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FINANCIAL PERFORMANCE AND STOCK VALUATION OF BANK CENTRAL ASIA

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Abstract

A bank has a vital role in a country. Banks can boost the economy by collecting funds from the community and channeling them back in the form of loans for working capital. This will provide a multiplier effect in the economy. Because of its important role, each country has a central bank that functions to maintain stability of the banking sector. Bank Indonesia (BI) as the central bank in Indonesia issues various regulations in carrying out its functions, including those concerning the bank healthiness. Several financial ratios related to bank health show that Bank Central Asia (BCA) as one of the largest private banks in Indonesia is included in the very healthy bank category in 2020. BCA stock is the largest market capitalization in Indonesia and its price is the highest in banking sector. BCA's Price to Book Value (PBV) ratio of 4.41 is the highest compared to other BUKU IV banks with the average of 1.79 as of April 25, 2021. BCA's Price to Earnings Ratio (PER) was also recorded as the second highest at 28.54 with the banks' average of 23.92. BCA's stock price is overvalued by 55.63% based on PBV relative valuation and overvalued by12.87% based on PER relative valuation. But, when using the Excess Return Model as a model to perform absolute valuation, the valuation of BCA's stock price shows an undervalued price of 18.93%.

Keywords: Bank, central bank, bank healthiness, BCA, stock price, PBV, PER, Excess Return Model

1. Introduction

According to Indonesian's Law number 10 of 1998 concerning about banking, banks are business entities that collect fund from public in the form of deposit and distribute it to public in the form of credit or other forms, in order to improving community's standard of living. Bank Indonesia is the central bank of Indonesia which acts as authorities for monetary and payment systems. Bank Indonesia has a vital role in creating a healthy financial institution's performance, mainly in banking. In the Bank Indonesia's regulation number 13/1/2011 about Banking Health Assessment of Commercial Banks, several indicators used to determine how healthy a bank is based on the financial ratios of the bank's financial statements. Financial ratio analysis is the activity of comparing numbers in financial statements by dividing one number by another (Kasmir, 2016).

In capital market, especially buying and selling stocks, banking sector is one of the investment alternatives. From Indonesia Stock Exchange (IDX) Annually Statistic 2020, stocks of five banks

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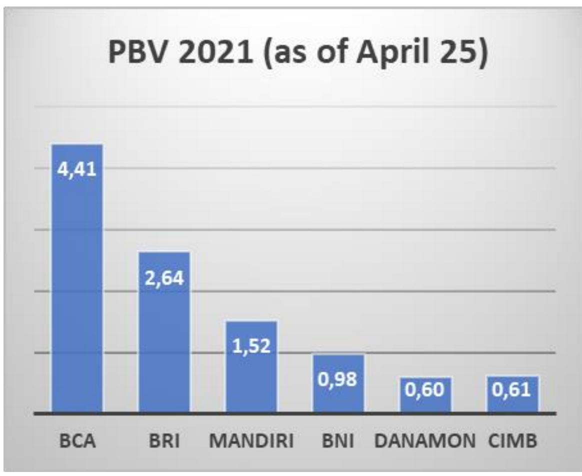
are include in 10 Biggest Market Capitalization. Even, Bank Central Asia (BCA) as the one of largest private commercial bank in Indonesia is in the first rank with 11.85% of market capitalization. When investing in stocks, investor will see how similar stocks are valued in the market. This is called relative valuation where the value of assets come from the price of similar assets which has been standardize based on certain variables. Two out of three most widely used variables in valuating companies are Price to Earnings Ratio and Price to Book Value Ratio(Damodaran, Investment Valuation University Edition (3rd Edition), 2012).PBV ratio is obtained by dividing price per share with book value of equity per share. While PERis obtained by dividing price per share with earning per share.



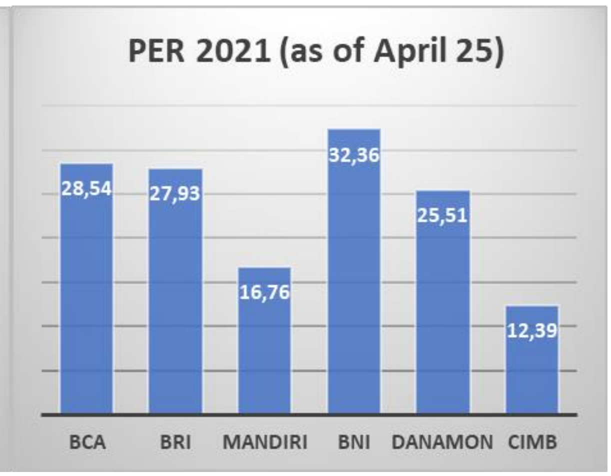


Figure 1. PBV Ratio of BUKU IV Banks Figure 2. PER of BUKU IV Banks

In Indonesia, banks are divided into four categories based on their core capital, namely Bank UmumKegiatan Usaha (BUKU). Banks with core capital above 30 trillion IDR are concluded inBUKU IV bank category which name are shown in figure 1 and figure 2. From the data above, we can see that BCA's PBV ratio was 4.41, the highest among all while the average PBV ratio of six BUKU IV banks was 1.79. BCA's PER was 28.54 and became the second highest among others with the average of 23.92. Based on data from BCA's Financial Statement in 2020, BCA's book value per share is 7,487 IDR and BCA's earning per share is 1,100 IDR. Using data of 7,487 IDR and PBV ratio of 1.79, BCA's current stock price of IDR 30,200 as of 29 July 2021 is considered overvalued by 55.63%. While using data of 1,100 IDR and PER of 23.92, BCA's stock price is considered overvalued by 12.87%. These show that BCA's stock price is overvalued based on relative valuation. To find out whether the stock price of BCA is really overvalued or not, it is necessary to calculate the intrinsic value of BCA's stock using absolute valuation.

2. Method

Bank Healthiness

Based on Bank Indonesia Regulation or PBI 13/1/PBI/2011, bank health rating is the result of bank's condition assessment which is conducted on risk and bank's performance. Assessment of

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risk profile, profitability and capital factors can be done by using financial ratios contained in financial statements. These financial ratios including Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Net Interest Margin (NIM), Return on Asset (ROA) and Operational Efficiency Ratio (OER). CAR assessment is included in the bank capital factor in assessing the health of a bank. CAR is a ratio that measures capital adequacy of a bank in covering current risk exposures and anticipating future risk exposures (Hayes, 2021). CAR is calculated by dividing capital to risk-weighted assets.

NPL and LDR assessments are included in the bank risk profile factor in assessing the health of a bank. Non-Performing Loan is a ratio to measure level of credit problems faced by banks. Credit risk is the risk that caused by the uncertainty of repayment or non-repayment of loans given by bank to debtors (Hasibuan, 2007). NPL is calculated by dividing the number of non-performing loans by total loans. Loan to Deposit Ratio is a ratio between total amount of loans to third party funds. LDR is used to assess bank's liquidity.

NIM, ROA and OER assessments are included in the bank's profitability factor in assessing the health of the bank. Net Interest Margin is a ratio used to measure bank ability to manage its productive assets to generate profit. NIM is calculated by dividing net interest income with productive assets. Return on Assets ratio shows how efficient a company using its assets to generate profits (Hargrave, 2021). ROA is calculated by dividing earnings before tax with total assets. Operational Efficiency is a ratio that compares operational expense to operational income (Utami, 2021). OER is used to measures company's ability to manage its operational expenses.

Table 1: Ratio Classification and Range

Classification	**CAR Range**	**NPL Range**	**RIM Range**
Very Healthy	CAR ≥ 12%	NPL < 2%	NIM > 3%
Healthy	9% ≤ CAR < 12%	2% ≤ NPL < 5%	2% < NIM ≤ 3%
Quite healthy	8% ≤ CAR < 9%	5% ≤ NPL < 8%	1,5% < NIM ≤ 2%
Less healthy	6% < CAR < 8%	8% ≤ NPL < 12%	1% < NIM ≤ 1,5%
Unhealthy	CAR ≤ 6%	NPL ≥ 12%	NIM ≤ 1%
Classification	**ROA Range**	**OER Range**	**LDR Range**
Very Healthy	ROA > 1,5%	OER ≤ 83%	LDR ≤ 75%
Healthy	1,25% < ROA ≤ 1,5%	83% <OER ≤ 85%	75% < LDR ≤ 85%
Quite healthy	0,5% < ROA ≤ 1,25%	85% <OER ≤ 87%	85% < LDR ≤ 100%
Less healthy	0% < ROA ≤ 0,5%	87% <OER ≤ 89%	100% < LDR ≤ 120%
Unhealthy	ROA ≤ 0%	OER> 89%	LDR > 120%

Stock Valuation

Every asset, whether real or financial, has a value. The value calculation of one asset with another asset can be different. Therefore, the information needed in calculating the value of an asset with other assets can also be different. This information becomes very important because in investing and managing assets, the most important thing is not only how much the asset is worth, but also the source of that value. Valuating a financial service company is unique compared to other companies. This caused by two things. The first one is because of business run by a financial service company, where it is difficult to define between debt and reinvestment, making the estimation of cash flows much messier. Second is regulation. The effect from tight regulations by the regulator should be considered for valuating a financial service company. There are three alternatives that can be used for valuating a financial service company. They are dividend discount model, cash flow to equity discount, and excess return model (Damodaran, Investment Valuation University Edition (3rd Edition), 2012).

Excess Return Model

One alternative in valuing financial service companies is to use Excess Return Model. In this model, the value of a company is calculated based on the sum of capital currently invested in a company and the present value of excess return expected of the company in the future. Due to the difficulty of defining total capital in a financial services company, the calculation of value using this model can be done by focusing on total equity. So, the value of equity in a company can be written as the sum of equity currently invested in a company and the present value of expected excess returns to equity investors (Damodaran, Investment Valuation University Edition (3rd Edition), 2012). The formulas are as follows:

Value of equity = Equity capital invested currently + Present value of expected excess return to equity investors

Excess equity return = (Return of equity – Cost of equity) x Equity capital invested

Cost of equity = {Risk free rate + (Beta x Risk premium)}

The equity capital currently invested in a company is usually the book value of equity in that company. The calculation of excess equity return is obtained from the information on return on equity and cost equity. Here it is assumed that the return on equity is a good measure of the economic returns obtained from equity investment. When analyzing financial services companies, we can obtain information about return on equity from historical data. The cost of equity is the level of return that investors expect on equity investment in the company includes a premium for equity risk. So, we need to know firm's exposure to market risk in the form of betas (Damodaran, Investment Valuation University Edition (3rd Edition), 2012).

3. Results

Bank Healthiness

As we can see in the table below, financial ratios related to bank healthiness, namely CAR, NPL, NIM, ROA and OER indicate that Bank Central Asia is categorized as a very healthy bank for five consecutive years from 2016 to 2020. Even for CAR, ROA and OER, BCA's ratios are better than the average of BUKU IV banks' ratio. And for the NPL ratio, BCA is the only bank that categorized as a very healthy bank. BCA's LDR is in healthy category while the average of BUKU IV bank is in quite healthy category. These show that BCA's valuation based on capital, risk profile and profitability factor is very good individually and when compared to other BUKU IV banks.

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Table 2: BCA's Average Financial Ratio Comparison 2016-2020

	BCA	Classification	BUKU IV Banks	Classification
CAR	23.60	Very Healthy	21.29	Very Healthy
NPL	1.46	Very Healthy	2.70	Healthy
NIM	6.20	Very Healthy	6.35	Very Healthy
ROA	3.84	Very Healthy	2.66	Very Healthy
OER	59.96	Very Healthy	74.17	Very Healthy
LDR	76.64	Healthy	88.08	Quite Healthy

Excess Return Model

There are four data used to valuate BCA's stock price using the Excess Return Model. The first is beginning book value of equity obtained from BCA's 2020 Financial Statement, which is 184.715 billion IDR. Second is projected ROE which projection for the next ten years uses historical data from BCA's average ROE for the past ten years, which is 23.25%. In addition, the assumption used in this valuation is that the return after more than ten years will be equal to the projected GDP growth of 5% based on historical GDP data for the last nineteen years so that the terminal growth rate is 5%. Terminal growth rate formula is as follow:

Terminal value of excess return = {Excess return in the last year / (Cost of equity – Expected terminal growth rate)}

The third is Dividend Payout Ratio (DPR). DPR for the next ten years uses historical data from the average DPR BCA for the past ten years, which is 29.35%. The last is cost of equity which for calculating it, we need three data. First is risk free rate of 6.306% based on 10-Year Indonesian Government Bonds as of July 29, 2021data from CNBC Indonesia (CNBC Indonesia, 2021). Second is Indonesia's equity risk premium of 6.56% based on data from the NYU Stern School of Business website page as of July 29, 2021 with the latest update January 2021 (Damodaran, Country Default Spreads and Risk Premiums, 2021). Third is BCA's beta stock of 0.984 based on data from Pefindo as of July 29, 2021 with the latest update on June 3, 2021 (Pefindo, 2021). Below here is the Excess Return Model calculation table:

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Table 3: Excess Return Model Valuation of BCA

(in billion IDR)		0	1	2	3	4
	2020	2021F	2022F	2023F	2024F	2025F
BV of Equity	184,715.00	215,056.52	250,381.97	291,510.02	339,393.83	395,143.08
ROE	23.25%	23.25%	23.25%	23.25%	23.25%	23.25%
Net Income	42,946.24	50,000.64	58,213.81	67,776.08	78,909.06	91,870.77
Dividend Payout Ratio	29.35%	29.35%	29.35%	29.35%	29.35%	29.35%
Dividend Paid	12,604.72	14,675.19	17,085.75	19,892.28	23,159.81	26,964.07
Retain Earning	30,341.52	35,325.45	41,128.06	47,883.80	55,749.25	64,906.70
BV of Equity	184,715.00	215,056.52	250,381.97	291,510.02	339,393.83	395,143.08
ROE	23.25%	23.25%	23.25%	23.25%	23.25%	23.25%
Cost of Equity	12.76%	12.76%	12.76%	12.76%	12.76%	12.76%
Excess Equity Return			**26,265.07**	**30,579.40**	**35,602.41**	**41,450.51**
Terminal Value						
Total			**26,265.07**	**30,579.40**	**35,602.41**	**41,450.51**
PV of Total			**23,292.90**	**24,050.21**	**24,832.14**	**25,639.50**

(in billion IDR)	5	6	7	8	9	10
	2026F	2027F	2028F	2029F	2030F	2031F
BV of Equity	460,049.78	535,618.13	623,599.43	726,032.65	845,291.68	984,140.35
ROE	23.25%	23.25%	23.25%	23.25%	23.25%	23.25%
Net Income	106,961.57	124,531.21	144,986.87	168,802.59	196,530.32	228,812.63
Dividend Payout Ratio	29.35%	29.35%	29.35%	29.35%	29.35%	29.35%
Dividend Paid	31,393.22	36,549.91	42,553.65	49,543.56	57,681.65	67,156.51
Retain Earning	75,568.35	87,981.30	102,433.22	119,259.03	138,848.67	161,656.12
BV of Equity	460,049.78	535,618.13	623,599.43	726,032.65	845,291.68	984,140.35
ROE	23.25%	23.25%	23.25%	23.25%	23.25%	23.25%
Cost of Equity	12.76%	12.76%	12.76%	12.76%	12.76%	12.76%
Excess Equity Return	**48,259.22**	**56,186.34**	**65,415.58**	**76,160.83**	**88,671.10**	**103,236.32**
Terminal Value						**1,330,364.98**
Total	**48,259.22**	**56,186.34**	**65,415.58**	**76,160.83**	**88,671.10**	**1,433,601.31**
PV of Total	**26,473.11**	**27,333.82**	**28,222.52**	**29,140.10**	**30,087.53**	**431,397.59**

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Table 4: Value per Stock Calculation of BCA

Book Value of Equity	215,056,516,793,750.00
Present Value of Total Excess Equity Return	670,469,420,758,829.00
Value of Equity	885,525,937,552,579.00
Number of Stocks	24,655,010,000.00
Value per Stock	**35,917**
Current Price (as of July 29, 2021)	**30,200**
Upside	**18.93%**

Book Value of Equity in table 4. is obtained from the 2021's Book Value of Equity in table 3. While the Present Value of Total Excess Equity Return is obtained from summation of PV of Total in table 3. With the number of stocks data obtained from BCA's Financial Statement, BCA's value per stock based on absolute valuation using Excess Return Model is 35,917 IDR. It shows that current price is undervalued by 18.93%.

Company Performance

From previous ten years until now, BCA has shown a positive growth in operating income where the growth has reached 208.04% with an average growth of 13.45% per year. Likewise with its net income which grew by 150.94% with an average growth of 10.98% per year. This was supported by loan growth as the largest contributor to operating income through interest earned. Loans grew in line with the growth of third-party funds which reached 32.47% in the past two years. This was due to the growth of BCA's number of accounts by 28.61% in the same period. Likewise, BCA's number of transactions increased to 99.96% for the same period. This shows trust from customers to make BCA as a bank of choice in transacting and saving money. This is the main factor in banking business and BCA has succeeded in doing so.

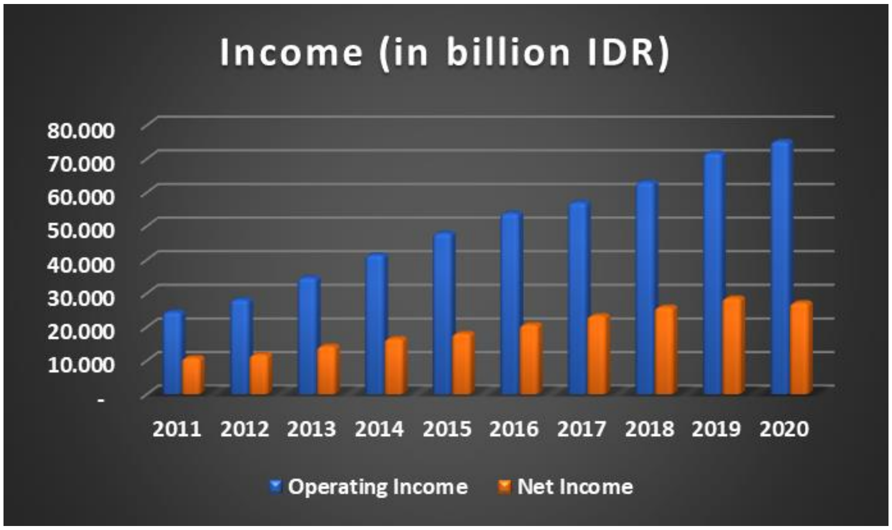

Figure 3. Operating Income and Net Income BCA 2011-2021

4. Discussion

BCA's valuation based on capital, risk profile and profitability factor through financial ratios such as CAR, NPL, NIM, ROA, OER and LDR is very good individually and when compared to other BUKU IV banks. Even CAR, NPL, ROA, OER and LDR of BCA are better than the average of BUKU IV banks' ratio. Even though BCA's current stock price is considered overvalued by 55.63% using PBV relative valuation and 12.87% using PER relative valuation, the result of absolute valuation calculated using the Excess Return Model shows that the intrinsic value of BCA stock is 18.93% upside from the current stock price. This shows that BCA's current stock price is undervalued.

Based on BCA's undervalued stock price of 18.93%, the recommendation for investor is to buy BCA stock. Considering the ratios related to bank healthiness that can be consistently maintained in the very healthy category for five consecutive years, then we can assume that important factors for a bank such as capital, risk profile and profitability can be maintained properly by BCA for the following years. BCA has won the trust of customers so that, in the end, it will improve company's financial performance through third party funds that are collected and then channeled it back into loans and generate interest income. Trust is a crucial factor in the banking industry.

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