THE RELATIONSHIP BETWEEN KEY FINANCIAL RATIOS TO THE REVENUE GROWTH AND FINANCIAL PERFORMANCE BENCHMARKING ANALYSIS OF OIL & GAS COMPANIES LISTED IN THE INDONESIAN STOCK EXCHANGE

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Abstract

The global oil and gas sector, a crucial driver of economic vitality, remains a focal point for investors navigating the dynamic energy market. According to the Handbook of Energy and Economic Statistics of Indonesia, the oil and gas industry constitutes a significant portion, approximately 43.5%, of the country's energy mix in 2022, equivalent to about 797 million barrels of oil equivalent (BoE). Projections from Indonesia's Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR) 2050 anticipate an increase to 1.4 billion BoE in 2050, even under the strictest emission scenarios. Given the pivotal role of oil and gas in Indonesia's energy landscape, it is imperative to examine investor interest in companies within this industry. Regarding the oil & gas companies in the Indonesian Stock Exchange (IDX), investors' attention has been drawn to only a few stocks in particular due to the attractiveness of profitable prospects in the oil and gas sector, which brings up the question: do these "popular" oil and stocks really perform admirably financially? Overall, this research uses the quantitative method. This research has the purpose to identify and analyze the financial ratios that have a significant impact on the revenue growth of Indonesian oil & gas companies, to determine which Indonesian oil & gas companies with significant ratios exhibit high potential and possess a high market capitalization, to identify Indonesian oil & gas companies with significant ratios that demonstrate high potential and have a low market capitalization, to evaluate Indonesian oil & gas companies with significant ratios that exhibit low potential but possess a high market capitalization, and to compare the financial performance of the high potential Indonesian oil & gas companies with highly reputable oil & gas companies that are not listed on the Indonesian Stock Exchange. To complete the first objective, this research uses regression analysis, which resulted in Asset Turnover and Assets Growth as the significant ratios to the Revenue Growth. Using these significant ratios to measure the potential, the High Potential – High Market Cap category included AKRA, RAJA, ELSA, and HITS while in the High Potential – Low Market Cap category, this research has found out KOPI is qualified into this category. In the Low Potential – High Market Cap category, TAMU and BULL are included. Lastly, when compared to worldwide industry leaders, the IDX-listed oil & gas companies which are marked as High Potential have found some interesting findings: AKRA have much better Asset Turnover ratio than industry leaders, ELSA's Assets Growth are observably better than Halliburton and Schlumberger, and HITS' profitability (Gross Profit Margin) is still better than the spectacularly growing Pertamina International Shipping.

The Relationship Between Key Financial Ratios To The Revenue Growth And Financial Performance Benchmarking Analysis Of Oil & Gas Companies Listed In The Indonesian Stock Exchange

Introduction

The global oil and gas sector, a linchpin of economic vitality, continually draws the attention of investors navigating the intricate landscape of the dynamic energy market. Overall, based on the Handbook of Energy and Economic Statistics of Indonesia, the oil and gas have still quite significant portion in the Indonesian energy mix in 2022, which is around 43.5% of the total energy supply or about 797 million barrel oil equivalent (BoE). Furthermore, in the Indonesia's Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR) 2050, it is projected that oil and gas will reach 1.4 billion BoE in 2050 even with the strictest emission scenario. Recognizing the oil and gas' importance in the Indonesian energy industry, it is vital to look at the investors' interest in companies operating in the oil and gas industry.

In the context of the Indonesian Stock Exchange (IDX), the allure of lucrative opportunities in the oil and gas industry has centered around a select few stocks, with PGAS, MEDC, and AKRA emerging as focal points for investors. Traditionally, there has been a widely held belief in the financial world that a company's market capitalization (market cap) serves as a reliable indicator of its financial performance. However, recent observations challenge this conventional wisdom, unveiling a nuanced reality where the size of market cap does not always guarantee superior financial outcomes. This revelation prompts a critical examination of the interplay between market cap and financial performance in the Indonesian oil and gas sector.

The core objective of this research is to discern the pivotal financial ratios that significantly influence revenue growth within the oil and gas industry. While market cap has often been considered the primary metric for assessing a company's worth, this study aims to shed light on the specific financial indicators that hold the key to sustained revenue growth. By delving into the intricate web of financial ratios such as Gross Profit Margin (GPM), Assets Growth, Asset Turnover, Debt-to-Equity Ratio, and others, we seek to uncover the underlying factors that propel revenue growth within the sector.

Moreover, this research extends beyond the confines of the IDX, venturing into a comparative analysis between high-potential Indonesian oil and gas companies and their more established counterparts on the global stage. The comparison involves benchmarking the performance of local companies against their multinational counterparts, examining whether the financial ratios deemed significant in the Indonesian context hold similar weight in the broader, international arena.

In navigating this exploration, we aim to identify patterns, anomalies, and key differentiators in the financial landscapes of high-potential Indonesian oil and gas companies when juxtaposed with global industry leaders. This comparative lens provides a comprehensive understanding of the financial dynamics at play and

underscores the unique challenges and opportunities present in the Indonesian oil and gas market.

This research is created to complete the following objectives: 1. To identify and analyze the financial ratios that have a significant impact on the growth of Indonesian oil & gas companies. 2. To determine which Indonesian oil & gas companies with significant ratios exhibit high potential and possess a high market capitalization. 3. To identify Indonesian oil & gas companies with significant ratios that demonstrate high potential and have a low market capitalization. 4. To evaluate Indonesian oil & gas companies with significant ratios that exhibit low potential but possess a high market capitalization. 5. To compare the financial performance of the high potential Indonesian oil & gas companies with highly reputable oil & gas companies that are not listed on the Indonesian Stock Exchange.

Method

In this research, quantitative research design is used. Theoretically, quantitative research is used. Quantitative research is a means of testing objective theories by examining the relationship among variables (Cresswell, 2009). This design is well-fitted to determine the significance between the financial ratios and revenue growth which then later on used to compare and classify the selected stocks. This research uses annual time-series data type spanning through the 2018-2022 fiscal periods. The companies analyzed are the ones listed in Section 1.3.

As mentioned in Section 2, in this research, the regression analysis used several variables starting from liquidity ratio, debt ratio, profitability ratios, activity ratios, and growth ratios. However, if the correlation analysis resulted in high correlations between one and another independent variable, some of these independent variables might be removed to improve the regression model and interpretability.

These variables are considered for the correlation and regression analysis:

Table 1 Variables for Regression Analysis

No.	Variables	Symbol
Dependent Variable		
1	Revenue Growth	y
Independent Variables		
2	Current Ratio	X1
3	Quick Ratio	X2
4	Debt to Equity Ratio	X3
5	Gross Profit Margin	X4
6	Net Profit Margin	X5
7	Return on Assets	X6
8	Return on Equity	X7
9	Asset Turnover	X8
10	Total Asset Growth	X9

The Relationship Between Key Financial Ratios To The Revenue Growth And Financial Performance Benchmarking Analysis Of Oil & Gas Companies Listed In The Indonesian Stock Exchange

Data Collection Method

In this research, author uses secondary data to gather the financial information data from the oil & gas companies. For the IDX-listed companies, most of these data are extracted through Stockbit. However, if the required data is not available on Stockbit, the financial information are assembled via IDX website or company's annual report. For the non-IDX-listed companies which are used for benchmarking analysis, the financial data is taken from the company's official annual report or financial statement report.

Data Analysis Method

As described in Section 2, this research will conduct multiple regression analysis to find the significant ratios which drive the revenue growth, then classify the stocks based on the significant ratios, and finally compare the high potential oil & gas IDX-listed companies with more reputable or multinational companies outside of the Indonesian Stock Exchange. Several data analysis tools such as Excel and *python* are used in order to complete said tasks.

Before beginning the regression analysis, correlation analysis is performed to calculate the Pearson correlation coefficient (r). The Pearson correlation coefficient will quantify the correlation between one independent variable to another. This way, we can eliminate certain variables if they are correlated to another in order to gain best regression results. In this research, correlation analysis is performed using *python* with the following code assuming that the independent variables are contained in 'X' variable:

```python
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

corr_matrix = X.corr()

plt.figure(figsize=(12, 10))
sns.heatmap(corr_matrix, annot=True, cmap='coolwarm', fmt=".2f", linewidths=.5)
plt.title("Correlation Heatmap")
plt.show()
```

To complete the regression analysis, *statsmodels* package in *python* programming language is used. Statsmodels is part of the Python scientific stack that is oriented towards data analysis, data science and statistics. Built on top of the NumPy and SciPy numerical libraries, Statsmodels integrates Pandas for data handling and makes use of Patsy[3] for an R-like formula interface. To utilize the OLS regression in the *statsmodels* package, the following codes are formulated:

```python
import statsmodels.api as sm

# Add a constant to the independent variables matrix
X = sm.add_constant(X)

# Fit the OLS regression model
model = sm.OLS(y, X).fit()

# Display the regression results
print(model.summary().tables[0])
print(model.summary().tables[1])
```

Figure 1 Python Lines for OLS Regression

The 'X' represents the independent variables, while 'y' represents the dependent variable. The program will try to fit the dependent & independent variables in the best way possible to find the appropriate coefficients and constant. Finally, the program will print out the summary which includes R-squared and t-test results.

After the regression analysis is completed, we can finally obtain the significant factors which drive the revenue growth. These significant factors are then used to determine the IDX-listed oil & gas companies' potential. If a company's significant factors are better than other companies, then the company is decided into "High Potential". Consequently, if a company's significant ratios are worse than other companies, then it would be categorized as "Low Potential".

Lastly, the companies with "High Potential" label are compared to non-IDX-listed companies with higher revenue and reputation. To clarify, the companies used as benchmarks have similar main business line in the oil & gas industry with the ones categorized as "High Potential" in the IDX from previously defined classification

Hasil dan Pembahasan

Liquidity Ratio Analysis

These companies resulted various liquidity ratios. Certain companies such as INPS and ENRG have a really low current ratios over the years compared to other companies. WINS on the other hand had also low current ratio in 2018 (0.62) but then gradually improved until they have a very healthy score in 2022 (2.56). Popular stocks like AKRA, MEDC, and PGAS do not show superior liquidity scores. On the other hand, APEX have substantially higher liquidity ratios compared to other oil & gas companies in the Indonesian Stock Exchange. The following figure shows the average current ratio and quick ratio for each company over the last 5 fiscal years:

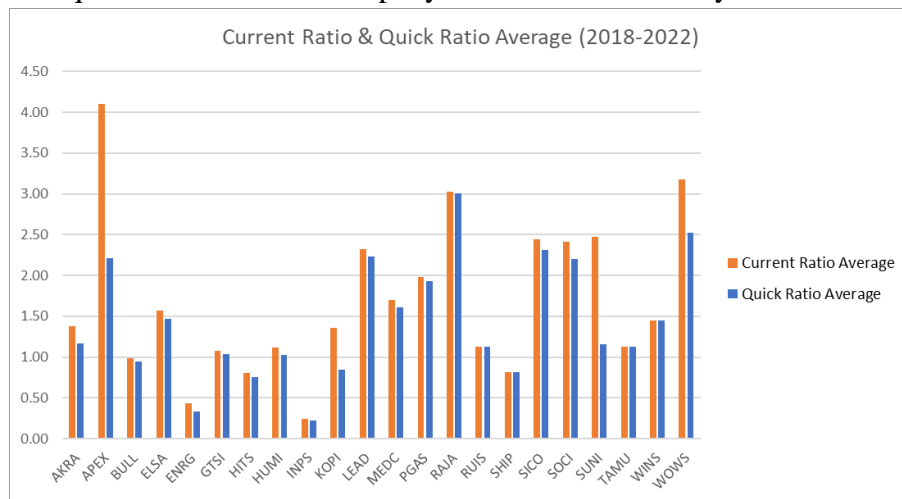*Figure 2 Current Ratio and Quick Ratio Average per Company (2018-2022)*

While liquidity ratios such as the current ratio and quick ratio are generally considered indicators of a company's short-term financial health, a high liquidity position is not always unequivocally beneficial. Excessive liquidity may suggest that a company is not efficiently deploying its resources, leading to missed opportunities for

higher returns. Maintaining a substantial amount of cash or highly liquid assets may imply a conservative approach that sacrifices potential profitability for the sake of immediate solvency. In dynamic business environments, especially those characterized by low interest rates, holding excessive cash might result in an opportunity cost as the funds could have been invested in income-generating activities or used for strategic initiatives. Additionally, industries with high capital expenditure requirements or those experiencing rapid technological advancements may find that deploying resources into long-term investments could yield more substantial benefits than keeping a surplus in liquid assets. Striking the right balance between liquidity and investment for growth is crucial, and a nuanced approach is needed to assess the specific needs and goals of the company within its industry context.

Debt Ratio Analysis

The following figure below shows the debt-to-equity ratio average for each company:
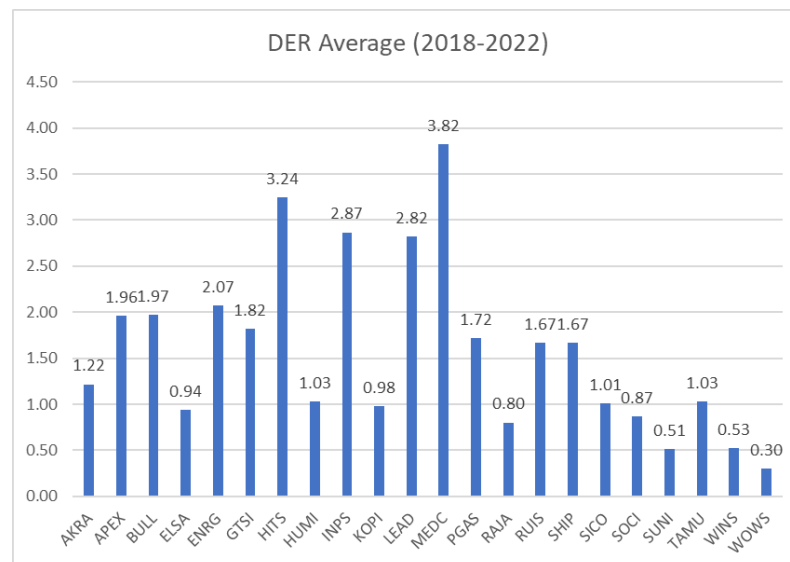

Figure 3 Debt-to-Equity Ratio Average for Each Company (2018-2022)

As reported in the table and chart above, these companies have different ranges of debt-to-equity ratio over the years. When assessing a company's financial structure, the debt-to-equity ratio (DER) is a crucial indicator that sheds light on its leverage and possible risk exposure. Since a lower DER indicates a lower debt-to-equity ratio, strong financial health, and lower financial risk, it is generally regarded as advantageous.

WOWS stands out among the companies surveyed, having the lowest DER average (2018–2022), at 0.30. WOWS can benefit from reduced reliance on debt financing during economic downturns or uncertain financial times, as indicated by a low DER. Due to their capacity to overcome financial difficulties without being overly indebted, companies with low debt-to-earnings ratio (DER) are frequently seen favorably by investors.

Conversely, MEDC has one of the highest DER averages (3.82), indicating the opposite end of the spectrum. It's important to understand that while a high DER may indicate financial risk and heightened susceptibility to changes in the economy, some

industries, like the oil and gas sector, which is frequently associated with high capital requirements, may naturally have higher debt levels. Companies deliberately use debt to finance expansion, exploration, and operational activities in these capital-intensive industries.

Investors must carefully assess a company's DER in the context of its industry and business model. While a low DER suggests financial stability, a moderate to high DER may not necessarily be detrimental if managed prudently. Companies can use debt strategically to fuel growth, enhance operational capabilities, and capitalize on market opportunities.

In capital-intensive industries like oil and gas, where substantial upfront investments are necessary, companies may carry higher debt loads. The key is maintaining a balance between leveraging debt for growth and avoiding excessive risk. Investors should look beyond absolute DER values, considering the company's overall financial strategy, operational efficiency, and the industry's capital structure norms.

In conclusion, DER is a critical metric in evaluating a company's financial health, but its interpretation requires a nuanced understanding of the industry landscape. Investors should consider not only the DER value but also the industry dynamics and the company's strategic use of debt in their decision-making process.

Profitability Ratios Analysis

The following table shows the Return on Asset, Return on Equity, Gross Profit Margin, and Net Profit margin ratio of the IDX-listed oil & gas companies over the last 5 fiscal years while the figure below shows the ratio average for each company:

Table 2 Profitability Ratio from IDX-listed Oil & Gas Companies

Ticker	Year	Return on Assets	Return on Equity	Gross Profit Margin	Net Profit Margin
AKRA	2018	8.25%	19.65%	6.60%	6.78%
AKRA	2019	3.35%	8.60%	8.72%	3.24%
AKRA	2020	4.95%	10.57%	11.56%	5.43%
AKRA	2021	4.73%	11.90%	8.92%	4.42%
AKRA	2022	8.84%	21.91%	8.94%	5.21%
APEX	2018	-20.17%	69.08%	-7.91%	-113.26%
APEX	2019	4.03%	35.89%	20.14%	21.52%
APEX	2020	13.24%	35.13%	9.72%	81.34%
APEX	2021	1.02%	2.79%	35.91%	5.59%
APEX	2022	-24.62%	-97.50%	24.86%	-79.89%
BULL	2018	4.10%	7.44%	39.29%	17.38%
BULL	2019	3.81%	7.83%	42.34%	22.91%
BULL	2020	4.35%	10.57%	50.13%	19.42%
BULL	2021	-37.87%	-208.94%	23.16%	-128.99%
BULL	2022	-11.65%	-37.70%	21.52%	-38.08%
ELSA	2018	4.88%	8.38%	9.84%	4.17%
ELSA	2019	5.24%	9.97%	10.39%	4.25%

The Relationship Between Key Financial Ratios To The Revenue Growth And Financial Performance Benchmarking Analysis Of Oil & Gas Companies Listed In The Indonesian Stock Exchange

Ticker	Year	Return on Assets	Return on Equity	Gross Profit Margin	Net Profit Margin
ELSA	2020	3.29%	6.66%	9.60%	3.22%
ELSA	2021	1.50%	2.88%	7.93%	1.34%
ELSA	2022	4.28%	9.19%	7.41%	3.07%
ENRG	2018	-1.74%	-6.63%	27.73%	-3.16%
ENRG	2019	4.12%	13.00%	47.14%	7.34%
ENRG	2020	6.35%	16.95%	39.38%	18.04%
ENRG	2021	3.79%	7.71%	36.50%	9.78%
ENRG	2022	5.59%	11.35%	40.63%	14.77%
GTSI	2021	-8.98%	-31.35%	-2.28%	-38.72%
GTSI	2022	2.15%	5.77%	35.30%	12.44%
HITS	2018	6.10%	31.48%	35.95%	15.36%
HITS	2019	5.30%	22.78%	33.86%	15.26%
HITS	2020	1.96%	8.45%	31.79%	8.13%
HITS	2021	-6.25%	-33.64%	15.91%	-15.17%
HITS	2022	3.42%	13.83%	27.54%	10.06%
HUMI	2021	-6.20%	-16.43%	11.57%	-19.56%
HUMI	2022	5.11%	9.44%	29.08%	11.98%
INPS	2019	-0.82%	-2.81%	14.07%	-2.72%
INPS	2020	-3.82%	-14.18%	32.42%	-1.56%
INPS	2021	-7.51%	-33.73%	17.69%	-6.14%
KOPI	2018	-34.46%	-63.72%	36.14%	-61.45%
KOPI	2019	4.53%	7.85%	28.72%	3.72%
KOPI	2020	0.48%	1.03%	26.26%	0.51%
KOPI	2021	1.30%	2.04%	28.19%	1.06%
KOPI	2022	2.67%	7.08%	30.43%	3.80%
LEAD	2018	-28.97%	-91.93%	5.66%	-168.89%
LEAD	2019	-5.66%	-21.11%	5.06%	-33.43%
LEAD	2020	-1.91%	-7.14%	18.03%	-10.42%
LEAD	2021	-1.94%	-7.55%	17.32%	-9.27%
LEAD	2022	-4.48%	-20.57%	12.17%	-20.22%
MEDC	2018	-0.98%	-4.21%	51.89%	-2.33%
MEDC	2019	-0.46%	-2.29%	41.14%	-0.94%
MEDC	2020	-3.20%	-18.43%	29.43%	-16.22%
MEDC	2021	0.83%	4.38%	42.76%	4.73%
MEDC	2022	7.66%	34.09%	53.89%	23.85%
PGAS	2018	3.84%	11.85%	33.84%	9.42%
PGAS	2019	0.92%	2.64%	31.89%	2.94%
PGAS	2020	-3.51%	-11.86%	29.61%	-7.48%
PGAS	2021	4.05%	12.03%	19.33%	12.01%
PGAS	2022	4.53%	12.38%	21.87%	11.25%

Ticker	Year	Return on Assets	Return on Equity	Gross Profit Margin	Net Profit Margin
RAJA	2018	5.98%	12.45%	17.37%	10.53%
RAJA	2019	3.16%	5.64%	14.02%	5.18%
RAJA	2020	0.83%	1.38%	16.31%	2.55%
RAJA	2021	0.92%	2.21%	15.70%	3.43%
RAJA	2022	3.39%	8.12%	19.80%	8.56%
RUIS	2018	2.73%	6.66%	16.41%	2.08%
RUIS	2019	2.64%	7.64%	14.72%	2.07%
RUIS	2020	2.05%	6.03%	14.67%	1.73%
RUIS	2021	1.41%	3.79%	13.18%	1.09%
RUIS	2022	1.59%	3.84%	12.43%	1.17%
SHIP	2018	4.31%	13.92%	39.41%	21.39%
SHIP	2019	5.82%	16.65%	39.76%	21.51%
SHIP	2020	5.75%	17.32%	44.04%	26.68%
SHIP	2021	4.61%	14.09%	39.85%	20.44%
SHIP	2022	4.98%	15.46%	37.43%	19.38%
SICO	2019	3.93%	12.11%	26.44%	3.45%
SICO	2020	7.50%	15.78%	37.31%	5.97%
SICO	2021	9.03%	15.65%	41.43%	8.57%
SICO	2022	8.31%	10.60%	44.87%	14.10%
SOCI	2018	2.00%	4.09%	36.62%	10.12%
SOCI	2019	1.36%	2.80%	32.62%	5.95%
SOCI	2020	4.13%	7.56%	27.78%	20.97%
SOCI	2021	0.86%	1.48%	27.80%	4.24%
SOCI	2022	1.02%	1.73%	28.30%	4.49%
SUNI	2020	-1.66%	-2.91%	12.50%	-4.81%
SUNI	2021	5.33%	9.29%	21.70%	9.12%
SUNI	2022	11.81%	19.98%	26.48%	13.52%
TAMU	2018	-3.83%	-7.47%	0.45%	-25.34%
TAMU	2019	-11.65%	-24.78%	6.94%	-65.74%
TAMU	2020	-1.13%	-2.31%	14.15%	-6.13%
TAMU	2021	-6.27%	-12.37%	2.47%	-38.89%
TAMU	2022	-7.71%	-15.75%	3.43%	-43.43%
WINS	2018	-9.25%	-17.07%	1.54%	-57.43%
WINS	2019	-5.38%	-9.81%	-2.31%	-30.00%
WINS	2020	-5.61%	-9.97%	2.65%	-34.49%
WINS	2021	0.09%	0.15%	14.10%	0.33%
WINS	2022	0.59%	0.87%	18.40%	1.37%
WOWS	2019	2.11%	2.88%	36.72%	9.60%
WOWS	2020	0.19%	0.24%	23.21%	0.89%
WOWS	2021	-4.74%	-6.04%	0.01%	-35.42%

The Relationship Between Key Financial Ratios To The Revenue Growth And Financial Performance Benchmarking Analysis Of Oil & Gas Companies Listed In The Indonesian Stock Exchange

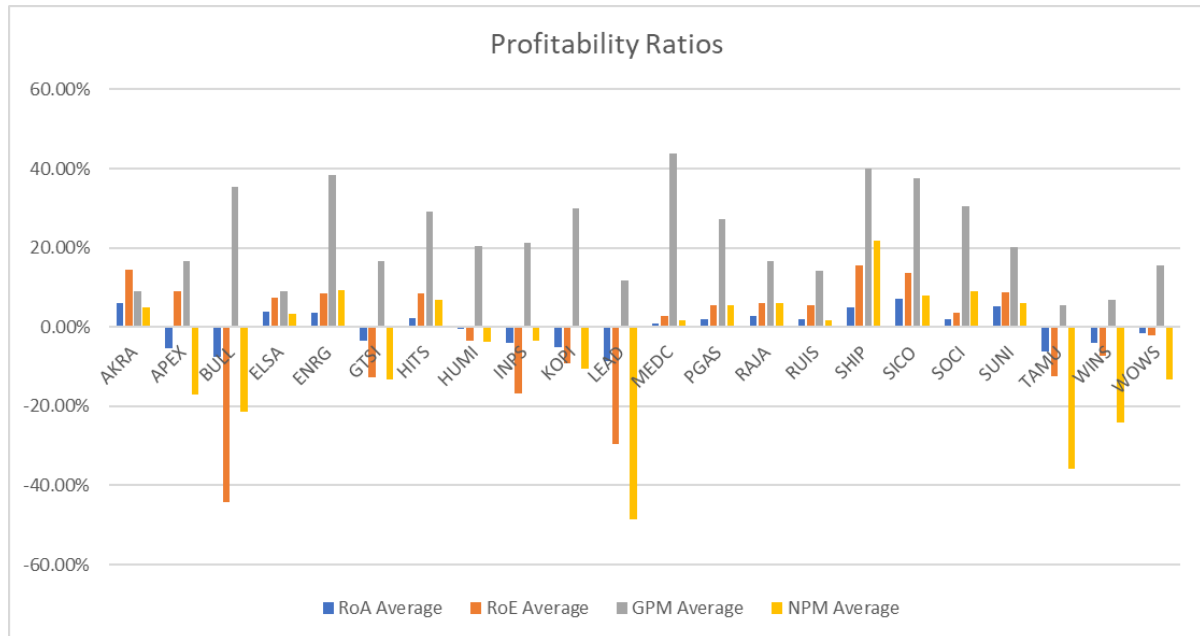| Ticker	Year	Return on Assets	Return on Equity	Gross Profit Margin	Net Profit Margin
WOWS	2022	-4.07%	-5.19%	2.02%	-28.28%

Figure 4 Average Profitability Ratios (2018-2022) for IDX-listed Oil & Gas Companies

Analyzing the profitability metrics of the listed companies is crucial for investors seeking insight into their financial health and potential returns. Among the companies with the lowest Return on Assets (ROA), we observe that BULL, LEAD, and TAMU consistently exhibit negative figures, indicating challenges in effectively utilizing their assets to generate net profits. Negative ROA implies potential inefficiencies in asset management, which could be a concern for investors as it signals lower earnings relative to the total assets deployed.

Companies that consistently have negative Return on Equity (ROE), like BULL, LEAD, and INPS, stand out in this regard. A negative return on equity (ROE) indicates that these businesses may have trouble making a profit for their investors. Investors frequently view return on equity (ROE) as a crucial indicator of a company's profitability in relation to shareholder equity. Low ROE values can cast doubt on the company's ability to make sound financial and strategic decisions.

Examining Gross Profit Margin (GPM), KOPI, GTSI, and INPS are notable for having lower figures. GPM reflects the percentage of revenue retained after accounting for the cost of goods sold, and lower values may indicate higher production costs or pricing pressures. For investors, a low GPM could signify potential challenges in operational efficiency, especially in industries where cost management is critical.

lower values may indicate higher production costs or pricing pressures. For investors, a low GPM could signify potential challenges in maintaining profitability, especially in industries where cost management is critical.

Similarly, in Net Profit Margin (NPM), BULL, HUMI, and INPS consistently demonstrate lower figures. NPM represents the proportion of revenue retained as net income, considering all costs and expenses. Investors typically value a healthy NPM, and consistently low values may suggest operational and financial inefficiencies.

On the other hand, businesses that exhibit the highest ROA, ROE, GPM, and NPM are regarded as strong performers. Notable ROA numbers for AKRA, ENRG, and SHIP highlight their effective asset use and potential for increased returns. SICO, SHIP, WINS, and SHIP continuously show good ROE performance, suggesting that equity is used profitably to create value for shareholders.

Higher GPM numbers are displayed by MEDC, SHIP, SICO, and SHIP, which can reassure investors by indicating efficient cost control and possibly greater pricing power. Comparably, businesses with high NPM figures—SHIP, SICO, and PGAS, for example—are skilled at converting revenue into net income, a sign of profitable operations and acceptable financial management.
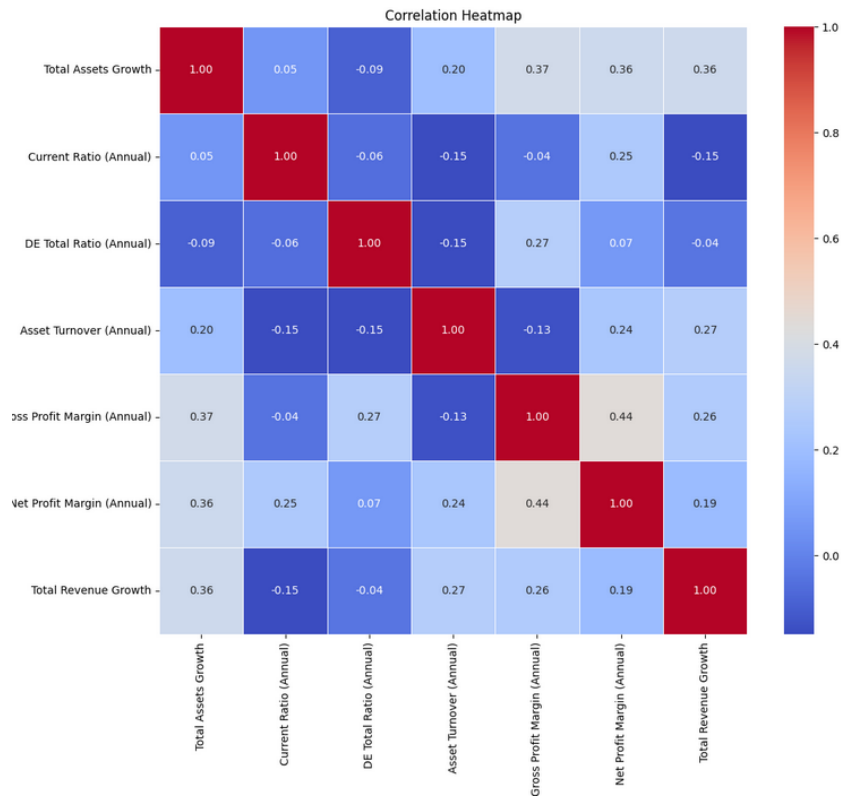
Correlation Analysis

As described in Section 2, Pearson correlation coefficient is determined to find the inter-relationship between several independent variables. The correlated independent variables may have to be removed so that the regression analysis with the Revenue Growth can avoid multicollinearity. The following heatmap chart created from python displays the Pearson's correlation coefficient between all of the independent variables:
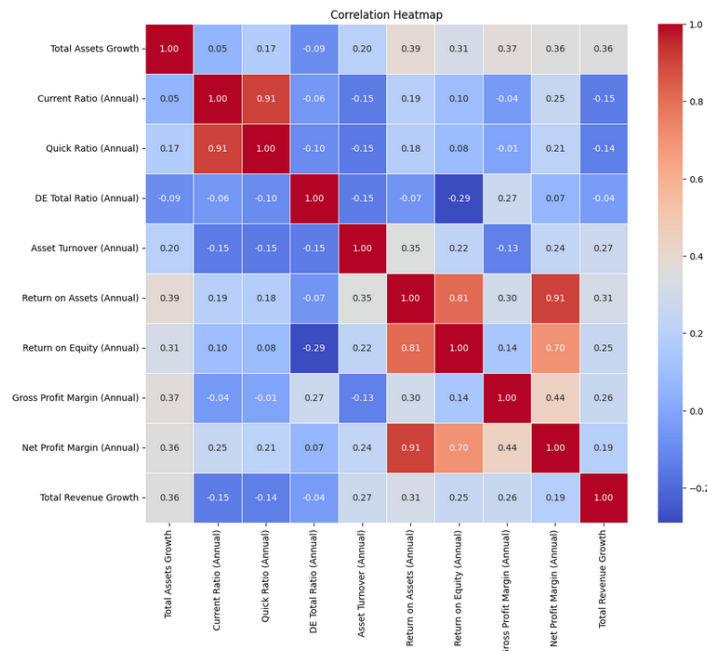
After Quick Ratio, Return on Assets, and Return on Equity are removed, we can once again check for the correlation between the variables. As can be observed in the updated correlation heatmap below, all of the independent variables have low correlation between one another therefore multicollinearity can be avoided. Also, it

should be noted that liquidity ratio, debt ratio, activity ratio, growth ratio, and profitability ratio are all still represented in the regression analysis even after the removal of several correlated variables.

Regression Analysis

Accommodating the Current Ratio, Debt-to-Equity Ratio, Asset Turnover, Gross Profit Margin, Net Profit Margin, and Assets Growth as the independent variables, we can find the relationship between these variables and Revenue Growth using python as explained in Section 3. The regression analysis uses the Ordinary Least Squares (OLS) method which are commonly used in these types of research. The following output showed the result of the regression analysis:

```
                           OLS Regression Results
==============================================================================
Dep. Variable:     Total Revenue Growth   R-squared:                       0.219
Model:                              OLS   Adj. R-squared:                  0.168
Method:                   Least Squares   F-statistic:                     4.259
Date:                Sat, 11 Nov 2023    Prob (F-statistic):           0.000795
Time:                        00:46:42    Log-Likelihood:                -11.011
No. Observations:                   98   AIC:                             36.02
Df Residuals:                       91   BIC:                             54.12
Df Model:                            6
Covariance Type:             nonrobust
==============================================================================

==============================================================================
                              coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------
const                      -0.0413      0.113     -0.366      0.715      -0.265       0.183
Total Assets Growth         0.3255      0.144      2.256      0.026       0.039       0.612
Current Ratio (Annual)     -0.0279      0.024     -1.141      0.257      -0.076       0.021
DE Total Ratio (Annual)    -0.0103      0.022     -0.462      0.645      -0.054       0.034
Asset Turnover (Annual)     0.1713      0.079      2.172      0.032       0.015       0.328
Gross Profit Margin (Annual) 0.4614     0.263      1.757      0.082      -0.060       0.983
Net Profit Margin (Annual) -0.0166      0.113     -0.148      0.883      -0.241       0.207
==============================================================================
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Figure 12 OLS Regression Results from Statsmodels Package

As can be observed from the figure above, the R-squared from the model resulted in 0.219 which means 21.9% of the Revenue Growth variability can be explained by Assets Growth, Current Ratio, Debt-to-Equity Ratio, Asset Turnover, Gross Profit Margin, and Net Profit Margin.

Total Assets Growth stands out as a significant variable, showing a t-test probability of 0.026, which is statistically significant. The null hypothesis, according to which Total Assets Growth is statistically insignificant to Revenue Growth, has been successfully refuted by this variable since its value is less than 0.05. This suggests that businesses that see an increase in their total assets will probably see a significant and favourable effect on their total revenue growth. According to this analysis, total assets seem to be a major factor driving revenue growth, so analysts and investors should keep a close eye on it.

Asset Turnover have turned out to be statistically significant to the Revenue Growth in the IDX-listed oil & gas companies' universe since its p-value is 0.032. The null hypothesis, according to which Asset Turnover is statistically insignificant to Revenue Growth, has been successfully refuted by this variable since its value is less than 0.05. The Asset Turnover, which calculates a company's ability to turn their assets into revenue stream have proven to be vital in growing a company's revenue in this selection of companies.

Stock Classification Based on The Significant Ratios

The groups considered for this analysis comprised in the following table:

No.	Group	Criteria
1	High Potential – High Market Cap	Asset Turnover > Asset Turnover Median, Total Asset Growth > Total Asset Growth Median, Market Cap > Market Cap Median
2	High Potential – Low Market Cap	Asset Turnover > Asset Turnover Median, Total Asset Growth > Total Asset Growth Median, Market Cap < Market Cap Median
3	Low Potential – High Market Cap	Asset Turnover < Asset Turnover Median, Total Asset Growth < Total Asset Growth Median, Market Cap > Market Cap Median

The median used as the pinpoint differ over the years due to various unique periodical circumstances in those years. Essentially, these categories offer investors a thorough framework for evaluating and planning their investments in the IDX-listed oil and gas industry. Investors can customize their portfolios in the dynamic energy market according to their growth expectations and risk tolerance by focusing on established underachievers, exploring opportunities among underdogs, or going for stability with high-potential leaders. And so, the results of the classification from the 2018-2022 fiscal years are described in the following table:

The Relationship Between Key Financial Ratios To The Revenue Growth And Financial Performance Benchmarking Analysis Of Oil & Gas Companies Listed In The Indonesian Stock Exchange

TICKER	2018	2019	2020	2021	2022
AKRA	High Potential - High Market Cap	High Potential - High Market Cap		High Potential - High Market Cap	High Potential - High Market Cap
APEX	Low Potential - High Market Cap				
BULL				Low Potential - High Market Cap	Low Potential - High Market Cap
ELSA	High Potential - High Market Cap	High Potential - High Market Cap	High Potential - High Market Cap		High Potential - High Market Cap
ENRG			High Potential - Low Market Cap	High Potential - High Market Cap	
GTSI					
HITS	High Potential - High Market Cap	Low Potential - High Market Cap	High Potential - High Market Cap	High Potential - High Market Cap	High Potential - High Market Cap
HUMI					
INPS		High Potential - High Market Cap			
KOPI		High Potential - Low Market Cap	High Potential - Low Market Cap		High Potential - Low Market Cap
LEAD					
MEDC	Low Potential - High Market Cap			Low Potential - High Market Cap	
PGAS	High Potential - High Market Cap			High Potential - High Market Cap	
RAJA	High Potential - Low Market Cap			High Potential - Low Market Cap	High Potential - High Market Cap
RUIS		High Potential - Low Market Cap	High Potential - Low Market Cap		
SHIP		Low Potential - High Market Cap			
SICO					
SOCI					
SUNI					
TAMU	Low Potential - High Market Cap	Low Potential - High Market Cap	Low Potential - High Market Cap	Low Potential - High Market Cap	Low Potential - High Market Cap
WINS					
WOWS					

Kesimpulan

Based on the analysis on Section 4, this research came into the following conclusions to answer the research questions: 1. According to the regression analysis and t-test results, Asset Turnover and Assets Growth are significant to the Revenue Growth in the IDX-listed oil and gas companies' universe. This conclusion is based on the *p-value* from the t-test for independent variables. The *p-value* for Asset Turnover and Assets Growth turned out to be 0.032 and 0.026. Since these values are less than 0.05, these independent variables are concluded to be significant to the dependent variable (Revenue Growth). 2. As described in Section 3 and Section 4, High Potential is defined as stocks with better-than-median scores for the significant ratios. This research has found out that Asset Turnover and Assets Growth are significant to the Revenue Growth. Furthermore, High Market Cap is defined as stocks with better-than-median market capitalization. Therefore, by this definition, focusing on the latest fiscal year (2022), this research has concluded that AKRA, RAJA, HITS, and ELSA qualified to be in High Potential – High Market Cap category. 3. High Potential stocks are those that score higher than the median for the important ratios, as explained in Sections 3 and 4. The results of this study indicate that revenue growth is significantly influenced by asset turnover and asset growth. Opposed to the second conclusion, the Low Market Cap definition means that the company have lower market capitalization than the IDX-listed oil & gas companies' median. Therefore, focusing on the latest fiscal year (2022), this research has concluded that KOPI qualified into the High Potential – Low Market Cap category. As opposed to the first and second conclusion, Low Potential is defined as companies who have lower-than-median Asset Turnover and Assets Growth. According to this research's findings, BULL and TAMU qualified into this category since they have poor Asset Turnover and Assets Growth but high market capitalization. BULL and TAMU may be considered to be the underachiever of the IDX-listed oil & gas companies since they have successfully attracted investors but failed to perform or grow as expected.

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