Arabia, where export is dominated by crude oil, (Bakar & Hassan, 2008) used the Vector Auto-regression (VAR) method to investigate the relationship between export and economic growth between 1970 and 2005. The results showed that the export sector had a significant positive effect on economic growth in the long-run. Similarly, (Bosupeng, 2015) conducted a study on a sample of 13 countries between 1960 and 2013 and found that export was a major driver of economic growth in eight countries (Brazil, Colombia, Costa Rica, Bangladesh, Burkina Faso, Nigeria, Australia, and Norway). In contrast, economic growth was found to be the driver of export in four countries (Botswana, Chile, India, and Japan). In a previous study covering the period 1973-1993, (Vohra, 2001) found a significant positive impact of export on economic growth in a sample of five countries (India, Pakistan, Philippines, Malaysia, and Thailand).

The outcomes of the estimation revealed a long-term relationship between economic growth and export. Export, particularly non-agricultural export, was a significant driver of economic growth in these countries, especially in those with high income levels. The findings were consistent with another study conducted by Raj and Chand (2017) on the small Fiji Island

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economy, which showed that export contributed significantly to economic growth between 2000 and 2015. On the other hand, (Mulder, 2009) conducted a study on Latin America and the Caribbean countries between 1985 and 2004 and found that an increase in export did not have a significant impact on economic growth. This finding contrasts with the experience of other regions, such as East Asia, where export continues to grow and plays a major role in driving economic growth. Furthermore, Cohen (1997) used the standard growth model to investigate growth in Africa after trade liberalization and found that trade failed to drive economic growth, despite the expectation that trade liberalization facilitates economic growth. The other factors that contributed to the poor growth of African countries were macroeconomic mismanagement and low investment.

The other variables that made positive impact on economic growth in these countries are market liberalization and foreign direct investment. In 2016 study, (Mosikari et al., 2016). investigated the connection between economic growth and manufactured exports in the 14 Southern African Development Community (SADC) members between 1980 and 2012. These countries are Angola, Botswana, Congo DR, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

The analysis found a strong positive correlation between total export and economic growth as well as a long-term causal association between manufactured export and growth. Additionally, (Ekanayake, 1999) examined the relationship in eight Asian emerging nations from 1960 to 1997 using co-integration and error-correction techniques. India, Indonesia, Korea, Pakistan, Philippines, Sri Lanka, Malaysia, and Thailand are these nations. The findings demonstrated a substantial positive relationship between export and economic growth as well as a strong bidirectional causal relationship. The export-led growth hypothesis, which contends that exports are a primary source of economic growth, is supported by a wealth of further empirical studies in the literature. Sanjuán-López and Dawson (2010) calculated the effect of agricultural and non-agricultural exports on economic growth in 42 developing nations using panel data technique.

3.   Trend of External Debt, Economic Growth, and Exports in South Asian Countries
3.1   External Debt

The economic growth of a country can be significantly affected by high levels of debt. Several recent studies have highlighted the tipping point or debt ratio threshold, the nonlinear effects of public debt on GDP, and the crucial role of debt in restricting capital formation in developing nations Kharusi and Ada (2018). In order to prevent macroeconomic stagnation, AL-Tamimi and Jaradat (2019) suggested generating lower profits and long-term capital accumulation. When public debt becomes too high, it can lead to a decrease in public spending, as governments prioritize debt sustainability over other expenses. This reduction in public expenditure can have a ripple effect, leading to further economic contraction. However, external debts can provide investment opportunities and stimulate economic growth in countries with strong institutional frameworks. While many developing countries have weak institutional systems, they often lack investment and growth opportunities ((Tiep et al., 2021). These countries rely heavily on foreign capital, such as remittances, financial aid, and external borrowing, to fill their financial gaps due to low per capita income and high government operating expenditures (Kharusi & Ada, 2018). However, relying solely on

foreign capital is not a sustainable solution for economic growth, and a well-formulated plan is necessary to use the funds effectively and pay off loans in a timely manner (Law et al., 2021). One key factor in determining a country's debt management is supply and demand analysis (Gopalakrishnan & Mohapatra, 2020). In contrast, debt-induced growth economies have had adverse effects in prior literature (Mohsin et al., 2021). Therefore, it is crucial to incorporate these funds into the economic growth process and formulate a sustainable macroeconomic environment and policy system. Financial aid has diminished significantly in South Asia due to altered global economic conditions and shifting trade partnerships in recent years (Mohsin et al., 2021). This has resulted in factors such as fluctuating bilateral dynamics, low national savings, and an expanding development deficit, which have contributed to mounting debt. These issues have impacted both national financial markets and international lenders and donors (Baloch et al., 2020; Sun et al., 2020). Moreover, the cost of capital-intensive imports cannot be offset by revenue generated from commodity exports, leading to an increase in external debt.

In developing countries, expanding export industries can play a crucial role in balancing debt and maintaining economic stability. Conversely, the inability to sustain external debt indicates a higher current account deficit, which can significantly hinder economic growth. Additionally, the country's economic foundation may be weakened due to reduced potential investments in the presence of high external debt, which poses a severe financial challenge. Long-term economic growth relies on the effective utilization of external debt by financing income-generating domestic investments and infrastructure development that encourages private sector participation. Moreover, enhancing revenue can improve the ability to service external debt obligations without necessarily involving domestic private investments. However, an economy heavily reliant on external debt can negatively impact economic growth (Chandio et al., 2021).

3.2   Export Trend

In December 1985, the South Asian Association for Regional Cooperation (SAARC) was established by seven South Asian countries with the aim of increasing trade and fostering regional cooperation. Additionally, in 1993, the South Asian nations signed the South Asia Preferential Trade Agreement (SAPTA) to promote trade among themselves intra-regional trade among South Asian countries accounts for only 5% of their total trade, whereas trade between the North American Free Trade Agreement (NAFTA) members is 52%, and among the Association of Southeast Asian Nations (ASEAN) is 26%. Gravity models have shown that smaller countries, like those in South Asia, can benefit from preferential trade liberalization. Therefore, this study aims to estimate the true potential for trade between Pakistan and its South Asian neighbors. Given that India, the second-largest economy in Asia and home to various strategic, demographic, and consumer benefits, has a closed border with most other South Asian countries, it is crucial to promote regional trade in the region. As the South Asian region is the second-worst affected by poverty after the African region, and water security and climate change pose significant threats to the region's inhabitants, reducing trade barriers could help alleviate poverty and unemployment. This study seeks to contribute to the ongoing effort to enhance regional trade and cooperation in South Asia by providing

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empirical evidence of the trade potential between its countries. The results of this study will be generated using American English, following its spelling, specific terms, and phrases. Export plays a vital role in any country's economy, as it is believed that a nation's growth is closely related to globalization. The economy of a country is directly connected to the exports of goods and services, as a significant portion of the country's revenue comes from trade, which also strengthens the stock market (Abdulai & Jaquet, 2002). According to the export formula, a country can experience more growth and improve its economy by generating more revenue, which can then be used for public welfare and social projects, as well as expenditures on social protection (Gnangnon, 2021). It is widely accepted that a country's total growth can be achieved by reducing production costs and increasing financial investment, which can boost exports. Many developing countries and their policymakers are confused about whether to focus on policies that promote exports or those that promote import substitution. It is important to note that many industries are closely linked to exports. For instance, the textile industry is a significant contributor to a country's GDP and employs a considerable portion of its labor force, which is largely dependent on exports. Foreign Direct Investment (FDI) also plays a crucial role in a country's economy, creating employment opportunities, promoting industrial growth, and supporting national growth. In countries with high GDP growth rates, businesses and entrepreneurs can earn more money, benefiting both the public and private sectors. In conclusion, economic theories suggest that both economic growth and export growth are interconnected.

3.3   Economic Growth
The key features of South Asia's growth during the period 1980–2000 is highlighted in Table 2.1. As shown, India and Bangladesh's gross domestic product (GDP) growth rates increased by roughly 2 percentage points per annum relative to the rates they had sustained in the two decades prior to 1980. Sri Lanka's growth increased marginally but from a strong rate of 4.5% per year. While average output growth declined after 1980 in Pakistan, it remained about 5% per year. These growth rates are impressive achievements that have helped these countries to reduce poverty rates and raise living standards. Indeed, South Asia grew more rapidly than any other region except East Asia. However, as also shown in Table 2.1, these growth achievements do not seem closely related to what happened to underlying inputs. In particular, investment as a share of GDP did not rise after 1980 in the countries where growth surged.

Instead, investment rates declined slightly in India and more sharply in Bangladesh. Furthermore, none of the four countries, including Nepal, Sri Lanka, and Bhutan, have reached the 30-40% investment rate range that is typical for East Asian economies during their rapid growth periods. The table also shows that while the labor force continued to grow rapidly in all four countries, this growth did not accelerate in India or Bangladesh. Thus, the data in Table 2.1 raises questions about South Asia's growth experience. Specifically, does the lack of significant capital accumulation suggest that it played a minimal role in driving strong growth in the region? Additionally, what are the implications for the importance of investment if South Asia is to sustain and increase its output growth over the next decade? Although investment rates are related to physical capital, it is also important to examine the role of human capital, which will be briefly discussed below.

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Table 1: South Asia Selected Indicators

Source: World Bank, 2005

Region/Period	GNI/Capita (PPP) ($)	Population (Millions)	GDP (Annual Rates of Change)	Labor Force (Annual Rates of Change)	Investment Share (Percent)
India					
1960-1980			3.5	2.1	21.9
1980-2003	2,880	1,064	5.7	2.0	21.3
Bangladesh					
1960-1980			2.4	2.2	22.7
1980-2003	1,870	138	4.4	2.3	18.2
Pakistan					
1960-1980			5.9	2.7	22.1
1980-2003	2,040	148	4.9	2.7	19.5

4.   Model Specification and Estimation Technique
4.1   The Model
The ARDL model, a statistical method utilized in econometrics, examines long-term correlations among variables. One of its key benefits is its capacity to manage both stationary and nonstationary time series data, making it suitable for evaluating economic connections where variables may exhibit varying patterns over time (Atmaca & Karadaş, 2020). Another advantage of the ARDL model is its ability to capture simultaneously short-term changes and long-run equilibrium relationships, which is particularly valuable for policymakers and researchers interested in comprehending the dynamics of economic phenomena and how they interact in both the short and long term. Additionally, the ARDL model allows for the inclusion of lagged variables, which helps to capture any potential time lags in the relationship between variables. It also allows for the inclusion of both exogenous variables (variables that are not affected by other variables in the system) and endogenous variables (variables that are affected by other variables in the system). In summary, the ARDL model offers a comprehensive and flexible framework for analyzing intricate economic connections dynamically.

4.2   Estimation Technique
In order to establish the properties of the variables in the model, preliminary unit root and co-integration tests are conducted. The unit root test checks the stationary status of all variables in the model, which is essential for producing useful policy estimates (Engle & Granger, 1987). The panel unit root test, proposed by Hadri (2000), Im et al. (2003), Levin et al. (2002), and employed in this study, is the standard method for determining stationary status in a panel model. On the other hand, cointegration tests are conducted to determine

the long-run convergence status of all variables. When variables are stationary and convergent, they are more likely to produce reliable and suitable policy estimates. The cointegration test, proposed by Pedroni (2004), is used in this study to determine convergence in a linear combination of variables. The convergence of the variables indicates a long-run harmonious relationship, which is beneficial for policy making.

The purpose of this study is to investigate the influence of explanatory variables on economic growth through the application of Mean Group (MG) and Pooled Mean Group (PMG) techniques, as proposed by Pesaran in (1999). These methods have been employed in various studies, including those by (Blackburne et al., 2007; Goswami & Junayed, 2006; Iwata et al., 2011; Kim & Lin, 2010; Lee & Wang, 2015a; Loayza & Ranciere, 2006). The MG technique assumes that the slope and intercept of a functional relationship are diverse across countries, enabling the group long-run parameters to be determined by averaging the parameters of all countries. In contrast, the PMG technique assumes that the slope and intercept are uniform across countries, allowing the group long-run parameters to be directly estimated. Both techniques are effective in providing accurate estimates of short-run and long-run impacts in an ARDL model when the variables are stationary and convergent, as shown by (Lee & Wang, 2015b).

5.   Empirical Results and Analysis

General Hypothesis of my study:

1)   Null Hypothesis: H01: = High External debt does not have negative impact towards economic growth.

2)   Alternative Hypothesis: H1: = High External debt has negative impact towards economic growth.

3)   Null Hypothesis: H02: = Declining exports does not have negative impact towards economic growth.

4)   Alternative Hypothesis: H2: = Declining exports have negative impact towards economic growth.

5)   Null Hypothesis: H03: Total revenue is not significant for the economic growth.

6)   Alternative Hypothesis: H3: Total revenue is significant for the economic growth.

5.1 Panel Unit Root and Cointegration Tests

The panel unit root test was conducted, using three approaches as shown in Table 1 the results show that unit root coefficients are significant at 5 percent level, which indicate all the variables are stationary in their first differences, thus rejecting the null hypothesis of non-stationarity.

Table 1

Panel unit root and cointegration test results.

Dependent variable: GDP as proxy for (Economic Growth)   number of countries: 5
Period: 2002-2021

Variable difference)	Unit root test (level)			Unit root test (first		
	ADF	PP	KPSS	AD F	PP	KPSS

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GDP(Y)	0.00	0.00	0.00		0.00	0.00	0.338
EX(X1)	0.513	0.302	0.414		0.00	0.00	0.053
REV(X2)	0.118	0.133	0.000		0.00	0.00	0.081
EDS(X3)	0.262	0.248	0.000	a	0.00	0.00	0.074

5.2 Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.292054	64.18562	63.87610	0.0471
At most 1	0.166976	30.68298	42.91525	0.4622
At most 2	0.072772	12.96179	25.87211	0.7412
At most 3	0.056417	5.632871	12.51798	0.5083

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Trace value is greater than its critical value it means reject H0 which shows there is cointegration among the variables.

5.3   Model estimation Results and Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDP(-1)	0.070381	0.101555	0.693039	0.4900
REVENUE	-3.19E-11	1.63E-11	-1.953525	0.0538
REVENUE(-1)	3.82E-11	1.71E-11	2.236112	0.0278
EXPORTS	0.073331	0.031187	2.351316	0.0208
DEBT	3.87E-11	1.74E-11	2.225916	0.0285
DEBT(-1)	-4.34E-11	1.83E-11	-2.374963	0.0196
C	3.622768	0.796456	4.548613	0.0000

R-squared	0.141113	Mean dependent var	5.392412
Adjusted R-squared	0.085098	S.D. dependent var	3.287845
S.E. of regression	3.144840	Akaike info criterion	5.197486
Sum squared resid	909.8818	Schwarz criterion	5.380979
Log likelihood	-250.2756	Hannan-Quinn criter.	5.271728
F-statistic	2.519220	Durbin-Watson stat	1.918422

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Prob(F-statistic)	0.026529

*Note: p-values and any subsequent tests do not account for model selection.

ARDL Long Run Form and Bounds Test

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.622768	0.796456	4.548613	0.0000
GDP(-1)*	-0.929619	0.101555	-9.153854	0.0000
REVENUE(-1)	6.24E-12	1.06E-11	0.586969	0.5587
EXPORTS**	0.073331	0.031187	2.351316	0.0208
DEBT(-1)	-4.68E-12	9.51E-12	-0.492781	0.6233
D(REVENUE)	-3.19E-11	1.63E-11	-1.953525	0.0538
D(DEBT)	3.87E-11	1.74E-11	2.225916	0.0285

 * p-value incompatible with t-Bounds distribution.
** Variable interpreted as $Z = Z(-1) + D(Z)$.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
REVENUE	6.71E-12	1.15E-11	0.583308	0.5611
EXPORTS	0.078882	0.032067	2.459934	0.0158
DEBT	-5.04E-12	1.03E-11	-0.490282	0.6251
C	3.897049	0.765417	5.091405	0.0000

EC = GDP - (0.0000*REVENUE + 0.0789*EXPORTS -0.0000*DEBT + 3.8970)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	17.05586	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

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		Finite Sample:		
Actual Sample Size	99	n=80		
		10%	2.474	3.312
		5%	2.92	3.838
		1%	3.908	5.044

The value of F-statistics is greater than the value of upper bound which is 17.05586 that means there is cointegration. Exports has positive and significant impact on GDP whereas debt has negative and insignificant impact on GDP also the revenue used as proxy for financial development has positive and insignificant impact.

ARDL Error Correction Regression

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(REVENUE)	-3.19E-11	1.54E-11	-2.070389	0.0412
D(DEBT)	3.87E-11	1.67E-11	2.322891	0.0224
CointEq(-1)*	-0.929619	0.098546	-9.433298	0.0000

R-squared	0.508253	Mean dependent var		0.018450
Adjusted R-squared	0.498008	S.D. dependent var		4.345189
S.E. of regression	3.078626	Akaike info criterion		5.116678
Sum squared resid	909.8818	Schwarz criterion		5.195318
Log likelihood	-250.2756	Hannan-Quinn criter.		5.148496
Durbin-Watson stat	1.918422			

* p-value incompatible with t-Bounds distribution.

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	17.05586	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

This result of error correction model for short-run coefficient and long-run adjustment. This is negative and significant which shows that the model will adjust monotonically.

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5.4   Policy Implications and Options for South Asia's Economic Development

•   To promote regional trade and eliminate trade barriers within South Asia, it is essential to improve economic integration and increase exports. This can be achieved by implementing policies that attract and efficiently allocate foreign direct investment (FDI) to productive sectors, which stimulates economic growth.

•   Additionally, strengthening institutional frameworks, governance, and political stability is necessary to create a conducive environment for sustainable economic development.

•   Developing effective strategies to manage external debt is also crucial, ensuring that borrowed funds are allocated to productive sectors and not wasted. To support economic growth and productivity, it is important to enhance investment in human capital through education and skills development.

•   Moreover, diversifying the export base by promoting the development of non-agricultural sectors can reduce dependence on a few export commodities and mitigate the impact of declining exports.

•   Finally, continuously monitoring and assessing the impact of external debt and exports on economic growth can inform evidence-based policy decisions.

6.   Conclusion

The aim of this paper is to bridge the gap in existing literature by analyzing the influence of external debt and exports on economic growth in South Asian countries using the ARDL methodology. The research emphasizes the significance of promoting regional trade in South Asia, particularly in light of the closed border between India and most other South Asian countries. The results indicate that investment rates in South Asia have not reached the levels observed in East Asian economies during their rapid growth periods, raising questions about the role of capital accumulation in driving growth in the region. The study utilizes the ARDL model, which offers a comprehensive and flexible framework for examining the dynamic economic connections between variables, allowing for the inclusion of lagged and endogenous variables. Furthermore, the paper discusses the potential consequences of high public debt, such as decreased public spending and economic contraction, while recognizing that external debts can provide investment opportunities and stimulate growth in countries with strong institutional frameworks. Overall, this paper provides valuable insights for policymakers and researchers who are interested in comprehending the dynamics of economic phenomena and their long-term implications in South Asia. The result analysis suggests exports has positive and significant impact on GDP whereas debt has negative and insignificant impact on GDP also the revenue used as proxy for financial development has positive and insignificant impact.

7.   Limitations/ Further Discussion

•   The research centers on a quintet of South Asian nations, which might not provide an all-encompassing portrayal of the entire region.

•   The study employs the linear Autoregressive Distributed Lag (ARDL) methodology, which has certain limitations and assumptions that could affect the precision of the results.

•   The paper does not delve deeply into the role of other factors such as political

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stability, governance, and institutional frameworks, which could also have an impact on economic growth in South Asia.

• The analysis is based on data from the period 2002-2021, and the findings might not necessarily reflect the current economic circumstances in the region.

• The paper does not take into account the potential influence of external shocks or global economic patterns on the connection between external debt, exports, and economic growth in South Asia.

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