THE IMPACT OF FINTECH ON ECONOMIC GROWTH: EVIDENCE FROM ASIAN COUNTRIES

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INTRODUCTION

Fintech, otherwise called internet finance or digital financial inclusion, simply refers to an amalgamation of finance and information technology. Behind the rise of Asian Fintech are several factors that work differently in different markets. Favorable market conditions such as the presence of a young, digitally savvy population and untapped demand in unbanked pockets are forthcoming. Fintech has found its sweet spot in tech-literate but financially weak markets. The onset of COVID-19 has accelerated the pace of digitization, especially in Fintech. Many countries paid more attention to Fintech during the COVID-19 pandemic.

In the rapidly evolving financial technology (Fintech) landscape, there has been an increase in the number of industry research papers and articles on Fintech adoption and innovations. In 2022, conduct research the impact of Fintech on economic growth in China (Song & Otoo, 2022). In 2022, conduct research on the effect of financial technology on economic growth in Nigeria (Udo *et al*. 2022). But no any research conducted for impact of Fintech on economic growth of Asian Countries.

The main research question is Does Fintech affect the economic growth of Asian countries. Under the sub research questions, the study examines that individually research variables effect to the economic growth of Asian Countries.

This article examines the dynamic relationship between financial technologies and economic growth in selected Asian countries over the period spanning from 2009 to 2020.

METHODOLOGY

This study focuses on ascertaining whether Fintech impacts the economic growth of selected Asian Countries. The research uses secondary data and descriptive statistics, and the panel data regression technique is used to analyze the study. The research uses deductive research logic and a quantitative research approach.

The operationalization of the study as follows,

Table 2
Operationalization

Concept	Variable	Measurement	Source
Dependent Variable	Gross Domestic Product	GDP = C+I+G+(X-M)	(Abdillah, 2020)
Independent Variable	ATM	ATMs per 100,000 adults	(Aduda & Kingoo, 2012)
	Credit Cards	Total No. of Credit Cards in Use (As at end period)	(Bu et al. 2022)
	Debit Cards	Total No. of Debit Cards (As at end period)	(Aduda & Kingoo, 2012)

	POS terminals	Total number of machines (End of period)	(Arseculeratne, 2019)
Control Variables	Labor force	Labor force participation rate	(Song & Otoo, 2022)
	Investment	Gross fixed capital formation	(Song & Otoo, 2022)

Note: [1] GDP = Consumption + Investment + Government Spending + Net Exports

The following regression model was developed to analyze the study,

$GDPit = \beta 0 + \beta i1DATMit + \beta i2DCCit + \beta i3DDCit + \beta i4POSit + \beta i5IUIit + \beta i6LFPRit + \beta i7INVit + \varepsilon it$ (1)

The total population consists of all Asian Countries. Eight countries were selected as the sample based on data availability. For a better comparison and to identify a trend, all the data collected falls into the period between 2009 -2020. There are believed to be the peak times when most Countries started to adapt Fintech services and hence will be more suitable for generating results that will help us to answer the research questions. Here the main data is collected from the financial statements extracted from the annual reports of the selected countries.

RESULTS AND DISCUSSION

Focusing on the impact of Fintech on economic growth by country,

Considering whether Fintech factors affect China's and India's economic growth, none of the independent and control variables independently effect on economic growth. However, the overall P-Values are 0.0033 and 0.0021 respectively. It says that model is significant. In Indonesia, the overall P-Value is 0.0526. It says that model is not significant. In Pakistan, the variables Depth of ATM, Depth of Credit Cards, Depth of POS terminals and Investments are independently affect. As well, the overall P-Value is 0.000. It is significant at 1% level. It says that model significant. In Russia, the variable Depth of POS terminals is significant with the study. Even so, the overall P-Value is 0.1759. It says that model is not significant. The overall P-Value of the Singapore is 0.0568. It says that model is not significant. In Sri Lanka and Turkey, only one variable significant with the study. There are Depth of ATMs and Depth of Credit Cards respectively. However, the overall P-Values are 0.0006 and 0.0236. It says that model is ok.

According to the Table 2, The Gross Domestic Product (GDP) regressed against the Depth of Automated Teller Machines (DATM), Depth of Debit Cards (DDC) and Investment (Gross fixed capital formation (INV)). The output P-values are represented as 0.000 (1%), 0.017 and 0.000 (1%) respectively. This results in the rejection of the null hypothesis and acceptance of the alternative hypothesis that there are significant relationship between the Gross Domestic Product (GDP) and the Depth of Automated Teller Machines (DATM), Depth of Debit Cards (DDC) and Investment. The previous article proves that ATMs and Debit Cards significantly increase profit of banks (Aduda & Kingoo, 2012). According to the (Song & Otoo, 2022), investment significantly increase the economic growth of China.

The Gross Domestic Product (GDP) regressed against the Depth of Credit Cards (DCC), Depth of Point of Sale terminals (POS) and labor force participation rate (LFPR). The output P-Values are represented respectively as 0.158 (15%), 0.199 (19%) and 0.267 (26%). In conclusion, there is no significant relationship between the Gross Domestic Product (GDP)

and Depth of Credit Cards (DCC), Depth of Point of Sale terminals (POS) and labor force participation rate (LFPR). According to the (Song & Otoo, 2022), labor has an insignificant effect on China's economic growth. Although previous researchers proved that POS terminals have insignificantly an effect on banks' profit (Arseculeratne, 2019).

Table 3
Regression Analysis

	Coefficient	Std. Err.	t	P>t
DATM	0.011	0.001	5.98	0.000
DCC	1.580	1.110	1.42	0.158
DDC	1.660	6.820	2.43	0.017
POS	2.540	1.960	1.3	0.199
LFPR	0.002	0.002	1.12	0.267
INV	0.070	0.013	5.29	0.000
_cons	10.571	0.399	26.53	0.000

$R^2 = 0.7055$
N = 88
F = 32. 33 (p<0.0000)

Skewness and Kurtosis test were performed to check the normality of the data set. According to the data table the Skewness and kurtosis value of the dependent variable is 0.6096 and 0.3803 respectively. These are less than 2 and 5. Therefore, according to the tests, data set is normal.

Table 4
Test for Normality

Variable	log_gdp
Pr(Skewness)	0.610
Pr(Kurtosis)	0.380
Prob>chi^2	0.590

CONCLUSION AND IMPLICATIONS

The literature on Fintech has recently received a great deal of attention among academics and policy makers; however, studies assessing the contribution of Fintech to economic growth are rare. Theoretically, financial, institutional, regulatory, and individual tailback financial market imperfections, information asymmetry, and transaction costs increase the financial exclusion gap. Fintech is a key enabler of financial inclusion for economic growth. The study investigated the impact of financial technology on economic growth in Asian Countries using annual data from 2009 to 2020. Most empirical studies reviewed primarily use the linear model. The main conclusions of this study can be drawn from findings. Fintech aims to close financial exclusion through an inclusive financial system that benefits the base of the pyramid through increased access to appropriate financial products and services to stimulate economic growth. The role of Fintech in this regard is essential by expanding account ownership among the unbanked and account usage among the banked. The Fintech is an effective policy option for growth and development in Asia. Fintech and financial policies alone are not enough to

solve the problem of income inequality, poverty and financial exclusion. Fiscal policy is crucial to address these issues. The study's conclusion is that the Fintech variables effect to the economic growth of Asian countries. Consequently, this study suggests that policymakers should encourage the growth of Fintech in Asian countries.

Keywords: ATM, credit card, debit card, economic growth, fintech,

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