Bankers Update

Unlocking Indonesia's Better Future using Psychometric Test and Credit Default Swap Concept

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Introduction

      Indonesia is forecasted to be one of the leading economies in the world in the near future. PwC estimates that Indonesia will be the 4th world economic power in terms of GDP at PPPs that in 2050 (Hawksworth, Audino, Clarry 2017). Considering the fact that Indonesia's GDP in 2020 is the highest in ASEAN will make the forecast seem justified. However, upon closer observation, Indonesia is still facing challenges in terms of economic inequality. This argument is supported by the fact that our GDP per capita is in 5th position despite our dominating GDP in 2020 (see Figure 1), not to mention that Indonesia's Gini index (a representation of wealth distribution) shows an inferior level than Myanmar, Thailand, Vietnam, and Singapore (The World Bank 2021; World Population Review 2021).
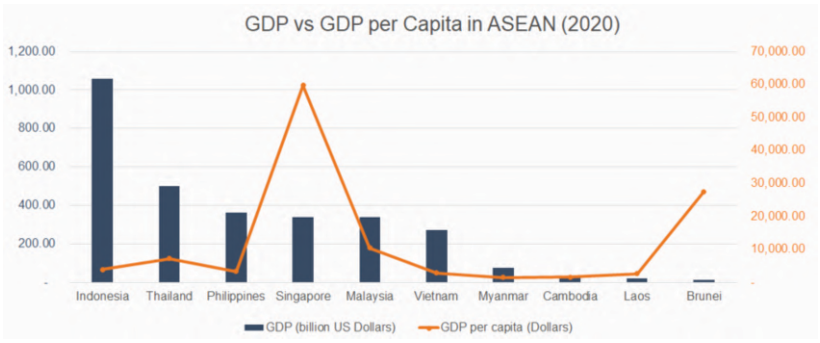
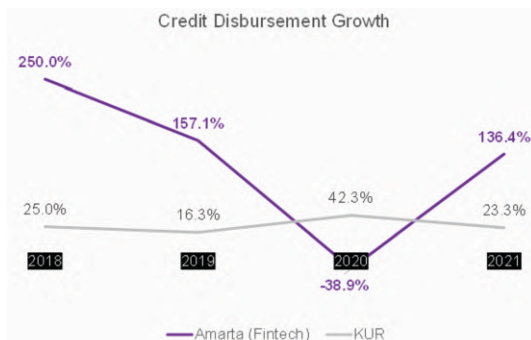Source: Statista 2021; The Global Economy 2021

Figure 1. Indonesia's GDP per Capita is not as good as its GDP compared to other countries in ASEAN

Indonesia's economy is still being led by Java island which dominates 58.75% of the Gross Regional Domestic Product (GDP) share in 2020 (BPS 2021). This economic inequality driving power among Indonesian areas is also shown by the Williamson Index of 0.79 which indicates a high imbalance (The Conversation 2020). Despite the complex nature of poverty and development issues, the difficult access to business loans is argued as one of the main causes of slow economic development across Indonesian areas (Jawa Pos 2018; kumparanBISNIS 2021). However, applying for a bank loan is not a simple task, especially for people in rural area who do not own adequate collateral or financial reports. This essay will discuss two potential solutions to help Indonesian banks provide loans with easier access for anyone who wants to start or develop a business.

The Issues

Banks in general will require anyone who asks for a business loan to provide financial reports, background information, and collaterals (Cermati 2017; Muhammad 2021). All of these requirements are essential for banks to mitigate credit risk (The World Bank 2019). However, these requirements are difficult for Indonesian small and medium businesses to fulfil as most of them have relatively low financial literacy (Pratama 2021). The Indonesian government, regulators, and state-owned banks indeed acknowledged this issue and have implemented a program, called Kredit Usaha Rakyat (KUR) that omits the collaterals and easy requirements (SimulasiKredit.com 2021), despite the same old method to select worthy loan applicants.
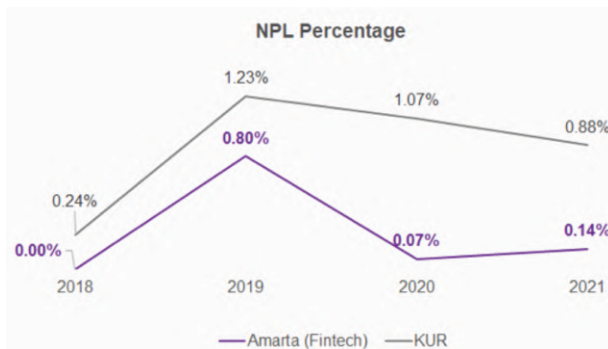
In contrast, financial technology (fintech) companies, such as Amartha, develop unique methods to model risks and determine the probability of payment from demographic profiling and psychometric tests (Amartha 2018). Amartha's excellent performance in terms of credit disbursement growth and NPL during 2018-2021 compared to KUR is a strong testament of the business model's feasibility (see **Figure 2** and **Figure 3**).

Credit Disbursement Growth

250.0%
157.1%
136.4%
25.0%   16.3%   42.3%   23.3%
2018   2019   2020   2021
-38.9%

— Amarta (Fintech)   — KUR

Source: Amartha.com, Kontan.co.id, Katadata.co.id; 2021 data is an estimated figure

Figure 2. Fintech vs KUR Business Growth in Comparison

Indonesia's economy is still being led by Java island which dominates 58.75% of the Gross Regional Domestic Product (GDP) share in 2020 (BPS 2021). This economic inequality driving power among Indonesian areas is also shown by the Williamson Index of 0.79 which indicates a high imbalance (The Conversation 2020). Despite the complex nature of poverty and development issues, the difficult access to business loans is argued as one of the main causes of slow economic development across Indonesian areas (Jawa Pos 2018; kumparanBISNIS 2021). However, applying for a bank loan is not a simple task, especially for people in rural area who do not own adequate collateral or financial reports. This essay will discuss two potential solutions to help Indonesian banks provide loans with easier access for anyone who wants to start or develop a business.

Source: Amartha.com, Beritasatu.com, Kontan.co.id, CNBC Indonesia, Bisnis.com; 2021 data is an estimated figure.

Figure 3. NPL Comparison between Fintech and KUR

The Proposed Ideas

There are two main proposed ideas for banks to adopt so more Indonesian businesses can be supported by:

1. Implementing demographic profiling and psychometric tests to assess creditworthiness.

2. Adopting Credit Default Swap (CDS) concept to remove the need of collateral for the loan.

Demographic profiling and psychometric tests can help the banks to create a risk model or probability of default based on many variables such as mobile-phone usage patterns, utility-bill payments, characters reflected in psychometric tests, and even social media activities (Baer, Goland, Schiff 2013; Scott 2017; Roy 2018). The output of the model will be insights on what kind of person who will repay the loan, providing banks valuable insights. Figure 4 shows the visualization of the model discussed.
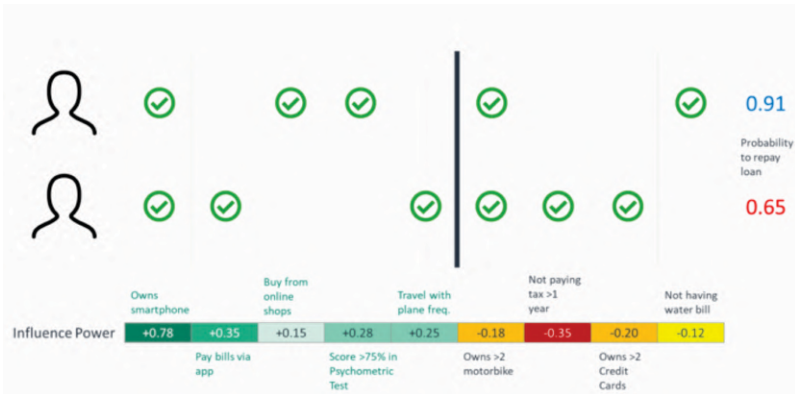
Figure 4. **Visualization of "Probability to Repay Loan" based on Observed Variables**

Meanwhile, banks are encouraged *to act like* CDS buyers to "obtain" collateral demanded from a loan applicant. CDS is a financial derivative or contract that allows an investor to divert the risk of loan default to another investor (Hayes, 2021). It usually works when a CDS buyer makes payments to the CDS seller until the loan tenor reaches maturity. If the loan defaults, the CDS seller will pay the CDS buyer with all of the interests. In the proposed scenario, bank will act as a CDS buyer and individual investors will act as CDS sellers.

However, the proposed model needs some adjustment to work for three parties: individual investors will put their money cumulatively as collateral for a business loan (act like a CDS). Then, a bank will act like a CDS Buyer and will pay those individual customers the "CDS premium". This "CDS premium" is obtained by the bank from the loan repayment. This proposed model is explained in **Figure 5** and **Figure 6**.
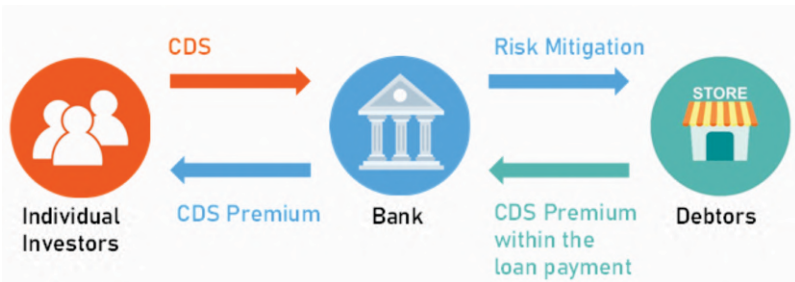
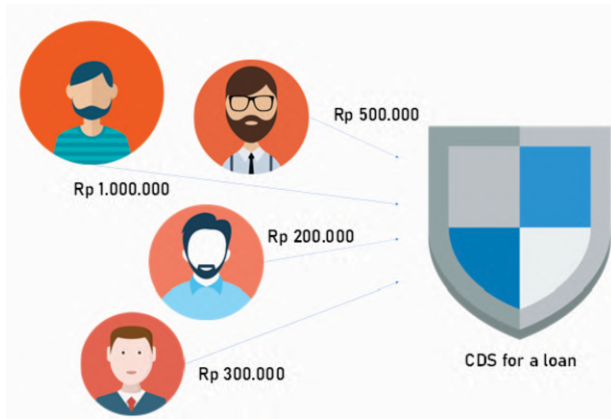**Figure 5.   Proposed Model of Implementing CDS Concept**

Figure 6.   Conceptual Ideas on How Individual Investors Collect Money to Create a CDS

Considering how well retail customers welcome the Peer-to-Peer (P2P) Lending investment (see **Figure 7**), the proposed model might attract the same positive response from the Indonesian market as the amount of money needed to "finance" a loan's collateral is relatively low considering the loan size needed by small and medium businesses in Indonesian P2P Lending market, around IDR 11.9 Million per person (Detik.com, 2012).
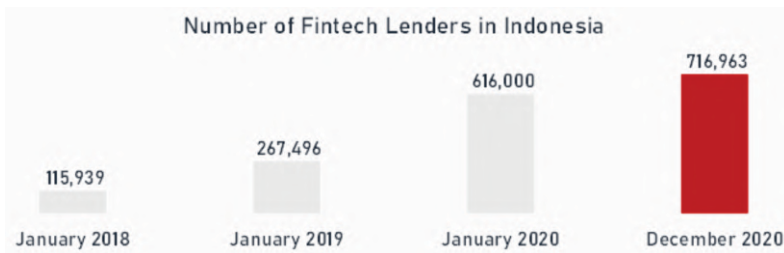
Source: OJK (2018-2021)

Figure 7.   The Steady Increase on Number of P2P Lenders in Indonesian Market

The Next Things to Do

The two discussed ideas surely need heavy research to ensure that real implementations will not create negative side effects for any side of the business and stakeholders. For example, developing and testing demographic profiling and psychometric tests to assess creditworthiness will need a lot of data and pilot projects to see what variables significantly affect default probability. Additional entities such as reinsurance company and even Lembaga Penjamin Simpanan (LPS) might be needed to protect individual investors when implementing CDS concept as discussed.

In conclusion, implementing these two ideas will potentially help to lift the Indonesian economy significantly by empowering many small and medium businesses that not only mention how many individual investors can join the proposed new business model but also create further economic development for Indonesia. A careful analysis of how these ideas can work in a real market setting will determine their feasibility.

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Telah Terbit
Daftar Buku Ikatan Bankir Indonesia

Rp. 80.000,00	Rp. 80.000,00	Rp. 78.000,00	Rp. 68.000,00	Rp. 115.000,00	Rp. 88.000,00	Rp. 75.000,00	Rp. 72.000,00	Rp. 150.000,00	Rp. 115.000,00

Rp. 108.000,00	Rp. 88.000,00	Rp. 88.000,00	Rp. 90.000,00	Rp. 99.000,00	Rp. 98.000,00	Rp. 65.000,00	Rp. 85.000,00	Rp. 115.000,00	Rp. 80.000,00

Rp. 95.000,00	Rp. 105.000,00	Rp. 105.000,00	Rp. 99.800,00	Rp. 108.000,00	Rp. 115.000,00	Rp. 89.000,00	Rp. 84.000,00	Rp.128.000,00	Rp. 125.000,00

PROFIL IBI

Ikatan Bankir Indonesia (IBI) berdiri pada 12 Desember 2005 sebagai hasil merger antara Institut Bankir Indonesia dengan Bankers Club Indonesia. Pendirian tersebut disaksikan oleh Gubernur Bank Indonesia dan Menteri Keuangan RI. Visi IBI adalah menjadi asosiasi profesi bankir di Indonesia yang memberikan manfaat bagi anggotanya dalam bidang pengembangan profesi, praktik perbankan yang sehat, dan penerapan tata kelola yang baik untuk membantu pemerintah mengembangkan ekonomi nasional yang kuat melalui 6 kegiatan utama: (i) Menyatukan bankir dari seluruh bank yang beroperasi di Indonesia; (ii) Meningkatkan profesionalisme dan integritas bankir; (iii) Membantu para anggota; (iv) Menyediakan sertifikasi kompetensi profesi bagi para anggota; (v) Menjadi mitra profesional bagi otoritas perbankan dan pemerintah untuk mewujudkan sistem perbankan yang sehat; dan (vi) Mewujudkan anggota yang disiplin melalui Kode Etik Bankir Indonesia.

PROFIL LSPP

Lembaga Sertifikasi Profesi Perbankan (LSPP) didirikan oleh IBI, Perbanas, Himbara, Asbisindo, Asbanda, dan Perbarindo pada tahun 2006 di bawah lisensi Badan Nasional Sertifikasi Profesi (BNSP). LSPP menyediakan sertifikasi untuk 9 unit kompetensi yaitu Manajemen Risiko, Audit Internal, *General Banking*, *Treasury Dealer*, *Compliance*, *Funding and Services*, *Operations*, *Credit and Wealth Management*. Sertifikasi kompetensi yang dikelola oleh LSPP meliputi 3 aspek yang ditentukan oleh BNSP yaitu Pengetahuan, Keahlian, dan Perilaku, untuk menghadapi tantangan industri modern perbankan. Sejak 2008 sampai dengan 2017, LSPP telah mensertifikasi tidak kurang dari 144.000 bankir dari seluruh bank di Indonesia.