



Reciprocal Data Portability to Foster Financial Services Competition in the Open Banking System Era

Jamal Wiwoho¹; Umi Khaerah Pati²; Anugrah Muhtarom Pratama³

^{1,2,3} Faculty of Law, Universitas Sebelas Maret, Indonesia

Corresponding author's email: umi_khaerah@staff.uns.ac.id

Article Information

Submitted : July 1, 2023

Reviewed : November 17, 2023

Revised : April 25, 2024

Accepted : August 14, 2023

Keywords: Open Banking;
Reciprocal; SNAP; Right To
Data Portability

Doi:10.20961/yustisia.
v13i2.75786

Abstract

This article analyzes the feasibility of incorporating reciprocal financial data into Indonesia's open banking system by studying its implementation in the United Kingdom and other countries. The methodology employed is conceptual, statutory, and comparative legal, utilizing data gathered from secondary legal sources. The study discovered that reciprocal data finance could be a supplementary measure to enhance data portability rights. This approach enables banks to provide compensation for access to account data, utilizing the concept of "paying by data". Indonesia should contemplate the adoption of data reciprocity alongside the portability rights outlined in Article 13 of the PDP Law. Subsequently, it can be configured inside the SNAP settings. Before proceeding with this development, it is crucial to establish Open banking in Indonesia by effectively balancing the goals of personal data rights and market competition. This circumstance will encourage Bank Indonesia to collaborate with other regulatory bodies, such as competition authorities, data protection regulators, and sector regulators. Despite potential differences in their objectives, this collaboration is necessary as reciprocal data portability initiatives may involve multiple regulatory domains.

I. Introduction

Bank Indonesia, since August 2020 through the blue print 2019-2025 and regulatory technical standard (*Standar Nasional Open API Pembayaran* or "SNAP") 2021, issued an open banking policy that is more consumer-centric-oriented (BL, 2020). The vision for open banking is a globalized financial system that enables an immediate, real time, and cross-border payments network. By empowering customers over their financial data,

facilitating seamless multi-homing without the hindrance of switching costs ([Kranz et al., 2023](#)), open banking fosters competition between banks and third party ([Premchand & Choudhry, 2018](#)). Data portability is a right for bolstering individuals' control over their own personal information ([Barr, DeHart, & Kang, 2019](#)). The concept of portability has the potential to decrease switching costs for consumers, thereby reducing barriers to entry ([Affairs & Committee, 2022](#)). Additionally, interoperability enables consumers to maintain network effects even when utilising products from competitors, which can facilitate multi-homing and further decrease switching costs and barriers to entry ([OECD, 2023](#)). Data portability may serve as a precursor to interoperability and may lead to an increase in consumer choice and competition, and competition policy is clearly playing an important role in driving data portability initiatives. However, portability regimes are often designed with policy goals that may conflict with competition ([Affairs & Committee, 2022](#)).

Legal environment around open banking has a neutral effect on the capacity of large tech companies (e.g Google , Amazon, Apple, Meta) to penetrate the financial sector ([Colangelo, 2021](#)). The sharing of account information through the right to data portability may also favour the entry of large online platforms ([Colangelo, 2021](#)). Once the problems with standardizing APIs have been addressed and consumers have the ability to move between different providers, regulators should refrain from trying to prevent the development of new market concentrations ([OECD, 2023](#)). Open API opens up opportunities for market concentration and market consolidation is underway to create an exclusive ecosystem. Some have grown into big tech that can dominate the market using its first mover's advantage in a data-driven ecosystem ([Zufall & Zingg, 2021](#)). Big technology enters finance through the payment system ([Bank of International Settlement, 2019](#)). The findings of BIS (2019) states that big tech in emerging countries generally develop proprietary payment services. BIS divides big tech into two categories, first, big tech as an overlay system provider, which relies on existing third-party infrastructure to process and complete payments (Apple Pay, Google Pay and PayPal). Second, big tech as a proprietary system provider, whose settlement process is carried out through infrastructure built by big tech itself (Alipay, M-Pesa, and WePay). This system generally develops in emerging countries, including Indonesia, along with the large unbanked population ([BI, 2020](#)). Such businesses profit from innovative data analysis skills and cutting-edge technologies. However, they have created challenges, such as data silos that result in market dominance. Firms may harness the data-network-activities (DNA) loop to exclude competitors (BIS, 2020). This would enable them to analyse transaction and consumer data in order to maximise their available resources. By leveraging such competitive advantages, it is expected that BigTech firms could rapidly expand in the Financial markets, posing an immense competitive threat to traditional banking. While their initial forays will be in the payment industry, they could rapidly get into credit, insurance, savings, and investment products. The competitive pressure posed by BigTechs as challengers raises significant concerns for incumbents

([Colangelo, 2021](#)). Large platform-based technology businesses could potentially enter the retail-banking markets by utilising the vast amounts of data gathered through their networks and leveraging the benefits of open banking SNAP, which provides access to payment account information. Specific dominant or gatekeeper firms, since asymmetric requirements can prevent small firms or new entrants from facing an undue burden that would worsen competition outcomes ([Competition and Markets Authority, 2020](#)). Its outcome may be the concentration of data-driven financial services in the hands of a few, dominant BigTechs ([Preziuso, Koefer, & Ehrenhard, 2023](#)).

As a response to this, certain countries advocate for the inclusion of a reciprocal clause to complement data portability right. This paper aims to examine the notion of reciprocal data and assess the practicality of integrating reciprocal financial data into Indonesia's open banking system through a comparative analysis of its implementation in the United Kingdom and other nations. This study employs a statutory method, utilizing a comparative legal perspective. Raymond Saleilles and other scholars assert that the main purpose of comparative law is to strengthen domestic law and legal theory ([Taekema, 2018](#)).

II. Data Portability: Understanding It and Why It's Relevant to the Data-Driven Economy Era

The Organization of Economic Co-operation and Development (OECD), an inter-governmental organization whose mission is to create a strong, clean, and equitable global economy, has recently issued a study on data portability that describes data portability, namely "*The ability (sometimes described as a right) of a natural or legal person to request that a data holder transfer to the person, or to a specific third party, data concerning that person in a structured, commonly used and machine-readable format on an ad-hoc or continuous basis.*" ([OECD, 2021](#)) Meanwhile, The International Organization for Standardization (ISO), has defined its own data portability as "*the ability to easily transfer data from one system to another without being required to re-enter data.*" ([Schneider, Maurer, & Friedberg, 2017](#)). Instead, other definitions have been developed primarily in a business-to-consumer context. The U.S. Office of Science and Technology Policy (OSTP), for example, sees it as "*the ability to download the information that a service stores for or about an individual.... and to enjoy the convenience of keeping our data online, and the ability to gain access to it and use it how we wish*". Lynskey ([Lynskey, 2017](#)) describes data portability as "*providing individuals with the opportunity to obtain access to their own information in order to use it for further purposes*". From the technical perspective, Petcu (2011) defines data portability as "*the ability of a customer (individual or organisation) to retrieve application data from one provider and import it into an equivalent application hosted by another provider*".

As technology continues to evolve, the core of data portability changes over time. The perception of data portability varies from context to context, and there is no definition that fits all. Obviously, the definitions of existing data portability are diverse,

fragmented and inconsistent. Difficulties in achieving the result of a common definition, it is said, of several factors:

- a. Scope and type of data, e.g. personal data, usage data, consumer data;
- b. Relevant stakeholders, e.g. businesses, public authorities, individuals;
- c. Data export/download methods, data transfer, automatic data exchange;
- d. Goals, e.g. competition, consumer welfare, innovation, institutional efficiency; and Intervention Rates, e.g. self-regulatory, co-regulatory, statutory.

These factors are identified interrelated with each other. For example, the purpose of data portability determines the scope of the data in question, the possibilities of optimal methods, as well as the degree of intervention required. Looking at the above, this study will look at lessons from several countries that have implemented and provided policy recommendations for regulators that are adapted to Indonesian conditions to be applied in the future, especially in the era of open banking.

III. Aspects of Right to Data Portability in the Indonesia's PDP Law

On November 22, 2022, the Indonesian parliament passed the Personal Data Protection (PDP Law), which is one of the proposed laws to strengthen privacy protections in response to problems facing businesses and society. Previously, data protection rules were sectorally controlled across a variety of laws, leaving weaknesses in inadequate data management and creating fertile ground for cybercrime and lack of responsibility, especially in the context of the new digital economy ([Hicks, 2021](#)) Regarding the RtDP in particular, it was first enshrined in Article 13 of the PDP Law. By enacting Article 13, Indonesia expressed its readiness to embrace the new emerging digital economy ([Rosadi, Noviandika, Walters, & Aisy, 2022](#)). Article 13 states the provisions of data portability as follows:

1. The Personal Data Subject has the right to obtain and/or use Personal Data about himself from the Personal Data Controller in a form that is in accordance with the structure and/or format commonly used or readable by electronic systems.
2. The Personal Data Subject has the right to transfer Personal Data about himself to another Personal Data Controller, as long as the systems used can communicate with each other securely in accordance with the principles of Personal Data Protection under this Law.
3. Further provisions regarding the right of the Personal Data Subject to use and Personal Data as referred to in paragraph (2) are regulated in a Government Regulation.

It is identified that the provisions of the RtDP in Indonesia where it actually meets its objectives, although it requires a lot of clarity. Indeed, the novelty of Article 13 has given rights to individuals, on the other hand, this leaves homework because it does not clearly articulate the conditions under which data portability prevails, making it difficult to quantify how data portability under the PDP Law will be applied when reflecting

on the two jurisdictions (the EU and UK). The experience and learning of these two jurisdictions has resulted in a number of approaches to implementing data portability from the lowest to the most robust.

Important points in forming a portability framework include:

1. Determine which data is portable. In general, it is certainly not easy to say which data should be portable. This is why it is important to clarify what data is considered subject to data portability requirements under Article 13 (e.g. whether volunteered data, observed data and/or inferred data are covered) to ensure that the subject has the right to transfer all relevant data and to provide the data controller with certainty ([Martinelli, 2019](#))
2. Determine which the level of data portability is compatible for the state and readiness of the Indonesian digital market. The idea of data portability can then be broken down further into levels. Weinlong Li has identified it and cultivated three levels of different levels. First, there is a form of low-level data portability or another term i.e. indirect data portability where the goal is only to give control to the individual in the narrow sense where interoperability is not required ([Li, 2022](#)). Article 20 GDPR, for example, which does not require it. Second, moderate levels of data portability, such as the Midata UK initiative, where the main focus is individual wellbeing and interoperability requirements are seen as optional Third, a strong level of data portability, which we refer to as direct data portability, which makes data transfer easy and improves competitiveness and market access with interoperability required ([Li, 2022](#))
3. Scope and type of data, e.g. personal data, usage data, consumer data;
4. Relevant stakeholders, e.g. businesses, public authorities, individuals;
5. Data export/download methods, data transfer, automatic data exchange;
6. Goals, e.g. competition, consumer welfare, innovation, institutional efficiency; and Intervention Rates, e.g. self-regulatory, co-regulatory, statutory.

IV. Aspects of Portability and Interoperability under SNAP (Indonesian Open Banking Regulatory Technical Standard)

PDP Law (Indonesian personal data protection law) and GDPR cover principle of data portability mentioned in article 13 paragraphs 3 of the PDP Law and in GDPR article 20 point 1 mentioning that

“the right to transmit those data to another controller without hindrance from the controller to which the personal data have been provided”

Portability principles also adopted in National Open API Payment Standard (SNAP). SNAP is a National Open API Payment Standard set by Bank Indonesia in the payment system industry ([BI, 2020](#)). SNAP states that consumer have the ability of exchanging information/ data or the ability of two cloud systems to talk to another, i.e. to exchange

messages and information in a way that both can understand within the scope of SNAP, namely the ability to exchange information about consenting to data processing by the customer to the PJP of the service provider and the PJP of the service user and obtaining information related to the use of data, convey information related to accessing and changing data by customers to PJP service providers and PJP service users. APIs are key enablers of interoperability, and facilitate the data flows that are necessary for open banking (Cross cutting). Interoperability process is the ability to exchange and use information (typically in a large heterogeneous network made up of several local area networks) ([Diallo, Herencia-Zapana, Padilla, & Tolk, 2011](#)). The right to data portability (RtDP) differ with interoperability. RtDP or Data portability, namely “the ability to move, copy or transfer” data, is one of the instruments of such control. ([Graef, Husovec, & Purtova, 2018](#)). Data portability gives rights to customers the right to obtain and reuse their personal data for their own purposes across different services, to move, copy, or transfer personal data easily from one IT environment to another in a safe and secure manner, without affecting its usability, and to use applications and services that can use this data to find them a better deal or to help them understand their spending habits. The right only applies to information provided by an individual to a controller.

Some experts say the application of data portability rights is a solution to two aspects ([Krämer & Schnurr, 2022](#)). Data portability enables data subjects to have stronger data control capacity, and can play a role in promoting healthy business competition within and among digital platform providers ([Lam & Liu, 2020](#)). This right encourages the free flow of data and to some extent, will also lead to increased competition among data controllers ([Lam & Liu, 2020](#)). Some experts also assume that data portability is pro-competition and pro-innovation is based on the dynamic nature of competition in the digital platform market. This can answer the problem of digital market competition that currently prevails winner-take-all (winner takes over all or most), a phenomenon where companies dare to make high-risk investments to get big profits as winners in attracting many users ([Siciliani & Giovannetti, 2019](#)). This is motivated by consumer behavior that tends to lock-in if they have used one digital platform of choice.

However, legal environment around open banking (including portability right) has a neutral effect on the capacity of large big tech to penetrate the financial sector ([Colangelo, 2021](#)). Data portability may serve as a precursor to interoperability and may lead to an increase in consumer choice and competition, and competition policy is clearly playing an important role in driving data portability initiatives. However, portability regimes are often designed with policy goals that may conflict with competition ([Affairs & Committee, 2022](#)). Unlike to FinTech companies, which establish themselves as start-ups in the market for inventive financial services, Big-Techs possess notable advantages upon market entry. ([Zufall & Zingg, 2021](#)) These advantages include a robust financial position, access to capital at low costs, an established user base spanning the globe, and the technical proficiency and data necessary to customize their offerings according to customer preferences. ([Bank of International Settlement, 2019](#)) They therefore have the

potential to rapidly gain a large market share in various financial services. Prominent technological corporations, such as Alibaba, Amazon, and Apple, often employ private data derived from their many services, such as social networking platforms, to customize their products and services according to the preferences of their customers ([Frost, Gambacorta, Huang, Song Shin, & Zbinden, 2019](#)).

Taking into account these factors, scholars usually criticize the EU and The UK approach because open banking does not really level the playing field, and it underestimates large technology companies' impact. The XS2A¹ rule might prove to be disproportionate, given that it does not consider the differences between FinTech and BigTech entrants. However, in the long term, the access to account rule may lead to monopolization by BigTech companies, which enjoy scale and scope economies, an established-loyal customer base, a vast amount of digital customer data, a solid reputation, and strong brands. Large Tech entities, when dominant, may engage in anticompetitive practices by bundling their services with banking products, discriminating incumbents in favour of their affiliates within their platforms, as well as privileging their own products and services.

In Indonesia, some of the notable big tech players that have impacted the banking market share in Indonesia include:

1. **Gojek** ([Dwinarko & Yasya, 2023](#)): Gojek (local), a super app, offers a wide range of services, including ride-hailing, food delivery, and financial services through its GoPay digital wallet. GoPay enables users to make payments, transfer money, and access various financial products and services.
2. **Grab**: Grab (Singaporean giants) another super app, provides ride-hailing, food delivery, and financial services in Indonesia. Grab's digital wallet, GrabPay, offers cashless payments and other financial products, including insurance and lending.
3. **OVO**: OVO is a digital payment and financial services platform that offers various services, such as payments, transfers, and investments. It has partnered with multiple banks to provide a wide array of financial products.
4. **Shopee**: Shopee, an e-commerce platform, has entered the digital payment space with ShopeePay. Users can make online and offline payments, as well as access discounts and cashback offers.
5. **LinkAja**: LinkAja is a digital payment platform formed through a consortium of state-owned enterprises. It offers a broad spectrum of services, including payments, transfers, and bill payments.
6. **Tokopedia**: Tokopedia, a leading e-commerce platform, has its own digital payment service, DANA. DANA allows users to make online and offline payments, transfer money, and access financial services.

¹ The provision of secure access to accounts operated by ASPSPs using APIs, in order to enable TPPs to provide Payment Initiation Services (PIS), Account Information Services (AIS), and Card Based Payment Instruments Issuing (CBPII) to customers.

7. **Bukalapak:** Another prominent e-commerce platform in Indonesia, Bukalapak, has introduced BukaReksa, a mutual fund investment service, and other financial products.
8. **Traveloka:** Traveloka, a travel booking platform, has ventured into financial services with PayLater, a digital credit offering that allows users to book travel and pay later in installments.

These big tech companies have used their digital platforms, mobile apps, and extensive user bases to offer a range of financial products and services, such as digital wallets, peer-to-peer payments, investments, lending, and insurance. They have also formed partnerships with traditional banks and financial institutions to expand their financial offerings and reach a wider audience. Indonesia Financial Services Authority (Otoritas Jasa Keuangan or “OJK”) said that 60 percent of the financial sector will be controlled by big-tech. Big tech challenges the banking business by providing a more enhanced customer-centric approach ([Barbu, Florea, Dabija, & Barbu, 2021](#)). Fintech startups have the potential to bypass traditional banks and gradually reduce their revenue. This would diminish banks’ capacity to accumulate capital through natural means, so affecting their ability to withstand challenges. If incumbent banks, which are expected to encompass domestic systemically significant banks, see any decrease in their resilience, it will consequently diminish the resilience of the entire financial system. The Study Group on Data and Competition Policy set up by the Japan Fair Trade Commission argues that the characteristics of digital markets make the marginalization of smaller competitors “self-reinforcing: access to a larger amount of data may support better services, which in turn attract more customers – and more data (“snowball effects’)” and ultimately lead towards “monopolization for data-related markets”. Finally, both the joint French and German report and the Joint Occasional Paper recognize the potential for abuse of a dominant position at the intersection of competition law and data ([Affairs & Committee, 2022](#)).

V. Reciprocal Data Portability Under Indonesian’s Open Banking Regulation for Fostering Financial Services Competition

1. *Reciprocal data portability across the United Kingdom, United States, European Union, and Australia.*

Customer portability right allows big tech businesses such as Apple and Google to gain data access and enter the market, which may have severe consequences in the long run. Due to the fact that these prominent platform companies are not obligated to disclose their data, there has been a rise in requests for reciprocity of data access ([de la Mano & Padilla, 2018](#)) ([OECD, 2021](#)). The identical proposal was also put forth during a session on data portability organized by the Federal Trade Commission of the United States on Tuesday, September 22, 2020. Panelists recommended that regulators should consider

implementing group portability as a solution to mitigate the network effects observed on certain social platforms. This would enable a group of users to transfer their shared data to another platform. Reciprocity could be a crucial aspect of any data portability program. This means that organizations that receive data should also be required to send forth data ([Zach, 2020](#)). Porto dan Ghadini suggests implementing a “Reciprocity Clause” for accessing “Other (Behavioral) Data” in the context of open banking regulations in the UK, with the condition of proportionality. The XS2A regulation is complemented by a ‘reciprocity clause’. That is, providing compensation to the existing banks in exchange for access to account data through the concept of “paying by data.” The cost of access would involve the “behavioral data” related to the same customers affected by the XS2A² request, which is available to the Big Techs ([Di Porto & Ghidini, 2020](#)). The European Union’s Digital Market Act 2022 (DMA) offers financial services firms an opportunity, as stated in Article 6, to obtain access to data stored by Big Tech firms who are considered ‘gatekeepers’ ([Smith & Geradin, 2022](#)). When used in traditional sectors, such as finance, data sharing must include reciprocity requirements ([Lopez & Smith, 2021](#)). In fairness the EU GDPR does include a right to ‘data portability’ which could be leveraged to ensure reciprocity ([Deloitte, 2019](#)).

In order to create fair competition, it may be necessary to mandate that the GAFAs³ disclose data in exchange. This data could include information on customer purchasing habits, which can be used by banks to determine the appropriate pricing of risk ([Smith & Geradin, 2022](#)). Data reciprocity needs to complement data portability. Reciprocity gives banks and other financial institutions access to the non-financial data tech companies have ([Lopez & Smith, 2021](#)). In Australia, The Open Banking review also introduced the concept of reciprocity, which supports the idea that a data recipient who is authorized in a certain sector should be obligated to supply identical data, in the same format, when directed by a consumer. Nevertheless, the task of identifying the specific components of ‘equivalent data’ for every industry sector continues to be a major obstacle ([Deloitte, 2019](#)). Absent reciprocity, the flow of information would be one-sided, and conditions of lock-in could resurface after users switch to a new service ([Zander Arnao, 2023](#)).

Ginsberg defined Reciprocity as the exchange of tangible and intangible goods and gifts ([Ginsberg & Malinowski, 1924](#)), Gouldner (1960) called this exchange “complementarity.” ([Gouldner, 1960](#)). Jhanji stated that Reciprocity means that APSPs (mostly banks) should get data back from TPPs in return for sharing their customers’ data ([Jhanji, 2023](#)). Implementing reciprocal data sharing frameworks that adhere to these principles will guarantee equitable and

2 XS2A is an interface that allows your application to communicate with payment and account services of various banks under PSD2 regulations for EU.

3 Big Techs stands for (Google, Amazon, Facebook, Apple)

dynamic competitive environments. Ultimately, this will result in improved consumer experiences through the provision of more tailored and cost-effective offers from a wider array of providers. Although this situation is theoretically reciprocal, one drawback is that it would result in a limited exchange of data among specific industry players, rather than adopting a more inclusive approach to ensure that all market participants may fully benefit from the potential of data ([Institute of International Finance, 2018](#)). lack of reciprocity [concerning data sharing] means that a regulation intended to facilitate the entrance of new players and promote competition and end-user choice in the payments market has created a competitive disadvantage for banks and other financial services firms vis-à-vis players from other industries ([de la Mano & Padilla, 2018](#)). The most obvious option to foster market diversity and rivalry is to mandate data sharing conditional on customer consent ([de la Mano & Padilla, 2018](#)).

In implementing reciprocity, it is necessary to pay attention to several things that are included in the Financial Conduct Authority (FCA) FCA's April 2024 Feedback Statement on Data asymmetry in financial services markets between Big Tech and financial services.

- a) **Data Segregation:** Implementing restrictions on the utilization of primary datasets owned by Big Tech companies in the realm of financial services. Specifically, companies were in support of segregating specific data sets from one another in order to apply distinct access controls to each group. In order to accomplish this, it is necessary to establish information barriers or explicit segregation between the data sets of established Big Tech companies and financial data sets. This should be done with well-defined criteria to ensure that customer agreement for data usage is explicit and fully comprehended. A clear accountability and governance framework might be established for all companies that possess financial data sets to ensure strict adherence to the standards. ([Financial Conduct Authority, 2024](#))
- b) **Gatekeeper test :** A firm will be presumed to meet the gatekeeper test if it satisfies the following criteria: it has had 45 million monthly active end users of the core platform service in the EU (approximately 10% of the EU's population) and more than 10,000 yearly active business users in the past three years; it has achieved an annual EEA turnover of at least EUR 6.5 billion in the past three years (or an average market capitalization of at least EUR 65 billion); and it offers a core platform service in at least three EU Member States. Once a gatekeeper is apprehended by the regime, it will be subjected to an extensive array of obligations and limits on its behavior, which will be further elaborated upon below ([Smith & Geradin, 2022](#)).
- c) **Testing.** The FCA will analyze and pilot "use cases" to comprehend the significance of data obtained from Big Tech companies and its application

in retail financial markets. The outcomes of this testing will be utilized to formulate policy recommendations, particularly in relation to Open Finance, and to enhance collaboration with the CMA.

- d) *Incentive alignment.* Once step 2 determines the value in Big Tech's data, the FCA will analyze how incentives might be adjusted to guarantee that data sharing agreements are advantageous for both the market and consumers ([Financial Conduct Authority, 2024](#)).
- e) Additionally, Di Porto and Ghidini emphasize that the data obtained by the banks should solely be utilized to improve the delivery of the payment service. The recipient (the large technology company) shall be recognized (via the TPPs registry) according to some quantitative thresholds (e.g. its initial capital or annual turnover, active personal or business clients) ([Di Porto & Ghidini, 2020](#)).

At the customers' behest, the augmented dissemination of their data will:

- a. bolster innovation as established entities upgrade their analytics capabilities,
- b. foster competition by increasing the number of market participants, and
- c. enhance the quality of services provided to consumers as enterprises vie for their patronage.

2. *Reciprocal data portability in Indonesia.*

Reciprocal Data Portability has not been introduced in Indonesia. Indonesia should consider implementing data reciprocity in addition to the portability rights stipulated in Article 13 of the PDP Law. Then it can be set in the SNAP settings. To begin, the first step is to identify the companies that can be classified as big tech. This can be done by conducting gatekeeper tests. Next, restrictions should be put in place to limit the use of primary datasets owned by big tech companies in the financial services sector. It is important to analyze and pilot "use cases" to fully understand the value of data obtained from big tech companies and how it can be applied in retail financial markets. Finally, incentives should be evaluated and adjusted to ensure that data sharing agreements are beneficial for both the market and consumers. Prior to developing this, it is necessary to establish Open banking Indonesia by carefully balancing the aims of personal data rights and market competition. Currently, the open banking policy in Indonesia remains concern on granting customers all control over their financial data, enabling them to transmit such data with explicit consent ([Bajrektarevic, 2022](#)). The SNAP initiative has primarily prioritized the notion of interoperability among stakeholders, as stipulated in the SNAP regulations and the Regulation of Members of the Board of Governors Number 23/15/PADG/2021 pertaining to National Standards for Open Application Programming Interfaces. However, the initiative has yet to place significant emphasis on the potential for level

playing field. However, open banking raises cross-cutting issues, not only data privacy but also competition law.

Additionally, In Indonesia, the responsibility for developing infrastructure pertaining to open banking rests solely with Bank Indonesia. The Indonesian central bank is the only institution that issues policies related to open banking without involving the unfair competition commission (KPPU) in formulating the policies. The central bank also gives the mandate to 5 banks and 8 fintech payments and 3 largest e-commerce in Indonesia which are members of ASPI (Indonesian payment system association) who formulated SNAP (open API RTS). However, Open banking initiatives address issues at the intersection of competition, privacy and consumer protection so that it needs for cross-agency regulatory and enforcement co-operation and the new strategy is necessary to maintain a level playing field between banks and fintech, preventing monopoly risk ([OECD, 2023](#)). For example, in The UK, the major banks were required to constitute an independent trustee to develop standards. In practice, the the Competition and Markets Authority (CMA) forced nine largest banks and building societies: to fund and cooperate with an independent new body, Open Banking Implementation Entity (OBIE) ([Dinçkol, Ozcan, & Zachariadis, 2023](#)). The OBIE developed, within a fixed (and short) timeframe, read-only open and common technical and product data standards and read-and-write open and common banking standards for the sharing of transaction data. ([Open Banking Implementation Entity, 2019](#)). Those standards ensure that any communication is secure and based on the consent of the customers ([Mancini, 2021](#)). Similar case-by-case provisions are also done in Australian Consumer Data Right (CDR) initiative ([Sullivan, 2022](#)). The ultimate option is to enact a public standards organisation to achieve this end. For example, the Australian government has given a legal mandate the Data Standards Body to develop standards for data access and portability. It works in close collaboration with the competition authority and the data protection authority. In order to establish its open banking policy that fostering market competition, Firstly, Bank Indonesia should engage in collaboration with the business competition commission, a practise that has been implemented by both the United Kingdom and Australia. The UK has been an early mover in the development of open banking and was originally focused on tackling anti-competitive behaviour in the financial services industry ([Leong & Gardner, 2022](#)) ([Dinçkol et al., 2023](#)).

In the event that prompt action is not taken by the Indonesian government, it is likely that the market share will be dominated by big tech entities functioning as overlay system providers (such as Apple Pay, Google Pay, and PayPal and Gojek, Ovo, Link Aja, and so on) and those functioning as proprietary system providers (such as Alipay, M-Pesa, and WePay) through the process

of data aggregation. This proposal holds significant importance due to the prevailing dominance of state-owned banks in the Indonesian banking system, accounting for 43.19 percent. It is followed by national commercial banks at 21.49 percent and Regional Development Banks (BPD) at 8.35 percent ([OJK, 2023](#)). The establishment of state-owned banks in Indonesia is empowered by the Constitution of Indonesia in Article 33 of the Basic Law of the Republic of Indonesia (UUD NRI) 1945 ([Rahmi Ayunda, 2022](#); [Aristanto, 2020](#)). Article 33 gives its authority to the government in the management of Natural Resources (SDA) as well as important branches of production, with the primary purpose of improving the well-being of the people in a just and civilized manner ([Saleh, 2019](#)). Furthermore, the concept of natural resource management and the important branches of production for the state can be managed monopolistically through state-owned enterprise based on Article 51 of Law No. 5 of 1999 concerning Prohibition of Practices Monopoly and Unfair Business Competition ([Putu Samawati, 2020](#)). Meanwhile Financial liberalization can have adverse implications on financial stability ([Cubillas & González, 2014](#)). Research conducted by Haiyan Yin on paper titled Bank globalization and financial stability: International evidence with a dataset covering 129 countries over 1995–2013, this study finds evidence that when facing foreign competition, banks that are tightly monitored by the supervisory body may not be able cope with the competition effectively.

VI. Conclusion

Reciprocal Data Portability has yet to be introduced in Indonesia. Indonesia should contemplate the adoption of data reciprocity alongside the portability rights outlined in Article 13 of the PDP Law. Subsequently, it can be configured inside the SNAP settings. Firstly, it is necessary to identify the companies that can be categorized as big tech (gatekeeper tests). Subsequently, measures should be implemented to restrict the utilization of primary datasets owned by these big technology companies in the financial services industry. Furthermore, it is crucial to thoroughly examine and test “use cases” to comprehensively comprehend the worth of data acquired from major technology companies and its potential applications in retail financial markets.

Last but not least, incentives should be assessed and modified to guarantee that data sharing benefits both the market and consumers. Before developing this, it is necessary to establish Open banking in Indonesia by carefully balancing personal data rights and market competition aims. Reciprocal data portability must be strengthened in concept and application to accommodate both objectives. Bank Indonesia must engage in collaboration with other regulatory bodies, including competition authorities, data protection regulators and sector regulators, despite potential differences in their respective objectives, as reciprocal data portability initiatives may span multiple regulatory domains.

References:

- Affairs, D. for F. and E., & Committee, C. (2022). Summary of Discussion of the Roundtable on Data Portability, Interoperability and Competition. *Organisation for Economic Co-Operation and Development (OECD)*.
- Aristanto, E. (2020). Peranan Strategis Bank Pemerintah (BUMN) dalam Pemberdayaan Pelaku Usaha Mikro dan Kecil. *Kertas Kerja*, 1(1).
- Ayunda, R. (2022). Personal Data Protection to E-Commerce Consumer: What Are the Legal Challenges and Certainties?. *LAW REFORM*, 18(2), 144-163. <https://doi.org/10.14710/lr.v18i2.43307>
- Bajrektarevic, Anis H., U. K. P. (2022). Costumer Explicit Consent Under Indonesian Open Banking Regulations. *Jambura Law Review*, 4, 176-194. <https://doi.org/10.33756/jlr.v4i2.15377>
- Bank of International Settlement. (2019). BIS Annual Report 2019-2020. *Fresenius.Com*, (December).
- Barbu, C. M., Florea, D. L., Dabija, D. C., & Barbu, M. C. R. (2021). Customer experience in fintech. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5). <https://doi.org/10.3390/jtaer16050080>
- Barr, M. S., DeHart, A., & Kang, A. (2019). Consumer Autonomy and Pathways to Portability in Banking and Financial Services. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3483757>
- BI. (2020). *Blueprint Sistem Pembayaran Indonesia 2025*.
- Colangelo, O. B. & G. (2021, April). OPEN BANKING AND THE AMBIGUOUS COMPETITIVE EFFECTS OF DATA PORTABILITY. *CPI Antitrust Chronicle*, pp. 1-6.
- Competition and Markets Authority. (2020). *Online platforms and digital advertising: Market study final report*.
- Cubillas, E., & González, F. (2014). Financial liberalization and bank risk-taking: International evidence. *Journal of Financial Stability*, 11(1). <https://doi.org/10.1016/j.jfs.2013.11.001>
- de la Mano, M., & Padilla, J. (2018). BIG TECH BANKING. *Journal of Competition Law & Economics*, 14(4). <https://doi.org/10.1093/joclec/nhz003>
- Deloitte. (2019). Blurring the lines: Creating an Open Banking data sharing ecosystem. *Deloitte Ireland*.
- Di Porto, F., & Ghidini, G. (2020). "I Access Your Data, You Access Mine": Requiring Data Reciprocity in Payment Services. *IIC International Review of Intellectual Property and Competition Law*, 51(3). <https://doi.org/10.1007/s40319-020-00914-1>
- Diallo, S. Y., Herencia-Zapana, H., Padilla, J. J., & Tolk, A. (2011). Understanding interoperability. *Emerging M and S Applications in Industry and Academia Symposium 2011, EAIA 2011 - 2011 Spring Simulation Multiconference*.

- Dinçkol, D., Ozcan, P., & Zachariadis, M. (2023). Regulatory standards and consequences for industry architecture: The case of UK Open Banking. *Research Policy*, 52(6). <https://doi.org/10.1016/j.respol.2023.104760>
- Dwinarko, & Yasya, W. (2023). *Becoming GoTo: Framing Analysis of Big Tech Corporate Merger in Indonesia*. https://doi.org/10.2991/978-2-38476-016-9_18
- Financial Conduct Authority. (2024). *Potential competition impacts from the data asymmetry between Big Tech firms and firms in financial services*. London.
- Frost, J., Gambacorta, L., Huang, Y., Song Shin, H., & Zbinden, P. (2019). BigTech and the changing structure of financial intermediation. *Economic Policy*, 34(100). <https://doi.org/10.1093/EPOLIC/EIAA003>
- Ginsberg, M., & Malinowski, B. (1924). Argonauts of the Western Pacific. *Economica*, (11). <https://doi.org/10.2307/2548181>
- Gouldner, A. W. (1960). American Sociological Review The Norm of Reciprocity: A Preliminary Statement. *American Sociological Review*, 25(2).
- Graef, I., Husovec, M., & Purtova, N. (2018). Data Portability and Data Control: Lessons for an Emerging Concept in EU Law. *German Law Journal*, 19(6). <https://doi.org/10.1017/s2071832200023075>
- Hicks, J. (2021). A 'data realm' for the Global South? Evidence from Indonesia. *Third World Quarterly*, 42(7), 1417–1435. <https://doi.org/10.1080/01436597.2021.1901570>
- Institute of International Finance. (2018). RECIPROCITY IN CUSTOMER DATA SHARING FRAMEWORKS. *Institute of International Finance*, 2.
- Jhanji, K. (2023). *Unlocking the Potential of Open Finance in the UK*. Boston.
- Krämer, J., & Schnurr, D. (2022). BIGDATA AND DIGITAL MARKETS CONTESTABILITY: THEORY OF HARM AND DATA ACCESS REMEDIES. *Journal of Competition Law & Economics*, 18(2), 255–322. <https://doi.org/10.1093/joclec/nhab015>
- Kranz, J., Kuebler-Wachendorff, S., Syrmoudis, E., Grossklags, J., Mager, S., Luzsa, R., & Mayr, S. (2023). Data Portability. *Business and Information Systems Engineering*. <https://doi.org/10.1007/s12599-023-00815-w>
- Lam, W. M. W., & Liu, X. (2020). Does Data Portability Facilitate Entry? *International Journal of Industrial Organization*, 69, 102564. <https://doi.org/10.1016/j.ijindorg.2019.102564>
- Leong, E., & Gardner, J. (2022). Open Banking in the UK and Singapore: Open Possibilities for Enhancing Financial Inclusion. In *NUS Law Working Paper No. 2022/011*. <https://doi.org/10.2139/ssrn.4194256>
- Li, W. (2022). Between Incrementalism and Revolution: How the GDPR Right to Data Portability is Revamped by the EU and the UK Post Brexit. In E. Kosta, R. Leenes,

- & I. Kamara (Eds.), *Research Handbook on EU Data Protection Law* (pp. 572–599). Edward Elgar Publishing. <https://doi.org/10.4337/9781800371682>
- Lopez, C., & Smith, B. (2021). Share the Data: Overcoming Trade-Offs in Tech Regulation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3843369>
- Lynskey, O. (2017). Aligning data protection rights with competition law remedies? The GDPR right to data portability. *European Law Review*, Vol. 42.
- Mancini, J. (2021). Data Portability, Interoperability and Digital Platform Competition: OECD Background Paper. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3862299>
- Martinelli, S. (2019). Sharing Data and Privacy in the Platform Economy: The Right to Data Portability and “Porting Rights.” In *Regulating New Technologies in Uncertain Times. Information Technology and Law Series* (pp. 133–152). Springer. https://doi.org/10.1007/978-94-6265-279-8_8
- OECD. (2021). Organisation for Economic and Co-operation and Development, “Mapping out data portability initiatives, opportunities, and challenges. *OECD*, (321). <https://doi.org/https://doi.org/10.1787/a6edfab2-en>
- OECD. (2023). OPEN BANKING PRIVACY AND OTHER CROSS- CUTTING ISSUES. *OECD*, (348), 37. <https://doi.org/https://doi.org/10.1787/6c872949-en>
- OJK. (2023). Statistik Perbankan Indonesia - Januari 2023. *Statistik Perbankan Indonesia*, 21(2).
- Open Banking Implementation Entity. (2019). Open Banking, Preparing for lift off. *The Open Data Institute*.
- Organisation for Economic, & Co-operation and Development. (2021). *Mapping out data portability initiatives, opportunities, and challenges*. Retrieved from <https://www.oecd.org/publications/mapping-data-portability-initiatives-opportunities-and-challenges-a6edfab2-en.htm>
- Petcu, D. (2011). Portability and Interoperability between Clouds: Challenges and Case Study. In *Towards a Service-Based Internet* (pp. 62–74). https://doi.org/10.1007/978-3-642-24755-2_6
- Premchand, A., & Choudhry, A. (2018). Open Banking & APIs for Transformation in Banking. *2018 International Conference on Communication, Computing and Internet of Things (IC3IoT)*, 25–29. IEEE. <https://doi.org/10.1109/IC3IoT.2018.8668107>
- Prezioso, M., Koefer, F., & Ehrenhard, M. (2023). Open banking and inclusive finance in the European Union: perspectives from the Dutch stakeholder ecosystem. *Financial Innovation*, 9(1). <https://doi.org/10.1186/s40854-023-00522-1>
- Putu Samawati. (2020). Monopoli BUMN dalam Perspektif Hukum Persaingan Usaha. *Tunggal Mandiri*.

- Rosadi, S. D., Noviandika, A., Walters, R., & Aisy, F. R. (2022). Indonesia's personal data protection bill, 2020: does it meet the needs of the new digital economy? *International Review of Law, Computers & Technology*, 1-13. <https://doi.org/10.1080/13600869.2022.2114660>
- Saleh, P. S. (2019). Legal Reasons Underlying Demonopolization by State-Owned Enterprises in Indonesia. *Sriwijaya Law Review*, 3(2). <https://doi.org/10.28946/slrev.vol3.iss2.126.pp124-136>
- Schneider, F., Maurer, C., & Friedberg, R. C. (2017). International organization for standardization (ISO) 15189. *Annals of Laboratory Medicine*, Vol. 37. <https://doi.org/10.3343/alm.2017.37.5.365>
- Siciliani, P., & Giovannetti, E. (2019). Platform Competition and Incumbency Advantage under Heterogeneous Switching Cost – Exploring the Impact of Data Portability. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3508658>
- Smith, T., & Geradin, D. (2022). Maintaining a level playing field when Big Tech disrupts the financial services sector. *European Competition Journal*, 18(1). <https://doi.org/10.1080/17441056.2021.1936401>
- Sullivan, C. (2022). The New Australian Consumer Data Right: An Exemplary Model for Open Banking. *WIREs Forensic Science*. <https://doi.org/10.1002/wfs2.1458>
- Taekema, S. (2018). Theoretical and Normative Frameworks for Legal Research: Putting Theory into Practice. *Law and Method*. <https://doi.org/10.5553/rem/.000031>
- The Development of Digital Payment Systems in Indonesia: a Review of Go-Pay and Ovo E-Wallets. (2020). *Economic Alternatives*, (3). <https://doi.org/10.37075/ea.2020.3.03>
- ZACH, G. R. & A. (2020). DATA TO GO: THE FTC'S WORKSHOP ON DATA PORTABILITY. *FEDERAL TRADE COMMISSION*, p. 5.
- Zander Arnao, D. D. (2023, July). Why the Internet Needs a Data Portability Ecosystem. *Tech Policy Press*.
- Zufall, F., & Zingg, R. (2021). Data Portability in a Data-Driven World. In *Artificial Intelligence and International Economic Law* (pp. 215-234). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108954006.012>