

# Fintech for Financial Inclusion:

## Indonesia case

Mustika Rahmi

Prodi Manajemen

Universitas Ahmad Dahlan

Yogyakarta, Indonesia

mustika.rahmi@mgm.uad.ac.id

**Abstract**—Financial inclusion has been a significant agenda in the most government policy. However, based on the World Bank Report, in worldwide only 41% of adults have a bank account in developing country; while among adult living in extreme poverty, the number drops to only 20%. Technological progress is essential to economic development. The emergence of financial technology (Fintech) has become one of notable trend in the world of financial services. The article discusses some potential impact of financial technology to the progress of financial inclusion in Indonesia.

**Keywords**—*fintech; financial inclusion; financial services*

### I. INTRODUCTION

Financial inclusion refers to the accessibility of financial service to all households and businesses, regardless of level of income [1]. It means that low level of financial inclusion may jeopardize the economic along with the stability of financial system. Despite of significant poverty reduction, Indonesia experiences increasing income inequality from 0.30 in 2000 to 0.39 in 2016 [2]. The World Bank Report claimed that in 2014, the level of financial inclusion in Indonesia is only 36%; which means that only 36% households able to access formal financial institution. In response to the statistic, the Central Bank of Indonesia raises its financial inclusion target up to 75% by 2019.

The emergence of Financial Technology (Fintech) era has revolutionized the financial services around the world including Indonesia.

There have been several researches on Fintech and financial inclusion in Indonesia, but only few that specifically discuss the relationship between the two. Tambunan discusses the financial inclusion, and regulation in Indonesia [3]; while Sarma et al. discusses the interdependence between financial inclusion and development in India and Indonesia [4]. Meanwhile, the report of Rijanto explains the financial inclusion for Small Medium Enterprise (SME) in Indonesia [5]. Along with the increasing emergence of Fintech start-up in Indonesia, there are several researches which specifically discuss the existence of it [6-9].

As the phenomenon of Fintech is still rather in the beginning phase, there has been no specific periodical numeric data. This study uses a comprehensive literature review as the

method to examine the potential impact of Fintech to the progress of financial inclusion in Indonesia.

### II. FOUNDATIONS

#### A. The Rise of Fintech

According to Central Bank of Indonesia, Regulation Number 19/12/PBI/2017, technology which fall into the term of Fintech need to be innovative, brings impact on existing products, technology and services along with financial business models. Fintech would also need to be beneficial for the community and be accessible extensively [10]. The regulation divides Fintech into the following categories: (i) Payment System; (ii) Market Support; (iii) Investment and Risk; (iv) Lending, Financing, Funding, Capital Raising and (v) Other mean of financial technology services.

#### B. Financial Inclusion

The Asian crisis in 1997-1998 has changed the nation's financial strategy from exclusive to inclusive orientation. Among the reason are: (i) the highly concentrated financial sector which mainly consist of banks, (ii) the banking services are only accessible to few parts of total Indonesian population; (iii) the significant level of poverty in Indonesia [3].

According to the Global Findex Database 2017 [11], around 1.7 billion adults worldwide have no access to formal financial institution and a mobile money provider as well. While account ownership is considered universal in developed countries, nearly half of unbanked adults live in the developing country including Indonesia, Pakistan, Nigeria, Mexico, India, Bangladesh, and China.

Indonesia has successfully achieved a significant reduction on the level of poverty; however, the income inequality remained a challenge as it increases from 0.30 in 2000 to the point of 0.39 in 2016. The Government realized that a more integrated approach is necessary to address the trend of poverty reduction. The Government of Indonesia initiated Sustainable Development Goals (SDGs) as a roadmap to achieve financial inclusion mainly through microfinance [5]. One result of this agenda shown by the statistic of 2017, which describe the growing equality in account ownership among men and women. The account ownership among adults rose from 20% in 2011 to 49% in 2017.

III. SOME ISSUES (RISKS)

While FinTech brings new revolution to improve the level of financial inclusion in Indonesia, there are several issues that may hinder the assimilation of Fintech into the Indonesian society.

A. Low Level of Internet Access in Indonesia

The level of internet penetration in Indonesia is only 50.4%; it is considered lower than other countries in Asia Pacific. This fact may hinder the growth of Fintech, however the Indonesian internet users has raised from 89 million in 2015 to 104.96 million in 2017 [12]. It suggests that more than 40% of Indonesians were internet savvy in 2017, while the rest could not use the internet in the same year. The distribution of internet users is 65% are based in Java which is the most populated island of Indonesia, 15% are based in Sumatera while just under 6% are living in Kalimantan [13]. The significant divide of internet users is mostly because of the insufficient telecommunication infrastructure. Raising awareness of the advantage of internet access which can be used to promote Fintech may substantially push the progress of financial inclusion.

B. Regulatory Concern

The Financial Services Authority (OJK) claimed that private placement on Fintech company, i. e peer to peer lending brings high risk [14]. The statistic of bad credit financing keeps increasing on January 2018 at the level of around 1.28%. The level seems to be small, but significantly increased compare to December 2017 at the level of 0.99%. The staggering amount of Fintech lending reach Rp.3 trillion on January 2018, which substantially increased from Rp.2.5 trillion in December 2017 [15].

The OJK which is still fairly new for an important task as one of Indonesia financial system watchdog has important responsibility. The P2P lending ease people to get financing, however the P2P companies eyes it as an opportunity to offer a high rate which possibly lead to loan shark-like practice. It needs to issue regulation on the mechanism to acquire and collect fund to protect customer's fund.

IV. DISCUSSION

The relationship between fintech and financial inclusion:

A. The Relationship between Fintech and Financial Inclusion

Financial inclusion in Indonesia absolutely needs Fintech to accelerate its progress in the digital era. Embracing Fintech provides a substantial aid for the Government of Indonesia to achieve its 2020 Go Digital Vision goal including the rise of overall growth, the improvement of worker' skills along with the job creation. The National Strategy for Financial Inclusion plans to meet the target of 75% of Indonesians has access to a formal financial sector by 2019 while Fintech is clearly the important substance of the plan.

The arising Fintech industry in Indonesia provides unprecedented opportunity for growth, especially for the unbanked and underbanked Indonesians. A study of World

Bank claims that one percent increase in financial inclusion boosts an annual GDP growth per capital by 0.03%. The ambitious projected economic growth combine with the uprising in financial inclusion, may encourage the exponential growth in GDP for the next few years. New jobs will be increased as the result of economic growth.

B. Figures and Tables

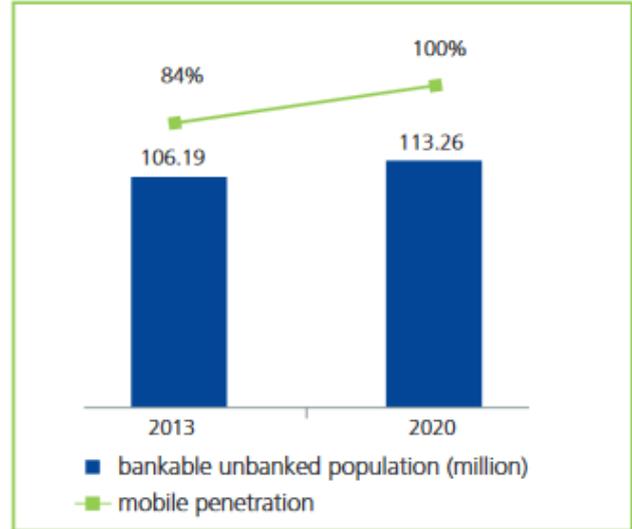


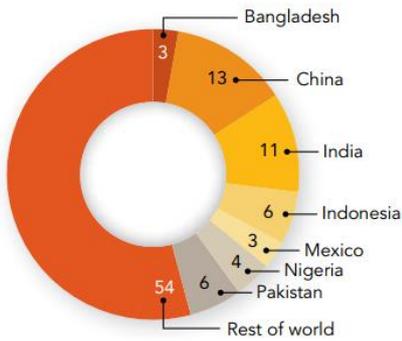
Fig. 1. Total bankable unbanked population & projected mobile penetration growth from 2013 to 2020.

TABLE I. FINTECH PRODUCTS

Savings and Investments		Money Transfer and Payments		Borrowing		Insurance	
1.	Peer-to-peer (marketplace) platforms for investment	6.	Online foreign exchange	9.	Borrowing using peer-to-peer platforms	10.	Health premium aggregators or car insurance using telematics intended to lower premiums
2.	Equity or rewards crowdfunding	7.	Overseas remittances				
3.	Online investment advice and investments	8.	Non-banks to transfer money				
4.	Online budgeting and financial planning						
5.	Online stockbroking or spread betting						

Nearly half of all unbanked adults live in just seven economies

Adults without an account by economy (%), 2017



Source: Global Findex database.

Fig. 2. Adults without an account by economy (%).

V. CONCLUSION

The emerging Fintech industry in Indonesia is expected to bring positive impacts to Indonesia's economic growth. While in general it offers many opportunities, Fintech is absolutely important to increase the level of financial inclusion in Indonesia which later will have massive consequences on the overall Indonesia's economy. The future success of Fintech growth in Indonesia clearly depends on effective regulation by the Government and OJK as well. It means that any risks associated with new digital providers and products should be well anticipated and efficiently managed. Efficient regulation promotes transparency, reduces the risk of fraud, and cybercrime; these will encourage confidence in the society that can boost fintech adoption.

REFERENCES

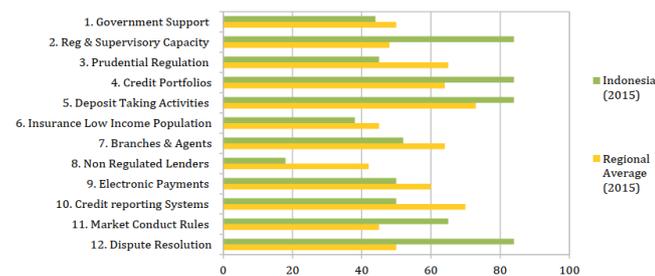


Fig. 3. Enabling environment for financial inclusion in Indonesia & the region.

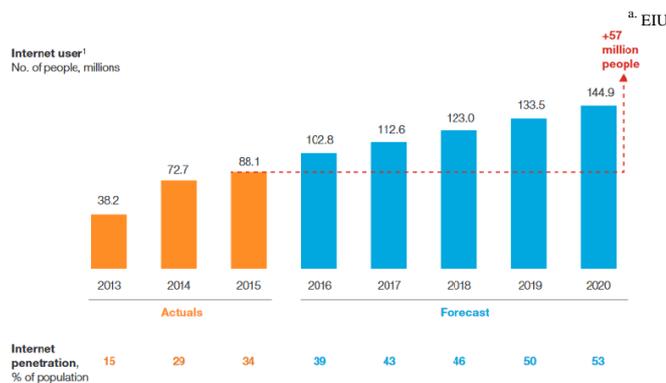


Fig. 4. Indonesia's internet population.

- [1] A. Demircuc-Kunt, L. Klapper, D. Singer, and P. Van Oudheusden, The Global Findex Database 2014 : measuring financial inclusion around the world. 2015.
- [2] Badan Pusat Statistik. [Online]. Available: <https://www.bps.go.id/>. [Accessed: 23-Aug-2018].
- [3] T. Tambunan, Financial Inclusion, Financial Education, and Financial Regulation: A Story from Indonesia. Asian Development Bank Institute, 2015.
- [4] M. Sarma and J. Pais, 'Financial Inclusion and Development', Journal of International Development, vol. 23, no. 5, pp. 613–628, Jul. 2011.
- [5] M. E. Rijanto, 'Financial Inclusion for SME In Indonesia', 2016.
- [6] I. Rom?nova and M. Kudinska, 'Banking and Fintech: A Challenge or Opportunity?', in Contemporary Issues in Finance: Current Challenges from Across Europe, vol. 98, 0 vols, Emerald Group Publishing Limited, 2016, pp. 21–35.
- [7] K. Davis, R. Maddock, and M. Foo, 'Catching up with Indonesia's fintech industry', Law and Financial Markets Review, vol. 11, no. 1, pp. 33–40, Jan. 2017.
- [8] P. Muthukannan, B. Tan, F. T. C. Tan, and C. Leong, 'The Concentric Development of the Financial Technology (Fintech) Ecosystem in Indonesia', ICIS 2017 Proceedings, Dec. 2017.
- [9] C. Haddad and L. Hornuf, 'The emergence of the global fintech market: economic and technological determinants'.
- [10] 'Teknologi Finansial - Bank Sentral Republik Indonesia'. [Online]. Available: <https://www.bi.go.id/id/sistem-pembayaran/fintech/Contents/default.aspx>. [Accessed: 23-Aug-2018].
- [11] A. Demircuc-Kunt, L. Klapper, D. Singer, S. Ansar, and J. Hess, The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. The World Bank, 2018.
- [12] Internet usage in Indonesia - Statistics & Facts | Statista .
- [13] 'Digital Market Overview Indonesia', Frost & Sullivan, 2018.
- [14] OJK Nilai Investasi di Fintech Pinjaman Berisiko Tinggi. .
- [15] K. Setiawan, 'Financial Technology Business in Indonesia'.