

Journal of Business and Economic Options



Towards Inclusive Growth: Financial Sector Dynamics and Poverty Reduction in Pakistan

**Amjad Ali^a
Asif Sajid^b**

Abstract

The study's focus on unraveling the complex interplay between financial development, economic growth, financial instability, income inequality, and poverty reduction in Pakistan underscores the multifaceted nature of the country's economic landscape. By employing rigorous econometric techniques and comprehensive data analysis, the research sheds light on the long-term dynamics and causal relationships shaping Pakistan's economic trajectory. The identification of cointegration among the variables underlines their enduring and intertwined nature, signifying sustained and systemic linkages that transcend short-term fluctuations. This finding underscores the importance of adopting a holistic and integrated approach to economic policymaking that accounts for the interconnectedness of financial development, economic growth, and social outcomes such as income inequality and poverty. Moreover, the study's revelation of a positive relationship between financial development and economic growth underscores the pivotal role of a robust financial sector in fostering broader economic prosperity. By facilitating efficient allocation of capital, promoting investment, and fostering innovation, a well-functioning financial system can serve as a catalyst for sustainable economic growth and development. However, the study also highlights the detrimental impact of financial instability on economic growth, revealing the destabilizing effects of volatility and uncertainty in the financial sector. This underscores the imperative of sound regulatory frameworks, effective risk management practices, and prudent macroeconomic policies to mitigate the risks of financial instability and safeguard economic stability. Furthermore, the study's emphasis on the role of the financial sector in addressing income inequality offers valuable insights for policymakers grappling with the challenge of socioeconomic disparities. By leveraging the financial sector as a policy tool, policymakers can design targeted interventions to promote inclusive growth, expand access to financial services, and enhance economic opportunities for marginalized segments of society. This study's findings provide a comprehensive understanding of the intricate relationships between financial development, economic growth, financial instability, income inequality, and poverty reduction in Pakistan. By offering actionable policy recommendations tailored to the country's specific context, the research equips policymakers with valuable insights to navigate the complex terrain of economic policymaking and foster inclusive and sustainable development.

Keywords: Financial Development, Economic Growth, Financial Instability, Income Inequality, Poverty Reduction

JEL Codes: O16, G01, E44

1. INTRODUCTION

Indeed, financial development plays a crucial role in the overall development of an economy. When individuals and businesses have easy access to finance at affordable rates, it fosters economic growth by facilitating productive investments and efficient allocation of resources. Developed financial institutions are essential for ensuring the effective utilization of financial resources, which can enhance the productivity and competitiveness of the economy.

The relationship between financial development and economic growth has been extensively studied, with research suggesting that financial development can stimulate economic growth through various channels. Firstly, it helps in reducing risks associated with financial transactions, thereby encouraging investment and entrepreneurial activities. Secondly, by lowering the cost of financial operations through economies of scale and scope, financial development promotes efficient resource allocation and capital formation. Moreover, it facilitates the mobilization and channeling of savings into productive investment ventures, which can drive innovation, job creation, and overall economic expansion.

Economic growth is widely recognized as a crucial tool for poverty alleviation, as it creates opportunities for income generation and improves living standards. Financial development can contribute to poverty reduction by enabling greater access to credit and financial services for the poor. By providing access to capital for entrepreneurship and investment in human capital, financial development can empower individuals and communities to lift themselves out of poverty.

^a Lahore School of Accountancy and Finance, University of Lahore, Lahore, Pakistan

^b Department of Economics, Punjab University, Lahore, Pakistan

However, it's important to note that the benefits of financial development may not reach everyone equally, and inclusive financial policies are essential to ensure that the benefits are distributed equitably across society. Additionally, the proper functioning of the financial system is essential for sustaining economic growth, as any inefficiencies or disruptions in the financial sector can hinder investment and economic activity, leading to slower growth rates. Therefore, policymakers should prioritize the development of robust and inclusive financial systems to support sustainable economic growth and poverty alleviation efforts.

Financial instability can have detrimental effects on marginalized sections of society, particularly the poor, exacerbating income inequality and increasing poverty rates. During periods of economic downturns, such as financial crises, wages tend to decline while the cost of living rises, further squeezing the income of vulnerable populations. This phenomenon, known as the conduit effect, underscores the importance of financial institutions in providing opportunities for economic advancement, especially for the poor.

A well-developed financial system can serve as a conduit for wealth creation and poverty reduction by expanding access to financial services and promoting inclusive growth. However, financial instability undermines this process by disrupting the flow of credit and investment, leading to income losses and widening inequality. In such circumstances, the benefits of economic growth may disproportionately accrue to the wealthy, exacerbating social disparities.

Addressing the linkages between financial sector development, economic growth, income inequality, and poverty reduction requires a comprehensive policy approach. This strategy should encompass macroeconomic policies, financial sector reforms, and regulatory measures aimed at fostering inclusive growth and equitable distribution of resources. By aligning these policies towards common objectives, policymakers can work towards mitigating the adverse effects of financial instability and promoting inclusive development.

Despite the challenges, there is evidence to suggest that financial development can have a positive impact on economic growth in countries like Pakistan. However, the key challenge lies in ensuring that the benefits of growth are shared equitably among all segments of society, including the poor and middle-income groups. This necessitates targeted interventions and policies aimed at improving access to finance, promoting income equality, and fostering inclusive economic development.

2. LITERATURE REVIEW

The relationship between financial development and economic growth has been a subject of extensive inquiry in both theoretical and empirical literature. Scholars such as Bagehot (1873), Schumpeter (1911, 1934), and Hicks (1969) laid the groundwork for this exploration, while subsequent researchers like Cameron (1972), Cole and Park (1983), Gupta (1984), King and Levine (1993), and many others have delved deeper into understanding this connection. Numerous studies have identified a positive association between financial development and economic growth, with researchers like Goldsmith (1969), Shaw (1973), Bencivenga et al. (1995), and Fry (1995, 1997) highlighting this relationship.

To investigate the link between financial development and economic growth, researchers have employed a variety of methods. Cross-country growth regressions have been widely used, with studies by King and Levine (1993), Odedokun (1989), Sala-i-Martin (1997), and Berger et al. (2004) being notable examples. Some researchers have also utilized panel data frameworks, as demonstrated in studies by Calderon and Liu (2003) and Edison et al. (2002). Additionally, time series analysis has been employed to explore the causal relationship between financial development and economic growth in recent literature, with studies by Demetriades and Hussein (1996), Arestis et al. (2001), Chang (2002), Ghirmany (2004), and Khalid (2005) contributing to this body of research.

The extensive examination of the relationship between financial development and economic growth across various methodologies underscores the importance of understanding the dynamics between these two variables in fostering sustainable economic development.

The relationship between financial development and economic growth has been examined using various methodologies, including cross-country and time series data sets with simple regressions. Scholars such as Levine (1996, 1997), Arsis et al. (2001), and the World Bank (2001) have contributed to this area of research.

One of the seminal studies in this field is by King and Levine (1993), whose empirical evidence is particularly noteworthy. Their analysis indicates that a higher level of financial development is significantly and robustly correlated with faster rates of current and future economic growth, as well as with improvements in physical capital accumulation and economic efficiency. This suggests a strong and positive relationship between financial development and overall economic performance.

Additionally, Wurgler (2000) has documented that financial development Granger causes economic growth significantly, further supporting the notion that a well-developed financial sector plays a crucial role in driving economic expansion. These findings underscore the importance of understanding and fostering financial development as a key driver of sustainable economic growth.

Christophoulos and Tsions (2004) conducted an investigation into the causal relationship between financial development and economic growth using panel cointegration techniques. Their study contributes to the understanding of how financial development influences overall economic performance.

Waqabaca (2004) explored the relationship between financial development and economic growth from the perspective of an open economy. He concluded that financial integration with the rest of the world can lead to increased economic benefits for an economy, highlighting the importance of global financial linkages.

In a study by Harrison et al. (2004), it was described that economic growth precedes financial development, and subsequently, the development of the financial sector contributes to further economic development. This suggests a cyclical relationship between economic growth and financial sector development.

Mavrotas and Son (2004) argued that the impact of financial sector development on economic growth is more pronounced in low-income economies compared to high-income ones. Their findings emphasize the significance of financial development in fostering growth, particularly in less affluent nations.

On the contrary, Ardic and Damar (2006) identified a negative impact of financial development on economic growth in the case of Turkey. Their study, which used the ratio of commercial bank deposits to GDP as an indicator of financial development, suggested that the expansion of the Turkish banking sector primarily served to cover government budget deficits rather than fuel productive investment ventures. This highlights the importance of ensuring that financial resources are effectively channeled towards productive uses to support sustainable economic growth.

In North Cyprus, Guryay et al. (2007) challenge the notion that financial development significantly contributes to economic growth. Their study suggests that the positive relationship between economic growth and financial development is minimal in North Cyprus, highlighting the complexity of the relationship between financial sector expansion and overall economic performance.

Conversely, Ghali (1999) presents a contrasting view, arguing that the consistent association between financial development and economic growth supports the idea that "financial development can be an engine of economic activity," particularly in countries like Tanzania. This perspective emphasizes the potential role of financial sector development in driving economic progress in certain contexts.

Similarly, in Greece, Hondroyiannis et al. (2004) demonstrate that while financial and stock market development may promote economic growth over the long term, their impact is relatively modest. This suggests that while financial sector expansion may contribute to economic growth, its effects may not be as substantial as in other countries or regions.

In support of the positive relationship between financial development and economic growth, Wachtel et al. (2006) provide empirical evidence indicating that financial development stimulates economic activity and accelerates the pace of economic growth. However, they highlight the importance of creating an environment conducive to investment, including protective property rights, attractive investment opportunities, and improved access to financial services, in order to fully realize the potential benefits of financial sector development.

Shahbaz (2009) conducted a study examining the relationship between financial development and economic growth in Pakistan using time series data spanning from 1971 to 2005. The findings of the study suggest that financial development has a positive impact on economic growth in Pakistan, highlighting the potential role of a well-developed financial sector in driving overall economic performance.

In a similar vein, Zhang (2005) investigated the nexus between financial development and economic growth during the financial crisis period in several East Asian economies, including Malaysia, Indonesia, Philippines, Singapore, Thailand, China, Japan, and Korea. The results of Zhang's study indicated that during the financial crisis, the financial sector had an inverse effect on economic growth in these economies. This suggests that in times of financial turmoil, the relationship between financial development and economic growth may exhibit different dynamics, potentially leading to adverse effects on economic performance.

The enhancement of efficiency within the financial sector can sometimes exacerbate income inequality. This phenomenon occurs when the privileged class is better positioned to capitalize on new opportunities, while the benefits of these advancements fail to trickle down to the broader population. One contributing factor to this disparity is the adoption of capital-intensive techniques, which typically favor skilled labor over unskilled labor (Lopez, 2003, 2004). As the demand for skilled labor increases, their wages rise more rapidly compared to those of unskilled laborers, thereby widening wage inequality and subsequently contributing to overall income inequality.

Greenwood and Jovanovic (1990) argue that during the initial stages of financial development, financial institutions may overlook individuals from lower socioeconomic backgrounds, limiting their access to credit. Moreover, established financial institutions may be hesitant to extend loans to poorer individuals due to their lack of collateral or political connections. Consequently, the financial sector may exacerbate income inequality, particularly in the early phases of financial development (Dollar and Kraay, 2002; Beck et al., 2004).

The flow of resources toward high-return projects for impoverished enterprises may encounter obstacles due to the aforementioned financial constraints (Banerjee and Newman, 1993; Galor and Zeira, 1993). This impediment to efficient capital allocation can exacerbate income inequality (Banerjee and Newman, 1993; Aghion and Bolton, 1992; Greenwood and Jovanovic, 1990).

Dollar and Kraay (2003, 2004) have delved into the relationship between poverty and the development of the financial sector, incorporating additional descriptive variables to examine the impact of trade openness, inflation, and government consumption. Their findings suggest that trade openness tends to benefit poorer segments of the population by equalizing

income distribution. However, financial development, inflation, and higher government consumption expenditures are associated with increased income inequality.

Lopez (2003) presents an argument that highlights the complexity of this relationship. He suggests that while developments in the financial sector, trade openness, and a smaller government size are typically associated with higher income inequality, financial instability may surprisingly lead to an improvement in income distribution.

Calderon and Serven (2003) observe that financial development tends to increase income inequality, whereas better education has the opposite effect. Burgess and Pande (2005) explore the relationship between financial development and poverty in the Indian economy. Their analysis indicates that the opening of bank branches in rural areas leads to improved income distribution and a reduction in poverty.

In a study focusing on the Thai economy, Motonishi (2006) finds that financial development enhances the income shares of the poorer segments of the population. Clarke et al. (2003, 2007) investigate the connection between financial development and income inequality, concluding that a developed financial sector can reduce income inequality by significantly increasing the income of the poorest quintile.

Similarly, Canavire et al. (2008) examine the impact of financial development on income distribution in Latin American and Caribbean economies. They find that financial development does not necessarily increase the income share of the poorest segments of the population worldwide. Instead, the income of the second, third, and fourth segments of the population experiences disproportionate growth due to the expansion of the financial sector.

Brittencourt (2006) found that a developed financial sector can enhance income distribution in the case of Brazil. Levine (2008) investigated the relationship between financial development and income inequality, revealing that a 0.60 percent improvement in income distribution is associated with a 1 percent increase in financial development.

Beck et al. (2007) studied the impact of financial sector development on income inequality and the growth rate of income for the poorest individuals. They concluded that the development of the financial sector reduces income inequality and increases the growth rate of income for the poor.

Chaudhary (2007) highlights the importance of women's empowerment among the bottom 20 percent of the population for poverty reduction efforts.

The investigation reveals that banking sector crises exacerbate poverty by negatively affecting economic growth. The primary reason behind this is that the impoverished segments of the population are more vulnerable to the cyclical fluctuations of economic growth compared to the affluent ones. The wealthy class typically possesses more information regarding the volatility of national income, enabling them to better anticipate economic instability. Consequently, during periods of recession, the income of the impoverished declines significantly more than the income of the affluent, contributing to heightened poverty levels (Beck et al., 2004).

The attainment of macroeconomic goals such as sustained economic growth and employment generation hinges significantly on the presence of developed, sound, and well-organized financial markets within an economy (Latifee, 2003; Green et al., 2003; Mauro, 2004; Brittencourt, 2006). Hussein (2002) and Hussein and Kirkpatrick (2005) conducted a study to explore the impact of financial development on poverty reduction in less developed economies. Their analysis suggests that financial development contributes to poverty reduction primarily through its effects on economic growth. However, the extent to which financial development reduces poverty depends on its ability to improve income distribution.

In the case of specific country studies, Odhiambo (2009) investigated the impact of financial development and economic growth on poverty in South Africa. Employing the error correction method (ECM) and cointegration approaches to examine trivariate causality, the empirical findings indicate that both financial development and economic growth have the potential to reduce poverty. Furthermore, the results suggest a bidirectional causality between economic growth and financial development, with financial development playing a crucial role in the poverty reduction process in South Africa.

Akhter and Daly (2009) delved into the relationship between finance and poverty using the fixed effect decomposition method applied to a panel of 54 developing countries spanning from 1993 to 2004. Their research findings suggest that financial development has the potential to benefit the poor through mechanisms such as financial intermediation, including access to credit and savings. However, this positive impact is offset by financial instability prevalent in these economies.

Recently, Akhter et al. (2010) conducted a study to investigate the impact of financial development on poverty reduction in the context of financial instability, using cross-country data from 1993 to 2004. Their empirical findings suggest that while financial development contributes to poverty reduction, financial instability has adverse effects on the welfare of the poor.

Ang (2008, 2010) argues that financial development plays a role in reducing income inequality in India. Meanwhile, Wahid et al. (2010) examined the relationship between financial sector development and income inequality using time series data spanning from 1985 to 2005. Their results indicate that financial development tends to increase income inequality in small developing economies like Bangladesh. Additionally, their findings suggest that economic growth can lead to improved income distribution, implying that enhancements in economic growth may facilitate income redistribution and foster a more egalitarian society.

Kappel (2010) conducted a study to analyze the impact of financial development on income inequality and poverty. The results of the study suggest that financial development contributes to the reduction of income inequality and poverty through the enhancement of loan markets and the development of the stock market.

3. THEORETICAL FRAMEWORK

The proposed empirical model aims to analyze the impact of financial development on economic growth within the context of a single country. The equation of the model is structured as follows:

$$LNGDP=f(LNFD,INF, LNTR,PINV,PL) LNGDP=f(LNFD,INF, LNTR,PINV,PL)$$

In this equation, LNGDP represents the natural logarithm of GDP, serving as a proxy for economic growth. LNFD stands for the natural logarithm of a measure of financial development, capturing the degree of sophistication and accessibility of financial services within the economy. INF represents the inflation rate, reflecting the influence of price stability on economic growth dynamics.

Additionally, LNTR denotes the natural logarithm of trade openness, which indicates the extent of the economy's integration with international markets and its impact on economic growth. PINV represents private investment, reflecting the contribution of investment activities to economic growth processes. Lastly, PL stands for labor productivity, representing the efficiency of labor in contributing to overall economic output and growth.

By analyzing this model using time series data for a specific country, researchers can gain insights into the dynamics of financial development and its relationship with economic growth over time. Such analysis enables policymakers to understand the nuanced interactions between financial sector development, macroeconomic variables, and economic growth dynamics, thereby facilitating the formulation of targeted policy interventions to promote sustainable economic development and poverty reduction.

4. RESULTS AND DISCUSSIONS

The table 1 provides the results of the Augmented Dickey-Fuller (ADF) unit root test conducted at the level and for the first difference for several variables: LNGDP (Log of GDP), LNFD (Log of Foreign Direct Investment), FNS (Foreign Net Sales), INF (Inflation Rate), LNRT (Log of Real Trade), LNPINV (Log of Private Investment), and PL (Price Level).

For the variable LNGDP, the ADF test statistic at the level is -2.692 with a probability value of 0.2459, indicating insufficient evidence to reject the null hypothesis of a unit root. However, at the first difference, the ADF test statistic is -7.902 with a probability value of 0.0000, suggesting strong evidence to reject the null hypothesis, indicating stationarity after differencing.

Similarly, for LNFD, the ADF test statistic at the level is -2.583 with a probability value of 0.2894, suggesting insufficient evidence to reject the null hypothesis of a unit root. However, at the first difference, the ADF test statistic is -5.442 with a probability value of 0.0005, indicating strong evidence to reject the null hypothesis, suggesting stationarity after differencing.

For FNS, INF, LNRT, LNPINV, and PL, similar patterns are observed. At the level, the ADF test statistics range from -1.831 to -4.425, with probability values ranging from 0.0067 to 0.9999, indicating mixed evidence regarding the presence of a unit root. However, at the first difference, all variables exhibit stronger evidence for stationarity, with ADF test statistics ranging from -5.156 to -4.088 and probability values ranging from 0.0012 to 0.0155, indicating significant evidence to reject the null hypothesis of a unit root, suggesting stationarity after differencing.

In summary, the results suggest that all variables become stationary after differencing, indicating that they are integrated of order 1 (I(1)). This implies that they exhibit a stable long-term relationship and are suitable for further time series analysis.

Table1: Unit Root Test

Variables	ADF Test at Level		ADF Test at 1 st Difference	
	Intercept and Trend	Prob-value	Intercept and Trend	Prob-value
LNGDP	-2.692	0.2459	-7.902	0.0000
LNFD	-2.583	0.2894	-5.442	0.0005
FNS	-4.425	0.0067	-5.071	0.0016
INF	-3.681	0.0380	-4.482	0.0060
LNRT	-2.797	0.2081	-4.088	0.0155
LNPINV	1.410	0.9999	-5.156	0.0012
PL	-1.831	0.6672	-5.536	0.0004

The table 2 displays the results of lag length selection criteria for a Vector Autoregression (VAR) model, considering various information criteria such as LR (sequential modified LR test statistic), FPE (Final Prediction Error), AIC (Akaike Information Criterion), SC (Schwarz Information Criterion), and HQ (Hannan-Quinn Information Criterion).

For each lag order considered (0, 1, and 2), the corresponding values of the LR statistic, FPE, AIC, SC, and HQ are provided.

At lag order 0, the LR statistic is not applicable (NA), and the values of FPE, AIC, SC, and HQ are given as 1.54e-07, -1.4956, -1.2688, and -1.419347, respectively.

At lag order 1, the LR statistic is 171.7320, indicating significant autocorrelation in the residuals at the 5% level. The corresponding values of FPE, AIC, SC, and HQ are 1.24e-09, -6.3409, -4.9804, and -5.8831, respectively. At lag order 2, the LR statistic decreases significantly to 47.7930, suggesting that the inclusion of the second lag improves the model fit. The values of FPE, AIC, SC, and HQ at lag order 2 are similar to those at lag order 1, except for AIC, which decreases to -6.9981, indicating a better model fit according to this criterion. Overall, lag order 2 is selected as the optimal lag order by the AIC criterion due to its lowest value among the considered lag orders. However, it's worth noting that different lag orders might be preferred based on other criteria such as the LR statistic or the SC and HQ criteria.

Table 2: Lag Length Selection

VAR Lag Order Selection Criteria					
Lag	LR	FPE	AIC	SC	HQ
0	NA	1.54e-07	-1.4956	-1.2688	-1.419347
1	171.7320	1.24e-09	-6.3409	-4.9804	-5.8831
2	47.7930	7.18e-10	-6.9981*	-4.5040	-6.1589

* indicates lag order selected by the criterion
 LR: sequential modified LR test statistic (each test at 5% level)
 FPE: Final prediction error
 AIC: Akaike information criterion
 SC: Schwarz information criterion
 HQ: Hannan-Quinn information criterion

The table 3 presents the results of the Autoregressive Distributed Lag (ARDL) estimation for long-run cointegration, accompanied by a cointegration test to determine the existence of a long-run relationship among the variables. The calculated F-statistic for the cointegration test is 9.523, with a lag order of 2. To assess the significance of the test, the calculated F-statistic is compared against the critical values at different significance levels (1%, 5%, and 10%). For the unrestricted intercept and trend model, bound critical values are provided for both integrated of order 0 (I(0)) and integrated of order 1 (I(1)). At the 1% significance level, the critical bound values are 7.52 for I(0) and 6.34 for I(1). At the 5% significance level, the critical bound values are 5.85 for I(0) and 4.87 for I(1). At the 10% significance level, the critical bound values are 5.06 for I(0) and 4.16 for I(1). Since the calculated F-statistic exceeds the critical values at all significance levels, we reject the null hypothesis of no cointegration. This suggests strong evidence of a long-run relationship among the variables under consideration, indicating that they move together in the long run.

Table 3: ARDL Estimation for Long Run

ARDL Cointegration Test	Calculated-Value	Lag-order	Significance Level	Bound Critical Values (Un-restricted Intercept and Trend)	
				I(0)	I(1)
F-statistic	9.523	2	1%	6.34	7.52
			5%	4.87	5.85
			10%	4.16	5.06

The table 4 presents the outcomes of the long-run estimation for the dependent variable lnGDPC (Natural Logarithm of Gross Domestic Product per Capita) along with various independent variables. For each variable, the table lists coefficients, standard errors in parentheses, and corresponding probability values (Prob-value). The "Constant" term represents the intercept of the model, indicating the baseline value of lnGDPC when all other independent variables are zero. The coefficients are 5.9619 and 6.4590 for different models, both of which are statistically significant with p-values of 0.0000. LNFD (Natural Logarithm of Foreign Direct Investment) has coefficients of 0.4856 and 0.3392 in different models, both statistically significant with p-values of 0.0001 and 0.0023, respectively. FNS (Foreign Net Sales) has a coefficient of -0.0139 in one model, indicating a negative association with lnGDPC, and it is statistically significant with a p-value of 0.0327. LNTR (Natural Logarithm of Real Trade) has coefficients of 0.6227 and 0.5922 in different models, both statistically significant with p-values of 0.0002 and 0.0017, respectively.

INF (Inflation Rate) has coefficients of -0.2120 and -0.1792 in different models, both statistically significant with p-values of 0.0000 and 0.0001, respectively.

PL (Price Level) has coefficients of -0.1207 and -0.1055 in different models, both statistically significant with p-values of 0.0003 and 0.0077, respectively.

LNPL (Natural Logarithm of Price Level) has coefficients of 0.0092 and 0.0007 in different models, both statistically significant with p-values of 0.0000 for both cases.

Furthermore, the table provides goodness-of-fit statistics for each model, including R-squared, adjusted R-squared, Akaike Information Criterion (AIC), Schwarz Criterion, F-Statistic, Prob(F-statistic), and Durbin-Watson statistic, which assess the overall fit and performance of the models.

Table 4: Long Run Outcomes

Variables	Dependant Variable = lnGDPC			
	Coefficients	Prob-value	Coefficients	Prob-value
Constant	5.9619 (12.582)	0.0000	6.4590 (8.297)	0.0000
LNFD	0.4856 (4.513)	0.0001	0.3392 (3.359)	0.0023
FNS	–	–	-0.0139 (-2.251)	0.0327
LNTR	0.6227 (4.207)	0.0002	0.5922 (3.484)	0.0017
INF	-0.2120 (-7.067)	0.0000	-0.1792 (-4.716)	0.0001
PL	-0.1207 (-4.091)	0.0003	-0.1055 (-2.881)	0.0077
LNPL	0.0092 (18.562)	0.0000	0.0007 (12.715)	0.0000
R-squared = 0.9627		R-squared = 0.9518		
Adj-R-squared = 0.9488		Adj-R-squared = 0.9412		Akaike in7fo
Akaike info Criterion = -2.4589		Criterion = -2.1441		
Schwarz Criterion = -2.1895		Schwarz Criterion = -1.8299		
F-Statistic = 144.7633		F-Statistic = 89.0477		
Prob(F-statistic) = 0.0000		Prob(F-statistic) = 0.0000		
Durbin-Watson = 1.7041		Durbin-Watson = 1.5114		

Table 5 presents the outcomes of the short-run estimation for the dependent variable $\Delta \ln \text{GDPC}$ (First Difference of Natural Logarithm of Gross Domestic Product per Capita) along with various independent variables.

For each variable, the table lists coefficients, standard errors in parentheses, and corresponding probability values (Prob-value).

The "Constant" term represents the intercept of the model, indicating the baseline change in $\Delta \ln \text{GDPC}$ when all other independent variables are zero. The coefficients are -0.0105 and -0.0071 for different models, both of which are statistically insignificant with p-values of 0.4206 and 0.5830, respectively.

LNFD (Natural Logarithm of Foreign Direct Investment) has coefficients of 0.4595 and 0.4281 in different models, both statistically significant with p-values of 0.0064 and 0.0215, respectively.

FNS (Foreign Net Sales) has coefficients of -0.4728 and -0.4596 in different models, both statistically significant with p-values of 0.0031 and 0.0044, respectively.

LNTR (Natural Logarithm of Real Trade) does not appear in one model, and in the other, it has a coefficient of -0.0863, which is statistically insignificant with a p-value of 0.6191.

INF (Inflation Rate) has coefficients of -0.1237 and -0.1289 in different models, both statistically significant with p-values of 0.0000 for both cases.

PL (Price Level) has coefficients of 0.1208 and 0.1723 in different models, both statistically insignificant with p-values of 0.3406 and 0.1931, respectively.

LNPL (Natural Logarithm of Price Level) has coefficients of 0.0111 and 0.0119 in different models, both statistically significant with p-values of 0.0000 for both cases.

Furthermore, additional lagged terms for LNFD and FNS are included in the models, which also have coefficients and significance levels provided in the table.

Table 5: Short Run Outcomes

Dependent Variable = $\Delta \ln \text{GDPC}$				
Variables	Coefficients	Prob-value	Coefficients	Prob-value
Constant	-0.0105 (-0.819)	0.4206	-0.0071 (-0.556)	0.5830
LNFD	0.4595 (2.987)	0.0064	0.4281 (2.466)	0.0215
FNS	-0.4728 (-3.285)	0.0031	-0.4596 (-3.158)	0.0044
LNTR	-	-	-0.0863 (-0.504)	0.6191
INF	-0.1237 (-6.756)	0.0000	-0.1289 (-6.657)	0.0000
PL	0.1208 (0.972)	0.3406	0.1723 (1.340)	0.1931
LNPL	0.0111 (5.049)	0.0000	0.0119 (5.409)	0.0000
LNFD	-0.0043 (-1.590)	0.1247	-0.0062 (-2.351)	0.0276
FNS	0.0149 (0.843)	0.4070	0.0136 (0.776)	0.4455
ECM_{t-1}	-0.3327 (-2.512)	0.0191	-	-
ECM_{t-1}	-	-	-0.4227 (-2.733)	0.0118

5. CONCLUSIONS

The primary objective of the current study is to explore the intricate connections between financial development, financial instability, economic growth, income inequality, and poverty within the context of Pakistan. Building upon theoretical frameworks that elucidate the various channels through which the establishment and evolution of financial markets and institutions influence economic growth, this study aims to empirically investigate whether financial instability undermines the relationship between finance and growth in Pakistan.

By delving into empirical analysis, the study seeks to shed light on whether episodes of financial instability pose challenges to the traditional understanding of the nexus between financial development and economic growth in the Pakistani context. Through rigorous examination of relevant data and statistical techniques, the study endeavors to uncover insights into how financial instability may impact the effectiveness of financial development in driving economic growth within the country. Furthermore, the study seeks to explore the broader implications of financial instability on income inequality and poverty levels in Pakistan. By considering these multifaceted relationships, the research aims to provide valuable insights for policymakers, economists, and other stakeholders involved in shaping financial policies and strategies aimed at fostering sustainable and inclusive economic development in Pakistan.

The empirical findings of this study reveal several important insights into the relationship between financial development, financial instability, and economic growth in Pakistan. Firstly, the evidence suggests that financial development positively contributes to economic growth, aligning with existing theoretical frameworks that highlight the role of well-functioning financial systems in driving economic expansion.

However, a notable observation is the inverse relationship between financial instability and economic growth. This indicates that episodes of financial instability can undermine the positive impact of financial development on economic growth, potentially offsetting the benefits accrued from advancements in the financial sector. Policymakers should therefore prioritize measures to mitigate financial instability and safeguard against disruptions that could hinder economic growth prospects.

Furthermore, the study highlights the positive influence of trade openness on economic growth, underscoring the importance of integrating Pakistan into the global economy to leverage opportunities for growth and development. Additionally, private investment emerges as a key driver of economic growth, emphasizing the significance of creating an enabling environment that encourages and facilitates investment activities.

Inflation, however, is found to have a detrimental effect on economic growth, indicating the importance of maintaining price stability to support sustained economic expansion. Finally, the study underscores the role of political stability in fostering an environment conducive to economic growth, as stable political conditions can enhance the predictability and effectiveness of economic policies.

Creating an environment conducive to financial stability and growth requires a multifaceted approach that addresses various aspects of governance, regulation, and infrastructure. Enhancing the effectiveness of the private sector in credit evaluation and risk management is crucial for ensuring prudent lending practices and minimizing the risk of financial instability.

Moreover, robust public sector surveillance, supported by stringent accounting standards and auditing practices, helps maintain transparency and accountability within the financial system, fostering trust among investors and depositors. A sound legal framework provides the necessary foundation for enforcing contracts, protecting property rights, and resolving disputes, all of which are essential for a well-functioning financial system.

Attracting foreign direct investment (FDI) requires more than just offering financial incentives; it necessitates creating a stable macroeconomic and political environment that instills confidence in investors. Providing secure property rights, ensuring regulatory consistency, and cultivating a skilled workforce are also critical factors that contribute to Pakistan's attractiveness as an investment destination.

Ultimately, by addressing these key areas and establishing a conducive environment for financial deepening and FDI inflows, Pakistan can harness the potential of its financial system to drive economic growth, create employment opportunities, and foster long-term prosperity.

REFERENCES

- Aghion, P. and Bolton, P. (1992). Distribution and Growth in Models of Imperfect Capital Markets. *European Economic Review*, 36 (2-3), 603-611.
- Aghion, P., Howitt, P., (1992). A Model of Growth through Creative Destruction, *Econometrica*, 60(2), 323-351.
- Ağır, H., Kar, M and Peker, O., (2010). Financial Development and Poverty Reduction in Turkey. Warsaw International Economic Meeting, University of Warsaw and National Bank of Poland, 2-4 July, Warsaw, Poland.
- Akhter, S. and Daly, K. J. (2009). Finance and Poverty: Evidence from Fixed Effect Vector Decomposition. *Emerging Markets Review*. 10 (3), 191-206.
- Akhter, S., Lui, Y and K, Lui., (2010), "Cross Country Evidence on the Linkages between Financial Development and Poverty", *International Journal of Business Management*, 5,pp: 1-19.
- Ang, J. B. (2008). *Finance and Inequality: The Case of India. CAMA Working Paper Series*, Centre for Applied Macroeconomic Analysis, The Australian National University, Australia.
- Ang, J. B., (2010). Finance and Inequality: The Case of India. *Southern Economic Journal*. 76 (3), 738-761.
- Ardic, O. P. and H. E. Damar. (2006). *Financial Sector Deepening and Economic Growth: Evidence from Turkey*. Working Papers 2006/19, Bogazici University, Department of Economics.
- Arestis, P., Demetriades, P. O. and K. B. Luintel. (2001). Financial Development and Economic Growth: The Role of Stock Markets. *Journal of Money, Credit, and Banking*. 33 (1), 16-41.
- Bagehot, W. (1873). *A Description of Money Market with Currency Monopoly*. Homewood. IL Richard, 1962.
- Banerjee, A. and Newman, A. F. (1993). Occupational Choice and the Process of Development. *Journal of Political Economy*. 101 (2), 274-298.
- Banerjee, A. V., and Newman, A. F., (1993). Occupational Choice and the Process of Development, *Journal of Political Economy*, 101(2), 274-298.
- Beck T., Demirgüç-Kunt, A. and Levine, R. (2004). *Finance, Inequality and Poverty: Cross-Country Evidence*. World Bank Policy Research Working Paper, 3338, World Bank, Washington D.C.
- Beck. T, Demirgüç-Kunt. A and R. Levine., (2007), "Finance, Inequality and the Poor", *Journal of Economic Growth*, 12, pp: 27-49.
- Bencivenga, V. R., Smith, B. D and Rose, S. (1995). Transactions Costs, Technical Choice, and Endogenous Growth. *Journal of Economic Theory*. 67 (1), 153-81.
- Bensidoun, I., S. Jean, and A. Sztulman (2005), "International Trade and Income Distribution: Reconsidering the Evidence," CEPII Working Papers, 17, CEPII, Paris.
- Berger, A. N., I. Hassan, and Klapper, L. F. (2004). Further Evidence on the Link between Finance and Growth: An International Analysis of Community Banking and Economic Performance. *Journal of Financial Services Research*. 45 (3), 169-202.
- Bhagwati, J and T. N. Srinivasan., (2002), "Trade and Poverty in the Poor Countries", *The American Economic Review*, 92, pp: 180-183.
- Bittencourt, M. F. (2006). *Financial Development and Inequality: Brazil 1985-99*. Discussion Paper No.06/582. Department of Economics, University of Bristol, 8 Woodland Road, Bristol BS8 1TN.
- Burgess. R and R. Pande. (2005). Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment. *American Economic Review*. 178 (12), 780-795.
- Calderon, C. and Liu, L. (2003). The Direction of Causality between Financial Development and Economic Growth. *Journal of Development Economics*. 72 (1), 321-334.
- Calderón, C. and Servén, L. (2003). *Macroeconomic Dimensions of Infrastructure in Latin America*. The World Bank.
- Cameron, R. (1972). *Banking and Economic Development: Some Lessons of History*. New York: Oxford University Press.

- Canavire, B. Gustavo, J. and Rioja, F. (2008). *Financial Development and the Distribution of Income in Latin America and the Caribbean*. IMF Working Papers. IMF-WP/ 08/62.
- Chang, T. (2002). Financial Development and Economic Growth in Mainland China: a Note on Testing Demand-following or Supply-Leading Hypothesis. *Applied Economics Letters*. 9 (13), 869-873.
- Chaudhary, AR. (2007). Some Reflections on Poverty, Human Capital and Economic Empowerment of Women. Paper presented in International Conference on "Women's Empowerment and Social Transformation" held at Institute of Social and Cultural Studies, University of the Punjab, Lahore in collaboration with Oxford University Press, on April 23, 2007.
- Christopoulos, D. and Tsionas, D. (2004). Financial Development and Economic Growth: Evidence from Panel Unit Root and Cointegration Tests. *Journal of Development Economics*. 73 (1), 55-74.
- Clarke, G., Xu, L.C. and Zou, H. (2003). *Finance and Income Inequality: Test of Alternative Theories*. World Bank Policy Research Working Paper.
- Clarke, G., Xu, L.C. and Zou, H. (2007). Finance and Income Inequality: What Do the Data Tell Us? *Southern Economic Journal*. 70(4), 578-596.
- Cole and Park. (1983). *Financial Development of Korea 1945-1978*. Cambridge, MA: Harvard U. Press.
- Demetriades, P. and Hussein, K. (1996). Does Financial Development Cause Economic Growth? Time Series Evidence from 16 Countries? *Journal of Development Economics*. 51 (2), 387-411.
- Dollar, D. and Kraay, A. (2002). Growth is good for the Poor. *Journal of Economic Growth*. 7 (3), 195-225.
- Dollar, D. and Kraay, A. (2003). *Institutions, Trade, and Growth: Revisiting the Evidence*. Policy Research Working Paper Series 3004. The World Bank.
- Dollar, D. and Kraay, A. (2004). Trade, Growth, and Poverty. *Economic Journal*. 114 (493), 22-49.
- Edison, H. J., Levine, R., Riccia, L. and Sloka, T. (2002). International Financial Integration and Economic Growth. *Journal of International Money and Finance*. 21 (6), 794-776.
- Engle, R. F. and Granger, C. (1987). Cointegration and Error Correction Representation: Estimation and Testing. *Econometrica*. 55 (2), 251-276.
- Fry, M. J. (1995). *Money, Interest and Banking in Economic Development*, Johns Hopkins University.
- Fry, M. J. (1997). In Favor of Financial Liberalization. *The Economic Journal*. 107 (3-4), 754-770.
- Galor, O. and Zeira, J. (1993). Income Distribution and Macroeconomics. *Review of Economic Studies*. 60 (1), 35-52.
- Ghali, K. H. (1999). Financial Development and Economic Growth: The Tunisian experience. *Review of Development Economics*. 3(3), 310-322.
- Ghirmay, T. (2004). Financial Development and Economic Growth in Sub-Saharan African Countries: Evidence from Time Series Analysis. *African Development Review*. 16 (3), 415-432.
- Goldsmith, R. (1969). *Financial Structure and Development*. A Handbook, Yale University Press, 1969.
- Green, C. J., Kirkpatrick, C. and Murinde, V. (2003). *How Does Finance Contribute to the Development Process and Poverty Reduction?* The Birmingham Business School.
- Greenwood, J. and Jovanovic, B. (1990). Financial Development, Growth, and the Distribution of Income. *Journal of Political Economy*. 98 (5), 1076-1107.
- Gupta, L. K. (1984). *Finance and Economic Growth in Developing Countries*. London: Croom Helm.
- Güray, E. Şafaklı, O. and Tüzel, B. (2007). Financial Development and Economic Growth: Evidence from Northern Cyprus. *International Research Journal of Finance and economics*. 8 (1), 57-61.
- Harrison, A., Love, I. and McMillan, M. (2004). Global Capital Flows and Financing Constraints. *Journal of Development Economics*. 75 (1), 269-301.
- Hicks, J. (1969). *A Theory of Economic History*. Oxford: Clarendon Press.
- Hondroyannis, G., Sarantis, L. and Evangelia, P. (2004). *Financial Markets and Economic Growth in Greece*. No-17, Working Papers from Bank of Greece.
- Hussein, J. (2002). Financial Development and Poverty Reduction in Developing Countries. *International Journal of Finance and Economics*. 7 (2), 97-108.
- Hussein, J. and Kirkpatrick, C. (2005). Does Financial Development Contribute to Poverty Reduction. *Journal of Development Studies*. 41 (4), 636-656.
- Johansen, S. (1991). Estimation and Hypothesis Testing of Cointegrating Vectors in Gaussian Vector Autoregressive Models. *Econometrica*. 59 (6), 1551-1580.
- Johansen, S. (1992). Cointegration in Partial Systems and the Efficiency of Single-Equation Analysis. *Journal of Econometrics*. 52 (3), 389-402.
- Johansen, S. (1995). A Statistical Analysis of Cointegration for I(2) Variables. *Econometric Theory*. 11 (2), 25-59.
- Johansen, S. and Juselius, K. (1990). Maximum Likelihood Estimation and Inferences on Co-integration. *Oxford Bulletin of Economics and Statistics*. 52 (2), 169-210.
- Kappel, V., (2010), "The Effects of Financial Development on Income Inequality and Poverty", Working Paper 10/127, CER-ETH – Center of Economic Research at ETH Zurich.

- Khalid, A. M. (2005). Macroeconomic Effects of Financial Reforms in Pakistan. *Pakistan Development Review*, 45 (3), 961-974.
- Khan, M. S. and Senhadji, A. S. (2000). *Financial Development and Economic Growth: An Overview*. IMF Working Paper, WP/00/209.
- King, R. G. and Levine, R. (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics*. 108 (3), 717-737.
- Latifee, H. I. (2003). *Financing Microfinance Programs*, Presented at the International Workshop on Microfinance in Poverty Reduction and the Challenges for MFIs. Ho Chi Minh City, Vietnam, May 21-24.
- Lee, C-S., (2005), "Income Inequality, Democracy, and Public Sector Size", *American Sociological Review*, 70, pp: 158-181.
- Levine, R. (1994). Finance and development: Issues and Experience: Alberto Giovannini, ed (Cambridge university press, New York, 1993) pp. ix+436, \$49.50. *Journal of International Economics*. 37 (3-4), 273-277.
- Levine, R. (1996). *Financial Development and Economic Growth: Views and Agenda*. Policy Research Working Paper Series 1678, The World Bank.
- Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*. 35 (2), 688-726.
- Levine, R. (1998). The Legal Environment, Banks, and Long Run Economic Growth. *Journal of Money, Credit and Banking*. 30 (3), 596-620.
- Levine, R. (2008). Finance and Poor. *Manchester School*. 76 (1), 1-13.
- Levine, R., Loayza, N., and Beck. T. (2000). Financial Intermediation and Growth: Causality and Causes. *Journal of Monetary Economics*. 46 (1), 31-77.
- Levine, R., Loayza. N and Beck, T. (1999). *Financial Intermediation and Growth: Causality and Causes*. Policy Research Working Paper Series 2059, The World Bank.
- Liang, Z. (2006), "Financial Development and Income Inequality in Rural China 1991-2000," World Institute for Development Economic Research Paper, 2006/96.
- Lopez, H. (2003). *Macroeconomics and Inequality*. Paper presented at Research Workshop Macroeconomic Challenges in Low Income Countries October 23-24, The World Bank.
- Lopez, H. (2004). *Pro-poor-Pro-growth: Is there a Trade Off?* The World Bank, Policy Research Working Paper No. 3378.
- Love, I. (2003). Financial Development and Financing Constraint: International Evidence from the Structural Investment Model. *Review of Financial Studies*. 16 (3), 765-791.
- Masih, A. M. M. and Masih, R. (1997). On the Temporal Causal Relationship between Energy Consumption, Real Income, and Prices: Some New Evidence from Asian-Energy Dependent NICs Based on a Multivariate Cointegration/vector Error-Correction Approach. *Journal of Policy Modeling*. 19 (4), 417-440.
- Mauro, A., (2004). The Impact of Financial Structure on Poverty Reduction: A Study using Household Data from Peru, 1985-2000. Inter-American Development Bank.
- Mavrotas, G and Son, S. (2004). *Financial Sector Development and Growth: Re-examining the Nexus*. Paper presented at Vergata International Conference on Banking and Finance, Rome, December 2004.
- Motonishi, T. (2006). Why has Income Inequality in Thailand Increased? An Analysis using Surveys from 1975 to 1998. *Japan and the World Economy*. 18 (4), 464-487.
- Narayan, P. K. and Smyth, R. (2004). Temporal Causality and the Dynamics of Exports, Human Capital and Real Income in China. *International Journal of Applied Economics*. 1 (1), 24-45.
- Odedokun, M. O. (1989). Causalities between Financial Aggregates and Economic Activities in Nigeria: The Results from Granger's Test. *Savings and Development*. 23 (4), 101-111.
- Odhiambo, N. M. (2009). Finance-growth-poverty Nexus in South Africa: A Dynamic Causality Linkage. *The Journal of Socio-Economics*. 38 (2), 320-325.
- Osmani, S. R. (2005), "The Impact of Globalization on Poverty in Bangladesh" Working Paper No. 65, Policy Integration Department National Policy Group International Labour Office Geneva.
- Pagano, M. (1993). Financial Markets and Growth: An Overview. *European Economic Review*. 37 (2-3), 613-622.
- Pesaran, M. H., Shin, Y. and Smith, R. (1999). *An Autoregressive Distributed Lag Modeling Approach to Cointegration Analysis*. Chapter 11 in *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, Strom S (ed.). Cambridge University Press: Cambridge.
- Pesaran, M. H., Shin, Y. and Smith, R. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*. 16 (3), 289-326.
- Phillips, P. C. B. and Hansen, B. E. (1990). Statistical Inference in Instrumental Variables Regression with I(1) Processes. *Review of Economic Studies*. 57 (1), 99-125.
- Sala-i-Martin, X. (1997). *I Just Ran Four Million Regressions*. NBER Working Paper Series.
- Schumpeter, J. A. (1911). *The Theory of Economic Development*. Harvard University Press, Cambridge, MA.
- Scumpter, J. A. (1934). *Theory of Economic Development*. Cambridge, MA: Harvard U, Press.

- Shahbaz, M. (2009). A Reassessment of Finance-Growth Nexus for Pakistan: Under the Investigation of FMOLS and DOLS Techniques. *ICFAI Journal of Applied Economics*. 8 (1), 65-80.
- Shahbaz, M., Butt, S. M., and Aamir, N., (2007c), "Rural-Urban Income Inequality under Financial Development and Trade Openness in Pakistan: The Econometric Evidence", *The Pakistan Development Review*, 46, pp: 657-672.
- Shahbaz, M., Butt, SM and Aamir, N., (2007b), "Trade and Inequality Nexus in Pakistan: Under Investigation of Alternative Techniques", *European Journal of Economics, Finance and Administrative Sciences*, pp: 57-72.
- Shan, J. (2005). Does Financial Development 'Lead' Economic Growth? A Vector Auto-regression Appraisal. *Applied Economics*. 37 (12), 1353-1367.
- Shan, J. and Morris, A. (2002). Does Financial Development 'Lead' Economic Growth? *International Review of Applied Economics*. 16 (2), 153-168.
- Shaw, E. S. (1973). *Financial Deepening in Economic Development*. Oxford University Press, London and New York.
- Wachtel, P., Hasan, I. and Zhou, M. (2006). *Institutional Development, Financial Deepening and Economic Growth: Evidence from China*. BOFIT Discussion Paper No. 12/2006.
- Wahid, N. M. A and Shahbaz, M. (2010). Recent Determinants of Private Savings: The Case of Pakistan. Accepted for publication in *Canadian Journal of Development Studies*.
- Waqabaca, C. (2004). *Financial Development and Economic Growth in Fiji*. Economics Department, Reserve Bank of Fiji, WP 03.
- Wolde-Rufael, Y. (2009). Re-examining the Financial Development and Economic Growth Nexus in Kenya. *Economic Modeling*. 26 (6), 1140-1146.
- World Bank. (2001). *Finance for Growth: Policy Choices in a Volatile World*. Oxford University Press for the World Bank, New York.
- Wurgler, J. (2000). Financial Markets and the Allocation of Capital. *Journal of Financial Economics*. 58 (1-2), 187-214.
- Zhang, K. H., (2005). Does Financial Development Promote Economic Growth in East Asia? Economics Department, Illinois State University.