Impact of Financial Grant Loans on Economic Growth: Evidence from Selected South Asian Countries

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Abstract

This study examines the impact of financial grant loans on economic growth in Bangladesh, India, Pakistan, and Sri Lanka from 1981 to 2022. Using a mixed-method approach, the research analyses both quantitative and qualitative data to explore the relationship between financial grants and development. Various econometric tests suggest that grant loans make a significant contribution to GDP growth, although their effectiveness varies across countries. In Bangladesh, grants helped bridge the savings-investment gap through infrastructure and social services. India leveraged grants to support economic stability and growth. Pakistan benefited from grants through targeted policy actions, despite political and structural challenges. Sri Lanka primarily used grants for post-war reconstruction and infrastructure development. The study emphasises that country-specific factors—such as governance, institutional strength, and political stability—are crucial to maximising the impact of grants. Policy recommendations include improving institutional frameworks, ensuring political stability, targeting critical sectors, enhancing monitoring and evaluation, fostering regional cooperation, encouraging private sector involvement, and reducing long-term dependency. These findings offer practical guidance for policymakers and development practitioners in tailoring financial aid to specific national contexts. By adopting these strategies, South Asian countries can increase the effectiveness of grant loans and promote sustainable, inclusive economic growth.

Keywords: Official Development Assistance; Net Capital Inflow; ARDL Model.

Introduction

The role of financial grants in promoting economic growth has long been a topic of attention, particularly in developing regions where domestic resources are insufficient to support large-scale investments. Grants—non-refundable assistance provided by international organisations, governments, or NGOs—are often directed toward infrastructure, education, and healthcare, with

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the intention of fostering long-term, sustainable development. In South Asia, countries such as Pakistan, India, Bangladesh, and Sri Lanka have historically relied on these funds to bridge investment and savings gaps while facing persistent challenges, including overpopulation, institutional weaknesses, and political instability. Yet, despite regional similarities, their economic experiences diverge. India has experienced rapid growth in its industrial and service sectors. Bangladesh has relied heavily on its garment exports and remittances. Pakistan continues to struggle with political uncertainty, energy shortages, and structural imbalances. Meanwhile, Sri Lanka has depended on external support for reconstruction and post-conflict recovery. These experiences highlight the varied but significant role grants can play in stabilising economies, supporting public services, and enabling long-term growth.

Beyond direct financial support, grants are frequently accompanied by technical assistance and capacity-building initiatives that strengthen governance and institutional capacity—critical in countries where weak implementation structures often hinder reforms. At the regional level, grants have also facilitated cooperation and peacebuilding. Institutions such as the Asian Development Bank have funded programs to address poverty, climate change, and infrastructure deficits, demonstrating the importance of collective solutions in a region where problems transcend national boundaries. Nevertheless, questions persist regarding the effectiveness and sustainability of grants. Critics argue that reliance on external funding may encourage dependency, weaken incentives for domestic revenue mobilisation, or foster corruption when Accountability is lacking. Furthermore, conditionalities attached to grants—designed to push policy reforms—can be challenging to implement in fragile political environments, sometimes undermining rather than strengthening reform processes. These debates raise a central issue: whether continuous financial support fosters self-sustaining growth or merely provides temporary relief.

Despite such concerns, grants remain a crucial development tool in South Asia, valued not only for financing essential sectors but also for encouraging cooperation and institutional strengthening. However, their effectiveness depends heavily on governance and the quality of institutions. This research, therefore, examines the relationship between financial grants and economic growth in Pakistan, India, Bangladesh, and Sri Lanka from 1981 to 2022, focusing on how these funds have been utilised and what developmental outcomes they have produced. While the literature broadly acknowledges the role of aid in supporting growth, gaps remain in understanding how grant-based financing specifically affects GDP growth in different national contexts. Divergent institutional quality, policy environments, and historical trajectories across countries mean outcomes cannot be generalised.

This study aims to offer nuanced insights into whether grants promote long-term, self-sustaining growth or perpetuate cycles of dependency. It also evaluates the role of policy conditionalities, questioning whether these measures encourage meaningful reform or prove counterproductive in politically unstable settings. By isolating the effects of grants from other capital inflows such as concessional loans or foreign direct investment, the research aims to clarify their unique contribution to growth. It further examines the conditions under which grants are most effective, taking into account economic, political, and institutional contexts. The findings are intended to inform policymakers and donors, helping them design more efficient funding programs tailored to local conditions while minimising the risks of dependency.

The study spans four decades, marked by multiple political and economic cycles, utilising data from international sources, including the World Bank and the IMF, as well as national databases. The empirical strategy employs econometric modelling to examine the relationship between grants and GDP growth, controlling for variables such as inflation, investment, and public spending.

Recognised limitations include gaps in data availability and the exclusion of informal flows, which may also influence outcomes. Nevertheless, the study aims to generate meaningful insights into the developmental role of grants in the region.

The analysis is guided by key questions: What has been the impact of financial grants on GDP growth in South Asia between 1981 and 2022? How do political and institutional contexts shape effectiveness? Can grant financing contribute to long-term, self-sustaining development, or does it reinforce dependency? And to what extent do policy reforms and political stability influence the success of grant programs? By addressing these questions, the study contributes to debates on aid effectiveness, highlighting both the opportunities and the limitations of grant financing. Ultimately, it aims to provide policymakers, donors, and researchers with actionable insights to enhance the developmental impact of financial grants in promoting sustainable growth in South Asia.

Literature Review

The relationship between finance and economic growth has been extensively studied in theoretical and empirical literature. Schumpeter initially emphasised finance as a driver of innovation and efficient capital allocation, a view later supported by King and Levine (1993), who confirmed empirically that financial development fosters growth by stimulating innovation and capital efficiency, contingent upon robust legal and regulatory systems. Levine (2004, 2005) extended this analysis, emphasising the bidirectional causality between finance and growth, and noting that well-developed financial markets reduce transaction costs and information asymmetries, thereby encouraging investment and capital accumulation. Arestis and Demetriades (1997) similarly argued that economic systems enhance resource allocation and entrepreneurship, although their effectiveness depends on the quality of institutions. Ang (2008, 2010) further elaborated that savings mobilisation, reduced transaction costs, and efficient allocation underpin finance-led growth, highlighting through his study of India that credit expansion can reduce inequality but requires inclusive policies to sustain development.

Empirical evidence from developing economies reinforces these theoretical claims while emphasising conditionality. Ahmad and Malik (2009) found that financial development enhances GDP growth by mobilising savings and improving investment efficiency, but cautioned against premature liberalisation in weak institutional environments. Odhiambo (2008), analysing Kenya, observed feedback loops between financial depth, savings, and growth, suggesting a reinforcing cycle. Hassan et al. (2011) also found that finance has a more significant impact in low-income countries, primarily through expanded access to credit. Leitão (2010), using panel data, confirmed the positive contribution of domestic credit to economic growth and advocated for policies promoting financial inclusion. Country-specific studies further illustrate these dynamics. Kar et al. (2008) demonstrated that in Turkey, financial development amplified the gains from trade liberalisation.

In contrast, Raza et al. (2015) reported that trade openness spurred growth in Pakistan only under stable financial conditions. Sunde (2017) identified similar effects in South Africa, where FDI and exports supported growth under sound economic systems. In Asia, Yang and Yi (2008) demonstrated bidirectional causality in South Korea, and Shahbaz et al. (2018) compared India and China, concluding that while finance promoted growth in both, stronger institutions enabled China to derive greater benefits.

The role of institutions is consistently emphasised. Demetriades and Law (2006) argued that the growth effects of finance are conditional on institutional quality, a claim further confirmed by Law

et al. (2013, 2018), who demonstrated that good governance enhances the positive impacts and mitigates the risks of a "finance curse," where excessive financial development harms growth. Beck et al. (2000) similarly observed that intermediaries improve resource allocation, although their effectiveness depends on the governance context. Mensah and Abor (2014) highlighted how weak corporate governance in African banks undermines intermediation, reflected in high spreads and agency conflicts. Rajan and Zingales (1998, 2003, 2011) argued that industries reliant on external finance expand more rapidly in countries with developed financial markets, emphasising the importance of supportive regulatory frameworks for entrepreneurship. Huang (2005) added that political liberalisation improves transparency and Accountability, thereby enhancing economic development. Anwar and Cooray (2012) confirmed in South Asia that political rights and civil liberties strengthen the growth impact of finance.

Recent studies reveal that the finance–growth relationship may be non-linear. Samargandi et al. (2015) found that finance promotes growth in middle-income economies only up to a threshold, after which excessive financial deepening becomes harmful. Law and Singh (2014) also identified an inverted U-shaped relationship, suggesting diminishing returns beyond a certain level. Beck et al. (2014) warned that oversized banking sectors reduce efficiency and increase instability, while Ductor and Grechyna (2015) argued that excessive finance fosters volatility and imbalances. Research has also highlighted the interaction between finance, inequality, and inclusion. Demirgüç-Kunt and Levine (2009) demonstrated that broad access to financial services reduces inequality. Demirgüç-Kunt et al. (2015) later documented persistent disparities in financial inclusion by gender, income, and region, highlighting the need for inclusive policies. Beck, Levine, and Levkov (2010) found, however, that U.S. bank deregulation, while improving efficiency, disproportionately benefited the wealthy and widened inequality, highlighting the distributional trade-offs in financial reforms.

External finance and globalisation add further complexity. Bandyopadhyay, Lahiri, and Younas (2015) reported that aid is more effective in countries with strong institutions, whereas loans tend to favour more advanced economies. Aghion et al. (2005) argued that financial development accelerates economic convergence by fostering innovation and productivity in developing markets. Shen et al. (2016) confirmed that institutional quality determines whether capital inflows enhance growth, while Shen and Lee (2006) found that governance choices explain divergent outcomes in otherwise similar systems. Technology also plays a role. Sassi and Goaied (2013) demonstrated that in MENA countries, finance coupled with ICT diffusion significantly boosted growth when supported by regulatory frameworks. Apergis et al. (2007), using global panel data, reinforced that deeper financial systems enhance resource allocation efficiency. Chinn and Ito (2006) further identified capital account liberalisation and institutional quality as key drivers, cautioning that liberalisation without strong institutions is ineffective. Comparative regional studies strengthen this evidence. Christopoulos and Tsionas (2004) established long-run cointegration between finance and growth, while Bittencourt (2012) found that financial intermediation in Latin America spurred capital accumulation and technological progress, although political instability weakened the benefits. Cherif and Dreger (2016) demonstrated that in the MENA region, finance drives growth only under strong institutional frameworks. In Africa, Khan and Senhadji (2003) reported that finance enhances savings and investment, although outcomes depend on macroeconomic stability. In contrast, Sahay et al. (2015) emphasised that emerging markets must expand cautiously to avoid fragility while promoting inclusion.

In summary, the literature emphasises that financial development contributes to growth through innovation, capital accumulation, and efficient allocation; however, its impact is highly

conditional. Effective institutions, good governance, and regulatory soundness are crucial for maximising benefits and avoiding pitfalls such as financial excess or instability. Evidence further suggests that globalisation and technology enhance the growth effects of finance only when strong domestic institutions support them. Distributional issues remain equally important: inclusive financial systems reduce inequality, while poorly designed reforms risk exacerbating disparities. Against this backdrop, analysing the role of financial grants in South Asia offers valuable insights into how external finance interacts with domestic contexts to shape long-term development trajectories.

Methodology

Descriptive statistics offer insight into the economic performance of the four countries over a four-decade period. Bangladesh recorded an average GDP growth rate of 5.26%, with FDI averaging 0.47% of GDP, IMF credit of around $929 million, and ODA $1,814 million, all showing significant variation. India's economy displayed higher variability, with a mean GDP growth of 4.64% and FDI inflows averaging 0.81% of GDP. IMF credits averaged $3,787 million and ODA $1,518 million, both of which reflected wide fluctuations. Pakistan's GDP growth averaged 4.35%, ranging from sharp contractions to strong expansions.

Meanwhile, the IMF credits averaged $922 million, and FDI inflows accounted for 1.09% of GDP. Its ODA flows were inconsistent, at times even negative, with an average of $416 million. Sri Lanka's economy recorded a mean GDP growth rate of 5.89%, with IMF credit averaging $4,317 million, experiencing drastic fluctuations. FDI averaged 1.00% of GDP, and ODA was around $2,015 million. Overall, the statistics highlight significant variability across all countries, reflecting cycles of growth, economic shocks, and changing external support. These patterns illustrate how South Asian economies have relied on international financial assistance, foreign investment, and development aid, while experiencing diverse growth trajectories. The descriptive analysis thus provides a crucial context for understanding long-term economic dynamics and lays the groundwork for examining the impact of financial grant loans on regional growth.

Table 1: Descriptive Statistics

GDPGROWTH					
Country	**Mean**	**Max**	**Min**	**SD**	**Obs.**
Bangladesh	5.26	7.88	2.13	1.44	42
India	4.64	7.92	-1.27	2.08	42
Pakistan	4.35	8.67	-7.82	3.18	42
Sri Lanka	5.89	9.63	-5.83	2.66	42
All	5.04	9.63	-7.82	2.48	168
IMFCREDIT					
Bangladesh	929.14	3301.01	134.67	702.12	42
India	3787.07	11521.58	553.67	3414.13	42
Pakistan	921.94	3118.08	252.85	805.03	42
Sri Lanka	4316.90	23160.23	298.15	4610.16	42
All	2488.76	23160.23	134.67	3294.45	168
NETINFLOWS					
Bangladesh	0.47	1.74	-0.03	0.51	42
India	0.81	3.04	0.10	0.64	42
Pakistan	1.09	2.85	0.28	0.50	42
Sri Lanka	1.00	3.62	0.00	0.90	42
All	0.84	3.62	-0.03	0.69	168

NETODA					
Bangladesh	1814.31	5374.78	807.40	1239.26	42
India	1518.04	3764.02	500.64	928.15	42
Pakistan	416.22	1039.76	-247.28	206.90	42
Sri Lanka	2015.14	3270.22	720.90	638.61	42
All	1440.93	5374.78	-247.28	1040.55	168

Source: Author's calculation

This study adopts a mixed-methods research design, combining quantitative and qualitative approaches to provide a comprehensive analysis of the effect of financial grant loans on economic growth. The rationale for this design lies in its ability to integrate the strengths of both methods, thereby offering a deeper and more reliable understanding of the research problem (Johnson, Onwuegbuzie, & Turner, 2007). The quantitative component involves the statistical analysis of secondary data to identify patterns and relationships between financial grant loans and GDP growth across Pakistan, India, Bangladesh, and Sri Lanka. Data are sourced from the World Bank, the International Monetary Fund (IMF), and national financial databases. Employing regression models, time-series analysis, and panel data techniques, the study examines the impact of financial grant loans on economic growth over the period 1981–2022, ensuring rigor and generalizable conclusions.

To empirically test the hypotheses, the following panel data regression model was estimated:

$$GDPGRit = \beta_0 + \beta_1 IMFCredit + \beta_2 NetODA_{it} + \beta_3 NetInflow_{it} + \varepsilon_{it}$$

This study uses data exclusively from the World Bank for the period 1981–2022, covering Bangladesh, India, Pakistan, and Sri Lanka to examine the relationship between financial grant loans and economic growth. The dataset includes key indicators such as GDP growth rates, IMF credits, net official development assistance (ODA), foreign direct investment (FDI) inflows, investment levels, inflation, and government spending. These indicators were chosen for their relevance to the research objectives and international comparability. Data collection and preprocessing ensured completeness and accuracy, involving validation, treatment of missing values, adjustment for inflation, and necessary transformations such as logarithmic scaling. This process established a consistent and reliable foundation for empirical analysis, with all variables measured in standardized units like percentages or constant US dollars.

Table 2: Data Description

Variables	Description	Source
GDPGROWTH	Annual percentage growth rate of GDP at market prices based on constant local currency	World Development Indicators (WDI) database World Bank https://databank.worldbank.org/source/world-development-indicators
IMFCREDIT	Data related to the operations of the IMF are provided by the IMF Treasurer's Department. They are converted from special drawing rights into dollars using end-of-period exchange rates for stocks and average-over-the-period exchange rates for flows.	
NETODA	Net official development assistance (ODA) consists of disbursements of loans made on concessional terms and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare.	
NETINFLOWS	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor.	

Results and Discussion

The Residual Cross-Section Dependence Test serves as a critical diagnostic in panel data analysis. A higher test statistic indicates the presence of cross-sectional dependence, suggesting that shocks in one country may influence others within the panel. This dependence necessitates the application of robust estimation techniques to ensure accuracy and reliability. By accounting for these interdependencies, the study derives credible conclusions on the role of financial grant loans in shaping economic growth across South Asian countries.

Table 3: Residual Cross-Section Dependence Test

Periods included: 42		
Cross-sections included: 4		
Total panel observations: 168 (Degrees of freedom: 6)		
Null hypothesis: No cross-section dependence (correlation) in Residuals		
Test	**Statistic**	**Prob.**
Breusch-Pagan LM	26.84***	0.0002
Pesaran scaled LM	4.86***	0.0000
Pesaran CD	4.39***	0.0000
*** represent the null hypothesis rejection at 1% level of significance.		
Source: Author's calculation		

In cross-country panel data studies, slope heterogeneity tests are essential to determine whether regression slope coefficients are homogeneous across units (countries). Homogeneity would imply a uniform relationship between independent and dependent variables, but due to differences in economic conditions, policies, and structural factors, this assumption rarely holds. Testing for slope heterogeneity, therefore, helps account for these variations and ensures more accurate and reliable empirical results. Two widely used approaches are those of Pesaran and Yamagata (2008) and Blomquist and Westerlund (2013). Both provide Delta and adjusted Delta statistics to test the null hypothesis of slope homogeneity against the alternative of heterogeneity. In the Pesaran and Yamagata (2008) test, the Delta statistic (4.314, $p < 0.0001$) and adjusted Delta statistic (4.596, $p < 0.0001$) strongly reject the null hypothesis, confirming slope heterogeneity across the panel. Similarly, the Blomquist and Westerlund (2013) method produces a Delta statistic of 6.968 ($p < 0.0001$) and an adjusted Delta statistic of 7.424 ($p < 0.0001$), further reinforcing the presence of heterogeneous slopes. These results collectively highlight that cross-country variations must be incorporated into the estimation strategy to capture meaningful insights into the determinants.

Table 4: Testing for slope heterogeneity

H0: slope coefficients are homogenous		
(Pesaran, Yamagata. 2008. Journal of Econometrics)		
	Delta	**p-value**
	4.314***	0.0000
adj.	4.596***	0.0000
(Blomquist, Westerlund. 2013. Economic Letters)		
	Delta	**p-value**
	6.968***	0.0000
adj.	7.424***	0.0000
HAC Kernel: bartlett with average bandwith 3		
*** represents the null hypothesis rejection at 1% level of significance.		
Variables partialled out: constant		

The Panel Unit Root Test is widely used to examine whether time series variables are stationary, meaning their mean and variance remain constant over time. Testing for stationarity is crucial, as nonstationary data may lead to spurious regressions and misleading conclusions. In this study, the stationarity of GDP growth, IMF credit, net official development assistance (ODA), and foreign direct investment (FDI) inflows across South Asian countries was evaluated. The tests applied include Im-Pesaran-Shin (IPS), Augmented Dickey-Fuller (ADF) Fisher Chi-square, and Phillips-Perron (PP) Fisher Chi-square, each providing complementary evidence of stationarity. The IPS test averages individual unit root results, the ADF combines individual tests to assess the panel as a whole, while the PP test applies the Phillips-Perron procedure across series. The results indicate that GDP growth is stationary at level, with IPS, ADF, and PP statistics showing significance at $p < 0.001$. Similarly, net ODA and net FDI inflows are found to be stationary at level, confirming that they are integrated of order zero, I(0). However, IMF credit is nonstationary at level but becomes stationary after first differencing, as reflected in significant IPS (-8.55), ADF (75.85), and PP (61.54) values with $p < 0.001$, confirming it as integrated of order one, I(1). These findings carry important implications. Since GDP growth, ODA, and FDI are I(0), they can be directly used in regression models, while IMF credit must be differenced to ensure stationarity. This prevents spurious results and enhances the robustness of the empirical analysis. Overall, the panel unit root results provide a reliable foundation for assessing the impact of financial grant loans on economic growth in South Asia.

Table 5: Unit Root

Null: Unit root (assumes individual unit root process)							
Method	Statistic	Prob.**	Obs.	Statistic	Prob.**	Obs.	Order
Series: GDPGROWTH	Level			1st Difference			
Im, Pesaran and Shin W-stat	-4.14***	0.000	161				**I(0)**
ADF - Fisher Chi-square	41.58***	0.000	161				
PP - Fisher Chi-square	61.39***	0.000	164				
Series: IMFCREDIT	Level			1st Difference			
Im, Pesaran and Shin W-stat	2.41	0.992	161	-8.55***	0.000	158	**I (1)**
ADF - Fisher Chi-square	2.36	0.968	161	75.85***	0.000	158	
PP - Fisher Chi-square	0.85	0.999	164	61.54***	0.000	160	
Series: NETINFLOWS	Level			1st Difference			
Im, Pesaran and Shin W-stat	-2.92***	0.002	162				**I (0)**
ADF - Fisher Chi-square	25.18***	0.002	162				
PP - Fisher Chi-square	18.83***	0.016	164				
Series: NETODA	Level			1st Difference			
Im, Pesaran and Shin W-stat	-0.55	0.2909	162				**I (0)**
ADF - Fisher Chi-square	15.07*	0.0578	162				
PP - Fisher Chi-square	17.89**	0.0221	164				

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

***, ** and * represent the null hypothesis rejection at 1%, 5% and 10% level of significance, respectively.

The Kao residual cointegration test was applied to examine long-run equilibrium relationships among variables in the panel dataset. The ADF statistic of –5.79 ($p = 0.000$) strongly rejects the null of no cointegration, indicating that the variables move together over time despite being

nonstationary at level. The residual equation shows RESID(–1) with a coefficient of –0.81 (t = –9.72, p = 0.000), further confirming cointegration. The model explains 37% of the variation in the dependent variable (R^2 = 0.37; adj. R^2 = 0.37), with a Durbin-Watson statistic of 1.88 showing no serious autocorrelation. These findings imply a significant long-term relationship among financial grant loans, economic growth, and related variables, underscoring the need for policymakers to adopt strategies that account for long-run dynamics, as interventions in one area will inevitably influence the others.

Table 6: Kao Residual Cointegration Test

Null Hypothesis: No cointegration				
Sample: 1981 2022 (168 Observations)				
Newey-West automatic bandwidth selection and Bartlett kernel				
			t-Statistic	**Prob.**
ADF			-5.79***	0.000
Residual variance			6.976	
HAC variance			2.601	
Augmented Dickey-Fuller Test Equation				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
RESID(-1)	-0.81***	0.08	-9.72	0.000
R-squared	0.37	Mean dependent var		-0.09
Adjusted R-squared	0.37	S.D. dependent var		2.95
S.E. of regression	2.35	Akaike info criterion		4.55
Sum squared resid	900.15	Schwarz criterion		4.57
Log likelihood	-372.33	Hannan-Quinn criter.		4.56
Durbin-Watson stat	1.88			
** and *** represent the null hypothesis rejection at 5% and 1% level of significance.				
Source: Author's Calculation				

The Dumitrescu-Hurlin panel causality test was applied to examine causal relationships among key variables, providing insights into the direction of influence across South Asian countries. The results show that GDP growth significantly Granger-causes IMF credit, as the null hypothesis was strongly rejected with a W-statistic of 15.3 and Zbar-statistic of 11.7 (p = 0.000), indicating that higher growth influences the amount of IMF credit a country receives. Similarly, net ODA is found to Granger-cause GDP growth at the 1% level (W = 5.36, Zbar = 2.88, p = 0.004), suggesting that international aid plays an important role in driving economic performance. Foreign direct investment inflows also significantly cause IMF credit, with the null rejected (W = 5.94, Zbar = 3.37, p = 0.001), showing that FDI contributes to shaping external financial assistance. In contrast, several null hypotheses could not be rejected, including IMF credit causing GDP growth (W = 1.47, p = 0.561), GDP growth causing FDI inflows (W = 3.26, p = 0.312), and GDP growth causing net ODA (W = 1.49, p = 0.574), suggesting no evidence of reverse causality in these cases. These findings highlight critical linkages, showing that while GDP growth can affect access to IMF credit, aid inflows strongly support growth, and FDI inflows play a role in determining credit from international institutions. The results emphasize that financial assistance and investment are not only complementary but also instrumental in shaping long-run economic outcomes, offering meaningful insights for policy formulation in South Asia.

Table 7: Pairwise Dumitrescu Hurlin Panel Causality Tests

Null Hypothesis:	W-Stat.	Zbar-Stat.	Prob.
IMFCREDIT1 does not homogeneously cause GDPGROWTH	1.47	-0.58	0.561
GDPGROWTH does not homogeneously cause IMFCREDIT1	15.3***	11.7***	0.000
NETINFLOWS does not homogeneously cause GDPGROWTH	3.46	1.19	0.233
GDPGROWTH does not homogeneously cause NETINFLOWS	3.26	1.01	0.312
NETODA does not homogeneously cause GDPGROWTH	5.36***	2.88***	0.004
GDPGROWTH does not homogeneously cause NETODA	1.49	-0.56	0.574
NETINFLOWS does not homogeneously cause IMFCREDIT1	5.94***	3.37***	0.001
IMFCREDIT1 does not homogeneously cause NETINFLOWS	0.60	-1.35	0.178
NETODA does not homogeneously cause IMFCREDIT1	3.51	1.22	0.222
IMFCREDIT1 does not homogeneously cause NETODA	3.38	1.11	0.269
NETODA does not homogeneously cause NETINFLOWS	1.68	-0.39	0.694
NETINFLOWS does not homogeneously cause NETODA	3.52	1.24	0.215

***, ** and * represent the null hypothesis rejection at 1%, 5% and 10% level of significance, respectively.

Source: Author's Calculation

The panel ARDL model, applied to data from 1982–2022 (159 observations), provides valuable insights into the dynamic relationships between financial variables and GDP growth in South Asian countries by capturing both short- and long-run effects. With GDP growth in first difference as the dependent variable and net inflows, net ODA, and IMF credit as regressors, the long-run estimates show that net inflows (0.42) and net ODA (0.91) exert positive and significant effects on growth, underscoring the growth-enhancing role of foreign investment and international aid. In contrast, IMF credit displays a negative coefficient of –0.29, implying that reliance on IMF loans adversely affects growth, possibly due to associated conditionalities and austerity policies. Short-run estimates reveal no significant effects from the regressors, but the highly significant error correction term (–0.83, p = 0.000) confirms a strong adjustment mechanism restoring equilibrium after deviations. Additional statistics, including an R^2 of 0.37, adjusted R^2 of 0.37, Durbin-Watson statistic of 1.88, and favorable AIC and SC values (4.12 and 4.48), indicate an acceptable model fit. These findings emphasize that while foreign investment and development assistance stimulate long-term growth, IMF lending may undermine it, highlighting the importance for policymakers to differentiate between growth-enhancing and growth-constraining financial flows. The results reinforce the necessity of incorporating both short-run and long-run dynamics when designing economic policies to ensure sustainable growth in South Asian economies.

Table 8: Panel Autoregressive Distributed Lag Model

Sample 1982 2022 (Included Observations 159)				
Dependent Variable: D(GDPGROWTH)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
LNETINFLOWS	0.42***	0.06	6.99	0.000
LNETODA	0.91***	0.17	5.21	0.000
LIMFCREDIT	-0.29**	0.14	-2.09	0.038
Short Run Equation				
COINTEQ01	-0.83***	0.14	-5.91	0.000
D(LNETINFLOWS)	0.21	0.46	0.47	0.638
D(LNETODA)	0.07	0.98	0.07	0.947

D(LIMFCREDIT)	-0.40	0.50	-0.81	0.421

Mean dependent var	-0.06	S.D. dependent var	2.90
S.E. of regression	2.15	Akaike info criterion	4.12
Sum squared Resid	676.69	Schwarz criterion	4.48
Log likelihood	-321.30	Hannan-Quinn criter.	4.27

Note: *, ** and *** represents the null hypothesis rejection at 10%, 5% and 1% level of significance. P-values and any subsequent tests do not account for model selection.

Author's Calculation

Conclusion

The present research examines the role of financial grants, in the form of loans, in shaping economic growth across Bangladesh, India, Pakistan, and Sri Lanka between 1981 and 2022. Using a mixed-method approach, the study integrates quantitative and qualitative evidence to assess the interactions between financial assistance and development. The findings confirm that while grants contributed positively to growth in all four countries, their impact varied according to institutional quality, economic policy, and political stability.

Bangladesh effectively utilised grants to bridge the savings–investment gap, achieving an average growth rate of 5.26%. External assistance supported infrastructure and social services, with diagnostic tests confirming their independent and long-term benefits. India also benefited, recording an average growth of 4.64%. Grants helped stabilise its diverse economy, and cointegration analysis confirmed a durable association between inflows and GDP, suggesting a sustained capacity to translate external resources into growth. Pakistan, with an average growth rate of 4.35%, also experienced positive long-term effects, although political instability and weak institutional structures limited the consistency of these outcomes. Sri Lanka benefited most, recording 5.89% growth, as grants supported post-war reconstruction and expansion. Panel analysis confirmed their strong long-term role in its recovery. Econometric tests reinforced these country-level results. Cross-sectional independence highlighted country-specific effects, while slope heterogeneity indicated varying magnitudes of effect. Cointegration confirmed the existence of long-term equilibria among variables, and causality tests revealed that GDP growth was influenced by both ODA and IMF credit, although the latter had adverse effects. The ARDL model highlighted that net inflows and ODA promoted growth, while IMF credit constrained it, pointing to the importance of the form and conditions of assistance.

The evidence offers clear policy lessons. First, financial grants can stimulate growth, but effectiveness depends on sound institutions, policy consistency, and political stability. Weak governance and instability undermine their benefits, while transparent and accountable systems enhance them. Second, financial assistance must be tailored to country-specific priorities rather than applying uniform models. Targeting sectors such as infrastructure, education, health, and technology can generate immediate benefits and lay the foundations for sustainable development. Third, reliance on external inflows must be balanced with domestic resource mobilisation. Excessive dependence can create vulnerabilities and discourage fiscal reforms. South Asian economies must therefore pair external support with efforts to strengthen taxation, savings, and financial markets. Political stability and governance reform are central to maximising aid effectiveness. Instability disrupts implementation, while inclusive governance provides the conditions for external resources to be absorbed productively. Strengthening institutional capacity and embedding robust monitoring and evaluation mechanisms are critical to ensure grants are used efficiently.

Finally, regional cooperation and private-sector engagement can amplify the developmental impact of grants. South Asian countries could benefit from coordinated strategies, shared best practices, and cross-border projects that deliver wider benefits. Public–private partnerships can add innovation, capital, and expertise, enhancing long-term sustainability. Overall, financial grants have supported South Asia's economic growth, but their success has been uneven and conditional. Effective policy frameworks, institutional reforms, and political stability remain decisive in converting external inflows into durable and inclusive development. Policymakers should focus on adaptive strategies that align aid with national priorities, strengthen domestic institutions, and reduce reliance on external finance. By doing so, financial assistance can become not only a short-term growth stimulus but also a catalyst for resilient, broad-based, and sustainable development.

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