THE RELATIONSHIP OF INFLATION AND GDP GROWTH RATE AND FIXED DEPOSIT INTEREST RATE IN NEPAL AN ANALYTICAL STUDY

Ashutosh Sharma Sapkota
PhD Scholar
School of Business, Management and Commerce,
Singhania University, Rajasthan, India,
Email: ashutosh.sapkota@gmail.com

Sakshi Soneja
School of Business, Management and Commerce,
Singhania University, Rajasthan, India,
Email: sakshi@singhaniauniversity.ac.in

Abstract

The impact of inflation and GDP on fixed deposit rates in Nepal is a critical area of study given its implications for financial stability and economic growth. Due to regulatory guidelines, banks are publishing different interest rates for individuals and institutions. Institutional deposits form major part of fixed deposit in Nepal and is highly skewed towards one year term. Historically, inflation affects deposit rates by eroding the real returns that depositors receive, thereby requiring higher rates to maintain depositor interest. On the other hand, GDP growth can affect these rates by altering the economic environment in which banks operate. A growing GDP generally promotes increased economic activity and investment opportunities, potentially resulting in changes to the demand for deposits and the rates offered. This research explores how these macroeconomic factors influence the fixed deposit interest rates, particularly fixed deposit rates of one year's tenor by examining 10 year quarterly historical data and applying suitable econometric models. The study indicates that unlike in other developing countries, GDP and inflation in Nepal has no statistically significant impact on 1-year fixed deposit rates. Policy makers must look for other factors and explore other tools for effective transmission of monetary policies to stabilize the fixed deposit rates. The banks in Nepal should explore other instruments of different tenor and nature for reducing the dependency on fixed deposits as sources of funds as better strategy. Similarly, depositors should be able to make better investment decisions to real interest rates to negate the inflation impact.

Keywords: *GDP growth rate, Fixed deposit interest rates, Inflation rates, Macroeconomic factors, Monetary policy, Liquidity, Institutional deposits.*

Introduction

Background of Study

Fixed deposits (FDs) represent one of the most fundamental and secure investment avenues offered by banks, both for individual savers and institutional investors. In the context of banking, the fixed deposit rate plays a pivotal role in attracting funds, maintaining liquidity, and ensuring

the stability of the financial system. According to Mishkin and Eakins (2018), the interest rate offered on FDs is a primary determinant in mobilizing household savings into the formal banking system. A competitive FD rate encourages individuals to park idle funds in banks, thus increasing the deposit base, which banks can then use for lending and investment purposes. Banks rely heavily on fixed deposits for stable and predictable funding. Unlike demand deposits, which can be withdrawn at any time, fixed deposits are locked in for the agreed term, giving banks greater control over liquidity management (Rose & Hudgins, 2013). This stability allows banks to plan long-term lending activities, including loans to businesses, housing finance, and infrastructure projects. FD rates indirectly affect broader economic stability. Stable and attractive rates encourage savings behavior, reduce cash hoarding, and channel funds into productive investments through the banking system. Although fixed deposit returns may not always outpace inflation, they offer a secure return compared to more volatile investments for savers in risk-averse categories, such as retirees (Fabozzi & Modigliani, 2009).

Inflation and deposit interest rates are closely interlinked in monetary economics, as inflation directly influences the real return on savings and banks' pricing of deposits. In line with the above, in high-inflation environments, banks are theoretically incentivized to raise nominal deposit rates to preserve savers' purchasing power and prevent the erosion of real returns, thereby sustaining deposit mobilization (Jhingan, 2020). For instance, Rao and Singh (2011) find that Indian commercial banks adjust deposit rates gradually to inflationary changes, reflecting competitive and operational constraints. Countries where inflation rates are volatile, fixed deposit interest rates also tend to shows increased volatility, as the higher inflation rates typically leads to higher interest rates. Conversely, prolonged periods of low inflation can lead to subdued deposit rates, potentially reducing household saving incentives and altering the deposit mobilization capacity of banks (Dornbusch et al., 2018).

GDP growth rate measures economic performance and indicates the overall expansion or contraction of a country's economy and serves as a primary indicator of a nation's economic performance, reflecting changes in the value of goods and services produced over time. During periods of robust GDP growth, businesses and households generate higher savings, which can be mobilized into fixed deposits, strengthening the banking sector's capacity to lend (Rose & Hudgins, 2013). Conversely, low GDP growth may constrain savings, reducing FD inflows. FD rates also influence investment behavior—higher rates incentivize saving over consumption, while lower rates may encourage spending and business expansion (Mishkin & Eakins, 2018). Thus, a balanced alignment between GDP growth and FD rates ensures financial stability, fosters investor confidence, and promotes long-term economic development.

The relationship between the inflation rate and the fixed deposit rates, in Nepal's context, has been a subject of limited research. Previous studies shows that the relationship between inflation and deposit interest rates in Nepal is a critical element of monetary policy, savings behavior, and banking sector stability. Studies such as Bhattarai (2019) highlight that during periods of high inflation—such as the food price surge in 2008 and liquidity shortages in 2021–22—banks offered higher fixed deposit rates to attract savings and maintain the credit. Conversely, in low-

inflation periods, deposit rates tend to stagnate or decline, reflecting reduced urgency for banks to compete for savings and the influence of expansionary monetary policy. Sustained negative real deposit rates risk discouraging formal savings, pushing households toward non-bank financial instruments or physical assets like gold and real estate, thereby reducing the resources available for productive investment through the banking system (Dahal, 2015).

Fixed deposits (FDs) remain a significant component of Nepal's banking sector liabilities, providing a stable source of long-term funding for commercial banks and development banks. In recent years, institutional deposits—funds placed by corporate entities, cooperatives, insurance companies, government agencies, and NGOs—have grown substantially within Nepal's banking sector.

FDs typically account for about 40% of total deposits in the commercial banking system, with the proportion rising during periods of high interest rates (NRB, 2023). Institutional deposits now account for over 50% of total fixed deposits in some commercial banks, compared to significantly lower shares a decade ago. The trend intensified during liquidity shortages in FY 2021/22, when banks competed aggressively for large-volume deposits, often offering preferential, negotiated interest rates to institutions. As per NRB guidelines, bank's cannot open fixed deposit of tenor of less than six months for the institutional depositors and as on mid-Dec 2024, 1 year FD constituted 37% of total fixed deposits. One-year FDs have traditionally dominated among the different tenors of fixed deposits.

For the purpose of measuring the FD rates, out of the available date, the data on fixed deposit has been collected for 6–12-month tenor (considered as 1 year). The sample data of fixed deposit interest rate for one year tenor has been collected based on the interest rate published by Nepal Rastra Bank in Nepal.

In view of gap in existing literature, this paper aims to fill the same by offering an in-depth analysis on whether inflation and GDP growth rate specifically affect the fixed deposit interest rate, especially short-term fixed deposit rate i.e. 1-year fixed deposit analysis. This study relies on historical data of past 10 years for analysis of the trends and finding correlations between two macroeconomic factors (inflation and GDP growth rate) and 1-year term deposit interest rate.

By examining these dynamics, this study will offer valuable insights for depositors, primarily institutional depositors who tend to make informed decisions on investments, seeking to have the right balance of fixed deposit of their funds and policymakers with actionable recommendations aiming to foster a more effective monetary policy. This study may also help in understanding the influence of inflation and GDP growth rate on fixed deposit rates with broader implications for emerging market economies.

Research Questions

Analyzing inflation, GDP growth rates, and how they influence fixed deposit rates brings up numerous critical questions that must be explored to fully comprehend economic performance. To investigate this, following research questions have been devised:

- How does the GDP growth rate influence fixed deposit rate in Nepal?
- How does the inflation rate influence the fixed deposit rate in Nepal?
- What is the combined effect of inflation and GDP growth rate on the fixed deposit rate?

Objectives of the Study

The primary goal of this study is to understand how macroeconomic factors, specifically inflation and GDP growth rate, influence FD interest rates Nepal's stock market performance. The specific objectives of the study are:

- To analyze the effect of GDP growth rate on fixed deposit rate.
- To explore the relationship between inflation and fixed deposit rate
- To evaluate the impact of GDP growth rate and inflation, combinedly, on the fixed deposit rate.

Significations of the Study

This study shall be important for policymakers, depositors, investors, and financial analysts, and other various stakeholders as it offers important perspectives on the connection between inflation, GDP growth, and fixed deposit rates in Nepal. Grasping these relationships is crucial for making well-informed choices that can improve economic stability and investment yields.

- For depositors: This study offers information to depositors primarily institutional about how macroeconomic factors like GDP growth and inflation affect fixed deposit rate movements. Such investors can modify their portfolios to better reflect economic cycles by knowing how these variables correlate with one another.
- For policymakers: Nepal Rastra Bank, in particular as a policy maker, has the ability to create and carry out policies that support a stable macroeconomic environment. For example, the study could help develop fiscal policies that boost GDP growth without escalating inflationary pressures or monetary policies that successfully regulate inflation, allowing them to take preventative action.
- For Financial Institutions: This study shall help banks to understand the impact of macroeconomic variables on FD rates so that they strategies resources mobilization effectively to protect their credit customers from high volatility of credit interest rate.
- For Financial Analysts: This research offers analysts concrete evidence regarding how various macroeconomic elements affect fixed deposit rates for institutional depositors, aiding them in providing more insightful advice to clients and stakeholders. Additionally, this study enhances the existing literature on emerging market analysis by presenting a model that can be utilized in similar economies.

Limitations of the Study

While this study provides valuable insights into the impact of inflation and GDP growth on FD interest rate, it is subject to several limitations that must be acknowledged. These limitations may affect the generalizability and robustness of the findings.

- This research limited to the impact of two macroeconomics factors i.e. GDP rate and inflation rate on the fixed deposit rate in Nepal and other macroeconomic factors are not considered in this research
- Other events such as natural disasters, economic conditions of neighboring countries specially India, political events, currency exchange rates, liquidity, government policies are not considered in this study.
- This study is based on secondary data of 10 fiscal years i.e. from 2071/72 B.S. (2014-15 AD.) to 2081/82 (2024-25 A.D.), that could contain specific biases or inaccuracies present in the data sources.
- The COVID 19 pandemic led to extraordinary impacts on the Nepalese as well as global economy including changes in GDP growth rate which is challenging to cover within the scope of this study.

Review of Literature

The relationship between macroeconomic factors like inflation, GDP growth, and interest rates has been studied across different economies. However, the unique characteristics of emerging markets, such as Nepal, necessitate a focused exploration of these links. The review that follows identifies important studies that are pertinent to the ongoing investigation and offers a basis for comprehending how GDP growth and inflation affect Nepal's fixed deposit rate.

The conventional relationship between inflation and deposit interest rates is that the interest rates move in tandem with expected inflation. In economic theory, the Fisher equation explains the relationship between interest rates and inflation.

The basic Fisher equation is: $r \approx i - \pi$

where r is real interest rate, i is nominal interest rate and π is inflation rate.,

The Fischer effect explains that nominal deposit rates are expected to adjust to anticipated inflation, ensuring that real interest rates remain relatively stable over time (Mishkin, 2019; Dornbusch, Fischer, & Startz, 2018).

In line with the above, in high-inflation environments, banks are theoretically incentivized to raise nominal deposit rates to preserve savers' purchasing power and prevent the erosion of real returns, thereby sustaining deposit mobilization (Jhingan, 2020).

However, empirical studies in emerging economies, including India and Nepal, suggest that while inflation exerts upward pressure on nominal rates, the pass-through is often partial due to market imperfections, regulatory controls, and liquidity conditions (Maskay & Pandit, 2010).

Nepal's inflation dynamics, largely shaped by domestic supply constraints and the exchange rate peg with the Indian rupee, also influence deposit rate behavior. Since inflation in Nepal is often imported from India through price transmission mechanisms (NRB, 2023), deposit rates tend to follow broader South Asian monetary trends but remain constrained by the Nepal Rastra Bank's interest rate corridor policy.

A study on relationship between 3- month and 10-year benchmark rates and nominal GDP growth over half a century in four of the five largest economies by K.-S. Lee, R.A. Werner (2018) found that interest rates follow GDP growth and are consistently positively correlated with growth in developed countries. Another study on relationship between economic growth, inflation and savings rate in Asia by V. Chaturvedi, B. Kumar, Dholakia (2008) found that only inflation positive effect on savings rate in Nepal, India, Bangladesh and Srilanka. In periods of high inflation, Indian banks typically raise deposit rates to safeguard savers' real returns, reflecting a conventional positive relationship between inflation and interest rates (Patra & Kapur, 2012). Similarly, in Bangladesh and Sri Lanka, studies suggest a moderate but positive responsiveness of deposit rates to inflation and output growth, though regulatory oversight still tempers the adjustment process (Rahman, 2017).

In Nepal's context, maintaining competitive FD rates is vital for channeling household savings into productive sectors, supporting capital formation, and sustaining growth momentum (Shrestha, 2014). Particularly in developing economies like Nepal, fixed deposits act as a bridge between informal savings practices and formal financial intermediation (Shrestha, 2014). In Nepal, sustained GDP growth indicates rising income levels, increased consumption, and greater investment opportunities (Todaro & Smith, 2020). Fixed deposit (FD) rates, offered by banks, are closely tied to economic conditions and the growth cycle. Gautam (2016) notes that in Nepal, GDP's influence on FD rates is indirect, primarily through its effect on credit demand and liquidity, rather than a direct one-to-one relationship. This dynamic suggests that while GDP growth provides a macro backdrop for interest rate movements, short-term FD pricing in Nepal is more responsive to liquidity pressures and regulatory compliance than to growth alone

The FD rate pattern in Nepal is cyclical, often influenced more by liquidity conditions and credit demand than by inflation alone. For example, in FY 2021/22, intense competition for deposits pushed FD rates above **12%**, compared to the average 6–8% range in low-liquidity periods (Kathmandu Post, 2022). NRB's introduction of an **interest rate corridor** and stricter credit-to-deposit (CD) ratio rules has indirectly shaped FD offerings, with banks adjusting rates to comply with regulatory liquidity requirements.

Saunders & Cornett (2019) explains how institutional investors manage deposits and investment decisions with a focus on risk-return balance. Retail investors, by contrast, tend to prefer FDs for their perceived safety, especially when stock market volatility or real estate slowdowns reduce alternative investment appeal (Lai, Yiyou. (2025).

The past literature has indicated that both inflation and GDP growth are positively correlated to the deposit interest rates.

However, not much is known about impact of GDP and Inflation on fixed deposit rates in Nepal.

Materials and Methods

The techniques and resources utilized in the study, outlining the data origins, analytical tools, and methods used to evaluate the connection between inflation, GDP growth rate, and the 1 Year FD Rate is represented by weighted average fixed deposit rate of 6-12 months.

Data Sources

The study is based on public secondary data from 4th quarter of 2014-15 till 3rd quarter of 2024-25 that is 10 years.

- Quarterly weighted average fixed deposit interest rate for 6-12 months period is sourced from Nepal Rastra Bank which is also published on its website.
- Quarterly Inflation data has been obtained Nepal Rastra Bank which is also available on its website.

Quarterly GDP data is based on Year-on-Year basis and is obtained from data published by National Statistics Office, Government of Nepal for GDP published for third quarter (2025). *https://nsonepal.gov.np/content/13388/date-published-third-of-third-quarterly--published/*

In Nepal, the fiscal year completes at Ashadh-end of Bikram Samvat calendar which is and Mid-July of Gregorian calendar. The quarter-ends in Nepal are Ashwin-end, Poush-end, Chaitra-end and Ashadh-end of Bikram Samvat calendar which falls around Mid-October, Mid-January, Mid-April, and Mid-July, respectively of Gregorian calendar)

Research Design

In order to investigate the connections between macroeconomic variables (inflation and GDP growth rate) and fixed deposit interest rate for the period of 10 years with quarterly periodicity.The study uses an empiricalresearch methodology that blends descriptive and correlational methodologies.

Sampling Strategy

Purposive sampling strategy has been undertaken for this study to select data for the analysis with n=40 from 4th quarter of FY 2014-15 till 3rd quarter of 2024-25. Quarter is represented by Q.

Analytical Tools and Techniques

The research uses a combination of statistical analysis tools and econometric models for data investigation, such as:

a. Descriptive Statistics: Descriptive statistics including averages, standard deviations, coefficients of variation, and trends are computed to encapsulate the information regarding inflation rates, GDP growth, and fixed deposit rates.

b. Correlation Analysis: This study has used Pearson's correlation coefficient for measuring the strength and direction of the relationship between inflation, GDP growth, and Fixed deposit rate. Performed at a 5% significance level of ($p < 0.05$), and the results are analyzed to determine the strength and direction of the relationships. The correlation analysis supports to find out whether there is a negative or positive correlation between the macroeconomic factors considered and fixed deposit interest rates.

c. Multiple Regression Analysis: The research has used multiple regression analysis to assess the combined effect of the GDP growth and the inflation on the fixed deposit rate. The

regression model evaluates how changes in inflation and GDP growth rates influence fixed deposit interest rates.

a. Software Tools: Considering the size of data used in this study, MS Excel is used to conduct the analysis. This is one of the common software tools used for econometric analysis. MS Excel tool has ability to efficiently and accurately perform the correlation and the regression analysis.

Research Model

With regard to this study, A multiple regression model is used to study the impact of the GDP rate and inflation rate on the FD interest rate where Fischer formula has been used as i.e.

Fixed Deposit Rate = β0+ β1· Inflation + β2· GDP Growth+ ei. Where,

β0 = It is the intercept.

β1 and β2=Beta are regression coefficients for inflation and GDP growth, respectively.

The *ei.* is the random error term.

Variables

The Fixed deposit rate is the dependent variable and two macroeconomic variables i.e. inflation rate and GDP growth rate are the independent variables.

1. **Results and Discussion**

The results of the research are analyzed in relation to the study's goals as follows:

Table 1

Mean, Standard Deviation and Coefficient of Variation

Fiscal Year (BS)	Fiscal Year (AD)	Quarter	FD Rate 6-12 Month	GDP Rate	Inflation Rate
2071-72	**2014-15**	**Q4**	6.47	-2.7	7.6
2072-73	**2015-16**	**Q1**	6.36	-4.7	8.2
		Q2	6.05	-6.1	12.1
		Q3	5.50	3.7	9.7
		Q4	5.76	7.0	10.4
2073-74	**2016-17**	**Q1**	5.87	12.1	6.7
		Q2	6.91	13.4	3.2
		Q3	8.85	4.9	3.8
		Q4	10.39	4.8	2.7
2074-75	**2017-18**	**Q1**	10.75	9.2	3.1
		Q2	10.55	6.2	4.0
		Q3	10.69	7.1	5.3
		Q4	9.92	7.3	4.6

Fiscal Year (BS)	Fiscal Year (AD)	Quarter	FD Rate 6-12 Month	GDP Rate	Inflation Rate
2075-76	2018-19	Q1	10.34	7.2	4.7
		Q2	10.25	3.2	4.6
		Q3	10.04	1.8	4.4
		Q4	9.83	0.3	6.0
2076-77	2019-20	Q1	9.61	3.5	6.21
		Q2	9.63	7.0	6.82
		Q3	9.63	4.7	6.74
		Q4	8.96	-10.6	4.78
2077-78	2020-21	Q1	8.18	1.9	3.79
		Q2	7.75	-0.7	3.56
		Q3	7.38	6.2	3.10
		Q4	7.34	10.6	4.19
2078-79	2021-22	Q1	7.73	3.8	4.24
		Q2	8.72	6.0	5.65
		Q3	9.56	1.9	7.28
		Q4	10.10	9.3	8.08
2079-80	2022-23	Q1	10.54	4.7	8.50
		Q2	11.06	-1.0	7.26
		Q3	10.94	2.6	7.76
		Q4	10.18	3.2	7.44
2080-81	2023-24	Q1	10.23	2.8	7.50
		Q2	9.04	4.7	5.26
		Q3	8.08	2.2	4.61
		Q4	7.07	3.6	3.57
2081-82	2024-25	Q1	6.21	3.7	4.82
		Q2	5.31	4.4	5.41
		Q3	4.68	4.8	3.39
	Mean		**8.56**	**3.85**	**5.78**
	SD		**1.85**	**4.58**	**2.17**
	CV		**0.22**	**1.19**	**0.38**

Note: Table 1 provides data on the FD Rate, GDP growth rate, and inflation for the period of 10 years, along with statistical metrics. The detailed interpretation is as below.

GDP Growth Rate

Trend Analysis:

- The GDP growth rate shows significant fluctuations, showing large range from a high of 13.4% in Q2 of 2016-17 to a low of -10.6% in Q4 of 2019-20 which is lockdown period due to COVID -19.

- Due to economic challenges caused due to natural disaster of earthquake during FY 2014-15 & 2015-16 and FY 2021-22 due to COVID reflects low growth period.
- High growth periods 2016-18 were recovery period post-earthquake in Nepal.

Statistical Metrics:

- Mean: The average GDP growth rate is 3.85%, suggesting moderate economic performance during the period.
- SD: 4.85 showing significant fluctuations indicates high volatility in GDP growth.
- CV of 1.19 signifies very high relative variability in GDP growth rate, reflecting Nepal's vulnerability to external and internal shocks.

Inflation Rate

Trend Analysis:

- Inflation rate during the study period is also volatile, ranging from a high of 12.1% in Q2 of 2015-16 to a low of 2.7% in Q4 of 2016-17.
- High inflation periods were during 2015-16 and 2021 to 2023 which can be attributed to external shocks such as natural calamity and COVID.
- Lower inflation is noted in 2018-17 as well as during 2024-25 possibly due to effective policies or reduced demand.

Statistical Metrics:

- Mean: The average inflation rate is 5.78%, indicating a moderate level of inflation during the period.
- SD: 2.17, shows lower variability of inflation compared to GDP growth.
- CV: 0.38, suggesting relatively stable inflation over the years.

Fixed Deposit Interest Rates (For 6-12 months period)

Trend Analysis:

- Weighted average fixed deposit interest rates for 6-12 months during the study show high volatility ranging from a high of 10.94% in 2022-23 Q2 and low of 4.68% in recent period.
- High inflation periods were during 2015-16 and 2021 to 2023 which can be attributed to external shocks such as natural calamity and COVID.
- Lower inflation is noted in 2018-17 as well as during 2024-25 possibly due to effective policies or reduced demand.

Statistical Metrics:

- Mean: The weighted average fixed deposit for 6-12 months for the study period is rate is 8.56%. However, the rates have tapered below 5% in recent period.
- SD: Standard deviation of 1.85% shows relatively lower variability.
- CV of 0.22 suggests stable fixed deposit rate over the years.

Relationships

Table 2

Correlation Matrix

	FD rate 6-12 M	GDP Growth	Inflation
FD rate 6-12 M	1		
GDP Growth	0.051139	1	
Inflation	-0.127051	-0.287472	1

Table 2 is the correlation matrix. This quantifies the relationships between the GDP Growth Rate, Inflation Rate, and Weighted average FD Rates.

1. F D Rate and GDP Growth Rate: The correlation coefficient is 0.0511. This indicates very low positive relationship. This level of correlation indicates that when GDP growth rate increases, FD rates also slightly increase, and vice versa
2. FD Rate and Inflation Rate: The correlation coefficient of -0.1271 indicates low negative relationship. This indicates that lower inflation rate is usually linked with higher FD, and vice versa
3. Inflation Rate and GDP growth Rate: The correlation coefficient of -0.2874 indicates low negative relationship. This indicates that when GDP growth rate increases, inflation goes down but has weak relationship.

Table 3

Regression Statistics

Regression Statistics	
Multiple R	0.127964
R Square	0.016374
Adjusted R Square	-0.036794
Standard Error	1.911635
Observations	40

- Multiple R 0.128 advocates that inflation and GDP growth have almost no explanatory power over FD rates. Inflation and GDP growth do not strongly predict FD rates.
- Other factors such as Nepal Rastra Bank's monetary policies, liquidity situation, market competition, demand for credit, global interest trends, etc.) might be far more influential.
- R^2 value of 0.0164 means only about 1.6% of the variation in FD rates is explained by Inflation and GDP growth together
- A negative Adjusted R^2 of -0.037 means the model is performing worse than a simple mean (no predictors). This strongly suggests that Inflation and GDP, in the data set of 10 years, do not significantly explain FD rate movements.

- The standard error of 1.911 represents the typical distance between the actual FD rates and the predicted FD rates. As the average FD rates are 8.56%, then an error of 1.91 can be considered relatively large, showing weak predictive accuracy.

Table 4

ANOVA

	Df	SS	MS	F	Significance F
Regression	2	2.2509	1.1255	0.3080	0.7368
Residual	37	135.2110	3.6544		
Total	39	137.4619			

- Regression SS (Sum of Squares) of 2.2509 means the variation in FD rates explained jointly by the GDP and inflation. The MS (Mean Square) of 1.1255 shows average variation explained by each of the two independent variables.
- 2. Residual SS of 135.2110 indicates variation in FD rates not explained by Inflation and GDP. The MS (Mean Square) of 3.6544 shows average variation unexplained by each independent variable.
- Total SS value is 137.4619 for total variation in FD rates (explained + unexplained).
- Most variation in FD rates (135.211 out of 137.462 ≈ 98.4%) remains unexplained by these two variables. Inflation and GDP growth do not explain FD rate movements in Nepal
- F-statistic compares the explained variation to the unexplained variation. Here a low value of 0.308 means the model does not significantly improve prediction of FD rates compared to just using the mean.
- Significance F (p-value) is 0.7368. Since p values is much larger than 0.05 so the Inflation and GDP, together, are not statistically significant predictors of FD rates.
- FD rates may be driven by Nepal Rastra Bank policies, liquidity in the financial system, demand for credit, and external shocks, not just macro variables like inflation and GDP.

Table 5

Regression Coefficient Table

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	9.1420	0.9991	9.1504	0.0000	7.1177	11.1663
GDP Growth	0.0064	0.0689	0.0936	0.9259	-0.1331	0.1460
Inflation	-0.1048	0.1456	-0.7194	0.4764	-0.3998	0.1903

- Intercept is 9.1420 and this represents the expected FD rate when both independent variables are zero. So, When GDP growth and Inflation are zero, the model predicts FD rates to be 9.14%.

- GDP Growth Coefficient = 0.0064 indicates that for every 1 percentage point increase in GDP growth, FD rates increase by 0.006 percentage which is almost negligible. Furthermore, P-value 0.926 is much greater than 0.05 so statistically non-significant. This establishes that GDP growth has no meaningful impact on FD rates
- Inflation Coefficient = −0.105 indicates that for every 1 percentage point increase in Inflation, FD rates decrease by 0.105 percentage which suggest a slight negative relationship. Furthermore, P-value 0.476 is much greater than 0.05 so statistically non-significant. This establishes that inflation does not significantly determine FD rates.

Conclusion

This research paper with quarterly dataset of 10 years can be concluded as There is high level of volatility in GDP growth rate of Nepal, which reflects it vulnerability to internal and external shocks. Inflation is relatively stable compared to GDP but still volatile. The regression analysis of quarterly data over ten years reveals a weak relationship between inflation, GDP growth rate, and fixed deposit (FD) rates in Nepal.

The model produced an R^2 value of 0.0164 indicating that The inflation and GDP collectively explain only about 1.64% of the variation in FD rates, implying that these macroeconomic indicators exert minimal direct influence.

The ANOVA results ($F = 0.308$, $p = 0.7368$) confirm that the regression model is statistically insignificant overall. This implies that inflation and GDP growth, taken together, do not significantly influence FD rates in Nepal.

From a theoretical perspective, inflation is generally expected to have a positive relationship with deposit rates, as higher inflation usually compels banks to offer higher interest rates to attract and retain deposits, preserving real returns (Mishkin, 2019).

Similarly, GDP growth is often associated with increased credit demand, which may drive banks to mobilize more deposits through higher rates (Dornbusch, Fischer & Startz, 2018).

While South Asian peers exhibit varying degrees of alignment between macroeconomic indicators and deposit rates. However, the results from model of this research in the Nepalese context reflect the stronger influence of central bank's policy and other structural factors have in determining FD rates.

Such an outcome aligns with the view that FD rates in developing economies like Nepal are more strongly determined by monetary policy directives of the central bank, liquidity management, and institutional deposit patterns rather than macroeconomic fundamentals alone (Mishkin, 2019; Shrestha & Sharma, 2020).

By contrast, Nepal's case demonstrates weaker macroeconomic linkages, with Fixed Deposit rates remaining largely policy-driven and less sensitive to inflationary and growth pressures. This difference can be attributed to the relatively smaller and more regulated financial market, the dominance of institutional deposits, and strong reliance on Nepal Rastra Bank's directives

as a primary determinant of Fixed deposit interest rates underscoring the unique features of its banking environment.

Recommendations/Implications

Implications - for policy makers

- **Strengthen monetary policy effect**: The weak link between macroeconomic fundamentals and 1-year fixed deposit rates suggests that the transmission of monetary policy into the financial system is limited. The Nepal Rastra Bank (NRB) should explore mechanisms to enhance the effectiveness of its policy in influencing deposit rates, possibly through greater reliance on market-based instruments.
- **Enhance transparency in deposit rate setting:** Since fixed deposit rates are largely policy-driven, NRB could encourage banks to adopt more transparent frameworks that align deposit pricing with liquidity conditions and inflation expectations, thereby improving market efficiency.
- **Stabilize institutional deposit flows:** Given the dominance of institutional deposits as well as shorter term fixed deposits, policies that promote diversification of funding sources—such as encouraging for alternate instruments for longer-term deposits—could reduce volatility and strengthen the stability of banking sector from funding source perspective.

Implications for Banks and Financial Institutions

- **Risk management:** High volatility in GDP growth underscores Nepal's vulnerability to shocks, which can indirectly affect deposit flows and liquidity. Banks should adopt stronger liquidity buffers and dynamic asset-liability management to withstand these fluctuations.
- **Deposit mobilization strategies:** Banks should recognize that macroeconomic trends like GDP growth and inflation may not directly dictate deposit behavior in Nepal. Instead, competition, liquidity needs, and regulatory ceilings/floors will remain decisive in rate setting.

Implications for depositors

- **Real return awareness**: Since FD rates in Nepal are not strongly tied to inflation, depositors may face periods where real returns (interest rate adjusted for inflation) are low or even negative. Depositors should actively compare FD rates with inflation trends before making long-term commitments.
- **Dependence on policy changes**: With FD rates largely influenced by NRB directives and liquidity conditions, depositors should closely monitor central bank policy announcements, as these can directly affect the attractiveness of deposits.

Implications for Researchers

- **Future research directions:** Since inflation and GDP growth explain very little of FD rate variation in Nepal, future studies should include additional explanatory variables, such as NRB policy rate, interbank market rates, credit-to-deposit ratios, and external remittance inflows, to better understand deposit rate determination.
- **Policy evaluation:** The study's findings reinforce that FD rates in Nepal are less a reflection of macroeconomic fundamentals and more of structural and regulatory factors. Policymakers should account for this distinction when designing monetary policy tools, as conventional macroeconomic linkages may not apply directly.

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