How Financial Development and Regional Integration Promotes Inclusive Growth? Evidence from BRI Countries?

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ABSTRACT: This research examines the role of financial development and regional integration to attain inclusive growth in selected BRI countries from 2000 to 2020. Existing studies for BRI focused on economic growth, infrastructure development and environmental sustainability. A few studies indicated pro-poor growth, but no empirical study was found regarding inclusive growth. Economic growth is inclusive in a sense to promote employment level, reduction in poverty and inequality along with increased accessibility and social security. To incorporate these factors, this study calculates a detailed inclusive growth index incorporating its four dimensions using principal component analysis (PCA) and applies Pooled OLS and two stages least squares (2SLS) to overcome the endogeneity problem. The results shows that FD, TO and FDI are significant in explaining inclusive growth in selected countries. Moreover, four pillars of inclusive growth are individually analyzed to attain clearer results. These findings indicate that regional integration along with FD, TO and FDI increases economic growth with employment level, reduces poverty and inequality and increases accessibility with social protection. Therefore, the study recommends that outward FDI flow from China towards BRI emerging countries is crucial for employment generation with reduced poverty and inequality and improves accessibility and social security. Domestically, Host countries must stabilize their economies politically, socially, and culturally to attain maximum gain from this FDI inflow for sustainability.

KEYWORDS: Inclusive growth, foreign direct investment, Financial Development, BRI

1. INTRODUCTION

The Belt and Road Initiative (BRI) is one of China's largest outward foreign direct investments (OFDI) project that was launched in the fall of 2013 by President Xi Jinping. This project was initiated to promote regional connectivity between China and other Asian, African, and European countries to integrate economies for shared prosperity, technology transfer, trade liberalization, and the achievement of development with mutual consent. This connectivity initiated a wide range of activities, such as the connectivity of more than 70 nations including 5 billion people and an anticipated increase of 30% in global GDP (An *et al.,* 2021). The BRI prioritized economic development with free trade, connectivity between oil-exporting and importing nations, and industrialization to attain sustainable development goals (NDRC, 2015).

The Belt and Road Initiative (BRI) is an extensive connectivity of China with Asia Pacific and Europe to initiate several development projects (Lee *et al.,* 2018). It includes many projects related to infrastructure development, energy projects, and the creation of trade hubs to facilitate unrestricted trade among member nations (An *et al.,* 2021a). This project further aimed to encourage business enterprises to improve cross-border trade to attain economies of scale with efficient resource allocation (Huang, 2016; Rehman and Ding, 2020). During last decade Chinese outward foreign direct investment (OFDI) has increased by 30 percent since the start of BRI in 2013 (MOFCOM, 2019). This project attained more attention over the globe because most of the BRI countries are emerging economies with lower per capita income and they acquired foreign direct investment (FDI) with expected positive outcomes like employment creation, accessibility to health, education, social security, and infrastructure development (Kodzi, 2018; Rehman *et al.,* 2020). Therefore, most of the stakeholders from developing countries have placed FDI inflow as a top priority in their policy to enhance technological innovation, industrialization and to overcome the energy crisis with the initiation of megaprojects (Jiang *et al.,* 2020).

The outward foreign direct investment pattern of China is different from the globe. As global FDI has decreased from 8.1 percent to 6.7 percent from 2012 to 2017 and further declined in 2018 to its lowest level (UNCTAD, 2018a). Contrary to the globe, OFDI from China increased to 31 percent across Belt and Road countries in the last five years (MOFCOM, 2019). Over the globe,

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China has become one of the greater outward investors spread over 180 countries and has covered 80 percent of the globe with investment (UNCTAD, 2018b).

In the BRI project outward FDI from China and inflow of FDI to many developing countries have got prime importance. It is because FDI inflow has a huge impact on economic prosperity and is considered a step forward for economic development (Lee. C, 2009). More FDI inflows in developing nations push them to move from traditional society to take-off and drive to maturity stages where these economies invest capital to industrialize themselves. FDI exerts more development in developing economies through financial development (Alfaro *et al.,* 2009). It has a positive and significant impact on economic development in South Korea as it encourages monetary development that helps to promote physical and human capital (Koojaroenprasit 2012). Furthermore, (Sokang, 2018) investigated FDI and economic development nexus in Cambodia and concluded that FDI brings innovation to firms and enterprises through technological innovation. This outward investment from China is more important because it is expected to contribute 80% of the global GDP by 2050, and commerce between China and BRI nations may reach five trillion dollars. Additionally, it is anticipated that FDI to BRI countries will grow by $70 billion with a 7% annual growth rate (Asian Development Bank, 2017).

After the instigation of the BRI project, many researchers have explored various aspects of BRI member countries. Yu, Zhao, *et al.,* (2020) conducted an empirical analysis and found that BRI project enhanced China's exports to forty-five BRI countries and thirty non-BRI countries. Du and Zhang (2018) found that BRI project has enhanced China's outward foreign investment since 2013. Rauf *et al.,* (2018) explored that BRI has encouraged the trade in ASEAN region and developing countries have also participated in it. Dong *et al.,* (2019) also examined the economic effects of BRI in selected countries and concluded that in most of developing countries, energy crises can be overcome with this foreign investment. Huang *et al.,* (2010) determined foreign direct investment as a major determinant of poverty reduction in East Asia. For BRI, Liao *et al.,* (2020) examined the considerable impact of international development aid on FDI in BRI countries but they also pointed out that socio-economic development in BRI due to FDI has not been conducted in the prior studies.

Developing countries are still developing due to lack of financing for development and BRI is considered a big opportunity for them to break the vicious circle of poverty. As it is a monetary inflow towards developing countries that pushes up physical capital, human capital and creates ease toward sustainable development. In this nexus, Pegkas, (2015) conducted an empirical analysis of the FDI and growth nexus for Eurozone countries. Results showed the existence of log run co-integration among variables and computed that FDI enhances economic growth in European countries. Jude & Levieuge, (2017) also conducted an analysis of growth and FDI and concluded that FDI increases economic growth beyond a specific level of institutional quality. They also found that institutional reforms impose higher effects of FDI on economic growth and vice versa. Barrel & Nahhas, (2018) examined the impact of foreign direct investment on market integration in OECD countries and results showed that FDI promotes market integration and optimization of resources across the countries.

Existing literature for BRI and foreign investment focused on the attainment of higher economic growth, infrastructure development, optimum energy consumption and financial development. Very rare studies focused on the attainment of pro-poor or inclusive growth. Economic growth is inclusive when it is attached to increase in employment level, reduction in poverty and inequality, improves infrastructure, accessibility, and social security. During the 1990 decade, the term inclusive growth was formally introduced by several studies and later defined it as pro-poor growth that reduces poverty and income inequality (Habito, 2009 and Rauniyar & Kanbur, 2010). Other studies broadly defined it as a mechanism of economic growth that reduces poverty and inequality and improves the socio-economic determinants including health, education, food supply and security (Tella and Alimi 2016 and Whajah *et al.,* 2019). Oluseye and Gabriel (2017) explored FDI as a major factor to promote inclusive growth. Moreover, Anand *et al.,* (2013) find that inclusive growth is linked with financial stability, FDI, trade openness, and human capital. Diversification and importance of inclusive growth can be visualized in the figure given below:

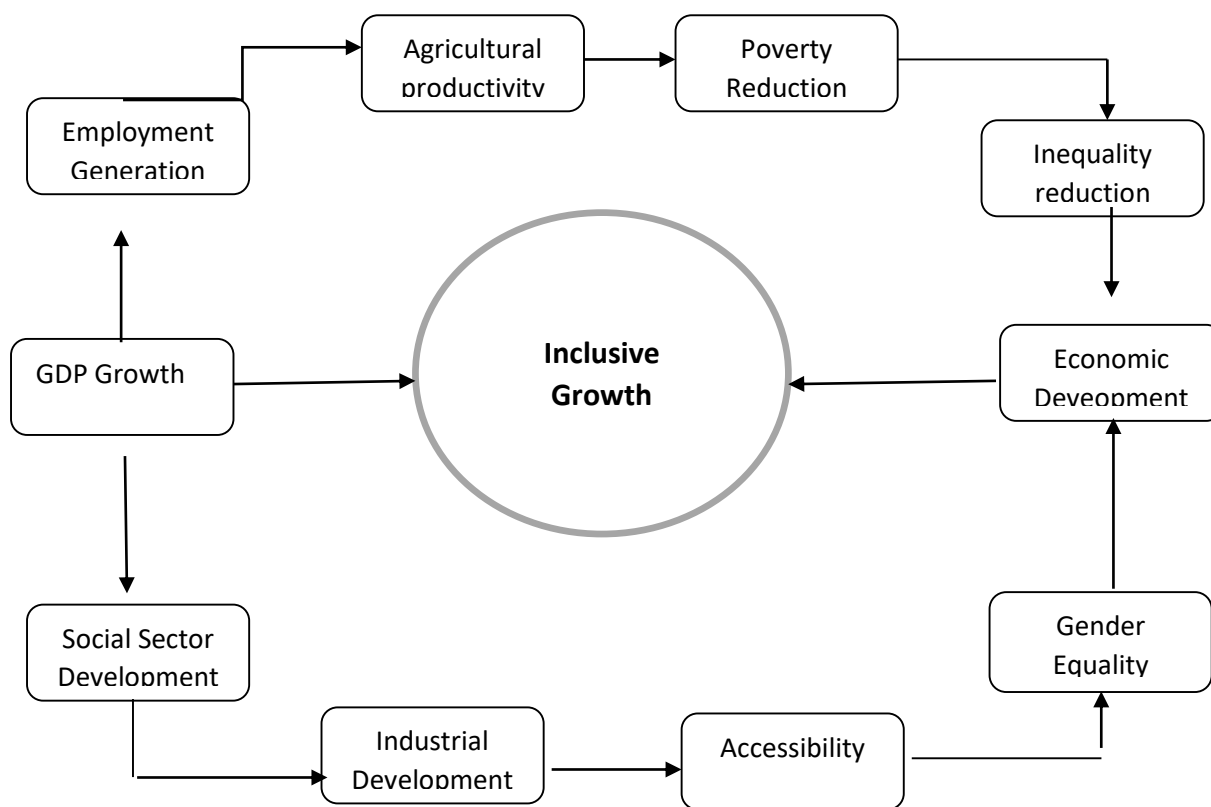**How Financial Development and Regional Integration Promotes Inclusive Growth? Evidence from BRI Countries?**

Figure 1. Elements of Inclusive Growth

This diagram indicates that economic growth is just one component of inclusive growth. More broadly, inclusive growth is linked with GDP growth but along with rise in employment generation and agricultural productivity, decline in unemployment and inequality. Moreover, social sector development, regional disparity, accessibility, and gender equity are also important components of inclusive growth. It can be concluded that economic growth and development are essential components, and all other elements are directly and indirectly linked to them. Considering these important elements of inclusive growth, this study attempts to analyze the effect of financial development, trade openness and foreign direct investment on inclusive growth rather than economic growth in selected BRI countries.

2. LITERATURE REVIEW

Foreign direct investment was initiated after the Second World War and at the initial stage, it was a political concern rather than economic. This stance was taken by developed countries to provide subsidies and incentives to developing countries to eradicate poverty. Its economic dimension describes the origination of technological progress, and it has a greater contribution to societal improvements (Solow 1956a). At present, improving human capital is the prior agenda of nations and these results in technological advancement. FDI inflows are directly linked with the country's internal employment level and skilled workers. At the macro level, FDI promotes economic growth only when the attitude of this inflow of revenue is positive. FDI inflows can be more beneficial if the host country is efficient in skilled labor and has better social, cultural, and resource characteristics (Sumner, 2005).

The link between human capital development FDI and human capital was deliberated on earlier in the literature and focused on economic growth. Bruno Ravallion, *et al.,* (1996a) argued that economic growth provides benefits to all individuals in society, but it could not decrease poverty and inequality accordingly. This situation along with economic growth creates an imbalance in the nation. In those countries where income inequality is high, higher economic growth may be achieved but overall socioeconomic well-being declines (Gohou & Soumare 2012). The growth process is required to be pro-poor which reduces poverty and income inequality to make economic balance. Many studies explored the relationship between FDI, and economic growth using different econometric techniques and found different results. Beugelsdijk, Smeets, Zwinkels *et al.,* (2008a) conducted an analysis of forty-four countries and found a positive effect of FDI on economic growth in developing countries but didn't find any horizontal or vertical effect. Lee & Chang, (2009) also conducted a similar analysis using a panel co-integration model for thirty-seven countries from 1970 to 2002 and found a strong relationship in the long run but weaker in the short run. Furthermore, a study using threshold regression for 91 countries' panel data set concluded that if the domestic financial market is developed

and improved more FDI will be inflow with greater positive influence, and without its improvement, there is no significant positive effect on FDI (Azman-Saini *et al.,* 2010).

Similarly, (Dutta & Roy 2011) explored the nexus between political stability financial development and FDI inflows for 97 countries and found a positive relationship between FDI and economic growth but political instability exhibits negative effects of FDI on economic growth. Omri *et al.,* (2014) investigated the nexus between FDI, carbon emission, and economic growth using a panel data set of 54 countries from 1990 to 2011. Regional analysis results showed that there found bidirectional causality in all regions except North Africa and Europe. Another panel data study for 49 developing countries from 1974 to 2008 concluded that higher FDI inflows lead to increase total factor productivity and bring technological advancement (Baltabaev, 2014a). Another study investigated the impact of FDI, trade openness, and economic growth in Ghana using an endogenous growth framework. The results justified the presence of log-run co-integration between FDI and economic growth. Findings also suggested that the interactive effect of FDI and exports can be more important for boosting economic growth (Sakyi *et al.,* 2015). Hussain & Haque (2016) also showed the positive effect of FDI and trade openness on economic growth in Bangladesh. Dutta *et al.,* (2017) computed the relationship between trade openness, FDI and economic growth. They have found positive effects, but unidirectional causality exists from FDI to growth, but bidirectional causality exists between FDI and domestic investment.

In the contrary, Bakari and Tiba (2019) investigated the nexus between trade openness, domestic investment and FDI on economic growth for 24 Asian countries. Fixed effect and Random effect model results showed that FDI and exports adversely affect the growth pattern of Asian economies. In case of Africa, Adegboye *et al.,* (2020a) analyzed the impact of FDI on economic development. Fixed and Random effect model results found that FDI is a significant determinant of economic growth in Africa. Adegboye *et al.,* (2020b) also pointed out that globalization has worsened the effects of trade openness and government effectiveness can play an important role in liberalizing only those sectors which improve income level and reduce poverty in the country.

The trade dimension is very important and considerable for BRI countries and many empirical studies have been conducted in this dimension. Over the globe, trade is considered an important determinant of economic growth. Akadiri *et al.,* (2020) investigated the impact of foreign trade on African developing countries. Panel bootstrapping estimation results revealed that trade significantly influences economic growth and existed bidirectional causality between GDP and trade openness. Similar findings were computed by Wasti and Zaidi (2020) in the case of Kuwait with a positive and bidirectional causal relationship. Stamatiou *et al.,* (2021) also conducted an empirical investigation to examine the trade and growth nexus in Greece. Vector error correction model and granger causality test results reported that trade openness increases economic growth, but a unidirectional relationship exists from trade to growth.

Chinese government believed that BRI's aim is to adjust a win-win situation to promote economic growth and prosperity with mutual consent (Li *et al.,* 2021). BRI project is nominated as a five-dimensional package that includes financial and infrastructure development, integration and trade facilitation, and furthermore cross-cultural exchange Zhang *et al.,* (2021). As so as, per capita income is concerned along BRI's route, most of the Sub-Saharan African and South Asian countries are low and lower-middle-income countries having per capita income less than 4000 US$ (Dong *et al.,* 2020). While in comparison, most of the countries from the Middle East, East Asia and Europe are categorized as upper-middle-income countries with an average per capita income of 41200 US$ (Dong *et al.,* 2020). Thus, increasing economic growth in low and lower-middle-income countries is an important agenda of the BRI project. Furthermore, in this dimension, Abbas et al., (2020) pointed out that regional integration for sustainable development required e-government and financial development to progress more efficiently and effectively. Moreover, Ullah *et al.,* (2021d) suggested that an important dimension of BRI for future work can be important to bridge the gap between financial development, natural resources, and government effectiveness. Besides, Usman *et al.,* (2021) also recommended incorporating financial inclusion with institutional and ecological factors for sustainable development through empirical investigation.

In the existing literature most of the studies conducted analysis for how integration with financial development, FDI and Trade openness increases economic growth in BRI countries. Very rare studies on BRI countries analyzed that growth is either inclusive or exclusive. Economic growth is inclusive when along with increase in gross domestic product; poverty and income inequality are decreased with rise in employment level. Furthermore, inclusive growth improves infrastructure and increases accessibility and social security. This study constructed a detailed index of inclusive growth including growth, inequality, poverty, employment, accessibility, and social security dimensions to investigate the importance of BRI for member countries in economic and socio-economic aspects.

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3. METHODOLOGY AND DATA

3.1 Conceptual Framework

Economic growth and inclusive growth are two different concepts. Growth simply indicates the level of productivity whereas inclusive growth indicates the positive outcomes or effects of economic growth in a country. Four major dimensions of inclusive growth are employment level, poverty and inequality, accessibility, and social security. Furthermore, employment level depends on different sectors such as agriculture, industry, and services. Poverty and inequality indicate the fairness and distribution of resources in the population and reflects population ratio and its respective income share. Accessibility indicates access to health, education and resources of the country including public and private sectors. The fourth important pillar is social security reflecting the overall social security ratings presenting equity of human and public resources. In this study financial development, foreign direct investment and trade openness are indicated as key factors to promote inclusive growth whereas inclusive growth is diversified in four important dimensions which are presented in the figure 2 given below:
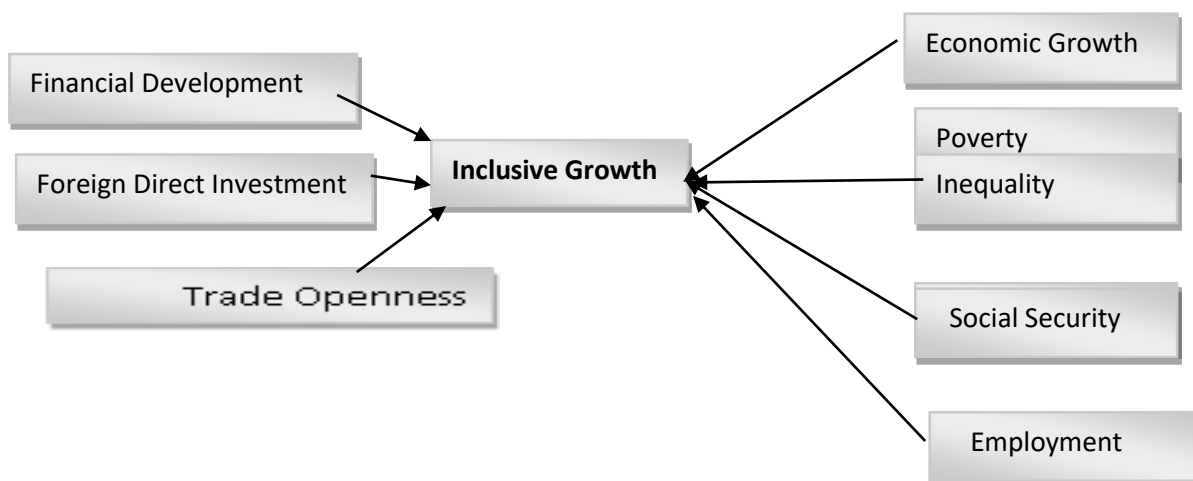

Figure. 2 Inclusive Growth Dimensions and Indicators

The purpose of this study is to empirically investigate the impact of financial development and regional integration with controlled factors on inclusive growth in selected BRI countries from 2000 to 2020. Inclusive growth is taken as dependent variable which includes four different dimensions. Foreign direct investment inflows (FDI) as percentage of GDP and trade openness (TO) as percentage of GDP and regional integration (RI) are taken independent variables in this study. Inclusive growth includes GDP per capita at constant US$2015, employment in services as percentage of total employment, employment in industries as percentage of total employment, gini index as measure of inequality, poverty head count ratio, life expectancy at birth, access to electricity percentage of population. Social protection dimension included equity of public resource inclusion (Ranking 1-6) high to low and overall social protection (1-6) are taken as social protection indicators. Furthermore, financial development is captured with financial development of banking sector represented by domestic credit to private sectors by bank as percentage of GDP. Financial development of private sector is presented by domestic credit to private sector as percentage of GDP. A dummy variable for regional integration is also created as (0) before 2013 and 1 after 2013. All these variables are used in the existing studies as Fayyaz *et al.,* (2019), Gohou & Soumare, (2012), Mansi *et al.,* (2020) and Osabohien *et al.,* (2022) The baseline model used in this study is given as follows:

IG =f (FD, TO, FDI, RI)   ---------------------- (1)

Where IG is inclusive growth, TO is the trade openness and FDI indicates foreign direct investment and a dummy variable for regional integration (RI) is created as (0,1). A prior expectation for explanatory variables is that these should be positively correlated with inclusive growth. Econometric model and description of these variables are given below as:

$$IG_{it} = \beta o + \beta 1 FD_{it} + \beta 2 TO_{it} + \beta 3 FDI_{it} + \beta 4 RI_{it} + \in_{it}$$ ------------------ (2)

In this model, IG presents inclusive growth; FD presents financial development, TO for trade openness, FDI for foreign direct investment and RI for regional integration.

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Table.1 Description of Variables and Data Source

Variables	Area of Index	Indicators	Measurement
Inclusive Growth Indicators Economic Growth Employment and Infrastructure	Economic Growth Employment Infrastructure	GDP at constant US$2015 Employment in industry Employment in services Energy consumption	GDP per capita at constant US$ 2017 **(WDI)** Emp. in Industries (%age of total) Emp. in services (%age of total employment) **(WDI)** Renewable energy consumption %age of total energy cons. **(WDI)**
Poverty and Inequality	Poverty headcount ratio Gini coefficient	Population earning < $2.15 a day The measure of population and respective income share	% age of population having income less than $2.15 a day **(HDI)** Gini index from 0 to 100 represents 0 as perfect equality and 100 as perfect inequality
Accessibility	(Health) Life expectancy at birth Access to electricity Adolescence illiterateness	Expected years of life at birth % age of population access to electricity % age of young out of education	Expected life at birth **(WDI)** % age of population access to electricity **(WDI)** % age of adolescent not enrolled in secondary school **(WDI)**
Social security	Equity of public resource ratings Equity of human resource ratings Overall social protection rating	Scale from (1-6) indicating high and lower range	Equity of public resource ratings (1=low and 6 =high) **(CPIA)** Equity of human resource ratings (1=low and 6 =high) **(CPIA)**
Financial Development	Financial development of private sector Financial development of banking sector	Domestic credit to private sector % age of GDP Domestic credit to private sector by banks % age of GDP	Domestic credit % age of GDP **(WDI)** Domestic credit to private sectors by bank % age of GDP **(WDI)**
Foreign Direct Investment	FDI inflows	FDI inflows % age of GDP	FDI net inflows as % **(WDI)**
Trade Openness	Imports and Exports Value	Value of exports and imports % age of GDP	Value of exports and imports % age of GDP **(WDI)**
Regional Integration (RI)	Before and After BRI	Dummy Variable	0 before 2013 and 1 after 2013

Note: WDI indicates world development indicators, World Bank Data, HDI presents Human Development Index data and CPIA presents Country policy and Institutional Assessment data

4. RESULTS AND DISCUSSION

4.1 Estimates from POLS, Fixed effect, and Random Effect

This subsection presents the results from pooled ordinary Least Squares (POLS). This technique is preferred to OLS because it doesn't encounter the differences in results through time or space but also considers two dimensions simultaneously rather than individually dealing cross-sections for different countries or time-series model for individual country (Adegboye *et al.,* 2020a). The Random effects (RE) based on the assumptions that cross countries specific effects are not stationary over time while fixed effects (FE) assume the stationarity of effects over time. Results are given below.

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Table 2. Pooled OLS, FE and RE estimates

Variables	Pooled OLS		Fixed Effect		Random Effect	
	Regression	Robustness	Regression	Robustness	Regression	Robustness
FDB	0.00822**	0.008022**	0.0041096**	0.004109**	0.004423*	0.00442***
	[0.00313] (0.0110)	[0.00312](0.001)	[0.001588](0.010)	[0.00326](0.0149)	[0.0016](0.006)	[0.00283[(0.11)
FDP	0.0200278*	0.0200278*	-0.0010455	-0.0010455	-0.00183	-0.00183
	[0.0027461] (0.000)	[0.0022] (0.0000)	[0.00156[(0.504)	[0.00227](0.648)	[0.00156](0.9)	[0.0022[(0.91)
TO	0.0015085*	0.001508*	0.2449602*	0.244960*	0.26227*	0.2622**
	[0.0005741] (0.009)	[0.000648] (0.0018)	[0.0615869] (0.000)	[0.136246] (0.008	[0.0605] (0.00)	[0.1281[(0.04)
FDI	0.04539**	0.045394**	0.0642662*	0.064266**	0.06279**	0.0627**
	[0.0234687] (0.055)	[0.02140](0.044)	[0.0118483](0.000)	[0.014185](0.015)	[0.01197[(0.000)	[0.0249](0.01)
RI	0.340837*	0.340837*	0.519867*	0.519867*	0.51211*	0.5121*
	[0.0616863] (0.000)	[0.340837](0.000)	[0.02554](0.000)	[0.054477](0.000)	[0.025](0.000)	[0.0548[(0.00)
CONS	-0.984145*	-0.94841*	-1.315142 *	-1.31514*	-1.479598*	-1.479598*
	[0.05805] (0.000)	[0.0598](0.000)	[0.2572](0.000)	[0.5912](0.003)	[0.2785](0.000)	[0.56772[(0.00)
R^2	0.45	0.45	0.50	0.50	0.50	0.50
F-stat	116.25	91.77	132.48	24.13	657.88	116.03
P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
No of Obs.	735	735	735	735	735	735

*Note: Standard errors and P-values are given in [ ] and ( ) respectively and significance is represented as *, ** , *** 1 %, 5% and 10% respectively*

The results of Pooled OLS, FE and RE shows that financial development, trade openness, foreign direct investment and regional integration are significant in explaining the inclusive growth in selected BRI countries. A 1 % increase in financial development of banking sector increases inclusive growth by 0.08 % while the financial development of private sector decreases inclusive growth by 0.2 %. Trade openness, foreign direct investment and regional integration significantly increase inclusive growth. A 1 % increase in TO, FDI and RI increases IG by 0.001, 0.04 and 0.34 respectively. The results from this study are in line with (Bakari and Tiba 2019; Wasti and Zaidi 2020 and Zhang *et al.,* 2021). BRI countries are lower and lower middle-income countries, and they required monetary inflow and investment to develop infrastructure along with increase in employment level, decline in poverty and income inequality with increased accessibility to health education and social security (Stamatiou *et al.,* 2021 and Rehman *et al.,* 2020).

The results of fixed effect and random effect are almost similar in sign but different in magnitude as in pooled OLS regression except financial development of private sector. Both FE and RE shows that FDP is not a significant determinant of inclusive growth in selected BRI countries. For TO, FDI and RI, the results are positive and significant in explaining inclusive growth in BRI countries (Liao *et al.,* 2020 and Dong *et al.,* 2019) also found similar results for BRI countries and pointed out that FDI inflows is a crucial factor to overcome energy crisis, employment generation, poverty reduction and an increased accessibility. Furthermore, Akadiri *et al.,* (2020) also found positive and significant and bidirectional causal relationship between trade openness and economic growth for developing countries having lower per capita income.

4.2 Results from Instrumental Variable Regression

The other aspect of empirical analysis deals with two-stages least squares (2SLS) and Instrumental variable (IV) regression. It is important to consider because the endogenous variables might be correlated with error term and more precisely error term correlated with the dependent variable. In this situation there comes the problem of endogenity problem. In the presence of endogeneity, the estimates obtained are spurious. Appropriate selection of instrumental variables normalizes standard errors and hence more reliable results are achieved. Results of 2SLS and IV regression are given below:

Table 3. Results from 2SLS and Instrumental Variable regression

Variables	2SLS- IV regression	FGLS Regression Results
FDB	0.00802*	0.015**
	[0.002471] (0.001)	[0.0031] (0.06))
FDP	0.020*	0.020*
	[0.0022] (0.02)	[0.0027] (0.000)

TO	0.0015*	0.0168*
	[0.00067] (0.012)	[0.00058](0.004)
FDI	0.04**	0.048**
	[0.0061] (0.034)	[0.024] (0.045)
RI	0.34*	0.552*
	[0.00713] (0.000)	[0.0774] (0.000)
CONS	-0.948*	0.0582**
	[0.059] (0.000)	[0.07640] (0.046)
R^2	0.46	0.45
F-stat	91.77	118.46
P-value	(0.000)	(0.000)
No of Obs.	735	735

*Note: Standard errors and P-values are given in [ ] and ( ) respectively and significance is represented as *, ** , *** 1 %, 5% and 10% respectively*

The results of instrumental variables from 2SLS and feasible GLS are exact to the prior expectations of positive and significant relationship among FD, TO, FDI and inclusive growth. The outward foreign direct investment (OFDI) from China and inflow of FDI in selected developing countries owned to impose positive effects. Both these model results indicate that financial development, trade openness, FDI and regional integration are significant determinants of inclusive growth in selected BRI countries. An *et al.,* (2021) also reported similar results that BRI has connected 70 nations and 5 billion people to promote financial development, facilitate trade and attain sustainable pro-poor growth. Kodzi, (2018) and Rehman *et al.,* (2020) explained that main aim of BRI project is to speed up major macroeconomic outcome like industrial development, trade facilitation, infrastructure development also to increase the ease of access for health, education, and other facilities. Furthermore, Liao *et al.,* (2020) determined the development of socio-economic indicators in BRI countries due to FDI inflow in developing countries.

4.3 Individual Analysis for Inclusive Growth Determinants
Although the above two models show reliable results using various econometric techniques based on reliability. As Osabohien *et al.,* (2022) has indicated four pillars of inclusive growth which are: (1) Economic growth and employment, (2) Poverty and Inequality, (3) Accessibility and (4) Social protection. This study analyzed the separate effects of financial development, FDI, TO and regional integration on these determinants. Therefore, our baseline model is further divided into four sub models to individually analyze the effects on four pillars of inclusive growth to attain clearer results.

$$G.EMP_{it} = \beta o + \beta 1 FD_{it} + \beta 2 TO_{it} + \beta 3 FDI_{it} + \beta 4 RI_{it} + \in_{it} \text{------------------ (3)}$$
$$POV.IN_{it} = \beta o + \beta 1 FD_{it} + \beta 2 TO_{it} + \beta 3 FDI_{it} + \beta 4 RI_{it} + \in_{it} \text{-------------------- (4)}$$
$$ACC_{it} = \beta o + \beta 1 FD_{it} + \beta 2 TO_{it} + \beta 3 FDI_{it} + \beta 4 RI_{it} + \in_{it} \text{---------------------- (5)}$$
$$SOC_{it} = \beta o + \beta 1 FD_{it} + \beta 2 TO_{it} + \beta 3 FDI_{it} + \beta 4 RI_{it} + \in_{it} \text{------------------------ (6)}$$

In the equation (3) G.EM shows growth and employment index which includes GDP growth and employment in industrial sector and employment in services sector. In equation (3), POV.IN indicates poverty and inequality index (Head count ratio and Gini coefficient). In equation (5) ACC presents accessibility index including Life expectancy at birth, population ratio having access to electricity and access to education. In equation (6) SOC presents social security index which includes (Equity of public resource ratings, equity of human resource ratings and overall social protection and these variables have ranking from (1 to 6). Pooled OLS estimates of these models are given below.

Table 4. Individual Estimates of Inclusive Growth Determinants

Variables	Pooled OLS			
	GROWTH	**POV.INEQ**	**ACCESSIBILITY**	**SOC.SEC**
FDB	0.0112*	0.00534	0.00396	-0.00358
	[0.00368] (0.002)	[0.00418] (0.195)	[0.00352] (0.261)	[0.00377] (0.33)
FDP	0.00494***	-0.0138 *	0.0279*	0.0241*
	[0.00323] (0.126)	[0.00361] (0.002)	[0.00309] (0.000)	[0.00326] (0.000)
TO	0.00429*	0.00259*	0.0017	-0.00094
	[0.00067] (0.000)	[0.000745[(0.001)	[0.00063[(0.78)	[0.001][(0.160)
FDI	0.12192**	-0.01337**	0.009	0.0154*

	[0.0061] (0.044)		[0.00675[(0.048)	[0.005] (0.09)	[0.006103] (0.012)
RI	0.21315*		-0.15382**	0.0418	-0.1802*
	[0.00713] (0.003)		[0.07973] (0.05)	[0.0682] (0.540)	[0.072] (0.013)
CONS	-0.8529*		0.0582	0.6267	-0.45227*
	[0.068323] (0.000)		[0.07640] (0.446)	[0.0654] (0.000)	[0.069] (0.000)
R^2	0.23		0.45	0.30	0.22
F-stat	45.11		6.87	62.50	41.08
P-value	(0.000)		(0.000)	(0.000)	(0.000)
No of Obs.	735		735	735	735

*Note: Standard errors and P-values are given in [ ] and ( ) respectively and significance is represented as *, ** , *** 1 %, 5% and 10% respectively*

These results shows that financial development of banking sector significantly increases growth and employment as 1 % increase in FDB increases GDP.EMP by 0.01 points but FDB is not a significant factor in explaining poverty inequality, accessibility, and social security. This might be due to fluctuations in bank rate policy in most of the developing countries. FDP is also a significant determinant of economic growth and employment and more importantly, it significantly decreases poverty and inequality in selected countries. As the private sector contributes more to total factor productivity of a country and a greater source of income and employment for labor force. Private sector's financial development significantly increases accessibility and social security. This means the private sector's financial development seemed a crucial factor for the attainment of inclusive growth. Trade openness significantly increased economic growth and employment and these findings are supported by many other findings in model one. Regarding poverty and inequality, trade openness seems to have a positive and significant effect. This is because developing countries specialize in agriculture sector while imports are mostly industrial products. When instead of subsidizing poor farmers, import substitution policies are mechanized trade can impose adverse effects on inequality. Regarding trade, export promotion as well as import substitution policies can be more beneficial for reduction in poverty and income inequality. Furthermore, trade openness is not a significant factor in explaining accessibility and social security in this study.

The two most important variables, foreign direct investment and regional integration are significant in increasing economic growth of BRI countries. The important finding of this study is that FDI and RI are significant elements to decrease poverty and inequality in selected BRI countries. Moreover, FDI is also significant in increasing accessibility and social security, but RI indicates negative and significant effect on social security. This is because developing countries have weak institutional framework to design and enforce proper and balanced legislation. Strengthened institutions with sound legislation can give favorable results for trade openness and social security.

5. CONCLUSION AND POLICY IMPLICATIONS

This study aimed to analyze the effect of financial development, FDI, trade openness and regional integration on inclusive growth in selected BRI countries from 2000 to 2020 based on the availability of the data. For baseline model Pooled OLS, FE and RE regression techniques are used and for convenience 2SLS instrumental variable technique was also applied. Results from this regression computed that FD, TO, FDI and RI are significant determinants of inclusive growth in selected BRI countries. Four important pillars of inclusive growth are individually analyzed to obtain more detailed results. These results also indicated that these selected variables are important to increase economic growth with employment, reduction in poverty and inequality, increased accessibility to health education and social security. Based on these following important policy implications are suggested for selected BRI countries.

- Emerging BRI countries have greater opportunity to attain economic transformation through FDI inflows from China. In this contemplation, these countries must stabilize their domestic economy politically, socially, and culturally to provide ease to investor country to better utilize the resources.
- Selected country governments must co-operate the investor country's government in land provision for routes and other infrastructure projects. It is worthy because this investment must provide employment opportunities, poverty reduction with reduced inequality and access to education and health facilities. Hence, it will make an ease for the host countries to attain sustainable development goals.
- Other than foreign investment, these countries must invest in private sector because financial development in private sector seems an important aspect for increasing economic growth with employment, poverty and inequality reduction and increased accessibility to health and education.

How Financial Development and Regional Integration Promotes Inclusive Growth? Evidence from BRI Countries?

5.1 Limitations of the study And Further Research

This study selected only 35 countries based on the availability of data, hence it can't completely explain BRI's importance. Secondly, inclusive growth can also include accessibility towards safe drinking water, hospitals, and educational institutions. Furthermore, institutional quality and political stability can be more crucial for better utilization of inflowing FDI. Hence there is a new space for other researchers.

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Table 5. List of countries used in this study.

1). Angola 2). Armenia 3). Bolivia 4). Burundi 5) Carboverde 6) Chad   7) Comoros 8). Congo. De 9). Congo. Republic 10). Cote.Id Lvoire 11). Dijibouti   12). Domonicia 13). Ecuador 14). Ethiopia 15). Fiji 16). Georjia 17). Ghana   18) Guinea 19). Guinea Biss 20). Kargyz. Rep   21). Lao. Pdr. 22) Malavi   23). Maldives 24). Mali 25). Maldova 26) Mongolia 27). Niger 28) Nigeria   29). Pakistan 30). Rwanda   31). Senegal 32). Tanzania 33). Togo 34). Uganda   35). Vietnam