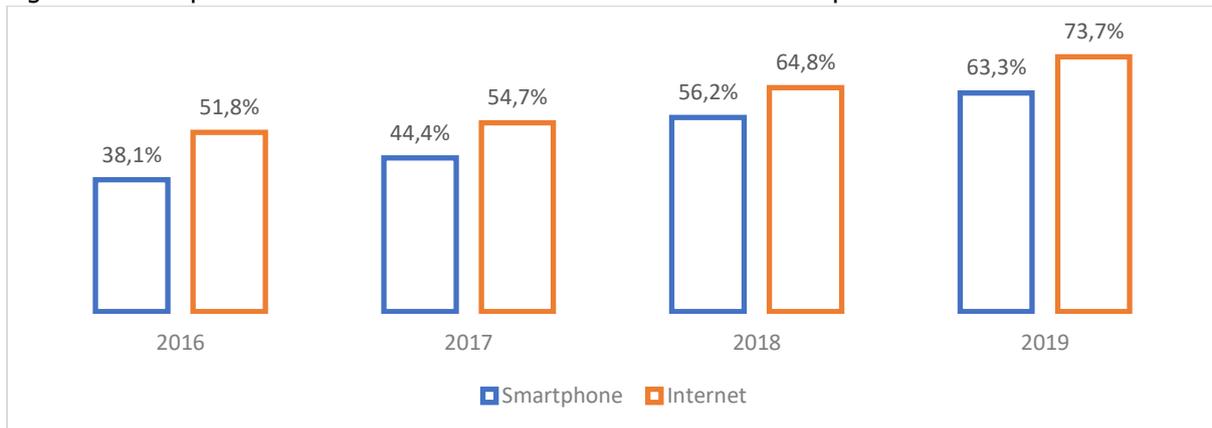


Tech Revolution in Banking: Embracing Digital Transformation

Analyst: Hanif Pradipta

Indonesian consumers are becoming increasingly adaptive to new digital products, driven by a growing tech-savvy and convenience-focused youth population, with around 52% of Indonesians aging under 30, according to BPS survey in 2020. We expect the demand for digital banking and financial technology (fintech) in Indonesia to grow along with the increasing convenience and speed of services, in addition to the lower costs compared to the traditional banking services. Loan demand that cannot be fully served by banks has also led to the need for digital financial services. The rising internet and smartphone penetration in Indonesia have also promoted digital transformation, with more than 70% of Indonesia's population using smartphones.

Figure 1. Smartphone & Internet Penetration Rate as Share of The Population in Indonesia

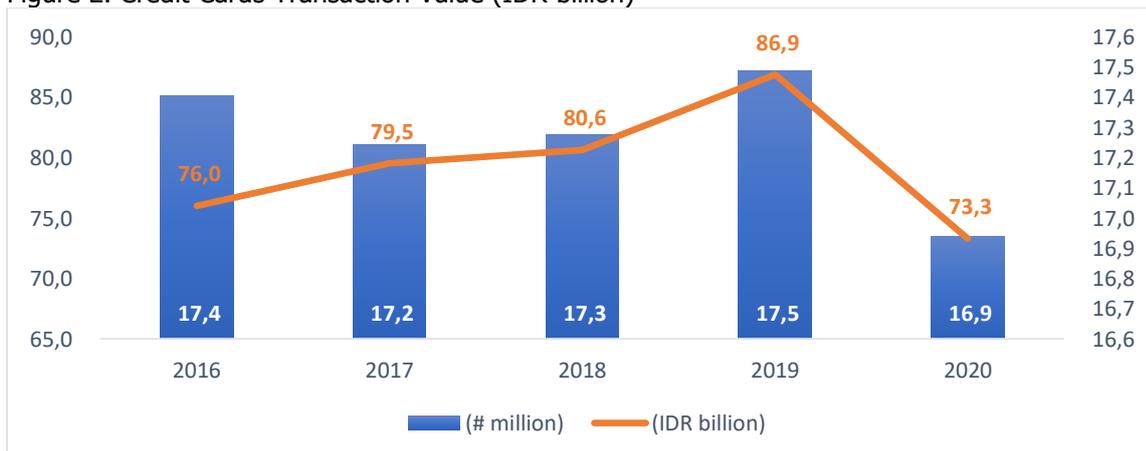


Source: Asosiasi Penyelenggara Jasa Internet Indonesia

Fintech and banks are more likely to collaborate

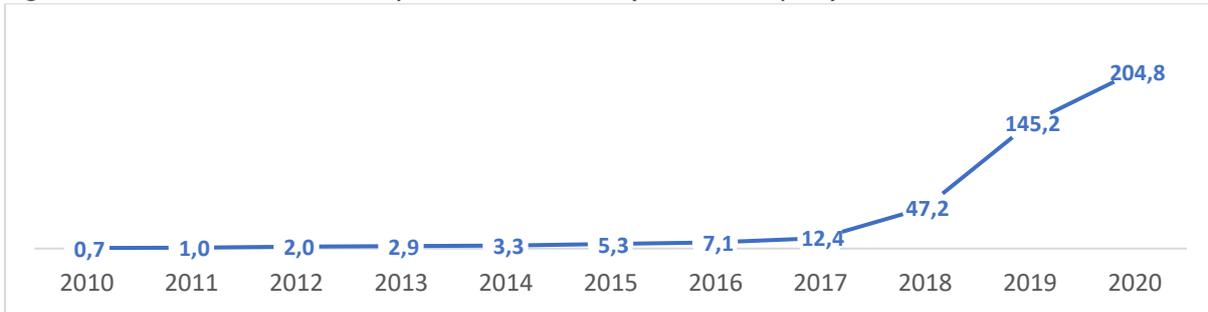
Fintech uses innovative technology and business models in the financial services process. Fintech in Indonesia has leveraged the less-developed financial services and under-served segments often overlooked by traditional banks, such as electronic money or e-wallets, one of the most popular forms of fintech services in Indonesia. Electronic money transactions in the Indonesian retail market rose by 41% (YoY), reaching Rp204.8 trillion in December 2020 with non-bank institutions, such as Go-Pay, OVO, and DANA, being the top 3 e-Wallet platforms in Indonesia based on the number of monthly active users in 2H2019-1H2020. Another form of fintech services also quite common in Indonesia is tech-based consumer loans that we view to some degree as disrupting the existing retail banking services, particularly credit cards, as reflected in the stagnant number of credit cards holders in the past few years, due to the fast-expanding e-commerce market, low switching costs, and user-friendly fintech applications.

Figure 2. Credit Cards Transaction Value (IDR billion)



Source: Bank Indonesia & OJK Banking Statistic

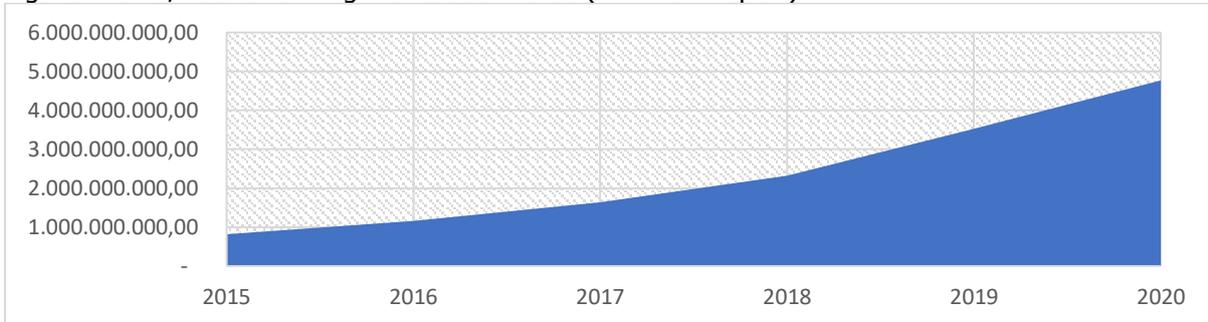
Figure 3. Annual electronic money transaction value (in trillion Rupiah)



Source: Bank Indonesia

Digital banking is an up-grade of the traditional banking system to digital channels such as online and mobile. In general, digital banks in Indonesia are established in two forms. The first type is digital banking services, which are one of the traditional bank products, such as Jenius from PT Bank BTPN Tbk and Digibank from PT Bank DBS Indonesia. The second type is a bank that has completely transformed to a digital bank, such as PT Bank Neo Commerce Tbk, PT Bank Jago Tbk, and PT Bank Digital BCA. We expect digital banks to benefit from their lower operating expenses compared to traditional banks. Compared to fintech companies, digital banks have the advantage arising from the more comprehensive lending and payment services, as they are essentially integrated with traditional banks.

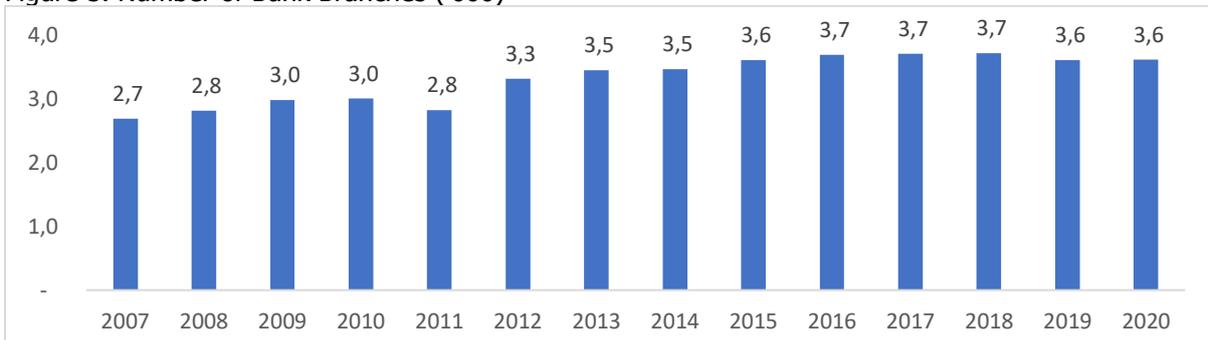
Figure 4. SMS/Mobile Banking Transaction Value (in Million Rupiah)



Source: Bank Indonesia

We expect banks to expand their value propositions to include a digital banking platform to enable them to provide new products beyond their current offerings and meet the changing customer needs by collaborating or partnering with fintech firms. To this end, Banks may learn from fintech's new perspectives and adoption of advanced technology, such as big data and AI-based credit scoring, as well as enhancing efficiency by redeploying resources and staff in creating higher added-value offerings. At the same time, fintech firms will also benefit from banks' strengths, including access to a more stable funding source, lower customer acquisition cost, and physical branches with human interaction, which will remain a critical part of financial services.

Figure 5. Number of Bank Branches ('000)

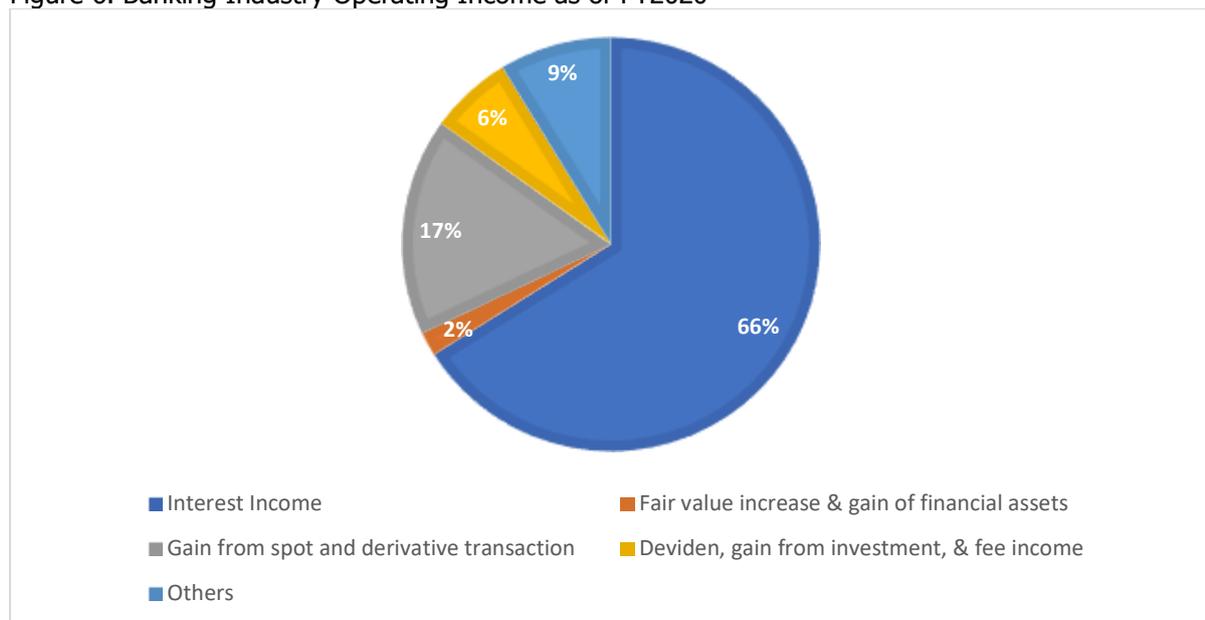


Source: OJK Banking Statistic

### Banking industry structure undisturbed by digital disruption

We view the digital disruption as unlikely to change the structure of the Indonesian banking industry. We expect SOE banks and top-tier private banks with well-entrenched retail franchises, higher internal capital generation, experience in meeting regulatory requirements, and better banking technologies to likely remain resilient in a more challenging environment and continue to dominate the industry market share. The top five banks' assets collectively accounted for 58% of the total banking industry as of December 31, 2020, and we expect it to remain virtually unchanged over the near to medium term. We also view that the revenue structure of Indonesian banks contributes to its resilience against fintech disruption. Fintech initially focused on inefficiencies in the banking system, eroding fees and commissions by providing low-cost alternatives. With interest income making up more than 65% of the Indonesian banks' revenue, fintech needs to disrupt the banks' deposit and lending business to significantly erode banks' revenue, which, in our view, is unlikely.

Figure 6. Banking Industry Operating Income as of FY2020



Source: OJK Banking Statistic

### Digital banking regulation is underway

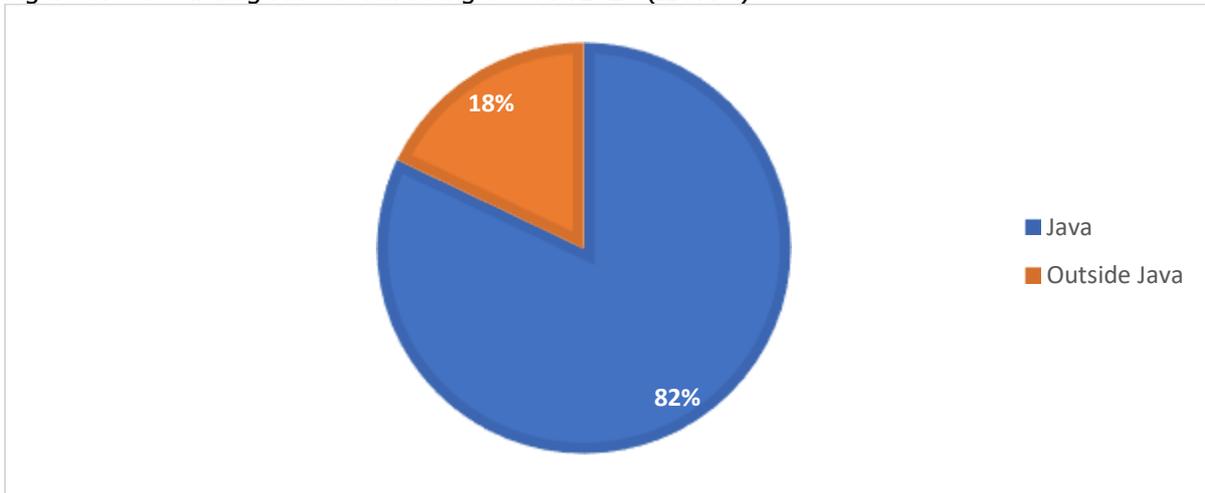
Until the end of June 2021, there is no specific regulation on digital banking activities. The authorities have neither issued digital banking licenses for non-bank institutions as those implemented in several other countries. Accordingly, the acquisition of existing banks is the most likely way for tech players to enter Indonesia's banking industry, which seems to be welcomed by Indonesia's Financial Services Authority (OJK). The existing regulation only stipulates tech-based lending, fintech, e-money, and digital services provided by commercial banks. Although we expect OJK to announce a regulation concerning digital banking this year, it remains to be seen whether obtaining digital banking licenses for investors will be easier.

In principle, regulators are receptive to innovation, in our view. POJK 13/2018 regarding digital innovation in financial service sectors includes several innovation facilitators, such as regulatory sandboxes process for companies with new business models. Under such a system, fintech companies are allowed to field-test their ideas under the supervision of regulators before fully rolling out new products. In our view, the regulators seek to balance between consumer protection and the need to safeguard the financial system integrity from disruption arising from unregulated entities, new market players, and big technology players. OJK recently also passed POJK 57/2020 regarding equity crowdfunding through funding portals to increase alternative fundraising methods for small and medium-sized enterprises and start-ups through the capital market.

**Blessing in disguise from the pandemic**

We believe consumers are likely to become more dependent on digital services than they did before the pandemic. During the pandemic, banks with well-developed capabilities in offering digital services have been among the best positioned to respond the challenges of social distancing. However, the remaining challenges are constraining further development of digital banking in Indonesia, particularly the less developed digital infrastructure in rural areas outside Java Island. Low financial literacy is another hurdle to overcome. Therefore, we view that the adoption and business of digital banks will remain concentrated in Java Island over the medium term. Nevertheless, given the digitalization becoming more reliable, we expect banks to gradually reduce their branch offices to promote efficiency since in the future branch offices might only serve as an expansion of its network.

Figure 7. Outstanding Fintech Financing as of FY2020 (IDR bn)



Source: OJK Fintech Statistic

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