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Rethinking Growth in a Technological Era: Role of Fin-tech and Inclusive Green Growth

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Abstract

This study aims to examine the impact of fintech on inclusive green growth. The study utilizes the dataset from the World Bank and IMF websites. The data is downloaded from 2019 to 2024. This study utilizes the panel data analysis, mainly relying on the fixed effect model. The results show that fintech has a positive impact on inclusive green growth. The results are further explored for high- and low-income countries, where the findings suggest that countries with high income have a significant impact of fintech on inclusive green growth. These results highlight that rich economies have a more profound relationship among the studied variables. The findings are important for policymakers and regulatory bodies as they help in strategic decision-making. Countries can make policies to accelerate financial technology, as it is beneficial to achieve sustainability goals.

Keywords: *Fintech, Inclusive Green Growth, Income Classification, Fixed Effect Model, Sustainability*

1. Introduction

In the last few decades, the global shift has been seen from economic growth to a new narrative of sustainable growth. It delineates the amalgamation of the doctrines of economic growth with social equity and environmental sustainability, referred to as inclusive green growth (IGG). It proposes an economic model that enhances social inclusion and economic growth by also enhancing environmental quality (Asian Development Bank, 2018; He & Du, 2022; Li & Fang, 2025a; Ofori et al., n.d.; Sun et al., 2020a). By reducing carbon dioxide emissions, decreasing wastage and pollution, it promises sustainable and green economic growth. Moreover, it also ensures a green and sustainable tomorrow by creating opportunities that encompass all the segments of society and by ensuring good environmental quality (Fan et al., 2022; Ghabbour, 1972; Wang et al., 2022). Policy

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makers are now more into achieving equitable distribution of the fruits of growth by not compromising environmental quality (Desalegn & Tangl, 2022; Xu et al., 2025).

With the passage of time, the notion of economic growth has evolved in favor of its nationals by integrating inclusiveness and greenness into it (Desalegn & Tangl, 2022). The blend of technology with the financial system helps the economies to achieve the objective of inclusive green growth. Such a combination of technology and financial system is also known as fintech. Fintech enables society to reap the benefits of financial inclusion and promote sustainable investments. For instance, fintech innovations such as blockchain and artificial intelligence allow renewable energy crowdfunding and carbon trading (Hassan et al., 2024). Further, fintech helps in the promotion and easy accessibility of financial instruments such as green bonds or socially responsible investments to the investors (Iqbal et al., 2024; Rehman et al., 2025). These instruments are exclusively designed for green buildings, renewable energy projects, eco-friendly transportation, and sustainable agriculture by corporations and governments, which ultimately boost both economic growth and save the ecosystem, referred as inclusive green growth (Deng et al., 2019; Kanu et al., 2014; Li & Fang, 2025b; Saleem et al., 2025).

Despite widespread literature on inclusive green growth and fintech, limited attention has yet been paid to exploring the link between them. The current study aims to examine the impact of fintech on inclusive green growth. A profound investigation of this relationship is necessary for policymakers, economic analysts, and technologists to know about this nexus of Fintech and IGG. This study is specifically significant about the attainment of Sustainable Development Goals (SDGs), which promise to resolve economic, social, and environmental problems. This study is a useful addition in the literature of studies related to the impact of fintech on inclusive green growth (IGG) by paving the way to know about the technological financial inventions that bring social inclusivity and environmental sustainability along with economic growth for the high- and low-income countries. By connecting innovations in finance with inclusiveness, greenness, and economic growth, this study bridges the gap in the literature on digital finance and gives policy implications to connect the technological developments with the more comprehensive objectives of development.

2. Literature Review

Numerous studies have revolved around the conception and measurement of inclusive green growth, whereas limited studies have discussed the role of fintech in inclusive green growth. The literature is divided into two segments, first segment

explains the evolution of the concept of inclusive green growth, and the second segment explains its

2.1 Evolution of Inclusive Green Growth

Inclusive Green Growth (IGG) has been devised from the conceptions of social inclusion, economic progress, and environmental sustainability (Jha et al., 2018). Traditional concepts of economic growth mostly resulted in higher incomes along with some negative outcomes. Means they have widened the rich-poor gaps, lessened inclusion of the middle and low-income classes, and increased environmental deterioration (Aminata et al., 2022; Bouma & Berkhout, 2015; Zhou, 2022). This scenario led the economists and policymakers to devise such a mechanism and focus on that strategy which enhances economic progress in its true meaning. Thus, concepts like pro-poor growth, inclusive growth, and inclusive green growth were merged with the passage of time. World Bank, many other organizations, and researchers gave the concept of pro-poor growth which means the benefits of economic progress should reach the poor people. For its measurement, different methods were adopted, including 'Watts Index' and 'Growth Incidence Curve'(Ravallion & Chen, 2003). It is also explained as the "departure from the trickle-down effect" (Kakwani & Pernia, 2000). They presented a new index to quantify it, believing it to be a superior measure than the Gini Index (Bakker & Messerli, 2017). It is also argued that the need to introduce a better version of the depiction of economic growth, which reduces the threats to political, institutional, and social stability, and leads to sustainable economic growth (Ali & Son, 2007; Jones, 2013). Hence, the concept of inclusive growth was coming into the realization of researchers, institutions, and policymakers in the mid-2000s. This concept diverted the objective towards gaining equity and more inclusion of people through creating more jobs and entrepreneurship rather than the redistribution, which only covers the nexus of poverty and economic growth (Bakker & Messerli, 2017; Ianchovichina & Gable, 2012). This concept was further researched by many, and different definitions were presented. Among these, a researcher referred to it as "growth coupled with equal opportunities"(Ijaz, 2022; Rauniyar & Kanbur, 2010). According to the World Bank, inclusive growth permits nationals to make contributions and to enjoy the fruits of economic growth. It was also stated that this growth must be at a broad level, comprising all sectors and inclusiveness of a greater portion of the labor force (Ianchovichina & Gable, 2012; Ianchovichina & Lundström, 2009). In 2007, the Asian Development Bank marked inclusive economic growth by writing it as a sophisticated and complex process of alleviating

absolute poverty along with sustained and inclusive growth achieved by having more employment and a better standard of living, successfully facing economic challenges. Moreover, the African Development Bank in 2013 also highlighted the definition of inclusive economic growth. It defines that inclusive economic growth is obtained from "wider access to sustainable socioeconomic opportunities" for nationals by maintaining the "fairness, equality and plurality" (Kanu et al., 2014). But this concept also got polished in 2015 with the arrival of agreements made on Sustainable Development Goals (SDGs) and climate change at the global level. Asian Development Bank presented a new concept of Inclusive Green Growth and its measurement with the help of creating an index (Jha et al., 2018). This concept was superior to the previous ones because of its focus on environmental sustainability. Aforementioned frameworks, along with the Asian Development Bank's and International Monetary Fund's frameworks, neglected these environmental factors (Jha et al., 2018; Kanu et al., 2014; Mlachila et al., 2017). After this, the World Economic Forum also presented the concept of IGG and its measurement with the help of an index, but its third pillar, related to the environment, lacks important indicators like the use of water and energy intensity (Schwab, 2018). So far, only the Asian Development Bank's methodology of 2018 has measured IGGI more broadly, comprising all important and relevant indicators depicting the true picture of economic progress in the economy in its report of the Asian Development Bank (Jha et al., 2018). In this, a more accurate framework of inclusive green growth has been presented and measured with the help of three main pillars (economic growth, social equity, and environmental sustainability) comprising several relevant indicators.

2.2 Insights from Fintech and Inclusive Green Growth (IGG)

These days, technology plays a vital role in performing financial activities, which has generated the notion of Fintech (Guermazi, 2025; Schueffel, 2016). This can be illustrated as betterment of financial assistance with the help of innovations in technology, by keeping in view the affiliated terms and conditions of the specific firm. (Leong & Sung, 2018). It is one of the emerging areas encompassing mobile payments to high-frequency trading, digital currency to blockchains (Kim, 2018).

Recently, various theoretical frameworks and measurement strategies have been developed for fintech and emerging along with their impact on economic indicators. Basically, fintech is a broad term covering the latest technology, convergence towards new approaches, and optimal financial facilities (Habib, 2025). It is comprised of various stakeholders, covering the aggregate level to the firm

level, by utilizing the latest internet technology for the provision of financial facilities. The presence of variety in its nature makes it more challenging to measure, causing researchers to adopt varying indicators (B. Wu et al., 2024). Different proxy variables have been utilized for fintech, including research and development expenditures, the number of firms related to fintech (Song et al., 2021), the digital financial inclusion index (Kaur & Negi, 2025; You et al., 2023), and the number of mobile and internet users (Ghouse et al., 2025). Moreover, numerous variables affect fintech. Study suggests that when the number of fintech startups rises, regional economic development also increases (Haddad & Hornuf, 2019). A key study also assessed the role of fintech in their study and found that people with technological expertise are widely available in areas with strong financial management facilities, which leads to the development of fintech (Laidroo & Avarmaa, 2020). Another study highlighted financial regulations and policy-making as a moderator of the growth in fintech (Knight & Wójcik, 2020). While on the other side, if fintech and inclusive green growth are discussed, then the available literature becomes more limited. As almost all the studies are at the regional and provincial level of China. The linkage between fintech and inclusive green growth for 287 administrative units of China for the time period of 2011-2021 was analyzed (Wu et al., 2024). Text analysis was made to check the measurement of developments in fintech. Moreover, a double machine learning model was also incorporated to carry out the empirical analysis. It was concluded that there exists a significant positive relationship between fintech and inclusive green growth. In another study, the inclusive green growth for 30 provinces of China over the time range 2011-19 was quantified (Li & Fang, 2025b).

Numerous empirical analyses, along with objective and subjective examinations, were made and derived the promote of inclusive green growth due to digital finance via innovations in technologies. Moreover, the impact of the Belt and Road Initiative on tourism, fintech, and green growth for China was checked (Iftikhar et al., 2025). The sample size comprised 148 countries over the time span of 2004-2021. The two-step Generalized Method of Moments was employed, and it was concluded that the Belt and Road Initiative is a positive moderator of tourism, fintech, and green economic growth. Control variables, including institutional quality and renewable energy, also revealed a positive relation with green growth. In addition to this, the role of digital finance and green growth mainly for the 270 cities of China over the time range of 2011-21 was analyzed (Peng & Zeng, 2024). Panel data was utilized, and the two-stage least squares method, along with fixed effects

models, was used. It was concluded that fintech enhances inclusive green growth in the cities of China, whereas green technology was found to be the main factor behind this. In addition to these, numerous studies were conducted mainly for China only (Fan et al., 2023; Wu, 2024; Ishtiaq et al., 2024). Whereas mixed results were seen, one study found a positive linkage among fintech and inclusive green growth (Ishtiaq et al., 2024), whereas some found a negative one (Fan et al., 2023; Sun et al., 2020b).

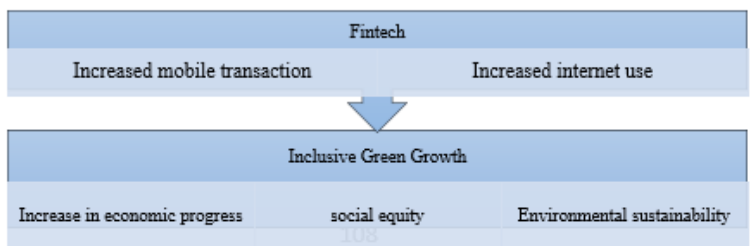
By adding up, it is evident that fintech and inclusive green growth have significant ties, but unfortunately, this area has very limited research. Only provincial and city-level pieces of research could be found, having very narrow frameworks. It is a need of the hour to give a comprehensive framework of fintech and inclusive green growth at the global level, explaining separately for developed and developing economies.

2.3 Theoretical Underpinnings

According to the Schumpeterian Growth model, innovation and technological change are the driving factors of economic growth. Creative destruction is a prerequisite to a sustained process of economic growth (Aghion, 2002; Aghion et al., 2014; Dinopoulos & Thompson, 1998, 1999; Ertur & Koch, 2011). To achieve a sustained process of economic growth, new technologies in the financial sector play a vital role. In this regard, fintech is primarily responsible for enhancing the quality and quantity of economic growth, i.e., promoting inclusivity and greenness in economic growth (Bel Hadj Miled, 2025; Novák et al., 2025). Some researchers argue that newer technologies create pollution, so it is important to look into the issue of environment side by side, so that not only inclusivity but also greenness in growth can be achieved (Brock & Taylor, 2005).

Figure 1 illustrates that widespread use of the internet and mobile transactions leads to the exacerbated use of financial technology, which in turn raises the economic progress along with equitable fruits to all segments of society and environmental sustainability due to reduced reliance on paper transactions, etc.

Figure 3. *Theoretical Framework*



3. Methodology

3.1 Data

The data for the studied variables were downloaded from the websites of the World Bank, IMF, and World Integrated Trade Solutions. The studied data range from 2019 to 2024.

3.2 Econometric Model

The economic model for this study is

$$IGGI = f(Fintech, Control\ Variables)$$

$$IGGI = \beta_0 + \beta_1 Fintech + \beta_2 GDP + \beta_3 TS + \beta_4 TP + \beta_5 HTE + \beta_6 RE + \beta_7 FDI + \mu$$

Here, IGGI denotes inclusive green growth, Fintech means financial technology, GDP means Gross Domestic Product (USD), TS stands for tertiary school education, TP means total population, HTE stands for High-Tech expenditures, RE stands for renewable energy, and FDI means foreign direct investment.

3.3 Variables Construction

3.3.1 Dependent Variable

IGGI has been taken as the dependent variable, and it is constructed as per the methodology of the Asian Development Bank (Jha et al., 2018). According to this, IGGI is quantified by applying Principal Component Analysis (PCA) firstly on the indicators of IGGI and then on the pillars of IGGI to get a single value showing the IGGI value for each country and each year. Detail on the pillars and indicators is given below.

Table 1. *List of all Indicators of the Index*

Pillar 1: Economic Growth	**Source**	**Pillar 2: Social Equity**	**Source**	**Pillar 3: Environmental Sustainability**	**Source**
GDP per capita growth rate	WDI	Employment–population ratio	WDI	Natural resource rent	WDI
Inverse CV of GDP per capita growth		Life expectancy gender gap	WDI	Renewable freshwater resources	WDI
Trade openness	WDI	Primary enrollment gender gap	WDI	Water productivity	WDI
HH Market Concentration Index	World Integrated Trade Solution (WITS)	Labor force participation gender gap	WDI	Air pollution	WDI

Age dependency ratio	WDI	Life expectancy at birth	WDI	CO2 per GDP	WDI
Adjusted net savings	World Bank	Infant mortality rate	WDI	Energy intensity of primary energy	WDI
Gross general government debt	WDI	Access to improved sanitation	WDI	Use of renewable energy	WDI
		Access to improved water	WDI		
		Access to electricity	WDI		
		Gini coefficient on inequality	WDI		
		Poverty gap	WDI		
		Mean years of schooling			
		Primary completion rate	WDI		
		Political participation gap			

(Source: (Jha et al., 2018))

3.3.2 Independent Variable

Fintech is measured as the number of mobile and internet transactions (Ghouse et al., 2025) and the value of mobile and internet transactions.

3.3.3 Control Variables

In addition to this, various control variables have been taken, including high technology exports, total population, renewable energy consumption, tertiary school enrollment, and foreign direct investment. Proxy variables and the source of all the variables are mentioned in Table 2.

Table 2: *Detail of Variables and Their Source*

Symbols	Variable Name	Proxy	Data Source
IGGI	Inclusive Green Growth	Inclusive Green Growth Index	Asian Development Bank
FINTECH	Fintech	Number of mobile and internet banking transactions per 1000 adults	IMF
		Value of mobile and internet banking transactions per 1000 adults	
HIGHTECH EXPO	High Tech Exports	High Technology Exports (% of manufactured exports)	WDI
POP	Total Population	Population, total	WDI

GDP	Gross Domestic Product	Gross Domestic Product	WDI
RENERGY CONSP	Renewable Energy Consumption	Renewable Energy Consumption (% of total final energy consumption)	WDI
EDU	Tertiary School Enrollment	School enrollment, tertiary (% gross)	WDI
FDIINFLOW	Foreign Direct Investment	Foreign Direct Investment, net inflows (BoP, current US$)	WDI

4. Results

4.1 Descriptive Stats

The results for descriptive statistics are shown in Table 3. The index for IGGI is developed as per the guidelines of Asian Development Bank. The average value of IGGI is 0.207 with a standard deviation of 0.109, whereas the minimum (maximum value) is 0.076 (0.779). The higher value of IGGI shows higher green growth of an economy. It can be seen from the table that the studied dataset has mixed values. The average value of FINTECH is 9.556 with a standard deviation of 3.044. It is evident from the table that this variable has a very low standard deviation. It means that most of the values lie near the mean. The GDP has a mean of 25.19, with a deviation value of 2.924. The maximum (minimum) values are 19.615 (31.709). The GDP values are mostly close to the average value. This is because of taking the logarithm of GDP. Tertiary education (EDU) has an average of 3.712 with a standard deviation of 0.821. The variable population (POP) has an average of 2.997 with a standard deviation of 10.447. A higher deviation of population indicates that the sample consists of a mixed population of countries in which some countries have higher and lower populations. The renewable energy consumption has an average value of 2.887 with a standard deviation of 1.321, whereas the minimum (maximum) values are -2.303 (4.571). The sample has a minimum value in minus, which shows that in the studied samples, some countries are not relying on renewable energy resources. The variable of high technology exports has an average value of 1.813 with a standard deviation of 1.599. Higher deviation of the variable shows that the sample consists of countries with high reliance on technology exports, whereas some sample countries have the least reliance on high-tech exports. The variable of FDI inflows has an average value of 21.782 with a standard deviation of 2.937.

Table 3: *Descriptive Statistics*

Variable	Obs	Mean	Std. Dev.	Min	Max
IGGI	642	0.207	0.109	0.076	0.779
FINTECH	601	9.566	3.044	-6.031	21.872
GDP	630	25.19	2.924	19.615	31.709
EDU	457	3.712	0.821	1.435	5.292

POP	642	16.152	2.997	10.477	22.655
RENERGY CONSP	612	2.887	1.321	-2.303	4.571
HIGHTECH EXPO	512	1.813	1.599	-10.232	4.56
FDIINFLOW	528	21.782	2.937	14.346	28.162

4.2 Correlation Matrix

The bivariate correlation analysis is shown in Table 4. In the table, column (1) shows the correlation matrix of dependent, independent, and control variables used in this study. It can be seen in Table 4 that fintech shows a positive correlation with the inclusive green growth index. These results attest to the argument that fintech helps in increasing the green growth of a country. Other variables, GDP, POP, RENERGY CONSP, and FDIINFLOW show positive correlation. It means that these variables are also playing a positive role for green growth; however, HIGHTECH EXPO shows a negative correlation. A plausible justification is that high-production countries confront pollution from emitted gases, which causes a reduction in green growth.

Table 4: *Matrix of Correlations*

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) IGGI	1.000							
(2) FINTECH	0.059	1.000						
(3) GDP	0.128	0.014	1.000					
(4) EDU	-0.367	0.056	0.248	1.000				
(5) POP	0.274	0.026	0.873	-0.177	1.000			
(6) RENERGY CONSP	0.085	-0.002	-0.195	-0.522	0.056	1.000		
(7) HIGHTECH EXPO	-0.037	0.031	0.572	0.530	0.306	-0.380	1.000	
(8) FDIINFLOW	0.067	-0.038	0.909	0.362	0.715	-0.274	0.613	1.000

4.3 Regression Analysis

In Table 5, the regression results are shown. In the table, Fintech is the main independent variable, whereas inclusive green growth is the dependent variable in all the models (1-8). All other variables are control variables. In model 1, bivariate regression has been applied to check the impact of fintech on IGGI. The results in model 1 show that fintech has a strong positive impact on IGGI at 1% level of significance. From models 2 to 7, the researcher adds a few more variables to control their effect on IGGI. The model 8 has a detailed finding of fintech impact on IGGI along with all control variables. It can be seen in column 8 that fintech has a strong positive impact on green growth at 1% significance level. The result describes how fintech helps in sustainable development (Bel Hadj Miled, 2025; Deng et al., 2019; Habib, 2025; Kaur & Negi, 2025). However, the current finding is unique as the researchers examine the qualitative relationship between fintech and

sustainability (Deng et al., 2019), whereas the current study confirms the quantitative empirical relationship between them. In addition to this, GDP has a positive impact on IGGI with 5% significance level. This result shows that stable economies are more focused on green growth. The population has a significant positive impact on green growth; however, the result is significant at 1% level. A plausible reason for the positive impact is that a higher population enables the economies to focus on alternative resources, and hence they can rely more on renewable resources. Another plausible reason is educational level and awareness of sustainable development (United Nations Economic and Social Commission for Asia and the Pacific, 2023). Renewable energy consumption has a significant positive impact on IGGI at 1% significance level. This result describes that economies can achieve the goal of green growth by utilizing more renewable energy resources (Bel Hadj Miled, 2025).

Table 5: *Main Analysis*

	(1) IGGI	(2) IGGI	(3) IGGI	(4) IGGI	(5) IGGI	(6) IGGI	(7) IGGI	(8) IGGI
Fintech	0.003***	0.003***	0.003***	0.002***	0.003***	0.003***	0.003***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gdp		0.000						0.021**
		(0.005)						(0.009)
Edu			0.003					-0.006
			(0.004)					(0.007)
Pop				0.052***				0.038*
				(0.018)				(0.022)
Ren Eng Consp					0.004			0.019***
					(0.003)			(0.005)
HT Expo						-0.000		0.000
						(0.001)		(0.001)
Fdi							-0.001	-0.001
							(0.001)	(0.001)
Const	0.180***	0.175	0.170***	-0.659**	0.167***	0.185***	0.202***	-1.057***
	(0.004)	(0.135)	(0.013)	(0.288)	(0.008)	(0.004)	(0.019)	(0.374)
Obs	601	589	431	601	571	478	494	327
R-square	0.092	0.093	0.171	0.107	0.093	0.104	0.105	0.277

*Standard errors are in parentheses, *** p<.01, ** p<.05, * p<.1*

4.4 Subgroup Analysis

Table 6 shows the results of two different samples. The authors divided the sample into low- and high-income countries as per the classification of the World Bank. It can be seen in panels A and B that fintech has positive impact on green growth only for high income economies. A possible reason can be their huge resources to invest in sustainability, whereas low-income economies strive for fundamental needs and hence unable to spend on green goals (Khan et al., 2024).

Table 6: *Subgroup Analysis Results*

Panel A	**High-Income Economies**							
	(1) IGGI	**(2) IGGI**	**(3) IGGI**	**(4) IGGI**	**(5) IGGI**	**(6) IGGI**	**(7) IGGI**	**(8) IGGI**
Fintech	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***	0.004***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
Control		0.007						0.015
Const	0.182***	0.002	0.163***	-0.889	0.168***	0.188***	0.221***	-1.580
	(0.004)	(0.414)	(0.025)	(0.671)	(0.018)	(0.005)	(0.032)	(1.067)
Obs	371	359	277	371	353	303	315	209
R-square	0.126	0.129	0.238	0.146	0.124	0.137	0.146	0.408
Panel B	**Low-Income Economies**							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Fintech	0.001	0.001	0.001*	0.000	0.000	0.001	0.000	0.000
	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Control		0.000						0.015
Const	0.188***	0.182	0.182***	-0.281	0.178***	0.190***	0.187***	0.533
	(0.005)	(0.144)	(0.047)	(0.680)	(0.014)	(0.007)	(0.024)	(1.346)
Obs	230	230	154	230	218	175	179	118
R-square	0.006	0.006	0.023	0.014	0.017	0.020	0.004	0.174

*Robust standard errors are in parentheses, *** p<.01, ** p<.05, * p<.1*

4.5 Robust Analysis

So far, the results show that fintech has a significant positive impact on IGGI; however, the results can be biased due to proxy measurement. To avoid any possible bias in measurement, the researchers use an alternative proxy of fintech, which is the value of mobile and internet transactions. The findings have been presented in Table 8, which shows that fintech enhances green growth (Guermazi, 2025; Habib, 2025; Li & Fang, 2025b). The current finding is consistent with our mainstream analysis; hence, it can be generalized that fintech increases green growth.

Table 7: *Robust Analysis with an Alternative Proxy of Fintech*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	IGGI	IGGI	IGGI	IGGI	IGGI	IGGI	IGGI	IGGI
Fintech	0.001***	0.001***	0.004***	0.001**	0.001***	0.003***	0.001***	0.003***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)
Gdp		0.008						0.020*
		(0.005)						(0.011)
Edu			0.001					-0.015*
			(0.004)					(0.008)
Pop				0.082***				0.091***
				(0.018)				(0.026)
Ren Eng Consp					0.004			0.016***
					(0.003)			(0.005)
HT Expo						-0.000		0.000
						(0.001)		(0.001)
Fdi							-0.001	-0.001
							(0.001)	(0.001)
Const	0.198***	0.009	0.185***	-1.105***	0.185***	0.198***	0.228***	-1.896***
	(0.002)	(0.137)	(0.014)	(0.285)	(0.008)	(0.003)	(0.019)	(0.411)
Obs	596	584	411	596	566	466	483	307
R-square	0.018	0.022	0.069	0.059	0.023	0.038	0.022	0.224

*Standard errors are in parentheses, *** p<.01, ** p<.05, * p<.1*

5. Conclusion

The current study examines the empirical relationship of fintech with inclusive green growth. The global dataset was downloaded from the World Development Indicators website from 2019 to 2024. For empirical testing, the researchers adopted panel data analysis as the studied dataset had a panel dimension. The results from the analysis declare that fintech has a positive impact on inclusive green growth. Further empirical analysis for high- and low-income countries suggests that the positive impact of fintech on green growth is only persistent for high-income economies. A plausible reason is that high-income countries have more resources to invest in green initiatives compared to their counterparts. In addition to this, the findings show that renewable energy consumption also has a significant

positive impact on green growth. The findings are important for regulatory authorities and policymakers as the results highlight the importance of using technological financial services in the economy. The policy makers of countries can formulate polices to promote fintech in the financial sector, as it will also help them to move towards a green economy. This study has a few limitations, as the researchers had to drop the countries whose data were not available on the WDI database. This may create bias in generalizing the findings. Further, there might be many other factors to encapsulate green growth, but due to data limitations, the researcher relies only on the Asian Development Bank proxy measurement. Future research can extend the phenomenon of green growth and explore the individual impact of components of green growth.

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