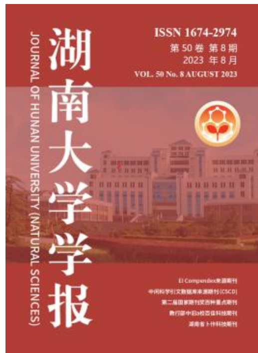

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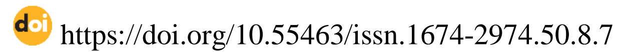
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How Does Financial Inclusion Affect Economic Growth, Poverty, Income Inequality, and Financial Stability in GCC Countries?

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Abstract: This study focuses on the impact of financial inclusion on economic growth, poverty, income inequality, and financial stability in GCC countries. Financial inclusion is measured using three dimensions: banking penetration, access to banking services, and use of banking services. The poverty ratio below the national poverty line and the Gini coefficient are used as indicators of poverty and income inequality, while financial stability is measured by the Bank Z-Score and bank nonperforming loans. The findings of the hypothesis test indicate that all dimensions of financial inclusion have a significant impact on economic growth, poverty, income inequality, and financial stability. However, the partial impact of financial inclusion on these factors in six GCC countries has not been fully optimized. Therefore, the study suggests that governments should consider the results and develop strategies to increase financial inclusion to achieve sustainable development and enhance the welfare of their citizens.

Keywords: financial inclusion, economic growth, poverty, income inequality.

金融包容性如何影响海湾合作委员会国家的经济增长、贫困、收入不平等和金融稳定？

摘要：这项研究的重点是金融包容性对海湾合作委员会国家经济增长、贫困、收入不平等和金融稳定的影响。金融包容性是用三个维度来衡量的：银行渗透率、获得银行服务和使用银行服务。低于国家贫困线的贫困比率和基尼系数被用作贫困和收入不平等的指标，而金融稳定性则由银行Z分数和银行不良贷款衡量。假设检验的结果表明，金融包容性的所有方面都对经济增长，贫困，收入不平等和金融稳定产生重大影响。然而，金融包容性对六个海湾合作委员会国家的这些因素的部分影响尚未得到充分优化。因此，该研究建议各国政府应考虑结果并制定增加金融包容性的战略，以实现可持续发展并提高其公民的福利。

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关键词：金融包容、经济增长、贫困、收入不平等.

1. Introduction

Financial inclusion has gained global policy attention in recent years, with many countries adopting it as a means to achieve more equitable economic growth. It is now widely recognized as an important policy priority in many countries and plays a crucial role in building a strong financial infrastructure, which is essential for economic growth and development.

The implementation of measures to increase financial inclusion in various GCC countries has led to a significant expansion of financial inclusion in the past decade. The World Bank has reported a rapid increase in financial inclusion in several GCC countries.

The primary goal of financial inclusion programs in GCC countries is to promote inclusive growth by reducing poverty, increasing development, improving income distribution, and enhancing financial system stability.

2. Literature Review

2.1. Relationship between Financial Inclusion and Economic Growth

The financial sector plays a crucial role in promoting economic growth by reducing risk, mobilizing savings, reducing transaction and information costs, and encouraging specialization. Previous studies have demonstrated a positive correlation between financial inclusion and economic growth. For example, Kendall et al. [1] and Ghosh [2] showed that access to financial services and the use of financial instruments positively impacted economic growth in India. Similarly, Mihasonirina and Kangni [3] found that financial inclusion and communication technology are essential for economic growth. Martinez et al. [4] suggested that access to finance is an important policy tool for stimulating economic growth. Sarma and Pais [5] found empirical evidence of a relationship between financial inclusion and economic growth in 49 countries. Falahaty and Hook [6] demonstrated that financial development is a significant determinant of economic growth. Law et al. [7] highlighted the importance of a well-developed financial system for economic growth. Sarma [8] analyzed the causality relationship between various dimensions of financial inclusion and economic growth, confirming a two-way causality relationship between access to banking services and economic growth. Recent studies by Pradhan et al. [9], Kim et al. [10], and Raza et al. [11] have also found a significant positive relationship between financial inclusion and economic growth.

In contrast to the studies mentioned earlier, some researchers have found a negative relationship between financial development and economic growth. Naceur and Ghazounai [12] conducted a study on 11 countries in the Middle East and North Africa and found that the development of banks had a negative impact on economic growth. Similarly, Khan [13] found that financial inclusion had a negative impact on economic growth. According to Khan, financial inclusion could lead to lower loan standards as financial institutions try to reach out to the underserved population by lowering the terms of loans. However, this could also increase the risk of reputational damage to banks, as some countries may lower the standards for establishing financial institutions in rural areas.

2.2. Relationship between Financial Inclusion, Poverty, and Income Inequality

Financial inclusion has been recognized as a means to lift the financial status and standard of living of the poor and reduce income inequality, according to Beck et al. [14]. Saving, as identified by Brune et al. [15], can help families cope with financial shocks, smooth consumption, accumulate assets, and invest in health and education. Financial services can break the cycle of poverty by promoting a saving culture and creating efficient and low-cost payment mechanisms, as Dixit and Ghosh [16] suggested. Sanjaya [17] found that financial inclusion through micro-credit programs can improve the social and economic status of the poor. Meanwhile, Park and Mercado [18] discovered empirical evidence of a negative relationship between financial inclusion, poverty, and income inequality. Additionally, Boukhatem [19] revealed that an increase in financial development directly impacts poverty reduction. However, Dhrifi [20] found that financial development encourages economic growth and reduces poverty in middle-and high-income countries, but not necessarily in low-income countries. Meanwhile, Seven and Coskun [21] argued that while financial development encourages economic growth, it does not necessarily benefit low-income people in developing countries, as financial inclusion may not play an important role in poverty reduction. Recent research conducted by Neaime and Gaysse [22] also found that financial inclusion does not have a significant impact on poverty.

2.3. Relationship between Financial Inclusion and Financial Stability

To summarize, financial inclusion has both positive and negative impacts on financial stability. In addition, financial inclusion can diversify bank assets, increase

the stability of deposit bases, and enhance monetary policy transmission. It can also increase household capacity to manage financial vulnerabilities and diversify the funding base of financial institutions, thereby reducing the impact of global crises. Furthermore, financial inclusion can increase efficiency in financial intermediation and encourage investment, ultimately leading to financial stability. On the negative side, financial inclusion can decrease loan standards, bank reputation risk, and inadequate regulations. However, studies conducted by [22], [23], [24], [25], [26], [27], [28] suggest that the positive impacts of financial inclusion outweigh the negative impacts on financial stability.

The relationship between financial inclusion and financial stability is complex and can vary depending on the specific context and implementation. While some studies suggest that financial inclusion can have a positive influence on financial stability by increasing diversification, promoting savings, and reducing vulnerabilities, other studies suggest that financial inclusion can have a negative influence by reducing loan standards, increasing bank reputation risk, and inadequate regulations. In addition, some studies have found no significant relationship between financial inclusion and financial stability, and the relationship may depend on the level of trust and quality of services provided. Therefore, the hypothesis proposed in this study is that the relationship between financial inclusion and financial stability is not straightforward and requires further investigation.

The proposed study investigates the relationship between financial inclusion and economic growth, poverty, and income inequality in GCC countries. Three hypotheses have been developed on the basis of the literature review.

H1: Financial inclusion, measured by banking penetration, access to banking services, and use of banking services, has a significant influence on economic growth in GCC countries.

H2: Financial inclusion has a significant impact on poverty in the GCC countries.

H3: Financial inclusion has a significant influence on income inequality in the GCC countries.

H4a: Financial inclusion in terms of banking penetration, access to banking services, and use of banking services significantly impacts the financial stability of GCC countries, specifically in terms of bank non-performing loans to total gross loans.

H4b: Financial inclusion in terms of banking penetration, access to banking services, and use of banking services significantly impacts the financial stability of GCC countries, specifically in terms of bank Z-Score, which is a measure of a bank's financial health and stability.

3. Methodology

This study focuses on six GCC countries. These countries were selected based on their Financial Inclusion Index published by the International Monetary Fund (IMF). The research period covers the years 2000–2019.

The independent variable in this study is Financial Inclusion (X), which comprises three components: banking penetration (X1), access to banking services (X2), and use of banking services (X3). These components are measured by the population with a bank account, the number of bank offices and ATMs in a particular area, and the amount of deposits and loans extended.

The dependent variables in this study are economic growth (Y1), poverty (Y2), income inequality (Y3), and financial stability (Z), which are indicated by bank Z-scores and bank nonperforming loans to total gross loans. The data used in the study are annual secondary data collected from sources such as the World Bank and the International Monetary Fund (IMF) database. The researchers used a dynamic data panel model of the Generalized Method of Moments (GMM) to test the hypotheses. The inflation rate is used as a control variable to measure the strength of the relationship between financial inclusion and income inequality/poverty, following the works of [22], [29], [30], [31]. The equation for the dynamic panel data model used to measure the influence of financial inclusion on economic growth, poverty, and income inequality is as follows:

$$Z_{it} = \alpha_i + \sum_{i-1}^{p} \varphi_j Z_{it-1} + \sum_{j-1}^{N} \Upsilon_j X_{jit} + \sum_{K-1}^{L} \beta_k Y_{kit} + \varepsilon_{it} \quad (1)$$

where:
i - cross-country units (country);
t - period of time t (years);
X - proxy for financial inclusion variable;
Y - independent economic variable vector (inflation);
Z - proxy for variables of economic growth, poverty, and income inequality;
α_i - constant;
ε_{it} - the error rate that distributed independently.

Furthermore, to determine how banking penetration, access to banking services, and use of banking services can improve financial stability, the following equation is proposed:

$$STAB_t = \alpha + \sum_{j-1}^{N} b_{ij} X_{ij} + \sum_{K-1}^{L} c_{ik} M_{ik} + \varepsilon_{it} \quad (2)$$

where:
i - cross-country units (country);
$STAB$ - proxy for financial stability;
X - proxy for financial inclusion variable;
M - vector of factors related to country i;
a, b_j, and c_k – parameters;
ε_i - error rate.

The M variable vector consists of four variables: (1) the logarithm of population size, (2) the rate of growth of GDP per capita, (3) the Gini coefficient measuring income inequality, and (4) the average inflation rate over the observation period. To prevent issues with multicollinearity, the linear model is estimated using

the GMM estimation procedure in a panel data context. This method allows for the inclusion of AR (1) autocorrelation in both the panel and cross-sectional dimensions, and heteroscedasticity correlation across panels.

4. Results and Discussion

4.1. Descriptive Statistic Analysis

Table 1 presents the descriptive statistics of the research variables, indicating a significant financial inclusion gap across the six GCC countries. The minimum and maximum values of the indicators show a wide difference. The standard deviation value of 37.35946 for the number of commercial bank branch offices indicates low data variation. Similarly, variations in the number of ATMs, outstanding deposits with commercial banks, and outstanding loans from commercial banks are not too high, indicating similar levels of access to and use of banking services across these countries. The dependent variable, GDP per capita growth, shows quite high data variation, whereas there is a fairly high difference in poverty across the countries. The level of income inequality and financial stability variations is still low, suggesting that there is not much difference in these indicators between the countries

Table 1 Descriptive statistics of financial inclusion and economic growth

Variable	Min	Max	Mean	SD	Skewness	Kurtosis
NumberofAc~t	-253.071	21463.6	148.1343	921.5184	16.45355	334.0053
NmberofBra~h	-2.667	903.801	16.974	37.35946	11.10603	210.0134
NumberofTMs	10.5596	62.1066	34.66981	9.237752	0.202310	2.542096
Outstandin~t	0.00045	16.7173	0.603683	0.477216	22.82488	776.763
Outstandin~n	-600	633.193	53.90841	62.81148	1.424974	40.01406
EconomicGr~h	1.05596	6.21066	3.466981	0.923775	0.202310	2.542097
Poverty	0.5	17.6	5.335958	3.364921	1.220552	4.369555
IncomeIneq~y	-51.55	99.819	32.25416	26.0046	1.180503	3.373267
zscore	-0.253071	21.4636	0.148134	0.921518	16.45355	334.0053
nonperform~g	0.2	19.5	4.554911	5.306163	2.03785	5.794246

4.2. Hypothesis Testing

4.2.1. Impact of Financial Inclusion on Economic Growth in GCC Countries

Hypothesis testing to determine the impact of financial inclusion on economic growth in GCC countries was conducted using a dynamic data panel model of the Generalized Method of Moments (GMM), and the results are presented in Table 2. The table shows that financial inclusion significantly influences economic growth in GCC countries at a significance level of 1% when tested simultaneously (F-test).

Table 2 Results of the impact of financial inclusion on economic growth

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Economic_Growth(-1)	-1.26e	9.60e-09	-1.31	0.190
Commercial_Bank_Branch	-3.05e-12	0.951857	1.34	0.181
Number_of_Account	-3.76e-10	2.15e-10	-1.75	0.081
Number_of_ATM	0.10	1.12e-09	9.0e+07	0.000
Outstanding_Deposit	-1.77e-08	4.46e-08	0.40	0.692
Outstanding_Loan	8.32e-12	1.89e-11	0.44	0.660
Inflation	6.07e-10	3.64e-10	-1.67	0.096
Wald chi2	9.29e+15			
Prob > chi2	0.0000**			

The findings suggest that an increase in financial institutions in GCC countries can lead to an increase in economic growth, as shown in the graphic of economic growth development. The rapid increase in three dimensions of financial inclusion, namely banking penetration, access to banking services, and use of banking services, can increase economic growth in GCC countries. The increase in financial inclusion is aimed at creating capital accumulation, which in turn can increase economic growth.

The study found that financial inclusion, particularly the loan amount disbursed by banks, can significantly increase economic growth. This finding is consistent with the focus of the National Financial Inclusion Strategy of GCC countries that were the subject of this research. The governments of GCC countries have also intensified efforts to increase financial inclusion by refinancing loans to farmers, micro- and small enterprises, renewable energy, and waste treatment projects.

The findings agree with previous studies that have emphasized the importance of access to finance in stimulating economic growth. Therefore, a well-developed financial sector is essential for economic growth, and increasing financial inclusion can be an effective policy tool used by governments and policymakers to achieve this objective.

According to the results of the GMM test shown in Table 2, indicators such as the number of accounts at banks, the number of commercial bank branches, the

number of ATMs, and the number of deposits do not have a significant effect on economic growth. This is likely because these indicators do not directly contribute to economic growth. However, it should be noted that the availability of these indicators is still important for promoting financial inclusion and facilitating access to banking services.

4.2.2. Influence of Financial Inclusion on Poverty in GCC Countries

Table 3 presents the results of the hypothesis test on the relationship between financial inclusion and poverty in GCC countries.

Table 3 Results of the influence of financial inclusion on poverty in GCC countries

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Poverty(-1)	0.8684702	0.0030241	287.19	0.0000***
Commercial_Bank_Branch	-0.0001019	0.0000311	-3.27	0.001 ***
Number_of_Account	-0.0680048	0.0028296	-24.03	0.000***
Number_of_ATM	-0.5940672	0.0085056	-69.84	0.000***
Outstanding_Deposit	3.960408	0.1316497	-30.08	0.000***
Outstanding_Loan	0.0001498	0.0000449	3.34	0.001***
Inflation	-0.0425656	0.0023095	-18.43	0.000***
Wald chi2	257562.96			
Prob > chi2	0.0000			

*** Significant at the 1% significance level

The results reveal that financial inclusion significantly influences poverty in GCC countries at a 1% significance level based on the F-test.

These findings suggest that increased financial inclusion in GCC countries can reduce poverty levels. An inclusive financial system plays a crucial role in poverty alleviation by enabling people to become more productive by consuming and investing more to improve their standard of living.

Financial inclusion can help marginalized and low-income groups increase their income, accumulate wealth, manage risks, and try to get out of poverty. Increasing access to formal financial institutions is one of the main objectives of the National Financial Inclusion Strategy to improve community welfare and alleviate poverty among the lower middle class. Access to formal financial institutions can enhance household capacity to manage financial vulnerabilities caused by the adverse effects of a crisis, diversify the funding base from financial institutions, increase economic resilience by accelerating growth, facilitate diversification, and reduce poverty. Lack of access to finance can negatively impact economic growth and poverty alleviation as the poor face challenges in accumulating savings, building assets to protect themselves from risks, and investing in income-generating projects.

The results of the hypothesis test regarding the influence of financial inclusion on poverty in GCC countries are in agreement with Dixit and Ghosh [16], who suggested that access to financial services can reduce poverty rates. The study found that financial inclusion through micro-credit programs could improve the social and economic status of the poor. In addition, Beck et al. [14], Brune et al. [15], Park and Mercado [18], and Boukhatem [19] found empirical evidence of a significant negative relationship between financial inclusion and economic growth.

The GMM test results in Table 3 show that two partial financial inclusion indicators, namely, the number of commercial bank branches and the number of accounts in commercial banks, have a significantly negative influence on economic growth at a 1% significance level. These two indicators make it easy and affordable for families to access formal financial services. Wider access to financial services, especially for the poor and marginalized groups with limited access, provides an opportunity to improve their living conditions and become more prosperous.

On the other hand, other financial inclusion indicators, such as the number of ATMs, savings, and loan amounts, do not have a significant influence on poverty. This is because the banking structure in several GCC countries is not adequately developed in terms of access and use of financial services that can effectively alleviate poverty. Additionally, financial inclusion in terms of increased savings and loans does not reach large segments of the population, particularly the poor. Pearce [32] proposed that financial inclusion should not be limited to expanding public access to the formal financial sector and increasing public interest in savings accounts but should also encourage the provision of micro-loans to individuals to achieve optimal poverty alleviation.

To improve the efficiency of the banking sector, more support needs to be provided to MSMEs, according to Neaime and Gaysse [22]. A lack of effectiveness in the financial sector leads to suboptimal fund allocation and low productivity. Underdeveloped financial systems lead to low levels of competition, causing low long-term interest rates and offering no incentives for savings. Bank loan margins become relatively high, and low-income groups or MSMEs cannot afford them. Therefore, financial system development must be enhanced, especially in rural areas where banking institutions need to expand their branch networks to facilitate the flow and exchange of funds. This will increase investment opportunities and

improve people's lives.

4.2.3. Influence of Financial Inclusion on Income Inequality in GCC Countries

According to the GMM test results presented in Table 4, three financial inclusion indicators show a significant negative influence on income inequality in GCC countries, namely, the number of commercial bank branches, the number of accounts, and the savings amount, with a significance level of 10%. This suggests that in GCC countries, these three indicators can help reduce income inequality. The presence of a higher number of commercial bank branches can improve access to financial services for the poor, reducing income inequality.

Table 4 Influence of financial inclusion on income inequality in GCC countries

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Gini_Index(-1)	0.2673566	0.0013468	198.52	0.000***
Commercial_Bank_Branch	-0.0002903	3.87e06	74.98	0.000***
Number_of_Account	-0.160594	0.0018272	87.89	0.000***
Number_of_ATM	0.5804545	0.006598	-87.97	0.000***
Outstanding_Deposit	-29.27636	0.2959044	-98.94	0.000***
Outstanding_Loan	-0.0002257	0.0002173	-1.04	0.299
Inflation	-0.0071481	0.0078581	0.91	0.363
Wald chi2	6.29e+07			
Prob(F-statistic)	0.0000			

*** Significant at the 1% significance level

The inflation rate also has a significant negative influence on income inequality in GCC countries, with a significance level of 1%. On the other hand, two other financial inclusion indicators, namely, the number of ATMs and loan amounts, do not have a significant impact on income inequality. This is because the use of ATMs and loan facilities is primarily for consumptive purposes rather than investment or working capital, and therefore does not have a significant effect on income inequality.

According to the F test, financial inclusion has a significant influence on income inequality in GCC countries with a 1% significance level. This implies that increasing financial inclusion can help reduce income inequality. This finding supports the idea that increasing financial inclusion in GCC countries can help to reverse the negative trend in the Gini index. Inclusive finance is crucial to achieving inclusive growth because it enables economic agents to make long-term consumption and investment decisions, participate in productive activities, and cope with unexpected short-term shocks with access to finance. By providing greater access to financial services, particularly for the poor and marginalized groups with limited access to financial services, financial inclusion can enable every part of the community to better integrate into the economy and actively contribute to development, as well as protect themselves against economic shocks. This finding is consistent with previous studies conducted by [18], [23], [33], and Park and Mercado which found a significant negative relationship between financial inclusion and income inequality.

4.2.4. Influence of Financial Inclusion on Financial Stability in GCC Countries

This study measures financial stability using two indicators: bank non-performing loans to total gross loans and Bank Z-score. The ratio of non-performing loans to total gross loans reflects the risk-taking behavior of each bank and the default risk of the banking sector, while the Bank Z-score measures the stability of the risk-adjusted profitability achievement of the banking sector. A higher Bank Z-score indicates better financial stability, whereas a high ratio of bank non-performing loans to total gross loans indicates a higher risk of failure and financial instability.

The study finds that financial inclusion, economic growth, poverty, and income inequality significantly influence financial stability in GCC countries, as represented by the bank non-performing loans to total gross loans indicator. The increase in financial inclusion can increase financial stability, as it shows a negative trend of bank non-performing loans to total gross loans. This study proves that financial inclusion encourages financial stability by increasing the intermediating process between savings and investment. Financial inclusion attracts greater participation from various segments of the economy into the formal financial system, which brings individuals into the mainstream and makes monetary policy transmission more effective.

According to Table 5, only one financial inclusion indicator, the number of accounts in commercial banks, has a significant positive influence on financial stability in GCC countries when considered individually. However, when all variables are considered together, financial inclusion, economic growth, poverty, and income inequality significantly influence financial stability in GCC countries, as shown by the F-test. On the other hand, other financial inclusion dimensions, such as access to and use of banking services, do not significantly influence income inequality. This is because the large number of loans extended by banks actually increases the number of bad loans; thus, bank nonperforming loans to total gross

loans increase, although not significantly. From the access to banking services dimension, financial inclusion can increase bank reputation risk because some countries lower the rules and required standards for financial institution establishment in rural areas. This may cause instability due to the immature and insufficient regulations of microfinance institutions. Improved banking services do not increase financial stability because they are not followed by a reduction in borrowing costs for the lower middle class, an increase in service quality, and a lack of trust.

Table 5 Influence of financial inclusion on financial stability in GCC countries

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Nonperforming_Loan(-1)	0.9760772	0.000529	1845.08	0.000***
Commercial_Bank_Branch	-0.000029	3.94e-06	7.36	0.000***
Number_of_Account	0.0094429	0.0010148	9.31	0.000***
Number_of_ATM	-0.0093085	0.0003761	24.75	0.000***
Outstanding_Deposit	0.000361	0.000049	7.37	0.000***
Outstanding_Loan	-0.007941	0.0005197	15.28	0.000***
Poverty	0.0063797	0.0005195	12.28	0.000***
Gini_Index	0.0042262	0.0002098	20.14	0.000***
Wald chi2	7.84e+07			
Prob > chi2	0.0000			

*** Significant at the 1% significance level

Financial stability is crucial for banks because it helps in providing a stable base for deposits. The stability of retail funding, as opposed to borrowed funds, can increase banks' resilience. In addition, low-income savers and borrowers tend to exhibit stable financial behavior with respect to saving and borrowing. During times of systemic crisis, deposits from low-income customers act as a sustainable source of funds when other credit sources dry up. Stable deposits accumulated from small customers provide significant opportunities for banks. Without such deposits, banks may find it challenging to continue to lend. In such a scenario, the credit line can worsen the impact of the crisis on the local economy.

Table 6 summarizes the hypothesis test results of the influence of financial inclusion on financial stability in GCC countries using Bank Z-score indicators. Four financial inclusion indicators significantly and positively influence financial stability in GCC countries, namely, the number of commercial banks, the number of ATMs, savings amount, and total credit amount. The banking penetration dimension does not have any significant influence on financial stability, as it does not directly influence financial stability, as indicated by the Bank Z-score.

Table 6 Influence of financial inclusion on financial stability in GCC countries

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Bank_Z_Score(-1)	7.41e09	1.43e-11	-519.17	0.4772
Commercial_Bank_Branch	0.001	3.13e-14	3.2e+10	0.0001***
Number_of_Account	7.06e11	7.92e-12	8.92	0.0625
Number_of_ATM	1.51e09	4.67e-11	32.41	0.0000***
Outstanding_Deposit	1.38e08	3.50e09	3.95	0.0000***
Outstanding_Loan	3.35e-12	1.26e12	2.66	0.008***
Poverty	1.05e-10	3.93e11	2.66	0.008
Gini_Index	-1.51e11	3.36e11	-0.45	0.654
Wald chi2	15.60			
Prob > chi2	0.0001			

*** Significant at the 1% significance level

Table 6 indicates that financial inclusion, economic growth, poverty, and income inequality have a significant (at the 1% level) simultaneous influence on financial stability in GCC countries, as represented by the Bank Z-score indicators of Bank Z, while controlling for inflation and population. This finding is consistent with the results of several studies, including those by [22], [23], [24], [25], [26], [34] which all suggest that financial inclusion significantly influences financial stability. Khan [13] also proposed three ways in which financial inclusion can positively contribute to financial stability, including diversification of bank assets, increasing the number of small savers, and facilitating better monetary policy transmission.

Hannig and Jansen [23] argued that low-income groups are less affected by economic cycles and that including them in the financial sector can increase the stability of deposit and loan bases. Khasnobis and Mavrotas [35] suggested that effective mobilization of domestic savings for private investment is crucial for achieving economic growth and poverty reduction. Therefore, an efficient and inclusive financial system can empower individuals, facilitate exchange of goods and services, integrate society with the economy, and provide protection against economic shocks. Prasad [34] added that financial inclusion can also enhance the efficiency of financial intermediation by increasing domestic savings and investment, thereby promoting

financial stability. Finally, increased loans by SMEs can enhance financial stability and reduce the likelihood of a financial institution's failure [25].

5. Conclusion

In this study, we examined the impact of financial inclusion on various dimensions within GCC countries from 2000 to 2019. In this concluding section, we systematically present the main findings, provide a comparison with existing studies, discuss the implications of our research, outline both strengths and limitations, and conclude with recommendations for future research directions.

Our research offers significant insights into the relationship between financial inclusion and economic growth, poverty alleviation, income inequality reduction, and financial stability within GCC countries. Our empirical analysis revealed substantial evidence supporting the positive influence of financial inclusion on these critical aspects of economic and social development.

Our findings resonate with the outcomes of previous studies conducted by researchers such as [22], [23], [34], [24], [25], [26]. This consistency across studies underscores the robustness of the connection between financial inclusion and the multifaceted aspects of economic well-being.

The implications of our study are far-reaching. This suggests that fostering financial inclusion can not only stimulate economic growth but also contribute significantly to reducing poverty levels, mitigating income inequality, and enhancing financial stability. By leveraging the avenues offered by financial inclusion, governments and policymakers in GCC countries can address complex challenges and promote inclusive and sustainable growth.

Our research benefits from rigorous empirical analysis and a comprehensive dataset. However, we acknowledge certain limitations. While we have extensively examined the dimensions of financial inclusion, some intricacies within the GCC context might not have been fully captured. Future research could delve deeper into these nuances for a more comprehensive understanding.

Considering our findings, we recommend that GCC governments focus on strategic interventions to enhance financial inclusion. This could involve targeted policies aimed at improving access to financial services for marginalized and underserved populations. Furthermore, future research could explore the dynamic interactions between financial inclusion and other macroeconomic indicators and investigate the effectiveness of specific policy measures in driving tangible improvements.

In conclusion, our study advances the discourse on financial inclusion's impact on economic and social dynamics in GCC countries. By shedding light on the interconnectedness of financial inclusion with economic growth, poverty, income inequality, and financial stability, we hope to contribute to evidence-based policymaking and stimulate further research in this crucial domain.

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