"Finance as a Catalyst for Accelerated Economic Growth: An Analytical Study"

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1. Introduction:

It is assumed that financial institutions play an important role for stimulating the economic growth rate through creating sufficient bank credit within an economy. Achieving higher economic growth has always been considered one of the main goals of India's five years plan and economic survey 2024-25 also suggested 8 to 8.5% of real GDP growth rate in the next two decades to achieve **Viksit Bharat.** Therefore, a strong, vibrant and stable financial system is utmost requirement for a developing country to achieve the desired level of economic growth. It facilitates higher capital formation through mobilisation of savings in socially desirable sectors and creates job opportunities and innovation. It has been noticed that many industrially developed nations like the United States, Japan, China & South Korea experienced steady economic growth where strong financial institutions have been developed along with industrial expansion.

The present study is an attempt to examine the nature of relationship between economic growth and bank credit by using simple statistical methods such as correlation and regression, review of existing literature, analysing theoretical and empirical data and makes recommendations for policy which are relevant to present economic scenario of our country. It is undertaken with an aim to examine how finance acts as a facilitator or catalyst for achieving higher economic growth.

2. Review of Literature

A lot of studies have been made by different notable economists, researchers, faculty members to find out the relationship between finance and economic growth.

The study of Credit and GDP and the relationship between the two has been the subject of much research. There are two views on the relationship between finance and growth. According to one view prevalent in 19th century, enterprise leads and finance follows implying that banks do not have a leading role in growth. The other view stresses complementarities between development and capital accumulation. So banks could finance investment in physical capital and growth in a proactive manner.

Joseph Schumpeter (1911): One of the first economists to highlight the value of financial intermediaries in fostering innovation and economic growth was Joseph Schumpeter (1911). Schumpeter asserts that banks are essential because they provide capital to entrepreneurs who launch new goods and innovations.

R.W. Goldsmith (1969): According to empirical data presented by Goldsmith (1969), financial development and economic growth are strongly correlated across nations. He discovered that economies grew more quickly when their financial systems were more advanced.

McKinnon (1973) and Shaw (1973): According to McKinnon (1973) and Shaw (1973), financial repression, including credit restriction and interest rate regulations, hindered investment and savings in developing nations. They were in favour of financial liberalisation to encourage economic growth.

Economic models based on the neo-classical traditions of Harrod-Domar and Robert Solow that emerged after World War II ignored the significance of the financial sector. As described in Rajan and Zingales (2001), economists, at best held the view that when opportunities arise in an economy that require financing, the economy will develop the necessary markets and institutions to finance these opportunities, i.e. as Robinson (1952) states "where enterprise leads, finance follows".
The relationship between financial development and economic growth in the Indian context has been studied from multiple perspectives. Bell and Rousseau (2001) studied post-independence India and the role that financial system played in industrialization. Using a set of Vector Autoregressive (VAR) and Vector Error Correction Models (VECM), they conclude that the financial sector was instrumental in not only promoting aggregate investment and output but also enabled the steady shift towards industry. Several studies including those by Pradhan (2009), Chakraborty (2010), Singh (2011), Ray (2013) and Mahajan and Verma (2014) among others have utilized various econometric methods and a multitude of proxies for financial development to study the impact it has on the economic growth of India. The results of these studies in terms of direction of causality between financial development and growth have been mixed.

(King and Levine, 1993): According to empirical research undertaken by King and Levine, financial depth indices like money supply and bank credit were highly predictive of long-term economic growth. According to their findings, finance is a catalyst for growth rather than just a by-product.

Mateut, Bougheas, & Mizen, (2006): Mateut, Bougheas, & Mizen argues that economic development is influenced by the stability of the banking sector and development level, particularly because economic finances generally depend on credit activities

Aydin (2008) : An important finding by Aydin (2008) states that a 2.5% decline in total credit causes the GDP to decline by over 1.5%.

J. Schumpeter Mohanty (2016) : J. Schumpeter Mohanty (2016), who said that the relationship between bank loans and economic development indicates that rising bank credit or financial expansion leads to high economic activity.

Antoshin (2017): According to Antoshin (2017), financial growth may be fundamentally impacted by economic progress. This typically occurs when the economy's rate of growth is responsible for facilitating the financial sectors' expansion.

World Bank and IMF: Current research from organisations like the World Bank and the International Monetary Fund emphasises how digital finance, capital market development, and financial inclusion promote equitable and sustainable growth.

Overall, the literature supports the view that finance plays a catalytic role in accelerating economic growth, particularly when financial systems are efficient, inclusive, and well regulated.

3. Topic Rationale

The following factors serve as the foundation for the logic for this study:

(i) Growing Importance of finance: Modern economies are highly rely on finance as most of the major decisions related to production and investment of an economy are influenced by the financial markets

(ii) Importance of Policy Making: To achieve sustainable economic growth Government adopt different policies like Monetary Policy, Fiscal Policy, Trade Policy, Tax Policy, EXIM policy and so on. A complete understanding about the financial system is highly essential for the successful implementation of different policies by the Govt.

(iii) Developing Country Perspective: Developing nations like India face issues like poor credit penetration, regional financial inequality, and restricted access to institutional funding.

(iv) Academic Significance: It is highly useful for the students and policy makers to adopt effective development strategies through understanding the relationship between finance and economic growth in a better way.

On the basis of above valid arguments, it is pertinent and essential to look at finance as a driver of economic expansion.

4. Objectives of the present study

The present paper makes a modest attempt to study the importance of finance in the context of economic growth of India with the underlined objectives.

(i) To examine the correlation between real GDP growth and bank credit.

(ii) To examine the significant relationship between real GDP growth and broader money.

(iii) To determine if financial intensification influences economic growth directly or serves as a catalyst.

(iv) To suggest appropriate policy measures for strengthening the financial sector so as to enhance its catalytic role in promoting sustainable economic growth.

5. Hypothesis:

"A hypothesis is a special proposition, formulated to be tested in certain given situation as a part of research which states what the researcher is looking for."

On the basis of the above objectives, the hypothesis proposed to be tested in the present study is as follows.

H_{01}: Bank Money doesn't influence GDP growth significantly.

H_{02}: GDP growth is least affected by Broad money.

6. Methodology of the Study:

The descriptive and analytical research strategy which is used in this paper is mainly based on secondary data collected from the following sources.

- Report on Currency and Finance-Reserve bank of India
- Economic Survey of India: Department of Economic Affairs, Ministry of Finance, Government of India
- Scholarly publications and research articles
- NITI Aayog Reports
- World Bank development indicators

In order to make the analysis comprehensible and appropriate for a seminar presentation, emphasis is made on the following statistical tools.

Analysis of percentages
Analysis of Pearson Correlation
Analysis of trends
OLS (Ordinary Least Square) regression analysis

7. SIMPLE STATISTICAL ANALYSIS

(A) Finance and Economic Growth (Using Simple Statistical Tools)

Bank credit is the term used when financial organisations lend money to people or businesses. From an economic perspective, bank credit includes short-, medium-, and long-term loans to individuals, businesses, non profit organisations, and real estate. A nation's economic growth is measured by its gross domestic product (GDP).
The size of the financial system in relation to the economy is a measure of financial depth, and the following indicators are commonly used to assess an economy's financial depth:

(i) The ratio of bank loan to GDP (ii) The proportion of GDP devoted to broad money. India's bank loan to GDP ratio has increased significantly since economic reforms, suggesting a rise in financial penetration.

Bank Credit as a percentage of GDP and Growth rate (2004 to 2026)

Year	Bank Credit(% of GDP)	Real GDP Growth (%)
2004-05	33	9.3
2005-06	35	9.3
2006-07	38	9.6
2007-08	43	9.8
2008-09	47	3.1
2009-10	49	7.9
2010-11	50	8.5
2011-12	51	5.2
2012-13	52	5.5
2013-14	53	6.4
2014-15	54	7.4
2015-16	52	8
2016-17	50	7.1
2017-18	48	6.8
2018-19	49	6.5
2019-20	50	4
2020-21	51	-7.3
2021-22	53	8.7
2022-23	❖ 55	7.2
2023-24	❖ 56	8.2
2024-25	❖ 57	7.6
2025-26	❖ 58	❖ 7

***Source:* Source: RBI bulletin 2024-25**

The above table reveals that bank credit as a percentage of GDP has continuously increased over the time period (2004-05 to 2025-26), due to expansion of bank credit by the banking sectors of our country, indicating financial deepening in the Indian economy. However, due to the presence of external shocks, global conditions and policy changes, the GDP growth rate seems fluctuating in certain years.

If closely examined, the evolving trend of bank credit (as a percentage of GDP) and GDP growth rate can be separated into five stages.

Phase I: Rapid Growth and Credit Expansion (2004–08)

Bank credit and GDP growth have a high positive correlation between 2004 and 2008.
• Bank Credit: Increased from 33% to 43%
• GDP Growth: Increased from 9.3% to 9.8%

Consequently, a surge in infrastructure and investments was spurred by the expansion of credit. It signals a period of expansion driven by credit.

Phase II: Effects of the Global Financial Crisis (2008–09)

The global financial crisis of 2008–09 caused a weak correlation between GDP growth and bank credit.

Bank credit as a percentage of GDP was increased to 47% whereas GDP grew by just 3.1%.

Despite higher lending levels, growth fell sharply due to a halt in investments, insufficient demand, and the effects of recession at global level.

Phase III: Recovery & Slowdown (2010–2019)

Bank credit peaked in 2014–2015 at about 54%, while the growth rate varied from 5 to 8% during 2010–2019. After 2015, the credit-to-GDP ratio started to decline as a result of bank stress and non-performing assets.

It is observed that growth rate was moderate even though credit declined from 2015 to 2017 which pointing structural factors that are not related to credit, such as global trends and reforms.

Phase IV: Shock of Pandemic (2020–21)

The 2020–21 pandemic shock showed that loan expansion by itself is insufficient to ensure economic growth during times of crises. Bank lending held stable at 51 percent of GDP, while the economy shrank sharply, with GDP growth dropping to -7.3%. Significant supply chain disruptions, state-wide lockdowns that halted economic activity and a precipitous decline in demand were the main causes of this extraordinary collapse. Mobility limitations hindered both local and international trade, businesses halted production, and consumers delayed spending because of uncertainty.

The experience clearly represents that in exceptional circumstances, like a pandemic, financial resources like bank lending by themselves cannot spur growth unless they are combined with regular economic activity, steady demand, and unbroken supply chains.

Phase V: Recovery Following the Pandemic (2021–26)

The Indian economy showed a distinct recovery during the Post-Pandemic Recovery (2021–2026), characterised by a robust economic rebound and a consistent increase in bank lending. As loan activity stabilised and corporate confidence returned, credit steadily rose from 53% to 58% of GDP. The GDP grew by 8.7% during the same time, then by 7.2%, 8.2%, 7.6%, and 7% in the following years. During the recovery phase, there is a definite positive correlation between credit expansion and economic growth, as evidenced by this parallel upward trajectory.

In contrast to the preceding year, credit was able to effectively translate into production, investment, and overall growth due to better demand conditions, normalised supply chains, and the reopening of economic activity.

(B) Simple Karl Pearson's correlation coefficient between Bank Money & Growth rate

Time Period	Correlation Coefficient(r)	Remarks
2004-2008	0.96	High degree positive correlation
2008-2015	0.37	Moderate degree positive correlation
2015-2025	0.26	Low degree positive correlation
2004-26	-0.23	Negative correlation

Observation:

(i) During 2004-08, India experienced rapid economic growth due to outcomes of economic reforms adopted in 1991 and strong credit expansion by the commercial banks. Apart from it, favourable global conditions, rising investment in infrastructure, real estate and industries are also equally responsible for establishing such a strong relationship between bank money and GDP growth rate. This suggests financial deepening strongly supported economic growth.

(ii) During 2008-2015, moderate correlation between bank credit and GDP growth rate is found which is the outcome is of global financial crisis and rising NPAs in Indian banking system. Moreover, declining private investment, structural bottlenecks and uncertainty in government policy further reduced the strength of credit –growth linkage.

(iii) During 2015-2025, the correlation coefficient further declined to 0.26 showing a very weak relationship between bank money and GDP growth rate. During this time period, major incidents like demonetisation, Goods and Services Tax (GST) and the COVID-19 pandemic took place in our country for which despite a large surge in liquidity, GDP growth rate declined significantly to a very low level showing that increased bank money did not immediately resulted in growth of output due to demand constraints and supply disruptions.

(iv) When the entire period 2004–2026 is taken together, the correlation coefficient becomes negative (-0.23). This negative overall correlation is largely due to structural breaks, crisis years, and divergent movements during extraordinary events such as the pandemic, when liquidity increased but growth declined. The negative value does not mean that bank money reduces or harms GDP growth rate; rather, it highlights that the relationship is unstable, time-variant, and influenced by external shocks and structural changes. Therefore, bank money acts more as a facilitating factor or catalyst for growth rather than as a direct and consistent determinant of GDP growth. This analysis suggests that the quality, allocation efficiency, and

timing of credit are more important than mere expansion in its quantity for achieving sustainable economic growth.

Broad conclusion:
Bank Credit is an important but not sufficient condition for sustained GDP growth.

C. Broad Money as a percentage of GDP and Growth rate (2004 to 2026)

Year	Broad Money (% of GDP)	Real GDP Growth (%)
2004-05	64.64	9.3
2005-06	65.55	9.3
2006-07	68.06	9.6
2007-08	72.28	9.8
2008-09	77.37	3.1
2009-10	79.08	7.9
2010-11	77.68	8.5
2011-12	78.84	5.2
2012-13	76.91	5.5
2013-14	78.18	6.4
2014-15	77.90	7.4
2015-16	78.01	8
2016-17	74.55	7.1
2017-18	74.14	6.8
2018-19	74.15	6.5
2019-20	76.05	4
2020-21	88.16	-7.3
2021-22	82.1	8.7
2022-23	**83.1***	7.2
2023-24	**84.0***	8.2
2024-25	**84.5***	7.6
2025-26	**85.4***	7

Source: Historical broad money as percentage of GDP: World Bank economic statistics

D. Simple Karl Pearson's correlation coefficient between Broad Money & Growth rate

Time Period	Correlation Coefficient(r)	Remarks
2004-2008	0.97	High degree positive correlation
2008-2015	0.33	Moderate degree positive correlation
2004-2026	-0.66	Negative correlation

Observation:

(i) During the period 2004–2008, the correlation coefficient was **0.97**, showing a very high degree positive relationship between broad money and GDP growth. It is seen that increase in broad money was closely

associated with higher GDP growth and liquidity position of our country was quite improved which extended support for higher investment, production, and consumption, leading to strong economic performance.

(ii) However, during 2008–2015, the correlation coefficient declined to **0.33**, showing only a moderate positive relationship. This period includes the impact of the global financial crisis of 2008 and subsequent economic uncertainties. Although broad money continued to increase, GDP growth slowed down due to global recessionary pressures, structural constraints, inflationary tendencies, and weakened investment demand. As a result, the responsiveness of economic growth to monetary expansion became weaker.

(iii) During the whole period 2004-2026, a negative relationship is found between broad money and GDP growth as the value of correlation coefficient becomes (-) 0.66. It suggests that rise in broad money supply (M4) did not consistently resulted into higher GDP growth over long run In recent years, it is seen that Government has taken suitable measures to expand money supply to support the economy especially during demonetisation, the COVID-19 pandemic but GDP growth rate either declined or negative even during pandemic. The overall negative correlation speaks of the importance of structural changes and extraordinary shocks rather than a simple cause-and-effect relationship. In nutshell, while broad money plays an important supportive role, economic growth depends on multiple factors beyond monetary expansion alone.

E. Multiple Correlation Analysis

Let us take Bank Credit: 1st variable, Broad Money: 2nd variable and GDP growth rate 3rd variable

Simple Correlation Matrix

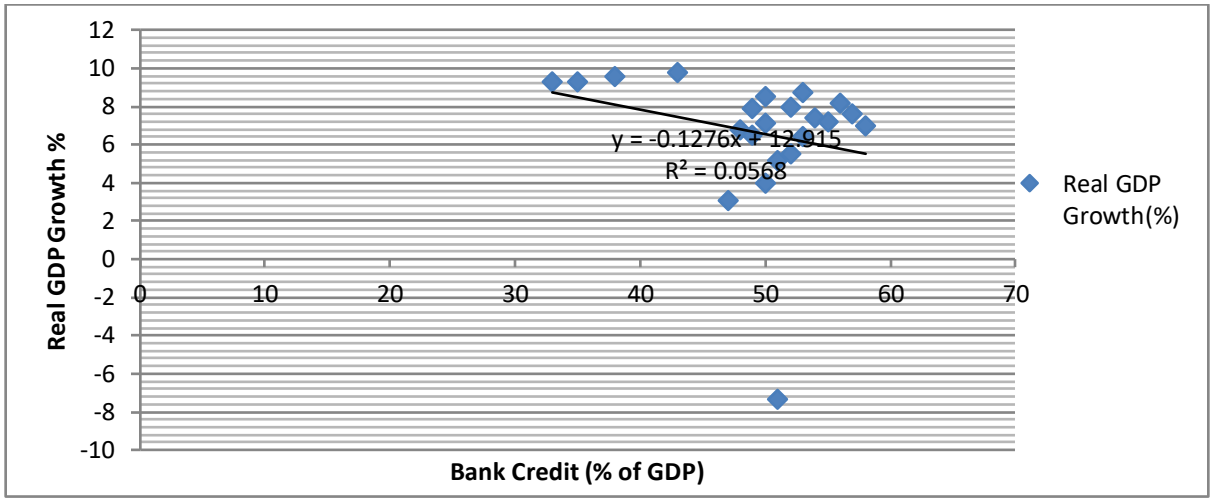
Variables	Bank Credit(1)	Broad Money(2)	GDP Growth(3)
Bank Credit(1)	1.0	0.89	-0.23
Broad Money(2)	0.89	1.0	-0.48
GDP Growth(3)	-0.23	-0.48	1.0

From the above table, following interpretation can be made:

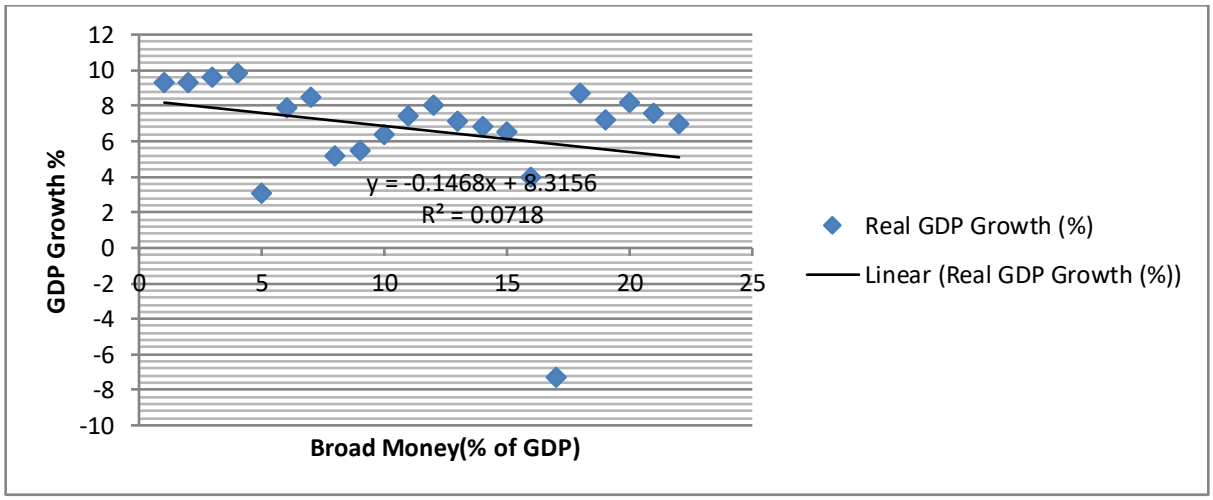
- Bank Credit and Broad Money **(r_{12})** represents Very high positive correlation (0.894)
- Bank Credit and GDP **(r_{13})** represents Weak negative correlation (−0.238)
- Broad Money and GDP **(r_{23})** represents Moderate negative correlation (−0.487)
- The value of Multiple Correlation coefficient ($R_{3.12}$) = 0.655 and R^2 = 0.430

The above interpreted results show that the GDP growth rate is moderate when both Bank Credit and Broad Money are taken together and 43% of variation of GDP growth is due to the combined effects of both the variables

(F) Regression line (Bank Credit & GDP Growth)



(G) Regression line (Broad Money & GDP Growth)



H. Multiple Regressions (Broad Money, Bank Credit and GDP Growth)

The estimated multiple regression equation is

$Y = 52.30 + 0.479X_1 - 0.9315Y1$

Where, Y=Real GDP growth rate, X_1 =Bank Money (% of GDP) and X_2 =Broad money (% of GDP)

Interpretation (with t-Statistics)

Variable	Coefficient	Std. Error	t-Statistic	p-Value	Interpretation
Intercept	52.83	9.69	5.452	0.000	Significant
Broad Money	−0.9135	0.214	−4.272	0.001	Highly significant
Bank Credit	+0.4785	0.193	2.481	0.025	Significant

Major findings from the above Table:

(i) The model is statistically significant and around 60.6% of variation id GDP growth rate is due to the joint impact of both the variables i.e. Bank Credit and Broad Money

(ii) The relationship is negative and significant in case of broad money alone. (as t= -4.272 and p=0.001).

During the crisis period the increase in money supply was associated with preference of the people for precautionary motive not for transaction motive for which there was not real expansion of GDP.

(iii) Bank Credit exerts a positive impact on GDP as it is noticed from the estimation given in the above table. (t=2.481 , p= 0.025 which is significant at 5%). In other words, GDP growth rate is much dependent upon Bank Credit in comparison to Broad Money.

7.2 Savings, Investment, and Growth

In a fast developing economy like India, savings is considered as a prominent source of investment otherwise known as capital formation. Financial institutions such as Commercial banks and Non Bank Financial Intermediaries play an important role for the mobilisation of savings and channelizing them into highly productive sectors such as MSMEs, education, Health, infrastructure etc. which ultimately brings higher and stable economic growth.

7.3 Role of Capital Markets

Capital markets help in aggregating savings from different sectors of the economy and make them available for investment in productive activity. The mobilisation ensures the creation of capital assets that drives higher economic growth through creating a positive vibes in the form of transparency, strong confidence of the investors and efficient allocation of resources.

7.4 Financial Inclusion and Inclusive Growth

All facets of society must have access to basic financial services such digital payment systems, credit, banking, and insurance in order for financial inclusion to be achieved. It promotes the development of MSMEs, agriculture, and self-employment prospects by increasing credit availability, which creates jobs and revenue. Promoting digital finance also lowers transaction costs, improves transparency, and boosts economic involvement in general. Financial inclusion therefore boosts domestic demand and is essential for fostering equitable and sustainable economic growth.

7.5 Risk Management and Stability

To manage the economic and financial risks, financial systems mainly use certain tools like insurance, diversification and hedging. While insurance protects the people and businessman from unexpected losses, diversification spreads investments across different assets to reduce risk. Hedging tools, such as derivatives, protect firms from changes in interest rates, exchange rates, and commodity prices.

A stable and well-regulated financial system builds confidence among investors, savers, and entrepreneurs. When risks are properly managed, investment increases. Capital is used more efficiently, and the economy grows steadily.

However, too much risk-taking and weak regulation can cause financial crises. Crises reduce credit, lower investor confidence, and slow down economic growth.

Therefore, strong regulation and careful risk management are necessary for stable and sustainable economic growth.

8. Summary and Findings:

A. Evidence based findings:

The present study is an attempt to analyse the role of finance in the context of accelerating the GDP growth rate of India. No doubt, finance is considered as one of the instruments in the hand of the Government through which conducive environment can be created to boost economic growth. However, taking into

account the whole sample year (2004-05 to 2025-26), the following empirical findings means a lot to justify the role of finance for achieving economic growth in developing countries like India.

(i) A weak or poor relationship is found between Bank Credit as a % of GDP and Real GDP growth. However, the relationship between two is moderate without taking into account the crisis years (2008, 2020) which shows structural distortions are caused due to exogenous shocks.

(ii) A negative correlation between Broad Money and GDP growth suggests that the impact of expansion of money supply on GDP growth rate is meaningless or negligible.

(iii) According to the empirical results, the effectiveness of credit allocation is more important than expansion in absolute financial ratios.

B. General Findings (Point wise)

1. Financial development and economic growth are positively correlated.
2. Efficient banking and capital markets accelerate investment and productivity.
3. Financial inclusion enhances inclusive and sustainable growth.
4. Technological innovation in finance such as Fin-tech strengthens financial efficiency.
5. Poor regulation and financial instability can weaken the growth process.

9. Recommendations

1. Efforts to be made to make the **financial institutions stronger** through improving efficiency, transparency and desirable autonomy to commercial banks and non bank institutions.
2. **Encouraging financial inclusion** through expanding credit accessibility especially for MSMEs, farmers, and marginalised sections.
3. **Developing Capital Markets through** promoting long-term financial products such as corporate bonds and infrastructure funds.
4. To maintain stability, integrity and safety of the financial sector **tough regulations** to be ensured but it should not restrict the growth and innovation.
5. To make financial services much easier, faster and wider accessibility, **digital mode of finance** to be encouraged with vast application of Fin Tech.

10. Conclusion

The study concludes that while financial depth indicators such as bank credit and broad money reflect monetary expansion, they do not independently drive economic growth. The relationship is highly sensitive to structural shocks, and credit effectiveness depends on macroeconomic stability, institutional efficiency, and sectoral allocation. Sustainable growth requires productive financial intermediation rather than mere liquidity expansion.

Considering the works of notable economists and derived results of the present study, it can be rightly said that finance plays a significant role as a catalyst for accelerating the GDP growth through efficient mobilisation of savings, boosting investment, facilitating innovation, and supporting inclusive growth. The experience of both developed and developing countries clearly demonstrates that growth is faster and more sustainable when supported by a strong and efficient financial system.

However, finance must be well regulated and inclusive to deliver its full benefits which need systematic focus on strengthening financial institutions, promoting financial inclusion, and maintaining economic stability by the policy makers. **In conclusion, finance is not merely a supporting mechanism but a powerful engine that accelerates economic growth when properly harnessed.**

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