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Company Valuation of PT Perusahaan Gas Negara TBK

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Abstract

More than decades, Indonesia's economic growth depend on the oil and gas sector. In the past few years, oil and gas sector's contribution to the state revenue decreased significantly along with the decline in reserves and production. The state revenue from the oil and gas industry decreased by almost 80 percent from Rp216 trillion in 2014 or 14 percent of state revenue to Rp44 trillion in 2016 or 2.8 percent of the state revenue. Perusahaan Gas Negara or also called as PGN is the largest national company in the natural gas transportation and distribution sector. In or der to make the business growing wider, PGN are going to acquiring Pertamina Gas or Pertagas. The acquisition is part of the establishment of the holding company in energy sector by the Ministry of State Own Enterprises, which was established on April 11, 2018. This research is made to know how the intrinsic value per share of Perusahaan Gas Negara (PGN) through calculating it with the discounted cash flow method using free cash flow to the firm. The data are obtained from PGN's financial report from 2013 to 2018. The result is the intrinsic value per share of Perusahaan Gas Negara is IDR Rp6,757.72.

Keywords: discounted cash flow, free cash flow to the firm, valuation.

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1. Introduction

Natural gas is an important component of the world's energy supply. It forms an important source for the production of both fuel and ammonia. Natural gas is a fossil fuel that emerged from the remains of plants, animals, and microorganism, stored deep underground for millions of years. But, not like other fossil fuels, gas is one of the cleanest, safest and most useful of all energy sources. Indonesia's gas production has always been directed towards export markets. However, the decline in domestic oil combination with a rising international oil price, made the government decide to make efforts to enlarge domestic uses of gas from the mid-2000s onward (Investments, 2019) [8].

In recent years, the domestic usage of gas has risen strongly at the expense of exports but limited infrastructural facilities in Indonesia's transmission and distribution networks complicate further development of domestic consumption. Limited adequate infrastructure is partly due to the lack of investment but also because of the country's geographical make-up. Distribution by tanker is easier than by pipeline as the key natural gas reserves are located offshore, far away from major gas demand centers (Gbgindonesia.com, 2019) [6].

Indonesia spent decades relying on the oil and gas sector's contribution to economic growth. However, in recent years, the oil and gas sector's contribution to state revenues decreased significantly along with the decline in reserves and production. Thus, the state revenue from the oil and gas industry decreased by almost 80% from Rp216 trillion in 2014 (14% of state revenues) to Rp44 trillion in 2016 (2.8% of state revenues), before rising oil prices improved the contribution of the oil and gas sector in 2017. A press release from Ministry of Energy and Mineral Resources (MoEMR) indicated an unaudited state income of Rp138 trillion from the oil and gas sector in 2017, which was 117% of the target (Pwc.com, 2019) [11].

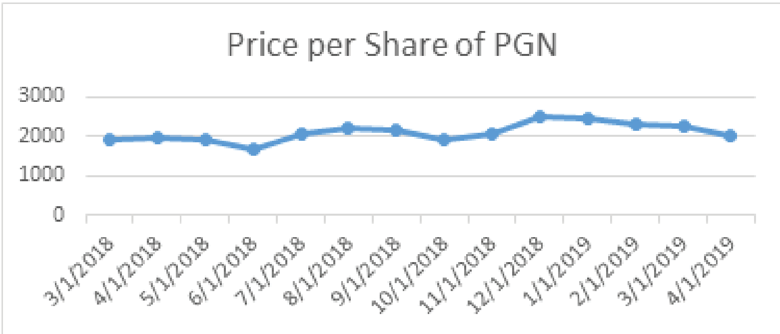
Perusahaan Gas Negara or also called as PGN is the largest national company in the natural gas transportation and distribution sector. The company has an important role to fulfilling the needs of domestic natural gas. The goal of the company is to providing the needed expertise, energy, and infrastructure to escalate Indonesia's economic growth in the long term. PGN has sustainably integrated its natural gas business chain from upstream to downstream to service the public. The government has given PGN a mandate to develop natural gas infrastructure in Indonesia. In carrying out this mandate, PGN works together with local governments, both directly and through regionally owned enterprises. The company is one of the largest listed Indonesian companies in terms of market capitalization. Indonesia's power generation industry is PGN's largest market, consuming about 40 percent of PGN's total sales volume in 2012 (Investments, 2019) [9].

In order to make the business growing wider, PGN are going to acquiring Pertagas. By this process, Pertamina will gives a right for PGAS to manage the gas business in an integrated manner in Indonesia as stated in Government Rule Number 06 Year 2018. The acquisition is part of the establishment of holding company in energy sector by State Own Enterprises (SOEs) ministry, which was established on April 11, 2018. On the last agreement that signed on June 29, both parties have decided only acquiring one of Pertagas's unit, which is PT Pertagas Niaga. Followed by acquiring the other 4 Pertagas's unit which is PT Perta Arun Gas, PT Perta-Gas, PT Perta-Samtan Gas, and PT Perta Kalimantan Gas (Post, 2019) [10].

To make the deal realized, the takeover payment method will be carried out in two phases. Firstly, 50 percent of the total purchase price or equivalent to Rp10,09 trillion will use the cash payment method. Secondly, the company will issue a Promissory Note for the rest of the shares. It implies that PGN needs to take on debt worth more than IDR 11.0 trillion (approx. USD $769 million) (Investments, 2018) [7].

The acquisition process also influencing the PGN's shares, after PGN releases the statement on 3 July 2018, that the financing of the acquisition process would need to be financed externally, the share price was fall down by 16.41 percent. This also meant that the company's price-to-earnings ratio (PER) has become quite attractive at 8.6 times. However, PGN shares are still not showing a recovery (Investments, 2018) [7].

Table 1: Price per Share of PGN.



The share price of PT Perusahaan Gas Negara Tbk (PGAS) or referred to as PGN is still moving in the red zone of stock trading on Wednesday (04/07/2018). The share price of PGAS in the red zone occurred after the company announced that it would acquire 51 percent of Pertagas's shares valued at Rp. 16.6 trillion. The weakening stock price of PT Perusahaan Gas Negara Tbk happened after PT Perusahaan Gas Negara Tbk and Pertamina made a material transaction by buying 51 percent of Pertagas shares which are Pertamina's subsidiaries..This research is made to know how much the intrinsic value per share of PT Perusahaan Gas Negara Tbk.

2. Literature Review

2.1. Merger

In merger, two or more companies that running in a similar business joining into one and construct a new company. It aims to reducing the number of competitors. Merger also including the common decision between two companies in order to gather and becoming into one object. The fewer valuable company suffer the identity and becoming element of the further value corporation, which hold the original existence (Devi, 2016) [4]. There are four types of merger which is horizontal, vertical, conglomerate, and congeneric merger.

2.2. Acquisition

An acquisition happens when one firm buys most or the majority of other company's shares to take control. It take place when a purchasing company gets over half proprietorship in an objective company (Piesse et al., 2013) [3]. There are some types of acquisition, such as negotiated acquisition, open market acquisition, and bail out acquisition.

2.3. Valuation

Each company has three sections that must be considered in an efficient valuation. Two of them are identified with company resources and company earning power that appeared in earnings and cashflow. To begin with, company resources can be esteemed by net saleable incentive to economic value that characterized with the estimation of discounted cash flows in the time of an economic life of the specified resources. Second, the earning power of the company, can be esteemed both by the discounting cash flows approach and P/E ratio and another usable indicator in capitalization. Third, therefore from the organization's uniqueness, that can be treated as a potential rebate which lower or more noteworthy than the settled estimation of organization resources and winning force (Orsag and Mcclure, 2013) [5].

2.3.1. Discounted Cash Flow

In this approach, the value of any asset is the present value of expected future cash flows on it. The cash flow will differ from one asset to another asset like dividends for stocks, coupons (premium) and the face value for bonds and after-tax cash flows. The discount rate will be a target of the hazard of the estimated, with higher rates for resources that increasingly hazardous and bring down rates for resources that less dangerous (Gitman, 2012) [2].

2.3.2. Free Cash Flow

The value of cash flow that usable to investors after the company has satisfied all of the operating expense and investments that has been paid in net fixed assets and net current assets. It is an essential measurement since it can show how effective a company in creating cash (Gitman, 2012) [2].

2.3.3. Free Cash Flow to Firm

Free cashflow to the firm is the total of the cashflows to all claim holders in the firm, including stockholders, bondholders and preferred stockholders. Since this cash flow is prior to debt payments, it is often referred to as an unlevered cash flow. This free cash flow to the firm does not incorporate any of the tax benefits due to interest payments. Because the use of the after-tax cost of debt in the cost of capital already considers this benefit and including it in the cash flows would double count it (Damodaran, 2005) [1].

2.3.4. Weighted Average Cost of Capital

Demonstrates the expected future cost of capital as time goes on by weighting the type of the cost of capital by its percentage in the firm's capital structure. Where cost of equity can be calculated by adding the risk-free rate with the sum of the multiplication of market risk premium with beta of the company. And cost of debt can be calculated by using the prime lending rate from the banks that lend money to the firm (Gitman, 2012) [2].

2.3.5. Terminal Value

Refer to the predicted value of a business that above the forecast period. It is an important part of the financial model that shown a large percentage of the total value of a company. The approaches that can be used for terminal value is perpetual growth. Perpetual growth method are assuming that the company will continue to generate free cash flow at a normalized state forever (perpetuity) (Gitman, 2012) [2].

3. Methodology

This research will be started by identifying the problems, after the problem has been identified, the next step is making research question and research objective that matches with the scope and limitation that already stated before. Then, reviewing the literature that aims to support the theory mentioned in this study and also collect all the previous research that related to support this study. After that, collecting the data by using secondary data from company's website, books, journals, and articles. The data are collected using quantitative methods. Then, making an analysis of the data by using valuation. The last step is making conclusion and recommendation from the result of the research.

4. Discussion

4.1. Discounted Cash Flow

4.1.1. Income Statement Assumption

The assumption that made on the income statement projection are based on the company's historical data, the condition of the industry, and the news that available on the market. The income statement projection are shown on the table 2.

4.1.2. Free Cash Flow to the Firm

As stated on the pro forma income statement and pro forma balance sheet, table 4.3 provides the calculation of the Free Cash Flow to the Firm of Perusahaan Gas Negara for the next five years, which is from 2019 until 2024. The tax rate used is 25% because it is the normal rate for corporate income tax. The formula for calculating the free cash flow to the firm are stated below:

$$\text{FCFF} = \text{EBIT}\ (1 - \text{tax rate}) + \text{Depreciation} - \text{Capital Expenditure} - \Delta\ \text{Working Capital}$$

4.1.3. Weighted Average Cost of Capital

To calculate the WACC, at first begin with calculating the cost of equity. The cost of equity can be calculated by using the formula below:

$$\text{Cost of equity} = \text{risk free rate} + (\text{market risk premium} * \text{beta})$$

Table 2: Income Statement Projection (in USD).

	2019E	2020E	2021E	2022E	2023E
NET REVENUE	4,257,293,411.80	4,810,741,555.33	5,532,352,788.63	6,528,176,290.59	7,703,248,022.89
COST OF REVENUE	(2,937,532,454.14)	(3,271,304,257.63)	(3,761,999,896.27)	(4,373,878,114.69)	(5,084,143,695.11)
GROSS PROFIT	**1,319,760,957.66**	**1,539,437,297.71**	**1,770,352,892.36**	**2,154,298,175.89**	**2,619,104,327.78**
Distribution and transmission expenses	(255,437,604.71)	(336,751,908.87)	(331,941,167.32)	(326,408,814.53)	(308,129,920.92)
General and administrative expenses	(298,010,538.83)	(288,644,493.32)	(276,617,639.43)	(326,408,814.53)	(462,194,881.37)
(Impairment)/impairment reversal of oil and gas properties, net					
Other expenses	(38,315,640.71)	(38,485,932.44)	(27,661,763.94)	(19,584,528.87)	(15,406,496.05)
Other income	127,718,802.35	144,322,246.66	110,647,055.77	65,281,762.91	77,032,480.23
OPERATING INCOME	**855,715,975.77**	**1,019,877,209.73**	**1,244,779,377.44**	**1,547,177,780.87**	**1,910,405,509.68**
Finance costs	(167,238,186.61)	(185,634,387.14)	(206,054,169.72)	(230,780,670.09)	(253,858,737.10)
Finance income	38,019,081.10	42,581,370.83	46,839,507.92	51,991,853.79	57,710,957.70
Tax relating to finance income	-	-	-	-	-
Loss on foreign exchange	(15,066,877.60)	(14,313,533.72)	(12,882,180.35)	(12,109,249.53)	(11,382,694.56)
Gain/(loss) on change in fair value of derivatives	2,298,072.50	1,263,939.88	720,445.73	432,267.44	259,360.46
Impairment losses of goodwill	-	-	-	-	-
Gain on bargain purchase	-	-	-	-	-
Share of profit from joint ventures	89,461,027.04	96,617,909.20	85,989,939.19	90,289,436.15	96,609,696.68
Write-off joint ventures investment	-	-	-	-	-
PROFIT BEFORE INCOME TAX / EBITDA	**803,189,092.20**	**960,392,508.78**	**1,159,392,920.21**	**1,447,001,418.63**	**1,799,744,092.87**
Depreciation	(237,481,057.28)	(218,482,572.70)	(198,819,141.15)	(180,925,418.45)	(166,451,384.97)
EBIT	**565,708,034.92**	**741,909,936.09**	**960,573,779.05**	**1,266,076,000.18**	**1,633,292,707.90**
INCOME TAX EXPENSES	(176,212,500.00)	(148,381,987.22)	(172,903,280.23)	(189,911,400.03)	(244,993,906.18)
PROFIT FOR THE YEAR / NET PROFIT	**389,495,534.92**	**593,527,948.87**	**787,670,498.82**	**1,076,164,600.15**	**1,388,298,801.71**

Table 3: Free Cash Flow to the Firm.

Valuation of PGAS					
Discounted Free Cash Flow to the Firm					
(in USD)					
	1	**2**	**3**	**4**	**5**
	2019E	**2020E**	**2021E**	**2022E**	**2023E**
EBIT	565,708,034.92	741,909,936.09	960,573,779.05	1,266,076,000.18	1,633,292,707.90
1 - Tax	75%	75%	75%	75%	75%
Depreciation	237,481,057.28	218,482,572.70	198,819,141.15	180,925,418.45	166,451,384.97
Capex	(228,912,710.08)	(278,128,942.75)	(303,160,547.59)	(367,161,107.64)	(444,264,940.25)
Change in NWC	494,635,380.98	22,914,097.84	(42,514,448.50)	(7,355,347.24)	68,861,567.76
FCFF	927,484,754.37	519,700,179.86	573,574,479.35	755,965,963.70	1,016,017,543.41

For the risk-free rate, the information will be gathered from the SBI (Sertifikat Bank Indonesia) rates which is 7.36%. The value for market risk premium is 8.6% based on the average of equity risk premium in Indonesia. The beta that are used is 1.66, that based on Reuters. The calculation of cost of equity will be:

Cost of equity = 7.36% + (8.6%*1.66) = 21.64%.

For the cost of debt, the value is obtained by getting the average of the prime lending rate from the banks that lend money to the company, which is 7.61%. Here is the calculation of the weighted average cost of capital:

$$= (\text{cost of equity } * \frac{Total\ Equity}{Total\ Liabilities\ and\ Equity})$$

$$+ ((\text{cost of debt}*\frac{Total\ Liabilities}{Total\ Liabilities\ and\ Equity})*(1\text{-Tax}))$$

$$= (21.64\% * \frac{3,201,890,711.00}{7,939,273,167.00}) + ((7.61\% * \frac{4,737,382,456}{7,939,273,167.00}) * (1 - 0.25))$$

= 12.13%

Since the company uses debt for financing, the calculation of the weighted average cost of capital of PGAS will be 12.13%.

4.1.4. Terminal Value

In calculating the terminal value, the assumption that are going to be used are the growth of PGAS after 2023 will be stable, since the price of natural gas will be remaining constant and stable. The terminal growth rate will be using the average rate of gross domestic product in Indonesia which is 5.28%. Here is the calculation of terminal value:

$$Terminal\ Value = \frac{1,016,017,543.41\ x\ (1 + 5.28\%)}{12.13\% - 5.28\%} = 15,612,268,403.53.$$

The terminal value will be 15,612,268,403.53.

4.1.5. Value of the Firm

To finding value of the firm, it can be calculated from discounting the free cash flow and terminal value by using the weighted average cost of capital. Since the financial report of the company are presented in USD, when calculating the value of the company, the exchange rate used are referred to the company's exchange rate that stated on the financial report which is 1 USD = IDR14,238. At year 5 or 2023, the value of the company will be USD11,505,649,021 or equal to IDR163,817,430,760,790.00 The intrinsic value per share will be IDR6,757.72 with the close price per share of 31 December 2018 in an amount of IDR2,120.00.

5. Conclusion and Recommendation

Perusahaan Gas Negara or also called as PGN is the largest national company in the natural gas transportation and distribution sector. The goal of the company is to providing the needed expertise, energy, and infrastructure to escalate Indonesia's economic growth in the long term. The government has given PGN a mandate to develop natural gas infrastructure in Indonesia. In carrying out this mandate, PGN works together with local governments, both directly and through regionally owned enterprises.

To make the business growing wider, PGN are going to acquiring Pertagas. By this process, Pertamina will gives a right for PGAS to manage the gas business in an integrated manner in Indonesia as stated in Government Rule Number 06 Year 2018. In addition, PGN as the main managers of natural gas downstream activities will become stronger and become the country's strategic tools in realizing the government's vision to encourage natural gas as an engine of growth.

TABLE 4: Value of the Firm.

Valuation of PGAS					
Discounted Free Cash Flow to the Firm					
(in USD)					
	1	**2**	**3**	**4**	**5**
	2019E	**2020E**	**2021E**	**2022E**	**2023E**
FCFF	927,484,754.37	519,700,179.86	573,574,479.35	755,965,963.70	1,016,017,543.41
Terminal Value					15,612,268,403.53
Total FCFF	927,484,754.37	519,700,179.86	573,574,479.35	755,965,963.70	16,628,285,946.94
PV of FCFF	827,140,770.48	413,331,176.43	406,825,123.65	478,181,573.21	9,380,170,377.22
Firm Value	11,505,649,021	IDR 163,817,430,760,790.00			
Current shares outstanding	24,241,508,196				

TABLE 5: Intrinsic Value per Share.

Intrinsic value per share (in IDR)	6,757.72
Close Price as per 31 December 2018 (in IDR)	2,120.00
Upside	218.76%
Recommendation	Buy

To knowing the value of the company, discounted cash flow method is used. Based on the calculation in chapter 4, the intrinsic value per share of Perusahaan Gas Negara is at Rp6,757.72 or higher than the close price on 31 December 2018 which is Rp2,120 per share.

Based on the calculation, the authors recommend to buy the share at Perusahaan Gas Negara. Since the intrinsic value per share which is IDR6,757.72 is higher than the price per share which is IDR2,120, that shows an upside of 218.76%.

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