

# Assessing the influence of financial repression on Bangladesh's financial development



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**Abstract** We investigate how financial repression affects financial development of Bangladesh over the period 1980-2022. Employing VECM, we find that repression policies negatively affect financial development, meaning that controlling the financial sector counteracts financial progress. Following the results, we recommend some policies. To accelerate financial progress, policymakers need to rethink on these restrictive policy instruments. For emerging nations like Bangladesh, this paper offers the first empirical data on the connection between financial repression and financial development.

**Keywords:** financial repression, financial development, Bangladesh

## 1. Introduction

The complex relationship between financial repression and financial development has been a focal point of many papers that concentrated on developing countries. Understanding this relationship is key to formulate effective economic policies. Although repressive financial policies are undertaken to improve economic stability, they end up limiting financial access and hampering economic activities. Financial repression refers to the various controlling measures that the government imposes on the financial markets. Empirical evidence suggests that financial repression often leads to inefficiencies in financial markets and restricts economic progress (Roubini & Sala-i-Martin, 1992). Financial development is the expansion of financial markets and institutions. Economic growth depends on a well-functioning financial system. Such a system makes resource distribution more efficient, improves risk management and also encourages savings and investment. Levine (2005) identified the degree of financial intermediation, the variety of financial products offered, and the ease of capital mobilization and allocation as indicators of financial growth.

Financial repression is common in many developing countries. It includes policies that require high reserve, caps interest rate, directs credit programs, restricts market entry and controls capital accounts. These measures often end up distorting the financial market and stall economic growth. McKinnon (2010) and Shaw (1973) explained that these policies constrain financial development as they reduce incentives for savings and investment. A significant correlation between financial repression and economic growth was found by Rajan and Zingales (1998) and King and Levine (1993). Financial repression may offer the government a reliable base for funding and help combat inflation. However, they can also hamper financial innovation, discourage investment and diminish financial market efficiency. Roubini and Sala-i-Martin (1992) found a negative impact of financial repression on economic growth. On the other hand, Ang and McKibbin (2007) found that financial liberalization, unlike restrictive measures, promotes both economic and financial development.

Financial repression has historically played a significant role in shaping Bangladesh's financial development. The country has implemented a number of repressive financial policies that aimed to regulate credit allocation, control interest rates and maintain a banking system dominated by the state. Such policies were part of post-colonial era economic strategies, where state intervention was considered essential for economic stability and growth (McKinnon, 2010; Shaw, 1973). In the early years of Bangladesh's independence, it followed a state-led financial model. Nationalized banks played a dominant role in credit allocation at the time. The government imposed various policies like strict interest rate ceilings, high reserve requirements and direct credit controls. This was done to support priority sectors like agriculture and industrialization. These measures were aimed at ensuring economic stability. But, they resulted in credit misallocation and financial inefficiencies (Ahmed, 2013). They resulted in poor loan recovery rates, increased non-performing loans and inadequate financial intermediation (Sarkar & Hoque, 2007). Thus, the banking sector suffered.



Financial repression was widely implemented as a policy instrument to control inflation and manage economics after the second world war. However, most countries recognized the negative impact of financial repression on economic growth in the 1980s and 1990s (Ang & McKibbin, 2007). So, they pursued market-oriented reforms and shifted towards financial liberalization. A shift in financial policies also occurred in Bangladesh in the 1980s and 1990s. The country adopted financial liberalization as part of structural adjustment programs launched by the International Monetary Fund (IMF) and the World Bank. The government, in order to promote financial development, implemented reforms such as interest rate deregulation, privatization of state-owned banks, and elimination of credit rationing policies (Yousuf, 2024). However, elements of repression continued to exist in spite of these reforms. They were present in the form of high statutory liquidity requirements, restrictions on capital account and governmental control over banking operations.

Global crises like the Global Financial Crisis and the COVID-19 pandemic has paved the way for the reemergence of financial repression during this recent era. For example, Bangladesh introduced administrative interest rate ceilings to stabilize borrowing costs in 2020 (Hossin, 2020). This move is similar to repressive financial policies of the past. Although such policies provided economic relief in the short-term, they restricted the efficiency of the financial market and also reduced access to capital for small and medium-sized enterprises (SMEs) (Kamal, 2011). Given Bangladesh's notable economic growth over the past decade, sectors like SMEs and other informal sectors still need more financing.

It is against this historical backdrop that understanding the impact of financial repression on Bangladesh's financial development becomes vital for policymakers. Following this argument, seeking the answer to the question 'how repressive policies affect financial development' has been a key concern for researchers and policymakers. We, therefore, have been motivated by the need to evaluate the historical effects of financial restrictions on the financial industry of Bangladesh. We investigate the primary factors shaping financial development in Bangladesh through the examination of these financial repression mechanisms. This study aims to evaluate how financial repression has influenced financial growth in Bangladesh from 1980-2022. This study examines both the short-term and long-term effects of repressive financial policies using a Vector Error Correction Model (VECM). Several diagnostics tests are conducted to verify the robustness and reliability of the model.

The findings of this study are expected to reveal how financial repression may restrict growth and restrict access to capital for SMEs. It will also shed light on the unintended effects of financial repression, such as increased informality and decreased investment, on overall economic progress. Moreover, this study will contribute to the broader discourse on financial development in the emerging economies. It will offer insights for policymakers to strike a balance between financial stability and market efficiency.

However, we organize this paper in the following ways. A thorough analysis of the correlation between finance and economic growth, emphasizing the role of repressive policies based on theoretical and empirical literature, is given in Section 2. In Section 3, we propose a method and model along with the reasons behind selecting the method. Section 4 showcases the empirical data supporting financial repression's effect on financial development. The paper is finally concluded in Section 5, discussing the results and policy implications.

## 2. Review of the literature

The past literature related to financial repression has been categorized into two categories: the first part is related to the studies outside of the Bangladesh perspective, and the second part is related to the Bangladesh economy.

### 2.1. Empirical Studies on Other Economies

The effects of financial constraints, such as limitations on lending and deposit interest rates and reserve liquidity requirements, on the six emerging nations (Thailand, Greece, Egypt, India, Korea, Philippines, and Thailand) during the years 1955–1997 were evaluated by (Arestis et al., 2002). They discovered that financial development is significantly affected by the real interest rate in four of the six economies. The applied Error Correction Model (ECM) and Cointegration approaches in their study to uncover this relationship. However, in Korea, the coefficient is negative and insignificant.

Restrictions on the finances of various banking sectors affected the financial deepening in Tunisia from 1961 to 2000, as examined by HACHICHA (2005). The study employed the structural error correction model and found a significant negative relationship between financial development and financial repression, as indicated by the actual interest rates. The findings dispute the fact that flaws in the financial system are persistent.

The relationship between financial development and economic growth in Malaysia's small open economy was assessed using time series data from 1960 to 2001, with a particular emphasis on the finance growth relationship, as assessed by Ang and McKibbin (2007). They used a cointegration approach and an error correction model (ECM) to assess the long-term relationship between financial repression and financial development in Malaysia. Their findings suggest that financial liberalization promotes financial sector growth and financial depths supports economic growth.

A negative correlation between the ratio of currency outside domestic banks to nominal GDP and growth in less financially liberalized economies and a positive correlation between the ratio and growth in more financially liberalized nations

was found by Kamal (2011) for the years 1970 to 2002, there is. The sample was divided into three geographical regions: Africa, Latin America, and South-East Asia.

Ahmed (2013) investigated how financial openness affected the financial development and economic expansion of 21 Sub-Saharan African nations during 1981–2019. He combined the first difference and original level specification to use Generalized Method of Moments (GMM) and dynamic panel data analysis to address the issues of weak instruments. The study used the GMM estimator in dynamic panel data and found a relationship with income growth. It further discovered that financial liberalization has a positive impact on financial expansion and mobilization of resources in Sub-Saharan Africa if fundamental macroeconomic tools of fiscal imbalances, inflation and institutional quality are under control.

In the Iranian economy, financial repression had a significant impact on financial development between 1965 and 2006 Feridun and Nejad (2013). Financial development is positively affected by trade liberalization, economic growth and savings. However, study utilizing the ARDL and ECM methodologies shows that the composite financial repression index has an opposing effect on financial development. This means that a significant negative relationship exists between repressive policies and financial sector growth.

Khatun (2019) used Fully Modified Ordinary Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS) to investigate the relationships between financial service trade openness and financial development in BRICS economies. The study found that financial development was considerably boosted by financial service trade openness from 1990 to 2012.

The results of the fully modified ordinary least square and dynamic ordinary least square tests have guaranteed a noteworthy and affirmative influence on the long-term relationship. Specifically, a 1 percent increase in financial services trade is correlated with a 0.109 rise in private sector credit, which is a proxy for financial development.

Jafarov et al. (2019) examined market signals and incentives to examine how financial repression affects growth. They utilized the Gourinchas and Obstfeld's (2012) approach for 90 countries from 1973 to 2017. The approach is based on panel fixed effect regression estimation. They discovered that financial restrictions cause a 0.4–0.7 percentage point reduction in growth. Additionally, it reduces the likelihood of a debt crisis within a specific period, indirectly impacting growth.

Financial deepening significantly and favorably affects economic growth in Nigeria, particularly regarding bank-based financial depth Okafor et al. (2021). The study used the Johansen cointegration test and Granger causality model to explore the long-run relationship between financial expansion and economic growth. The findings suggest that in the event of economic disequilibrium, it will be corrected to equilibrium by 39%. Furthermore, the Granger causality model traces a feedback effect between the variables.

Umutlu et al. (2021) employed a structural fixed effects model for 27 emerging countries and found that trade openness and capital account openness had a favorable and significant impact on financial development from 1996 to 2016. On the other hand, there was no significant or permanent effect of stock-market openness on financial development.

In Ethiopia, Fisseha (2023) found that financial repression negatively and statistically significantly affects private investment. The study used the vector autoregressive (VAR) approach. Moreover, trade openness and inflationary pressure have a negative effect on private investment for the years 1980 to 2020.

## 2.2. Relevant Empirical Studies on Bangladesh Economy

Financial liberalization's effect on economic growth was examined by Sarkar and Hoque (2007) for the pre-reform (1974: Q1–1989: Q4) and post-reform (1990: Q1 2001: Q1) periods. They used the OLS method and found that post-reform financial intermediation efficiency positively impacted growth. However, bank credit as a proportion to GDP slightly negatively impacted growth in both periods.

How financial reform affected individual savings from 1973 to 1999 was explored by Chowdhury (2001). He utilized the Johansen cointegration approach and found that actual interest rates, level of income and GDP percentage of agriculture had a positive impact on the savings rate. The public savings rate and the dependency rate have a detrimental impact on private savings. The financial reform index negatively impacts private savings.

Lee and Islam (2011) examined how responsive the 192 listed non-financial firms' investments were to the availability of cash and stock between 1992 and 2002. Financial development and investment-cash stock sensitivity to the small firm are found to have an inverse correlation according to the results of Generalised Method of Moment (GMM) dynamic panel technique. This research revealed tighter financing limits and increased sensitivity to cash stock, which are indicative of unequal access to outside funding. Small businesses benefit more from financial development than do large companies, including improvements in financial and stock market characteristics.

Majumder and Anthon (2012) examined the connection between district-level economic growth and financial development between 1977 and 2000. The precise nature of the geographic effect is yet uncertain because spread effects or spatial heterogeneity under the spatial lag model could be to blame. The square of financial deepening and economic progress are negatively correlated. A district may be small, but as it expands—especially in areas with high levels of agricultural specialization—its proportion of farmland increases.

Hye and Islam (2012) developed the financial development index for the economy during the years 1987–1988, 1992–1999, 2002–2006, 2008–2009, 1986–1998, and 2006–2007, respectively, to investigate how the index and long-term economic

growth are related. The study used rolling window regression and the ARDL approach to cointegration. The findings show that financial development index and real interest rate had a negative impact on economic growth.

The relationship between financial development and economic growth using quarterly data from 1976 to 2012 was examined by Shahbaz et al. (2014) and included trade openness in the production function. The study found a positive relationship between financial development and economic growth according to the results of the combined Bayer-Hanck cointegration technique. However, capitalization has a negative impact. It has been determined that there exists a feedback loop between financial development and economic growth.

The relationship between interest rate reforms, financial development, and economic growth for the annual data set between 1980 and 2014 was investigated by Hossin (2020). The study employed a cointegration approach. Findings of the study suggest that deposit rate liberalization positively affected financial growth. Additionally, the study found a bi-directional causal relationship between deposit interest rates and economic growth. Moreover, it found a one-way causal relationship between the variables.

### 2.3. Research Gap

Based on the past literature, there are several limitations in the research on financial liberalization and financial repression across various studies. The conclusions of Arestis et al. (2002) were questioned due to their conflicting results since Korea demonstrated a negligible and negative correlation between financial development and actual interest rates. Hachicha (2005) may have limited the scope of her analysis by concentrating solely on Tunisia and ignoring other factors that impact the financial market. Ang and McKibbin's (2007) research on Malaysia might not apply well to other economies with alternative institutional structures. Ahmed (2013) made the unsupported assumption that macroeconomic variables like inflation and institutional quality were under control, which makes their findings less reliable. The research on Iran by Feridun and Nejad (2013) may need to be narrower, using models that might be unable to forecast results in changing circumstances. Khatun (2019) may have overlooked other factors, such as financial inclusion, by emphasizing private-sector lending as a stand-in for financial development. Jafarov et al. (2019) ignored indirect consequences such as debt crises in favor of concentrating on direct financial constraints, simplifying the intricacy of financial market dynamics. Umutlu et al. (2021) found no significant effect of stock market openness, possibly due to limited data or failure to account for emerging forms of financial development like digital banking. These limitations suggest that more robust methodologies and broader considerations are needed in further research. In this context, a few studies analyzed the impact of financial repression on economic growth. However, the effect of financial repression on financial development has yet to be well investigated. By examining the effect of financial repression on financial development, this study will fill a gap in the literature.

### 3. Data and Methodology

The analysis uses annual time series data for Bangladesh's economy for the period of 1980 to 2022. Data was collected from the World Bank's World Development Indicators (WDI) dataset, and the IMF's Financial Development Indicators dataset. When working with time series data, it is crucial to look at the basic characteristics of the data. According to Nelson and Plosser (1982), the majority of macroeconomic series exhibit non-stationary behavior. Regression testing on a non-stationary series may yield inaccurate findings. The Vector Error Correction Model (VECM) can effectively capture both short-run and long-run relationships. So, it is chosen to understand the relationship between financial repression and financial development. Financial and macroeconomic variables are often non-stationary and show tendencies toward long-term equilibrium. Therefore, a standard Vector Autoregressive (VAR) model would not be appropriate. The VECM, on the other hand, corrects disequilibrium and estimates of long-term causal relationships. Additionally, it incorporates short-run adjustments.

Both the Augmented Dickey-Fuller Dickey and Fuller (1979) and Phillips-Perron Phillips and Perron (1988) are used. The ADF test extends the standard Dickey-Fuller test as it incorporates the lagged difference terms in order to address any potential autocorrelation in the residuals. But, it assumes homoskedasticity and relies on a specific lag length selection. This may affect the power of the test and lead to incorrect interpretations if there are structural breaks or heteroskedasticity in the underlying data. On the other hand, the Phillips-Perron test provides non-parametric correction for serial correlation and heteroskedasticity in the residuals. It does not require any lag length selection for this. This makes it particularly useful for financial and macroeconomic data. This is because such data often experience volatility clustering and structural shifts. We mitigate the limitations that each of these approaches has by using both the tests. This ensures a more reliable evaluation of stationarity.

If we find that the variables are integrated of order one  $I(1)$ , we proceed with the Johansen Cointegration Test (Johansen, 1988, 1991). This test will help us determine if there exists a long-run equilibrium relationship among financial repression, financial development, and economic growth. If there is a presence of cointegration, it justifies the use of VECM instead of a standard VAR model. This study provides a thorough understanding of how financial repression influences financial market efficiency, investment, and overall economic progress in Bangladesh by integrating these econometric techniques.

The following model can be used to quantify the effects of financial repression on the economy.

$$FDI_t = f(FRI_t, LGDPPC_t, Real Int_t) \quad (1)$$

FRI stands Financial Repression Index, Real int<sub>t</sub> is the control real interest rate, GDPPC is GDP per capita and  $\varepsilon_t$  is the error term.

Following Ang and McKibbin (2007), we include the GDP Per Capita, Real Interest rate Financial Development Index, and Financial Repression index.

GDPPC: GDPPC data was collected from World Bank database WDI. It is measured in USD constant 2010. The expected sign is positive. That is, higher GDPPC will promote in higher Financial Development.

Real Interest rate: It is calculated as lending rate adjusted for the inflation rate. The data was collected from WDI. The expected sign is negative, a higher interest rate reduces financial development.

Financial Development Index: The dataset comprises nine indexes that provide an overview of the depth, accessibility, and efficiency of financial markets and institutions. An aggregate of these indices is used to create an overall financial development index. The data was collected from IMF.

Financial Repression Index: We use the index calculated by Yousuf (2024). The author formulates the FRI considering five variables Share of State-owned Banks in Total Loans, Statutory Liquidity Ratio, control of International Capital Movements, Real Deposit Rate, and Interest Rate restriction. The expected sign is negative. The relationship is estimated by the following regression model, where, the description of the variables are presented in the regression model are presented in the table 1.

$$FDI_t = \delta_0 + \delta_1 FRI_t + \delta_2 LGDPPC_t + \delta_3 Real Int_t + \varepsilon_t \quad (2)$$

Where,

**Table 1** Description of the variables.

| Variable | Definition                  | Source        |
|----------|-----------------------------|---------------|
| LGDPPC   | Log GDP per capita          | WDI           |
| FRI      | Financial Repression Index  | Yousuf (2024) |
| FDI      | Financial Development Index | IMF           |
| Real Int | Real Interest rate          | WDI           |

The cointegration test developed by Johansen in 1988 and updated in 1991 has become a widely used instrument in statistical analysis. This approach is partially attributed to the perception that it possesses greater statistical power compared to alternative univariate cointegration tests, and its subsequent variations. Johansen cointegration is derived from the Vector Autoregressive (VAR) model. The Johansen methodology, which is commonly used for variables that have an integrated order of 1, I(1), consists of multiple steps:

Step 1: Conduct a test on the variables to determine if they exhibit non-stationarity. This can be done using common unit-root tests, such as the ADF test Dickey and Fuller (1979).

Step 2: If variables are found I(1) in step one, then run a VAR model with the I(1) variables.

a) Determine the suitable lag duration for the VAR model.

b) Check the issues of serial correlation, heteroscedasticity, and non-normality.

Step 3: Conduct rank tests (To find the degree of cointegration between the variables, use two tests (the Maximum Eigenvalue test and the Trace test).

Before performing the rank test choose the appropriate deterministic trend assumption for cointegrating equation and VAR from the following options:

Step 4: Estimate the Vector Error Correction Model (VECM) using a preset number of r cointegration relations and apply imposed limitations. This will give you long-run relationship along with short-run dynamics.

For economic and financial data, VECM is especially helpful in determining and estimating long-term equilibrium relationship between variables. The inclusion of variables and the selection of lag time may have an impact on the outcome. Biased outcomes may arise from misspecification. To overcome the problem, the lag selection factors let us choose the lag length.

#### 4. Results

We employ time series data for the empirical analysis. To begin, we outline the descriptive statistics of the data. Table 2 displays the basic characteristics for each variable.

Before estimating the regression model, we must determine whether the data is stationary or not. The Augmented Dickey-Fuller and Phillips-Parron Tests are employed to assess the stationarity of the series.

The results of the unit root tests are shown in Table 3. According to the ADF test, every variable is integrated of order one I(1) and stationary at the first difference. All of the variables are stationary at first difference, according to the PP test, meaning that they belong to the first order of integration I(1).

Table 4 reports the result of the correlation matrix. Financial repression index and real interest rate are negatively correlation with financial development and the correlation is statistically significant. But the log GDPPC has positive significant correlation with financial development.

**Table 2** Descriptive statistics.

|                | LGDPPC | FRI    | FD    | Real int |
|----------------|--------|--------|-------|----------|
| Mean           | 2.868  | -0.336 | 0.188 | 4.776    |
| Maximum        | 3.251  | 0.281  | 0.281 | 13.741   |
| Minimum        | 2.628  | -1.650 | 0.128 | -13.642  |
| Std. Deviation | 0.191  | 1.073  | 0.044 | 4.952    |
| Observation    | 43     | 43     | 43    | 43       |

**Table 3** Stationary Test.

| VARIABLES | ADF Test           |                    |          | PP Test            |                    |          |
|-----------|--------------------|--------------------|----------|--------------------|--------------------|----------|
|           | I(0)<br>(Constant) | I(1)<br>(Constant) | DECISION | I(0)<br>(Constant) | I(1)<br>(Constant) | DECISION |
| LGDPPC    | -0.5708            | -7.6926***         | I(1)     | -0.5622            | -7.5752***         | I(1)     |
| FRI       | -2.5489            | -8.0250***         | I(1)     | -2.9339**          | -8.5535***         | I(1)     |
| FD        | -1.4915            | -5.4658***         | I(1)     | -1.4736            | -6.0553***         | I(1)     |
| Real Int  | -5.0203***         | -10.0615***        | I(1)     | -5.0203***         | -21.0302***        | I(1)     |

**Table 4** Correlation Analysis.

|           | FDI                 | FRI                 | Real Int.           | LGDPPC |
|-----------|---------------------|---------------------|---------------------|--------|
| FDI       | 1.0000              |                     |                     |        |
| FRI       | -0.6160<br>(0.000)  | 1.0000              |                     |        |
| Real Int. | -0.0236<br>(0.0080) | -0.3842<br>(0.0110) | 1.0000              |        |
| LGDPPC    | 0.8134<br>(0.0000)  | -0.7246<br>(0.0000) | -0.0758<br>(0.6288) | 1.0000 |

Table 5 displays the results of the Johansen cointegration test. The p-values of the trace statistic and max-eigenvalue suggest the presence of at least one cointegrating equation among the variables.

**Table 5** Johansen Cointegration.

| Number of Cointegrating Equation | Eigen value | Trace Statistic | P-Value | Max-Eigenvalue | P-value |
|----------------------------------|-------------|-----------------|---------|----------------|---------|
| None***                          | 0.6373      | 71.1793         | 0.001   | 41.5857        | 0.004   |
| At most 1                        | 0.3590      | 29.5936         | 0.0528  | 18.2316        | 0.1214  |
| At most 2                        | 0.2388      | 11.3620         | 0.1902  | 11.1918        | 0.1449  |
| At most 3                        | 0.0041      | 0.1702          | 0.6800  | 3.8415         | 0.6800  |

Estimates from the long-run model with robust standard errors are presented in Table 6. The findings indicate that financial repression has a negative impact on financial progress. Financial restraint, on average, decreases financial development by 0.05 percentage points. This result is consistent with the findings of the Ahmed (2013). Contrarily, one percent increase in GDPPC significantly promotes financial development by 0.32 percentage points, supporting the findings of the other studies, Kamal (2011). The coefficient of the real interest rate is -0.005 and it is statistically significant at a significance level of 1%. In other words, a decrease in the real interest rate hinders financial development, which aligns with conventional macroeconomic theories.

**Table 6** Long Run Results.

| Variables | Coefficient            |
|-----------|------------------------|
| FRI       | -0.0506***<br>(0.0094) |
| Real Int. | -0.0050***<br>(0.0015) |
| LGDPPC    | 0.3207***<br>(0.0420)  |
| constant  | 0.7276                 |

In order to assess the dependability of the outcome, we employ several diagnostic examinations, and the findings are presented in Table 7. The model's success in passing the LM test of serial correlation shows that autocorrelation has no effect



on it. It is not possible to reject the null hypothesis that there is no heteroskedasticity in the model since the results of the heteroskedasticity test are statistically insignificant.

**Table 7** Diagnostic Tests.

|                            | Test Statistic | P-value              |
|----------------------------|----------------|----------------------|
| Serial Correlation LM test | F-statistic    | 0.9283<br>(0.5416)   |
| Heteroskedasticity Test    | Chi-Square     | 200.9853<br>(0.1355) |

## 5. Discussion

The study finds the inverse impact of financial repression on the financial development of Bangladesh. This finding aligns with the work of McKinnon (2010) and Shaw (1973), who argued that repressive financial policies limit the efficiency of the financial system by reducing the incentives for savings and investments.

The high real interest rate has an adverse effect on financial development by discouraging private and public investment, which has a negative effect on small and medium-sized enterprises (SMEs). This is consistent with the literature, including Ang and McKibbin (2007) and Hachicha (2005), who found that financial liberalization, which reduces interest rate caps and other repressive measures, promotes financial depth and economic growth.

Another core outcome of the study is a positive relationship between GDP per capita income and financial development. If per capita GDP increased by 1 percent, then financial development enhanced by 0.32 percentage points. This supports the theoretical framework proposed by Levine (2005), who argues that economic growth leads to financial deepening by enhancing the demand for financial services and promoting more efficient resource allocation. The evidence of the proportional effect between economic growth and financial development has also been documented by Shahbaz et al. (2014) in their study on Bangladesh, which found that economic expansion is a key driver of the growth of the financial sector.

When compared to studies on other economies, the findings of this paper are consistent with those of Jafarov et al. (2019) and Feridun and Nejad (2013), who found an inverse impact of financial repression on financial development in various emerging economies, including sub-Saharan Africa and Iran. This policy is more effective when policymakers want to stabilize macroeconomic variables like inflation, the financial market, and the influx of capital.

Additionally, this study's use of the Johansen cointegration method supports the long-run equilibrium relationship between financial repression and financial development, as well as the negative effects of financial repression on the overall financial system. These findings are supported by previous work from Arestis et al. (2002) and Okafor et al. (2021), who demonstrated that financial liberalization, as opposed to repression, fosters financial deepening and contributes to sustainable economic growth.

Policymakers should adopt a phased liberalization approach to promote financial development while mitigating the negative impacts of repression. Interest rate ceilings has been removed gradually and flexible rate bands should be introduced to manage inflation and improve market efficiency. Underperforming state banks need to be privatized to reduce state control in banking. Additionally, regulatory oversight should be improved to increase financial discipline. Easing capital account restrictions gradually will attract foreign investment. It will also maintain safeguard against instability. Financial inclusion should be extended through microfinance, fintech and credit guarantee schemes. This will facilitate access to credit for SMEs and promote economic participation. Moreover, to improve banking sector liquidity and lending capacity, statutory liquidity and cash reserve ratios should be lowered in line with international standards. Improved risk monitoring and stress testing by Bangladesh Bank can strengthen regulatory frameworks. This will ensure financial stability during transition. Finally, promoting capital market development can reduce dependence on traditional banking. This can be done through corporate bond markets, improving stock market governance, and increasing financial literacy. Phased implementation of these reforms—interest rate flexibility and SME credit expansion in the short term, banking privatization and capital account liberalization in the medium term, and full financial liberalization and deep capital markets in the long term—will enable Bangladesh to transition towards an open and efficient financial system that supports sustainable economic growth and inclusion.

## 6. Conclusions

Bangladesh's financial development was affected by repressive policies between 1980 and 2022, which is examined in this research. The findings show that financial repression has a significant negative impact on financial development using the VECM. Specifically, financial repression often leads to a 0.05 percent decline in financial development. This shows that repressive financial policies have negative impacts on how effective the financial industry is and on its expansion. The findings also establish the positive impact of GDP per capita on financial development. This result is consistent with the existing literature highlighting the significant role of economic expansion in developing a more sophisticated and resilient banking industry.

The overall outcomes of this study may help the policymakers of Bangladesh and other developing nations with similar banking systems. Firstly, the adverse effects of financial repression on financial development suggest calls for the re-evaluation of repressive financial policies and adjustment of these policies. A more favorable environment for financial development can be created by cutting back on these policies. This will result in increased efficiency and growth in the financial industry. Secondly, the importance of implementing comprehensive economic growth strategies is highlighted by the relationship between GDPPC and financial development.

However, the policymakers need to turn their attention to policies that induce economic growth. Such policies may include allocating resources towards infrastructure development, improving education and healthcare quality, and developing a favorable business environment. These initiatives have the potential to stimulate financial development by raising income levels and boosting the demand for financial services. Thus, considering the negative impact of high accurate interest rates on financial development, it may be sensible to maintain moderate interest rates. Policymakers should work towards controlling inflation and keeping interest rates at levels that encourage investment and growth. This could mean implementing sophisticated monetary policies that will take into account the country's economic background and stage of development. The present analysis concludes that financial repression has a significant negative impact on Bangladesh's financial development. It also focuses on the significance of economic growth and moderate interest rates in building a strong financial sector. Policymakers can facilitate financial development by relaxing repressive regulations and emphasizing greater economic growth. This will ultimately lead to long-term economic growth and development. Specifically, policymakers can allow the market to determine the interest and exchange rates. Additionally, state-owned banks should be privatized for the efficient functioning of the financial system. Moreover, based on priority, policymakers can rationalize the convertibility of capital accounts.

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### Ethical considerations

This research is based on secondary data and data were collected from the World Development Indicators (WDI) dataset, and the IMF's Financial Development Indicators dataset. As there are no human participations were involved or any kinds of clinical trials in this research; therefore, to follow any ethical guideline or ethical approval were not required for this study.

### Conflict of Interest

The authors declare that they have no known competing financial interests or personal conflicts that could have appeared to influence the work reported in this paper.

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