

## Digital Banks: Challenges and Opportunities

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### Executive Summary

Digital banks have proliferated in the last few years. The emergence of high-speed internet and mobile application framework has enabled financial service to enter the digital foray. Supported by increasing internet penetration in the country and large productive demography, the financial service, particularly banking service, aims to offer its entire product digitally. This will significantly reduce the need to establish conventional offices and reduces the capital overlay. In the meantime, the digital universe offers the opportunity to scale up rapidly. However, banking is a capital-intensive industry by nature. Even though the bank can manage its expenses by going digital, it still needs to fulfill regulatory minimum capital and set up provisions accordingly. We would like to view the digital banking industry from a rating agency's perspective, assessing the business and financial side of it, as well as the industry and parent support.

### Industry Overview

The digital banking industry is a subset of the general commercial banking industry. The difference is that a digital bank works entirely in the digital universe and established itself as an independent company, not a business unit of a conventional bank.

As laid out in POJK 12/2021, a digital bank is a bank that conducts its transactions electronically and does not have to have any branch. The capital requirement to establish a totally new bank, including a digital one, is IDR10 trillion, but for a conventional bank that transforms into a digital bank follows a regular regulatory core capital requirement of IDR3 trillion. We observe a number of digital banks, namely PT Bank Jago Tbk (ARTO), PT Bank Neo Commerce Tbk (BBYB), PT Allo Bank Tbk (BBHI), PT Krom Bank Indonesia Tbk (BBSI), PT Bank Digital BCA (BLU), PT Bank Seabank Indonesia (BBKE), PT Bank Raya Indonesia Tbk (AGRO), and PT Bank Aladin Syariah Tbk (BANK), among others.

Initially, it was a very enticing proposition, with a few digital banks thought they could enjoy first mover advantage. However, not only that a digital bank must compete with one another, but it also must encounter the digital platform or digital business unit from already established conventional banks, such as Jenius from PT Bank BTPN Tbk, Livin' from PT Bank Mandiri Tbk, Permata Mobile X from PT Bank Permata Tbk, TMRW from PT Bank UOB Indonesia, and Digibank from PT Bank DBS Indonesia, among others.

The impact of the presence of these digital banks will be different for large banks and small banks. For large banks, the impact will be negligible, as it poses little to no threat, considering those large banks have either their own digital banks within their groups in the form of a business unit, a subsidiary, a sister company, of which some may have even integrated the entire digital service into their own super apps. Meanwhile for small banks that engaged in the retail lending, the emergence of digital banks can crowd out their market and pose a competitive threat by making it easy for individuals to apply for a loan and to deposit money with less or no administrative charge. To the overall industry, however, the impact of digital banks is not yet significant, as traditionally it will be driven by large banks, where top 10 banks maintains over 60% dominance in the market.

The sustainability of this business model is also yet to be seen, considering the relatively new presence of less than 10 years. Digital universe is very dynamic, and the trend may change rapidly as evident during the first dotcom era at early year 2000, as well as the introduction of Web 2.0 in 2006 that provided a more interactive aspect of Internet. Therefore, despite some experience by these digital banks through a few credit cycles from their short-term loans (such as paylater loans which typically are of 1 month to 12 months), the sustainability must still be observed and proven over the longer period.

## Business Assessments

We look at the size of assets, size of lending and funding book as well as their diversification, infrastructure and quality of services, and management of the bank.

By the size alone, given their relatively early establishments, these digital banks are well below their conventional counterparts.

The diversification in terms of lending and funding should be moderate. On one hand, their customers come from the retail base, but on the other hand, they are mostly dependent to time deposit as indicated by low current account and saving account (CASA, see table 4). We view that these digital banks have not reached a level of being primarily used by large corporates for the demand deposit and savings deposit (which usually comes from payroll accounts). Most of the funding comes from rent-seeking depositors looking for a high rate from time deposit.

Table 1. Business Assessment by Assets, Loans, and Deposits

### As of September 2022

TICKER	Name	Total Assets (TA)	Estimated market share of TA	Total Loans (TL)	Estimated market share of TL	Total Deposits (TD)	Estimated market share of TD
BBKE	Sea Bank	23,861.03	0.23%	16,281.31	0.26%	19,754.56	0.26%
BBYB	Bank Neo Commerce	15,997.56	0.15%	8,934.64	0.14%	12,672.37	0.17%
ARTO	Bank Jago	15,823.10	0.15%	8,156.07	0.13%	7,285.98	0.10%
AGRO	Bank Raya	12,985.04	0.12%	8,374.41	0.13%	9,624.11	0.13%
BBHI	Allo Bank	10,598.94	0.10%	7,158.81	0.11%	4,077.89	0.05%
BLU	Bank Digital BCA	9,930.49	0.09%	1,659.23	0.03%	5,814.63	0.08%
BBSI	Krom Bank	2,837.81	0.03%	666.47	0.01%	685.24	0.01%
BANK	Bank Aladin	2,597.92	0.02%	302.37	0.00%	504.89	0.01%

Source : OJK statistics and quarterly financial reports as of September 2022

The critical point here is the ecosystem being provided, which serves a major differentiation factor between digital banks. Some of the digital banks are owned by fintech group, in which in terms of lending, they can leverage the existing database of lenders, such as from paylater service or from invoice financing service. By having existing borrowers, they can match their high funding cost with the lending rate. However, the track of such business models is limited, meaning that the business models are not yet well tested over many credit cycles, bringing questions over the sustainability of loan originators.

BBKE being owned by Sea Group may leverage the strengths of Shopee and Shopee Paylater, as the two are the top players in their respective industry (digital marketplace and buy now pay later or BNPL). This helps them to record higher than peers' figures in assets, as well as in loans and deposits. Several of these digital banks follow the same blueprint: BBYB, the second largest digital bank in terms of assets, lending, and deposit, is leveraging its Akulaku ecosystem, while AGRO enjoys its ties to Bank BRI Group ecosystem, while BBHI follows suit with its CT Corpora Group ecosystem.

ARTO is one of the pioneers in full-fledged digital banks and despite being independent in terms of ecosystem, it pursues tie-in with other well-known digital services such as Gojek and Stockbit/Bibit.id.

### Capitalization

Being most of them are recently established, OJK put more caution by requiring the capital to fulfill the required level at the establishment. Hence, many of these banks have already met the minimum core capital requirement. For the those who haven't, these banks have already provided the capital injection plan from its controlling shareholder.

As expected, digital banks that are very active in consumer lending using paylater schemes, such as BBKE and BBYB, have lower capital adequacy ratio (CAR) and CAR tier compared to their peers 1 due to their size of lending book as well as their lending characteristics that require high loan provisions.

Table 2. Banks' Capitalization Status by Equity, CAR, CAR Tier 1, and Equity to Assets

TICKER	Name	Related Group	Equity	CAR	CAR Tier 1	TE/TA
ARTO	Bank Jago	Northstar dan Jerry Ng	8,288.69	97.50%	96.52%	52.38%
BBHI	Allo Bank	CT	6,315.11	78.36%	77.45%	59.58%
BLU	Bank Digital BCA	BCA	4,017.05	146.51%	146.51%	40.45%
BBKE	Sea Bank	Sea Group	3,307.67	24.52%	23.38%	13.86%
AGRO	Bank Raya	BRI	2,397.31	27.33%	26.79%	18.46%
BBYB	Bank Neo Commerce	Akulaku - Alibaba	2,253.08	19.72%	19.05%	14.08%
BBSI	Krom Bank	Finacel/Kredivo	2,135.58	190.06%	189.49%	75.25%
BANK	Bank Aladin	Nojorono Tobacco	2,016.51	400.64%	399.78%	77.62%

Source: Quarterly financial reports as of September 2022

We view that generally higher CAR in digital banks does not necessarily entail better position than conventional banks, as lower opportunity to disburse lending due to not having any captive nor advantage in certain market also lead to higher CAR as the capital has not yet been optimally utilized. Newly transformed digital banks are also just recently appended their capital to meet regulatory level, so their CAR are also at a very high level.

We can also witness that half of this list of digital banks also have yet to fulfill the minimum regulatory capital level of IDR3 trillion, adding the challenge to these banks aside from their task to acquire almost the similar market.

### Asset Quality

In terms of asset quality, the track record of digital lending business is still limited. Since most of the digital banks are the result of existing banks being acquired and converted, any problem in asset quality mainly comes from legacy non-current loans.

Table 3. Banks' Asset Quality by Non-Performing Loans and Special Mention Loans

TICKER	Name	Gross NPL	SML
BBHI	Allo Bank	0.00%	0.03%
BLU	Bank Digital BCA	0.00%	0.00%
BANK	Bank Aladin	0.00%	0.00%
BBSI	Krom Bank	1.16%	4.88%
BBYB	Bank Neo Commerce	1.88%	15.05%
AGRO	Bank Raya	2.05%	36.70%
ARTO	Bank Jago	2.10%	6.20%
BBKE	Sea Bank	3.26%	8.03%

Source: Quarterly financial reports as of September 2022

However, there are a few digital banks that are being cleansed in terms of non-current loans before being acquired by the new shareholders. In this case, the non-performing loans (NPL) and special mention loans (SML) are at or near 0%.

Going forward asset quality is likely to remain challenging, as these banks has relatively higher cost of fund, as indicated by lower CASA for most of these banks, and in order to attain positive interest margin

and bottom-line profit, they have to lend at higher rate. In turn, these higher rate borrowers or debtors are often of higher risk or of lower quality, since higher quality debtors have stronger bargaining position and can command lower borrowing rate for themselves. BBKE and ARTO recorded high CASA at over 50%, but we view that the cost of its time deposit (which was higher than 6%) still burdened overall cost of fund. CASA will remain the problem for most these banks, as also evident in other small banks, as the reputation wise they lag behind their larger competitors.

Table 4. CASA

TICKER	Name	CASA
ARTO	Bank Jago	70.58%
BBKE	Sea Bank	60.89%
AGRO	Bank Raya	34.66%
BLU	Bank Digital BCA	28.54%
BBYB	Bank Neo Commerce	26.82%
BANK	Bank Aladin	16.96%
BBHI	Allo Bank	6.85%
BBSI	Krom Bank	5.24%

Source: Quarterly financial reports as of September 2022

### Profitability

Even though the benefit of going digital is cost efficiency, the cost to income will not be favorable in the near to medium term because the business is still in the early stage. The business model is mostly similar to one another, and those with a captive lending market, have not yet established proven track record of performance over the long term.

Table 5. Profitability by Cost to Income Ratio (CIR), operating expenses to operating income ratio (BOPO), Return on Assets (ROA), and Return on Equity (ROE)

TICKER	Name	Interest Income	Interest Expense	NII	Op Income	Net Income	CIR	BOPO	ROA	ROE
BBKE	Sea Bank	3,095.25	706.15	2,389.11	12.81	13.93	31.33%	99.60%	0.1%	0.4%
BBYB	Bank Neo Commerce	1,583.08	493.25	1,089.83	(595.95)	(601.17)	95.93%	130.97%	-3.8%	-26.7%
ARTO	Bank Jago	1,084.73	100.88	983.84	48.25	52.35	72.39%	95.75%	0.3%	0.6%
AGRO	Bank Raya	778.36	264.21	514.15	106.38	32.47	42.18%	91.41%	0.3%	1.4%
BBHI	Allo Bank	492.26	86.17	406.08	274.05	270.51	40.92%	55.81%	2.6%	4.3%
BLU	Bank Digital BCA	260.14	89.75	170.39	(18.46)	(18.24)	101.95%	106.53%	-0.2%	-0.5%
BBSI	Krom Bank	116.13	17.55	98.57	78.27	60.83	33.88%	33.93%	2.1%	2.8%
BANK	Bank Aladin	49.86	16.65	33.21	(146.29)	(146.42)	228.14%	314.27%	-5.6%	-7.3%

Source: Quarterly financial reports as of September 2022

Many of these banks still recorded losses in terms of operating as well as bottom line, while the rest of them recorded low return of equity and assets because of the high level of provisioning. Only BBHI and BBSI recorded better than the rest; BBHI enjoyed the benefit of being in the CT group with Bank Mega as their anchor bank, and BBSI having cleansed its loan portfolio, enjoyed better quality loans from Kredivo and Kredifazz.

### Liquidity

Some of these banks have ample headroom in terms of loan-to-deposit ratio (LDR) at below 85%. BBYB and BBKE which manage to be at the top 2 in terms of size of lending, can manage to have an LDR of below 85% given their success of obtaining higher amount of third-party deposit in comparison to their

peers. Nevertheless, the banks with high LDR ratios are supported by very high CAR, meaning that the lending activities are financed by their own equity.

Table 6. Liquidity by Loans to Deposit Ratio (LDR), Current and Savings Deposit to Total Deposit (CASA), sorted by LDR from low to high

TICKER	Name	Total Deposits (TD)	CAR	TE/TA	LDR	CASA
BLU	Bank Digital BCA	5,814.63	146.51%	40.45%	36.17%	28.54%
BANK	Bank Aladin	504.89	400.64%	77.62%	59.89%	16.96%
BBYB	Bank Neo Commerce	12,672.37	19.72%	14.08%	70.50%	26.82%
BBKE	Sea Bank	19,754.56	24.52%	13.86%	82.42%	60.89%
AGRO	Bank Raya	9,624.11	27.33%	18.46%	87.01%	34.66%
BBSI	Krom Bank	685.24	190.06%	75.25%	97.26%	5.24%
ARTO	Bank Jago	7,285.98	97.50%	52.38%	111.94%	70.58%
BBHI	Allo Bank	4,077.89	78.36%	59.58%	175.55%	6.85%

Source: Quarterly financial reports as of September 2022

### Conclusion

From our perspective, the challenging aspects of these digital banks include:

1. Size and sustainability of business, as most of these banks pursue similar retail market. The individual ticket size of this market is low, meaning that growing business will take time, and this will also encounter the competition from digital channel from more established brick-and-mortar banks.
2. Very short track record. Some of these banks have already undergone several credit cycles, but that still cannot override the necessity to observe over general economic cycle, that usually lasts between 5-10 years. Over time this will paint a better picture for a bank if the business model can really sustain over the long term.
3. The model is highly reliant on internet infrastructure availability and penetration in the target market.

While the encouraging aspects are:

1. High level of CAR, even when considering some of the banks have not yet met the regulatory minimum core capital. This means that these digital banks are generally solvent in the near term.
2. Synergy strategy with existing business. Some of these banks were founded to complement the financial service business already established by the group. This means that they already have some extent of captive business, although it does not totally remove the challenge to scale up rapidly given the overall competition in the industry.
3. By being primarily digital, it reduces the need to have physical offices and branches. The fixed cost component, then, can be significantly reduced, and business scaling may be executed more efficiently. For recently established digital banks (having recently transformed their banking business into digital), high cost to income ratio mainly comes from the initial costs of building system and establishing workforce haven't yet been properly compensated by its income.

We view that at this point of stage, for the credit profile of these banks looks to be moderate at the maximum, with some of them are considered weak given the limited track record in this highly competitive business. During this stage, the financial figures may fluctuate more often until the business has reached a certain stability.

The support from the shareholders will be crucial to ensure that the business can sustain during this development phase.

The impact of the digital banks to the banking industry will be limited in the near to medium term. We also observe that digital banks may pose potential business disruption to independent financing companies that also engage in multipurpose lending. On the other hand, in terms of collaboration and synergy, this can enable an integrated digital ecosystem between online financing being provided by the BNPL and invoice financing services by digital financing companies and digital funding being provided by digital banks. Ultimately, the end goal of this digital banks may not be different from conventional banks which is providing all-in-one financial services, enhancing the fees income, but digital banks begin by leveraging digital financial services early on, while existing conventional banks may be too established and too rigid in terms of their core banking system.