THE ROLE OF FINANCIAL INCLUSION ON THE ECONOMIC GROWTH: EMPIRICAL EVIDENCE FROM INDIA

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—Abstract—
Recent economic growth (EG) has relied significantly on financial inclusion, and scholars and policymakers should pay particular attention to this factor. As a result, the current study looks into how financial inclusion, such as commercial bank branches, depositors with commercial banks, domestic bank credits, and companies using banks for financial investment, impacts the EG in India. Industrialization served as a control variable in the study. The secondary data from the World Development Indicators (WDI) for the period of 1981 to 2020 was utilized in this article. The autoregressive distributed lag (ARDL) model was also used in the study to examine the relationships between the variables. The findings showed a favorable relationship between EG in India and commercial bank branches, depositors with commercial banks, domestic bank credits, businesses using banks for financial investment, and industrialization. The study provides regulators with guidance as they create EG-related rules using efficient financial inclusion.

Keywords: Financial inclusion, commercial bank branches, depositors with commercial banks, domestic credits by banks, economic growth

1. INTRODUCTION

Due to its broad significance to a nation, the acceleration and sustainability of EG have been a topic of discussion and controversy among researchers and practitioners. Real GDP growth, or the rising value of all national productivity, revenues, and expenditures, are EG (Van et al., 2021). With a high EG, the average income level rises, consumers are guaranteed access to the goods and services they need, poverty in the nation is reduced, and life expectancy is extended. It enhances employment opportunities and creates work for both qualified and less qualified people (Ahmad et al., 2021). It increases tax revenues and strengthens public services, resolving social, governmental, and political problems. Enhancing investment, fostering innovation and research and development, enhancing environmental sustainability, and paving the road for sustainable economic growth are all benefits of EG (Singh et al., 2021).

In EG, financial inclusion is seen as a key component. Financial inclusion is where all individuals and commercial entities have fair access to reasonably priced and valuable financial services and products to meet their financial needs. The facilities for transactions, payments, bills, savings, loans, credits, and insurance are among these goods and services (Gul et al., 2018). Some examples of financial inclusion include commercial bank branches (CBB), commercial bank depositors (DCB), domestic bank credit (DCRB), and businesses that use banks for financial investment (FBFI). The rise of CBBs gives the general public access to a platform where they can access financial services, and by having these services available, they may grow their enterprises. This improves EG (Sulong et al., 2018). The growth in the DCB improves the bank's ability to offer financial support to various economic sectors, which helps economic development. Businesses can recover from the financial crisis and take advantage of great prospects because of the rise in DCRB. Businesses' rising performance improves EG. Additionally, when more companies connect with banks for financial services and become aware of the significance of banks, their operations get easier, and their reach is increased. The rise improves the country's economic activity and the consequent rise in quality (Adzimatinur et al., 2021).

The role of financial inclusion in India's EG is examined in the current paper. India has a developing economy with a middle income. According to estimates for 2022, its nominal GDP is $3.469 trillion, and its PPP is $11.665 trillion. The International Monetary Fund (IMF) confirmed that India is ranked 142 by nominal GDP and 125 by nominal GDP (PPP). India's three main economic sectors are agriculture, industry, and services, which account for 16.38%, 29.34%, and 54.27% of the GDP, respectively (Khan et al., 2022). India's economy is still in its infancy. However, there are differences in the country's EG. Instead, it continues to change at random from year to year. With its wide range of financial services, the financial industry, particularly the banks, contribute significantly to the performance of individual enterprises. However, a sizable portion of the population in India still lacks appropriate knowledge of important
economic activities and banking financial services. And many places still don't have access to banking goods and services (Thaddeus et al., 2020). However, this issue requires attention, which is what the current study does.

The study's goal is to investigate how industrialization (IND) and financial inclusion (CBB, DCB, DCRB, and FBFI) interact in EG (Sulong et al., 2018). In terms of its contributions, the new study differs from earlier research in that it does not just restate it. First, the current paper presents a thorough analysis of EG with a focus on its financial side, which supports the national economy. Second, numerous studies have discussed the importance of financial inclusion in the nation's EG previously published research. However, most of these research have just looked at money as an EG driver, paying no regard to other types or degrees of financial inclusion. Because it studies the CBB, DCB, DCRB, and FBFI, the types of financial inclusion, to determine their function in EG, the current study contributes to the body of literature. Third, financial inclusion and its impact on the economy are not widely known in India, where the EG rate is low. But there aren't many articles that discuss this problem and offer remedies. The current study adds to the body of literature since it examines the role of industrialization (IND) and financial inclusion (CBB, DCB, DCRB, and FBFI) in EG for the Indian state. The following sections make up the current study: The second section examines the connections between FBFI, IND, and EG, as well as CBB, DCB, and DCRB, through studies of pertinent literature. The third section details the processes and techniques used to collect the data and analyze the findings. After the results are explained, they are compared to earlier literature to gain support. The report concludes with ramifications, findings, and research limitations.

2. LITERATURE REVIEW

A nation's financial health, internal economic conditions, geographic stability, environmental quality, social sustainability, and inhabitants' well-being are all reliant on the nation's position in the global economy. For the country to have a high EG, there must be growth in overall production, revenues, expenditures for development, and employment levels (Raza et al., 2019). Payments must be made, money must be transferred, money must be secured, money must be tracked in cash, money must be set aside for investments, and money must be secured. Financial inclusion helps address the financial needs of businesses. It raises the EG rate by ensuring that people and businesses have access to financial products and services such as payments, transactions, money transfers, deposits, loans, and insurance, among others (Pal et al., 2022). The current study examines the impact that commercial bank branches (CBB), commercial bank depositors (DCB), domestic bank credit (DCRB), and businesses employing banks for financial investment (FBFI) play in EG's industrialization (IND). The previously reviewed literature covered how CBB, DCB, DCRB, FBFI, IND, and EG relate to one another. The link between CBB, DCB, DCRB, FBFI, IND, and EG has been investigated in the following paragraphs in light of previously published material.
2.1 Commercial Bank Branches (CBB) and Economic Growth

Commercial banks are the primary provider of financial services and expanding bank branches has increased the range of financial services and products available to small and large-scale firms. It makes it easier to carry out business activities and accomplish business objectives. Thus, expanding bank branches leads to corporate growth and increased EG for the nation (Iorember et al., 2022). Pradhan et al. (2021) investigation examines the connection between EG, ICT development, and financial inclusion by a commercial bank. Twenty Indian states were used to collect empirical data for developing ICT, EG, and commercial bank branches between 1991 and 2018. The Granger-causality method was used to examine the relationship between these variables. According to the report, because banking services are easily accessible in countries where commercial banks expand their branches and begin operating in remote locations, these organizations may have more resources available to invest in developing ICTs. Businesses can gain competitive advantages and generate a larger portion of the nation's GDP when excellent information is available and an efficient communication network, resulting in higher EG. Emara et al. (2021)'s analysis of the connection between EG and financial inclusion. The availability of bank branches and ATMs, bank accounts, business usage of banks for investment, and business propensity to use bank loans are all indicators of financial inclusion. The General Method of Moments (GMM), a dynamic panel model technique, was utilized to collect data for forty-four emerging markets, including the MENA region, between 1990 and 2018. The study results show that increasing bank branches and ATMs improves the economy's overall output and revenues. Hence CBB and EG have a positive relationship.

2.2 Depositors with Commercial Bank (DCB) and Economic Growth

Banking services are what both individuals and businesses require to advance their level of operation. These services include savings, cash transfers, payments, and the purchase of financial resources. The growth in the total amount of commercial bank deposits ensures the availability of banking services, including savings, money transfers, payments, and resource purchases. These deposits strengthen banks' ability to finance these services. In this case, the smoothness of the business transaction contributes to EG by increasing the employment rate and production level (Akinrinola et al., 2022). In their article from 2020, Erlando, Riyanto, and Masakazu look at the effects of financial inclusion on EG, income inequality, and poverty reduction. Bank accounts and deposits measure financial inclusion. The information concerning the research's contributing factors was compiled from Eastern Indonesia. Toda-Yamamoto VAR bivariate causality model and PVAR were the two methods used to achieve the research goal. The findings revealed a favorable correlation between bank deposits and EG. The banks prepare to offer loans, credits, and resources on lease in a nation where banking deposits are rising. This improves the client companies' financial standing and enables them to boost the efficiency of businesses. Different economic sectors have higher output levels.
due to individual enterprises' success. (Menyelim et al., 2021) carried out a study to examine the relationship between the financial DCB increase and EG and income disparity. 48 Sub-Saharan African nations provided the quantitative data for DCB, income inequality, and GDP between 1995 and 2017. regarding the empirical examination of the variables and their interactions. The study's results demonstrated that bank deposits boost financial inclusion and, hence, have a favorable relationship with EG.

2.3 Domestic Credit by Banks (DCRB) and Economic Growth

Improvements in corporate strategies, energy transition, and technological innovation are needed to boost the GDP growth or overall production in many economic sectors. These programs demand significant investment. The majority of small firms cannot afford the considerable investment. However, expanding the credit available to banks allows them to make these efforts and improves corporate success. Consequently, a country's higher EG is determined by an increase in GDP (Majeed et al., 2020). Commercial banks have a policy of providing domestic lending products with reduced interest rates, convenient accessibility, and repayment obligations, according to Ullah et al. (2022). Commercial banks use this action to allow businesses to make extra investments. The increased financial capability that comes with access to credit allows commercial organizations to acquire more qualified workers and resources, which will increase production. The increase in productivity quickens the EG rate. Consequently, a larger DCRB denotes a higher EG. The effects of bank credits, financial inclusion, environmental sustainability, and EG are examined by Ozturk et al. (2022). The authors investigated the association between these variables in 42 OBRI countries between 2007 and 2019. Statistical methods were used to examine the data gathered, including pooled ordinary least squares (OLS), two-stage least squares (2SLS), and GMM approaches. According to the research, businesses can develop green information, acquire green resources, and implement eco-friendly business practices if they have access to bank credits. Sustainability in EG is ensured by environmental sustainability and resource protection.

2.4 Firms Using Banks for Financial Investment (FBFI) and Economic Growth

Businesses can continue to operate while overcoming the effects of crises and taking advantage of opportunities to achieve their objectives when they rely on banking links and personal sources of investment for funding. In addition to maintaining productivity, this company paves the way for other businesses to increase their output of goods and services. Consequently, EG is rising (Chen et al., 2021). Kim et al. (2018) identify the relationship of financial inclusion role in EG through empirical research. The sample for the study consisted of the fifty-five nations that make up the Organization of Islamic Cooperation (OIC). Companies organize investments for their operations using a variety of capital structures. When companies frequently turn to banks to acquire financial resources for company investment, they can replenish their resource pool and implement
their current business strategy. As a result, pursuing competitive advantages contributes to an increase in the country's GDP. Thus, FBFI encourages EG. Sethi et al. (2018)'s study looks into the role of financial inclusion in EG. The authors looked at the proportion of businesses that invest through banks as a measure of financial inclusion. 31 nations worldwide provided the pertinent data collected between 2004 and 2010. To examine the relationship between the chosen components and EG, panel data models such as panel causality tests, panel co-integration, time-fixed effect, random effect, and country-fixed regressions were used. The study discovers a substantial and favorable relationship between EG and the number of businesses using banks for investment purposes.

2.5 Industrialization (IND) and Economic Growth

Industrialization is closely connected with EG because it produces economic resources, promotes technological development, and increases the money available for economic investments. This keeps the economy going and advances EG (Ifediora et al., 2022). The industrialization of EG is emphasized by Opoku et al. (2019). The authors examined the effects of industrialization on EG in 37 African nations between 1980 and 2014. The GMM method explored the data gathered to achieve the research goal. The study results show that industrialization helps EG by supplying energy, fuel, tools, and instruments, stimulating technical advancement, and bringing better goods and services to market. Industrialization thus has a beneficial relationship with EG. The impact of industrialization in EG is examined by Ahmed et al. (2022). The information used to analyze how industrialization has affected EG was gathered from Brazil between 1961 and 2016. Three tests were used: the Hacker and Hatemi-J causality test, the Bayer and Hack co-integration test, and the Autoregressive Distributed Lag (ARDL) method. According to the study, EG increases along with industrialization. The two variables are, therefore, positively related.

3. RESEARCH METHODS

The study investigates the impact of commercial bank branches, depositors with commercial banks, domestic credits by banks, firms using banks for financial investment, and industrialization on the EG in India. The article used the secondary data extracted from WDI from 1981 to 2020. The study has developed the following equation:

\[ EG_t = \alpha_0 + \beta_1 CBB_t + \beta_2 DCB_t + \beta_3 DCRB_t + \beta_4 FBFI_t + \beta_5 IND_t + e_t \]  

Where;

- \( EG \) = Economic Growth
- \( t \) = Time Period
- \( CBB \) = Commercial Bank Branches
- \( DCB \) = Depositors with Commercial Banks
- \( DCRB \) = Domestic Credit by Banks
FBFI = Firm using Banks for Financial Investment
IND = Industrialization

The article used EG as the main variable measured by GDP growth annual percentage. The article also used financial inclusion as the predictor measured with commercial bank branches (per 100000 adults), depositors with commercial banks (per 100 adults), domestic credit by banks (% of GDP), and firms using banks for financial investment (% of firms). Finally, the study also used the industrialization measured with industry value added (% of GDP) as the control variable. These constructs with measurement and sources are given in Table 1.

Table 1. Variables with Measurements

<table>
<thead>
<tr>
<th>S#</th>
<th>Variables</th>
<th>Measurement</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Economic Growth</td>
<td>GDP growth annual percentage</td>
<td>WDI</td>
</tr>
<tr>
<td>02</td>
<td>Financial Inclusion</td>
<td>Commercial bank branches (per 100000 adults)</td>
<td>WDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depositors with commercial banks (per 100 adults)</td>
<td>WDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domestic credit by banks (% of GDP)</td>
<td>WDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Firms using banks for financial investment (% of firms)</td>
<td>WDI</td>
</tr>
<tr>
<td>03</td>
<td>Industrialization</td>
<td>Industry value added (% of GDP)</td>
<td>WDI</td>
</tr>
</tbody>
</table>

The study applied descriptive statistics to examine the details of the constructs used in the study. In addition, the article also applied the correlation matrix to investigate the correlation among the variables. Moreover, ARDL bound test is also applied to examine the co-integration. Finally, the study applied the Augmented Dickey-Fuller (ADF) test to examine the unit root between the variables. The equation for the ADF test is mentioned below:

\[ d(Y_t) = \alpha_0 + \beta t + YY_{t-1} + d(Y_{t-1}) + \epsilon_t \] (2)

Additionally, the ADF test has the characteristics to check the unit root individually. So, the separate equations are given below:

Economic Growth

\[ d(EG_t) = \alpha_0 + \beta t + YYEG_{t-1} + d(EG_{t-1}) + \epsilon_t \] (3)

Commercial Bank Branches

\[ d(CBB_t) = \alpha_0 + \beta t + YCBB_{t-1} + d(CBB_{t-1}) + \epsilon_t \] (4)
Depositors with Commercial Banks
\[ d(DCB_t) = \alpha_0 + \beta t + YDCB_{t-1} + d(DCB_t(-1)) + \epsilon_t \]  
\( (5) \)

Domestic Credits by Banks
\[ d(DCRB_t) = \alpha_0 + \beta t + YDCRB_{t-1} + d(DCRB_t(-1)) + \epsilon_t \]  
\( (6) \)

Firm using Banks for Financial Investment
\[ d(FBFI_t) = \alpha_0 + \beta t + YFBFI_{t-1} + d(FBFI_t(-1)) + \epsilon_t \]  
\( (7) \)

Industrialization
\[ d(IND_t) = \alpha_0 + \beta t + YIND_{t-1} + d(IND_t(-1)) + \epsilon_t \]  
\( (8) \)

Finally, the researchers used the ARDL model to analyze the linkage among the variables. It is suitable when the variables have no unit root at I(0) and I(1). In addition, it controls the effects of autocorrelation and heteroscedasticity (Adebayo et al., 2021). Moreover, the ARDL provides the best estimations in time series and long and short-run associations (Alhodiry et al., 2021). The estimation equation for the ARDL model is given below:
\[ \Delta EG_t = \alpha_0 + \sum_{i=1}^{6} \delta_i \Delta EG_{t-1} + \sum \Delta CBB_{t-1} + \sum \Delta DCB_{t-1} + \sum \Delta DCRB_{t-1} + \sum \phi_1 EG_{t-1} + \phi_2 CBB_{t-1} + \phi_3 DCB_{t-1} + \phi_4 DCRB_{t-1} + \phi_5 FBFI_{t-1} + \phi_6 IND_{t-1} + \epsilon_1 \]  
\( (9) \)

4. RESEARCH FINDINGS

The study applied descriptive statistics to examine the details of the constructs used in the study. The findings indicated that the mean value of EG was 5.758 percent, while CBB average value was 6.725 per 100000 adults and DCB mean value was 1.370 per 1000 adults. In addition, the findings indicated that the mean value of DCRB was 35.146 percent, while FBFI average value was 50.375 percent and DCB mean value was 27.676 percent. Table 2 shows these values.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>40</td>
<td>5.758</td>
<td>2.76</td>
<td>-6.596</td>
<td>9.628</td>
</tr>
<tr>
<td>CBB</td>
<td>40</td>
<td>6.725</td>
<td>4.802</td>
<td>0.993</td>
<td>14.74</td>
</tr>
<tr>
<td>DCB</td>
<td>40</td>
<td>1.370</td>
<td>0.164</td>
<td>1.094</td>
<td>1.644</td>
</tr>
<tr>
<td>DCRB</td>
<td>40</td>
<td>35.146</td>
<td>12.308</td>
<td>21.225</td>
<td>54.652</td>
</tr>
<tr>
<td>FBFI</td>
<td>40</td>
<td>50.375</td>
<td>9.831</td>
<td>30.300</td>
<td>65.569</td>
</tr>
<tr>
<td>IND</td>
<td>40</td>
<td>27.676</td>
<td>1.693</td>
<td>24.531</td>
<td>31.137</td>
</tr>
</tbody>
</table>
In addition, the article also applied the correlation matrix to investigate the correlation among the variables. The outcomes indicated that commercial bank branches, depositors with commercial banks, domestic credit by banks, firms using banks for financial investment, and industrialization positively link with EG in India. Table 3 shows these values.

**Table 3. Matrix of Correlations**

<table>
<thead>
<tr>
<th>Variables</th>
<th>EG</th>
<th>CBB</th>
<th>DCB</th>
<th>DCRB</th>
<th>FBFI</th>
<th>IND</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBB</td>
<td>0.007</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCB</td>
<td>0.012</td>
<td>0.986</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCRB</td>
<td>0.023</td>
<td>0.926</td>
<td>0.915</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBFI</td>
<td>0.106</td>
<td>-0.967</td>
<td>-0.969</td>
<td>-0.911</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td>0.407</td>
<td>0.186</td>
<td>0.245</td>
<td>0.350</td>
<td>-0.258</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Finally, the study applied the ADF test to examine the unit root between the variables. The findings indicated that the DCB, DCRB, and FBFI are stationary at the level, and EG, CBB, and IND are fixed at the first difference. Table 4 shows these values.

**Table 4. Unit Root Test**

<table>
<thead>
<tr>
<th>Augmented Dickey-Fuller Test (ADF)</th>
<th>Level</th>
<th>t-statistics</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>I(1)</td>
<td>-5.892</td>
<td>0.000</td>
</tr>
<tr>
<td>CBB</td>
<td>I(1)</td>
<td>-6.905</td>
<td>0.000</td>
</tr>
<tr>
<td>DCB</td>
<td>I(0)</td>
<td>-2.194</td>
<td>0.031</td>
</tr>
<tr>
<td>DCRB</td>
<td>I(0)</td>
<td>-2.009</td>
<td>0.047</td>
</tr>
<tr>
<td>FBFI</td>
<td>I(0)</td>
<td>-3.124</td>
<td>0.012</td>
</tr>
<tr>
<td>IND</td>
<td>I(1)</td>
<td>-5.827</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Moreover, ARDL bound test is also applied to examine the co-integration. The findings indicated that the calculated f-statistics (5.78) is bigger than the critical value at a five percent significance level. These results exposed that co-integration exists. Table 5 shows these values.

**Table 5. ARDL Bound Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>F-statistics</th>
<th>Lag</th>
<th>Level of Significance</th>
<th>Bound test critical values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I(0)</td>
</tr>
<tr>
<td>EG/(CBB,DCB,DCRB,FBFI,IND)</td>
<td>5.78</td>
<td>4</td>
<td>1%</td>
<td>6.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td>5.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10%</td>
<td>4.12</td>
</tr>
</tbody>
</table>
The outcomes of the ARDL model indicated that the commercial bank branches, depositors with commercial banks, domestic credits by banks, firms using banks for financial investment, and industrialization have a positive linkage with EG in India in the short run. Table 6 shows the short-run associations.

**Table 6. Short-Run Coefficients**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(CBB)</td>
<td>4.902</td>
<td>1.632</td>
<td>3.004</td>
<td>0.012</td>
</tr>
<tr>
<td>D(DCB)</td>
<td>2.887</td>
<td>0.754</td>
<td>3.829</td>
<td>0.003</td>
</tr>
<tr>
<td>D(DCRB)</td>
<td>3.256</td>
<td>1.066</td>
<td>3.054</td>
<td>0.010</td>
</tr>
<tr>
<td>D(FBFI)</td>
<td>0.654</td>
<td>0.183</td>
<td>3.574</td>
<td>0.005</td>
</tr>
<tr>
<td>D(IND)</td>
<td>2.837</td>
<td>0.727</td>
<td>3.902</td>
<td>0.001</td>
</tr>
<tr>
<td>CointEq(-1)*</td>
<td>-1.772</td>
<td>0.464</td>
<td>-3.819</td>
<td>0.002</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.674</td>
<td>Mean dependent var</td>
<td>-0.033</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.671</td>
<td>SD dependent var</td>
<td>2.243</td>
<td></td>
</tr>
</tbody>
</table>

The outcomes of ARDL indicated that commercial bank branches, depositors with commercial banks, domestic credit by banks, firms using banks for financial investment, and industrialization positively link EG in India in the long run. Table 7 shows the long-run associations.

**Table 7. Long-Term Coefficients**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBB</td>
<td>3.883</td>
<td>1.543</td>
<td>2.517</td>
<td>0.022</td>
</tr>
<tr>
<td>DCB</td>
<td>2.102</td>
<td>0.675</td>
<td>3.114</td>
<td>0.010</td>
</tr>
<tr>
<td>DCRB</td>
<td>4.783</td>
<td>1.564</td>
<td>3.058</td>
<td>0.014</td>
</tr>
<tr>
<td>FBFI</td>
<td>2.938</td>
<td>0.543</td>
<td>5.410</td>
<td>0.000</td>
</tr>
<tr>
<td>IND</td>
<td>4.443</td>
<td>1.882</td>
<td>2.361</td>
<td>0.031</td>
</tr>
<tr>
<td>C</td>
<td>1.227</td>
<td>0.201</td>
<td>6.104</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5. **DISCUSSIONS**

The results of the studies have demonstrated that CBB and EG have a favorable relationship. These findings are consistent with a prior study by Domeher et al. (2022) that looks at the function of commercial banking in EG. According to the report, as the number of commercial bank branches grows across the nation, more organizations will be able to use financial services, including deposits, withdrawals, transfers, payments, and collections, among other things. These financial resources allow the organization to grow its operations and significantly contribute to the nation's EG. The study by Usman et al. (2021), demonstrates that with the rise in commercial bank branches, it is now possible for the organization to expand its business in rural and remote areas as well
because financial transactions begin there, which is another source of support for these findings. The expansion of businesses in outlying and rural areas boosts GDP growth and adds to EG.

The findings demonstrated a favorable relationship between DCB and EG. These findings are consistent with previous research on Kelikume (2021). According to this study, commercial banks with significant recurring deposits that they retain to a certain degree are more active than other banks in carrying out their financing procedures. The overall trading and production level rises when a commercial bank with specialized branches broadens the scope of its operations and begins offering financial services to a bigger area and a greater number of client firms. This propels the nation's EG upward. The study of Saydaliyev et al. (2022), which details the effects of commercial bank deposits on EG, also lends weight to these findings. According to this study, a rise in total deposits improves banks' cash on hand and, as a result, their capacity to extend credit and provide other financial services. This quickens the economy's capital generation process and expands the prospects for economic growth.

The findings demonstrated a favorable relationship between DCRB and EG. These findings are consistent with earlier research by Chinoda et al. (2019). Numerous commercial banks have the policy of offering domestic credit products, such as loans, trade credit, green credit, and the acquisition of assets, etc., with simple interest, accessibility, and repayment requirements. Commercial banks do this to offer organizations running enterprises in many economic sectors the chance to invest. To improve productivity, business organizations can hire more skilled workers and resources thanks to the rise in financial capability that comes with access to credit. The rate of EG increases as production rises. Therefore, a greater EG is determined by a higher DCRB. The research of Ghosh (2019), which demonstrates the several ways domestic loan expansion by commercial banks aids small and weak business organizations in strengthening their financial positions, is another source of support for these findings. These companies raise the standard of several corporate processes, including management of information and communication, production quality, advertising, marketing, etc. Organizational effectiveness in the workplace increases EG.

The findings suggested a favorable relationship between FBFI and EG. These findings are consistent with a prior study by Chen et al. (2021), which found that companies use a variety of capital structures to organize investments for their operations. Businesses can replenish their resource pool and carry out current business strategies when they tend to resort to banks to acquire financial resources for business investment. As a result, the struggle to develop competitive advantages aids in raising the nation's GDP. FBFI, therefore, improves EG. These findings align with a study by Chatterjee (2020), which demonstrates that businesses may fulfill their obligations and continue operating effectively even in the face of a crisis when they engage in more bank interactions to get
various loans and credits. The country's EG is influenced by how consistently each corporation performs its business.

The findings demonstrated a favorable relationship between IND and EG. These findings align with a previous study by Yang et al. (2021), which looks at how industrialization accelerates EG. According to an earlier study, industrialization substantially impacts EG because it generates economic resources, fosters technical advancement, and increases capital for economic reinvestment. This keeps the economy moving forward and toward EG. The research of Wang et al. (2018) also supports these findings. This earlier study found that increased industrialization boosts building and manufacturing activities in rural areas. As a result, rural development in terms of infrastructure for transportation, opportunities for education, and access to healthcare grows. Therefore, industrialization fosters growth in all other economic areas and raises the EG rate of the nation.

6. THEORETICAL IMPLICATIONS

This study is quite important to the authors regarding its contribution to literature. The requirement for a rise in the EG rate is discussed in the paper. In this regard, it evaluates the effects of financial inclusion on a nation's EG as indicated by CBB, DCB, DCRB, FBFI, and IND. Some scholars have discussed the significance of financial inclusion in EG in earlier works. But the financial inclusion of EG has not been dimensionally expanded in these investigations. The current study looks at the economic value of the financial inclusion dimensions CBB, DCB, DCRB, FBFI, and IND. Examining the need to increase the rate of EG in India and investigating the roles of CBB, DCB, DCRB, FBFI, and IND in accelerating EG are two of the study's contributions to the literature.

7. EMPIRICAL IMPLICATIONS

Because it addresses the methods by which a country's EG can be expedited, the research is significant for the countries in the empirical world. The report offers recommendations for how economists and the government should act when creating economic and financial policies to speed up EG. According to the study's recommendations, more CBBs should be opened to expand financial inclusion and improve economic growth. According to the study, banks should be encouraged and provided with the necessary support for increased deposits to increase DCB and raise EG. Similar struggles must exist to support DCRB to raise EG. The study offers regulators guidance as they create EG-related rules using efficient financial inclusion. The study suggests encouraging FBFI growth will enhance financial inclusion and raise EG rates. The report also indicates that to improve EG, influential figures like economists, financial organizations, and the government must work to promote industrialization across the nation.
8. CONCLUSION

The current study's goal was to investigate the function of financial inclusion in EG. The effects of CBB, DCB, DCRB, FBFI, and IND on EG will be examined in this regard. Using quantitative research methods, information for CBB, DCB, DCRB, FBFI, IND, and EG was obtained from the Indian economy. The findings demonstrated a favorable correlation between EG and financial inclusion, including CBB, DCB, DCRB, FBFI, and IND. The study's findings suggest that expanding a commercial bank's branch network and geographic reach results in new economic norms that open up access to financial services. Therefore, it will raise EG. According to the research, the availability of financial services is based on the deposits made by customers. An increase in deposits encourages economic activity and leads to economic progress. The findings also showed that new firms emerge and existing businesses perform better when commercial banks boost their capacity to offer loans and credits to businesses under reasonable terms. All of these contribute to an elevated EG rate. Economic activities are facilitated if businesses increasingly use banks for financial transactions or other financial purposes. As a result, the rising GDP improves EG. Finally, the study concluded that as industrialization increases, so do the quantity of economic activities and the performance of these practices. So, economic activity is increasing quickly.

9. LIMITATIONS

The implications and validity of this study are constrained for several reasons. It is anticipated that these restrictions will be lifted in upcoming EG research. This study examined only the effects of financial inclusion with CBB, DCB, DCRB, FBFI, and IND on EG. The current research may fall short of its intended objective because it only considers a few variables in evaluating EG. Future authors are advised to take note of any aspects that might have an impact on a country's EG.

Additionally, the authors have solely gathered data from the Indian economy to empirically examine the association between financial inclusion and CBB, DCB, DCRB, FBFI, IND, and EG. They haven't paid any attention to other developing nations' economies while trying to gather pertinent data. The study has limitations because it can only be used to analyze India, a single country. It is advised that future authors gather empirical data on the function of financial inclusion using CBB, DCB, DCRB, FBFI, and IND in EG from other economies.

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