

# Value Investment: A Case Study for Energy Companies

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## ABSTRACT

Energy sectors are regarded as one of the fastest-growing industries globally. The findings of this study aim to help the stockholders and investors to assess the best energy company in the market and encourage the investors to invest. The study also highlights key issues affecting energy companies and recommends the most appropriate strategy to change the situation. In this paper, we focus on energy industry and assess the stock valuation of energy companies. The study adopted both qualitative and quantitative methodology to assess stock valuation in the energy sector, i.e. EBIT and EBITDA. The results show that both Energy Transfer and OKE companies have witnessed significant increases or variations in the stock market; moreover, there is a positive relationship between stock changes and financial performance. The findings from this study will be helpful for investors and shareholders in assessing the best company in the energy industry to invest in.

**Keywords:** EBITDA; Value investment; Energy sector.

## 1. INTRODUCTION

The stock market has been the topic of discussion in the past few decades among policymakers and scholars across the globe. The debate has gained momentum because of its significance and impact on the global economy [1]. The increased stock market and prices are restructuring global capital distribution [2]. The stock market is meant to accelerate economic growth by enhancing both local and international investment. To motivate people to save, the stock market aims to provide a different financial instrument, which helps meet their liquidity risks.

It is worth noting that the stock market in the energy sector has become a phenomenon of discussion in past years among investors. The energy sector represented on stock markets is a subset of equities listed by businesses that are actively or implicitly involved in power sale and delivery or have expanded their goods and services mainly in the energy industry. The United States energy industry is made up of businesses involved in the discovery, extraction, and sale of oil, gasoline, and solar and wind power all over the globe.

Also, upstream businesses that exploit oil or natural gas deposits are among the most popular energy industry equities.

In this scenario, valuation is critical for measuring the success of the tactical decision-making processes and allowing you to measure performance in terms of expected rise in price rather than simply revenue. Energy Transfer and Oneok, Inc. valuation is critical in evaluating the economic worth of a corporation or business activities. Evaluation of alternatives may be used to estimate the fair worth of a company for a number of purposes, involving selling worth, partnership control, taxes, and even separation procedures.

Energy Transfer and Oneok, Inc. (OKE) are some of the dominant companies in the US and have witnessed significant stock changes or valuation. Both of which operate in the energy industry, Energy Transfer and OKE have a significant interest in prospective energy pricing. Business valuation is challenging due to the significant fluctuation of petroleum and natural gas pricing [3]. This has been proven in current history, as

world oil prices have undergone substantial changes and a high degree of instability. This allows for examining the connection between the value of energy businesses and oil prices under various market circumstances and economic cycles. Based on the above analysis, the investigations in this paper can be summarized as follow. First, data analysis methodology (EBIT and EBITDA) and Second, data analysis presentation and discussion.

The research goal of this paper is to analyze the simple data of each stock to pick one stock in the "sweet" spot - it's cheap, exhibits fast growth, has high profitability, and pays a high dividend. This helps investors efficiently find companies worth investing in.

## 2. DATA

The data we collected is from the Electronic Data Gathering, Analysis, and Retrieval system from the U.S. Securities and Exchange Commission. We have total of 5156 companies that are in the U.S. stock market in our data set, and it is in chronological order from Jan 1st, 2015, to Dec 31st, 2019. First, in this paper, energy companies are of interests; Second, Energy Transfer and OKE are representative companies in energy industry. Thus, in this paper, Energy Transfer and OKE are selected for analysis.

Featuring roughly 90,000 miles of network and power grid spread throughout 39 countries, Energy Transfer is among the biggest and most diverse downstream energy firms in the nation [4]. An array of energy resources is managed and owned by Energy Transfer Operating, L.P. Intermediate fossil fuels, liquid petroleum products, and refined goods are among the offers. An international clientele is catered to by Energy Transfer Operation. ONEOK, Inc., along with its affiliates, gathers, processes, stores, and transports natural gas across the U.S [5]. Natural Gas Collecting and Handling, Nat Gas Solvents, and Exploration and Production are three of the company's business units that it operates in. Mid-continent and Rockies Mountains raw gas pipes and central processing unit are owned by the firm. Assembles and processes natural gas liquids (NGL), along with transporting NGL and NGL derivatives. Gas transmission pipes and fuel storage stations are also operated by the company.

## 3. METHOD

The P/E ratio is the most commonly used indicator of the connection between a firm's financial performance and profits. It is the amount of money a shareholder is prepared to spend for just a US\$ of corporate income. Alternatively, the P/E ratio indicates how many times a company's equity trades compared to its earnings. It is calculated by dividing the currency's pricing by its profits for each shares.

$P/E \text{ Ratio} = \frac{\text{Market value per share}}{\text{Earnings per share}}$	(1)
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Enterprise value-to-sales (EV/sales) is a financial valuation metric that pales in comparison a firm's asset value to its yearly sales. It provides stakeholders with a quantitative criterion for valuing a business based on its revenues while accounting for both the firm's equity and debt.

$EV/Sales = \frac{MC + D - CC}{\text{Annual Sales}}$	(2)
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$MC = \text{Market capitalization}$	(3)
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$D = \text{Debt}$	(4)
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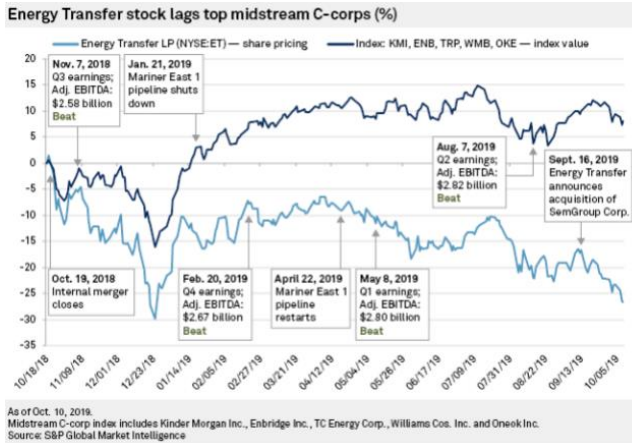
$CC = \text{Cash and cash equivalents}$	(5)
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The enterprise value divided by net income, taxation, depreciation, and amortization is the EV multiple, that is used to assess a company's worth (EBITDA). It takes into account an outstanding stock and liquidity levels, as well as its share value, and compares that valuation to the business' cash efficiency.

$\text{Enterprise Multiple} = \frac{EV}{EBITDA}$	(6)
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$EV = \text{Enterprise Value} = \text{Market capitalization} + \text{total debt} - \text{cash and cash equivalents}$	(7)
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$EBITDA = \text{Earnings before interest, taxes, depreciation and amortization}$	(8)
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**Figure 1** Energy Transfer stock lags top midstream C-corps (%)

Our analysis method is simply based on the annual financial reports of the two companies, screening out the key information, and then analyzing and comparing from various dimensions. Next, we will explain in detail which dimensions we compared from. In the first step, we have a preliminary understanding of the profitability of each company. At this time, we will use EBIT and EBITDA. Many indicators can be used to analyze the profitability of the company. EBIT and EBITDA are two of them. Although they have similarities, differences in the calculation may lead to different results and tell us different information. EBIT is used to analyze the performance of the company's core business, and EBITDA is used to measure the company's financial performance and project revenue potential. From these two aspects, we can roughly understand which companies are profitable. Next, we will analyze the dividend yield of each company. Although some industries usually have higher dividend yields, generally speaking, mature companies are most likely to pay dividends. On the other hand, the average dividend of relatively small but still rapidly growing new companies may be lower than that of mature companies in the same industry. Therefore, if the dividend rate is low, it is not often a bad thing. After all, we have to look for relatively "cheap" stocks. Next is earnings per share (EPS). EPS is a company's net profit divided by the number of common shares outstanding. Therefore, in other words, EPS represents how much money a company can earn per share. This is very direct data. The higher a company's earnings per share, the more profitable it is considered. Finally, we will analyze the P / E ratio of each company. We use the P / E ratio to determine the relative value in the stock comparison of the two companies. At the same time, it can also be used to compare a company with its history, or to compare the overall market with each other or over time. P / E also links the company's share price to its earnings per share. However, a high P / E ratio may

mean that the company's shares are overvalued, or investors expect a high growth rate in the future. Consequently, investors can't buy "cheap" stocks. To sum up, we use multi-dimensional analysis to find "cheap" stocks.

#### 4. RESULTS

This section presents analysis of valuation of Energy Transfer and Oneok, Inc. (OKE). The section also indicates that these companies as billion companies and have retained the market share in the competitive market. Energy Transfer has \$42.91 billion of enterprise value, and EBITDA is \$12.31 billion. The Forward P/E ratio is 6.16, Enterprise Value/ Revenue is 1.22, and Enterprise Value/EBITDA is 5.68. Its profitability is strong with 8.59% profit margin and 14.51% operating margin. In terms of management, the Return on Assets ratio is 5.56%, and the Return on Equity ratio is 18.45%. In the fiscal year of 2020, Energy Transfer has made \$58.79 billion of revenue and \$10.38 billion of gross profit. The quarterly revenue growth is 67.4%. There are 2.7 billion shares outstanding in the market, and the book value per share is 8.04 in the recent quarter.

OKE has \$42.91 billion of enterprise value, EBITDA \$3.08 billion. Forward P/E ratio is 16.89, Enterprise Value/Revenue is 3.13, and Enterprise Value/EBITDA is 13.28. Compared to Energy Transfer, OKE's share price is relatively high. What's more, OKE has better profitability with 10.43% profit margin and 17.98% Operating margin. In addition, OKE is effective in management provided that its Return on Assets is 6.59% and Return on Equity 23.83%. In the fiscal year of 2020, OKE made \$13.69 billion revenue and 108.6% quarterly revenue growth. The outstanding share is 445.84 million, and Book Value per Share is 13.10.

We can conclude from the two firms' current financial data that they are still growing and leading the energy production industry. They have good operating performance, and the whole industry seeks progress while maintaining stability. Furthermore, in this paper, we investigate the link between oil prices and equity markets in Energy Transfer and OKE in this study. The study found that both Energy Transfer and OKE companies have witnessed significant increases or variations in the stock market. The stock market in Energy Transfer can also be observed in the past few years; this is the same as OKE, whose stock market has shifted significantly in the last five years. Researchers find that almost all energy businesses have significant long-run relationships, whereas those in petroleum & energy storing and transit have a lesser correlation. Researchers discover time-varying findings and an asymmetrical integration for equities at NY Stock Market utilizing a rolling co-integration, wherein energy

businesses react more too bad than favorable news. This might result from small businesses meaning fewer current processes, leaving them more exposed to swings in energy costs.

TABLE I. RELATIONSHIP BETWEEN VARIABLES

<i>Variables</i>	<i>Coefficient</i>	<i>Standard error</i>	<i>t-statistic</i>	<i>Probability</i>
<i>Coint eq1</i>	-0.424	0.0053	-22.5345	0.0010
<i>D(op)</i>	-0.574	0.5350	-12.5353	0.0645
<i>c</i>	0.553	0.6430	2.5353	0.0020

The analysis discovered a substantial but inverse relationship between oil and the profitability of the Energy Transfer and OKE stock market indices. According to traditional knowledge, a spike in crude prices raises production costs for most industries and forces customers to end up spending on fuel, limiting corporate profitability for other companies. According to Energy Transfer and OKE analysis, a spike in oil prices often decreases the predicted economic growth while increasing inflationary pressures across shorter time horizons. Reduced economic expansion forecasts, in consequence, decreased company profitability projections, lowering the impact on stock values.

Generally, the behavior of the whole market and industry share prices throughout moments of great and poor genuine energy prices is compatible with the notion that rises in oil prices affect share prices through their effect on the forecast for company profits. In this regard, the cyclical products industry's relative shortfall may be connected to traders' fears that rising oil prices would have an especially big damping impact on profits, which is the most strongly associated with the economic cycle.

## 5. DISCUSSION

There is a significant association between energy prices as well as the share market, according to research. The results are congruent with Shaeri and Katirciolu's [6] results, who investigated the influence of petroleum products on the American stock market. In this case, they had examined data from the previous 15 years and used Karl Pearson's relationship between two variables, resulting in the conclusion that a decline in the value of petroleum products negatively influenced the stock markets. According to the results, petroleum is the most important supply of fuel all over the globe. They stated that crude prices are regarded as the most important necessity of every nation, and as a result, prices impact the nation's success. Oil prices are becoming just as crucial as financial markets. The petroleum industry is the nation's leading commodities market.

Our findings are comparable with Delgado et al. [7] and Bai and Koong [8], who discovered a clear correlation between stock market performance and gas price. This propensity for equities to move in lockstep with crude prices is completely unusual, particularly in Nepal, Ireland, Myanmar, and South Leone, which are major oil imports [9]. According to Atil et al. [10], one reasonable explanation for this movement in a similar direction is that these crude costs and share prices respond to changes in a collection of shared fundamental elements, referred to as world consumer spending. On the one hand, lowering consumer spending would decrease oil demand, putting down oil prices. On the other hand, slowing economic growth will reduce business investment, causing stock prices to drop. This means that when stock investors react to a change in the crude prices, they are reacting to a movement in a collection of common root factors that have prompted the oil cost to fluctuate.

The results are further corroborated by Mishra et al. [11], who investigated the link between energy prices volatility and Tehran stock market returns from 2017 to 2018. Considering the occurrence of large disruptions to the oil price throughout the time, and thus its influence on the trajectory of the New York stock exchange, the volatility for the oil price is assessed in this research using the values at risk (VAR) approach. As a result, they use three methodologies, notably Gregory and Hansen, Saikkonen and Lütkepohl, and the Johansen trace test, to analyze the long-run relationships among variables in the context of structural discontinuities. The findings revealed a long-term link between crude prices risk and UK stock prices. The findings also revealed that global restrictions on Iran's nuclear program had a substantial influence on the Stocks Listed. Furthermore, Wen et al. [12] discovered an inverse relationship between energy prices and the United Kingdom stock market. The findings revealed there is a long-run link between crude costs and the share market.

The findings imply that investors should broaden their investing or savings portfolios by including gold. The same is true for businesses, which might add gold deposits to their portfolios to buffer against inflationary pressure. The rising inflation rate has a favorable impact on the exchange rate volatility. This might be a favorable indicator for consumers, investors, businesses, and the administration. Whenever faced with growing inflation, consumers may anticipate that oil prices will rise shortly. As a result, a strong instinct should urge people to purchase metals at a certain time to appreciate greater gold returns while also offsetting the impact of interest rates.

## 6. CONCLUSION

While energy production industry has been a major sector of the U.S. stock market, it has not attracted enough attention from investors. From OKE and Energy Transfer we have uncovered that this industry is still expanding and making decent profit. At the same time, their stock price is not overrated. Hence, investors can include the energy industry in their investment bundles to bring more diversity into the decision. On the other hand, government can provide convenience to this industry to better consolidate its already existing strength. In addition, along with the expansion of the unforeseen pandemic, we need to be extra cautious to the performance of the energy industry. Investors, policymakers and scholars need to do more research on more energy companies at this time to review their financial and operating conditions so that we have a thorough knowledge of their value in the stock market.

The results show that OKE has an industry value of \$42.91 billion and EBITDA \$3.08 billion and Forward P/E ratio is 16.89, which is higher as compared to Energy Transfer. The findings also reveal that OKE has a better profitability and 10.43% profit margin and 17.98% operating margin. The results from this study will provide major insights into finance and economics because governments should take steps to improve the efficiency of the share market, which will promote North American economic activity. For instance, officials should eliminate the policy and institutional hurdles to stock market growth, expand the economic growth, strengthen the stock industry's capabilities, and reestablish market players' trust in the area.

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