



## HOW FINTECH CONDITIONS IN INDONESIA DURING THE COVID-19 PANDEMIC?

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### **Abstract**

*This study aims to see how the FinTech financial services industry's condition during the COVID-19 pandemic in Indonesia in a quantitative descriptive manner. E-money transactions, ATM/debit cards, credit cards, turnaround clearing, and RTGS transactions focus on our observations. Limited mobility during the COVID-19 pandemic and the large-scale social restrictions (PSBB) policy has increased electronic money payment transactions. In contrast to clearing turnover and RTGS transactions, they showed a downward trend; however, since the 'new normal' began in June, turnover in clearing and RTGS transactions improved.*

**Keywords:** FinTech, Pandemic COVID-19, e-money, RTGS

## 1. INTRODUCTION

The COVID-19 pandemic that has hit Indonesia since March 2, 2020, with two positive cases, has paralyzed Indonesia's economic activities for the past several months. The existence of social restrictions in preventing the spread of COVID-19 causes disruption both from the demand side, namely decreasing public income, decreasing household consumption and investment, and the supply side, namely decreasing production activities. Disturbances from the demand and production side, tend to weaken the economy and the financial sector, including the financial services industry such as FinTech.

Financial Technology (FinTech) refers to the use of technology to provide financial solutions. FinTech is the result of a combination of financial services and technology, which ultimately changes the business model from conventional to moderate. Where initially payment activities must be face-to-face with a certain amount of money, now payment activities can be carried out remotely using media such as cell phones, computers, etc. matter of seconds. FinTech appears in line with changes in people's lifestyles, which are currently dominated by users of information technology, the demands of a fast-paced life. With FinTech, it can minimize problems in buying and selling transactions and payments such as not having time to look for goods to a shopping place, to a bank/ATM to transfer funds, reluctance to visit a site because of the unpleasant service. In other words, FinTech helps to buy and selling transactions and payment systems to be more efficient and economical but still useful.

FSB defines FinTech as a technological innovation in financial services that can produce business models, applications, processes, or products with material effects related to the provision of financial services. The Financial Stability Board (FSB) classifies FinTech activities in financial services into five categories, namely 1. Payment, transfer, clearing, and settlement, such as mobile payments, electronic wallets, Bank Indonesia Real Time Gross Settlement (BI- RTGS), BI National Clearing System (SKNBI), and the use of ledger technology, 2. Online crowdfunding and P2P (peer-to-peer) lending platforms, and digital currency, 3. Risk management, such as FinTech companies participating in the insurance sector (InsurTech), 4. Market Support includes e-aggregators, big data,



digital ID verification, data storage and processing, and 5. Investment Management, including e-trading platforms.

The Indonesian FinTech Association (AFTECH), as the organizer of Digital Financial Innovation (IKD), explained that as many as 68% of FinTech companies had been affected by COVID-19. Still, the Indonesian Joint Funding FinTech Association (AFPI) stated that there was an increase in production financing through FinTech P2P services during the coronavirus pandemic. The existence of this gap motivates us to research whether there are differences in FinTech conditions before and during COVID-19. We use data on e-money transaction volume and nominal, ATM/debit card transaction volume and nominal, credit card transaction volume and nominal, clearing turnover volume and nominal, and RTGS transaction volume and value as FinTech indicators.

## **2. LITERATURE REVIEW**

### **2.1. History of FinTech Innovations**

The recent evolution of FinTech originated from the innovation of credit cards in the 1960s, debit cards, and terminals that provided cash, such as automatic teller machines (ATMs) in the 1970s. Then came telephone banking in the 1980s and various financial products, deregulation of the capital market, and bonds in the 1990s. Then came internet banking, which encouraged the existence of branchless banking and banking activities carried out remotely. With this change, customers no longer need to meet face to face with the bank. Furthermore, mobile technology has emerged, which makes financial transactions easier. These changes give rise to direct financing and intermediation, which will replace costly and inefficient indirect financing and financial intermediation.

Two main factors are driving the evolution in financial technology innovation, namely the power of demand (demand side) and supply-side. The strength of demand comes from the shift in consumer preferences that affect consumer demand for innovation. Secure internet access and internet network users' ability to transact real-time, low cost, and fast, have made it easier to use financial services. Also, the emergence of big data technology, artificial intelligence (AI), cloud computing, machine learning, and biometrics in utilizing business models is a demand-side force.

## **3. DISCUSSION**

### **3.1. Analysis of e-money Data, ATM/Debit Cards, and Credit Cards**

**Table 1.** Nominal transactions for e-money, ATM/Debit Cards, and Credit Cards

Period	Nominal Transactions e-money (Million IDR)	Nominal Transactions ATM/Debit Cards (Million IDR)	Nominal Transactions Credit Cards (Million IDR)
<b>Jan-2020</b>	15872433	605499506	28590793
<b>Feb-2020</b>	15178625	583732753	25869956
<b>Mar-2020</b>	15036070	596043486	24158166
<b>Apr-2020</b>	17552119	494528400	15962613
<b>May-2020</b>	15033708	554747200	15088736
<b>Jun-2020</b>	14955261	475150286	17101804

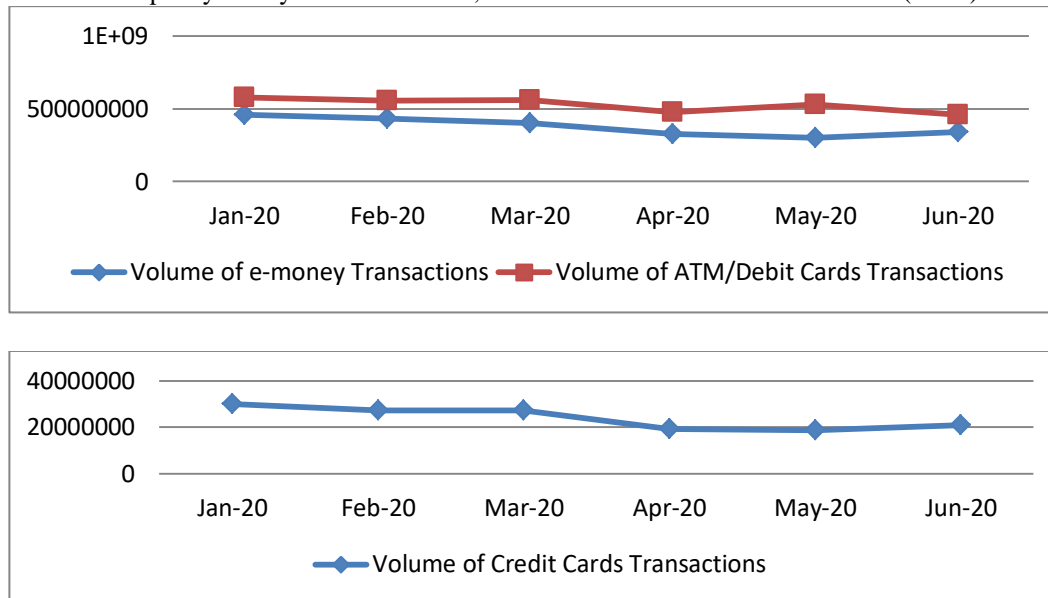
Source: [9]

Based on Table 1 above, during January and February 2020, before the coronavirus broke out in Indonesia, the nominal value of e-money transactions decreased by 693,808 million rupiahs from 15,872,433 to 15,178,625 million rupiahs. Entering March, it experienced another decline of 142,555 million rupiahs to 15,036,070 million rupiahs, but in April, it increased significantly by 2,516,049 million rupiahs to 17,552,119 million rupiahs. Even so, it decreased again in May to 15,033,708



million rupiahs, decreased by 2,518,411 million rupiahs, and in June it decreased again by 78,447 million rupiahs to 14,955,261 million rupiahs. The increase in transactions was due to people relying more on payment transactions using digital banking because of limited community mobility amid the COVID-19 pandemic and the existence of a Large-Scale Social Restrictions (PSBB) policy.

This situation also has an impact on simple transactions using debit or credit cards on EDC machines, and this can be seen in table 1. Since March 2020, debit card transactions have decreased by 101,515,096 million rupiahs from 596,043,486 in March to 494,528,400 million rupiahs in April. Experienced an increase in May, but in June, it again reduced to 475,150,286 million rupiahs. Likewise, the simple credit card transactions decreased by 8,195,553 million rupiahs from 24,158,166 in March to 15,962,613 million rupiahs in April. They continued to decline to 15,088,736 in May, in line with the policy to stay at home. Course, learn from home and work from home (WFH).



Source: [9]

**Figure 1.** The Volume of e-money Transactions, ATM/Debit Cards and Credit Cards

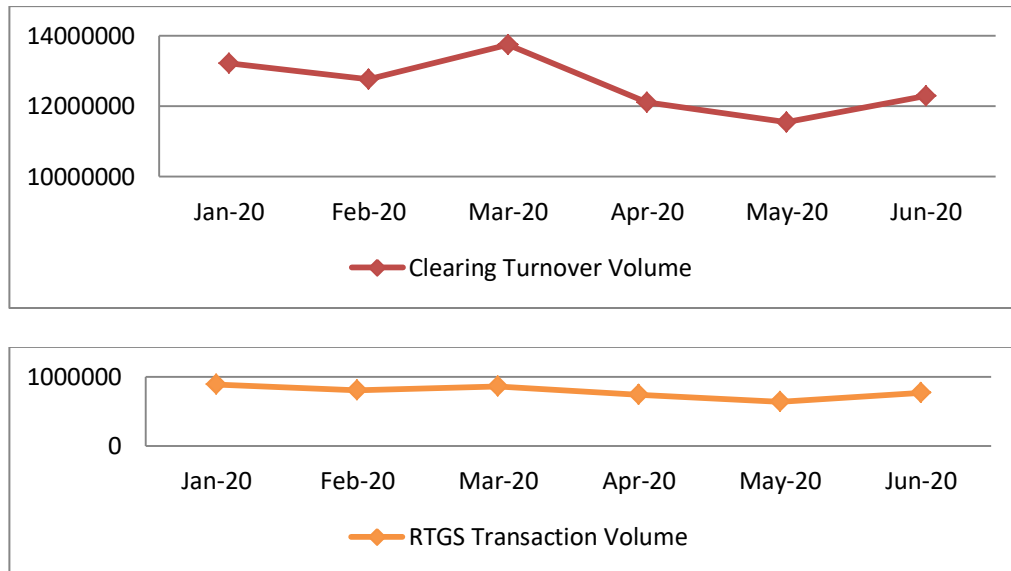
Not much different from simple transactions with debit and credit cards, the volume of debit and credit card transactions also decreased during COVID-19. However, the number of electronic money transactions declined compared to the nominal transaction increases. The use of financial technology by the community is minimal in regions, and inadequate facilities have caused the volume of electronic money transactions to decline, even though the nominal operations have increased.

### 3.2. Data Analysis of Clearing Turnover and RTGS Transactions

**Table 2.** Nominal Clearing Turnover and RTGS Transaction Value

Period	Nominal Clearing Turnover (Million IDR)	RTGS Transaction Value (Billion IDR)
Jan-2020	372456656.4	11804078.74
Feb-2020	352469161.5	9772486.56
Mar-2020	375914341.3	12079908.99
Apr-2020	335001611.5	11152539.57
May-2020	291353083.7	10552914.12
Jun-2020	338584418.8	11649920.29

Source: [9]



Source: [9]

**Figure 2.** Clearing Turnover Volume and RTGS Transactions

In terms of clearing turnover and RTGS transactions, both nominal and total volume show almost the same rhythm. During the COVID-19 pandemic that hit Indonesia, starting in March 2020, the amount of clearing turnover and RTGS transactions showed a downward trend. Changes in community behavior that have shifted to digital payments/transactions since "at home" indeed underlie this. Since the new normal started in June, clearing turnover and RTGS transactions, have improved marked by an increase in simple operations and volume.

#### 4. CONCLUSION

The phenomena that have been described above finally conclude that there will be a 'new normal' from the habits of public transactions, where digital finance is speedy. Therefore, it is hoped that FinTech can significantly impact the financial sector through increased financial innovation to encourage higher financial inclusion, which in turn improves the community's welfare.

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