

An Investigation of the Basic Analysis of Renewable Energy Businesses

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Abstract—Essential analysis evaluates how economic and industrial market and corporate factors impact general well-being. The primary purpose behind any analysis generates a prediction which serves to achieve financial gains from future price fluctuations. The renewable energy sector in India supports three primary purposes including economic progress and energy stability alongside universal energy distribution and climate change reduction. The leading organized renewable energy company sector contains First Solar and Gita Renewable Energy Ltd as well as Tata Power Solar Ltd and Waa Solar Ltd and Websol Energy System Ltd and Ujaas Energy Ltd. A sector needs investor attraction through proven profitability metrics along with anticipations about future profitability potential. Additional backing from significant RE policy instruments should exist to support sectors requiring substantial investment compared to traditional energy technologies.

Index Terms—Renewable energy Businesses, Fundamental analysis.

I. INTRODUCTION

The main purpose behind renewable energy deployment in India exists to support national growth and establish stronger energy security systems as well as raise access to electricity access and reduce carbon emissions. Sustainable development becomes achievable through sustainable power along with providing accessible affordable reliable sustainable modern energy to all citizens. India established itself as a world leader in renewable energy markets because of government backing and favorable economic conditions. The Indian government implements policies together with programs and a friendly financial framework to gain international investment which fuels fast growth in renewable energy markets. Future studies indicate that renewable energy will

establish numerous domestic employment positions throughout the upcoming decade.

The worldwide environmental problems including global warming and exhaustion of fossil fuels and pollution-related health threats serve as catalysts for shifting to renewable energy as an alternative energy source. The growing rate of renewable energy has reached its peak but renewables comprise a minimal fraction of overall global energy usage today. Renewable energy installations worldwide will grow their capacity by 50% during the coming five years. The International Energy Agency reports that solar capacity will expand by 600 GW while renewable electricity generation will increase by 1,200 GW throughout the next four years.

World renewable energy technologies offer vast unexploited potential according to current industry data. Any sector should demonstrate its profitability capabilities to attract investors through present or projected financial success. The sectors of Renewable Energy (RE) need extensive investment compared to traditional energy technologies which requires supportive strong RE policy instruments. The financial performance trend of RE companies remains unclear since it makes it hard to understand how individual RE policy instruments affect their operational outcomes. The research method uses K-means cluster within a machine learning algorithm to measure financial performance while tracking an ROE trend of selected companies. The application of a machine learning algorithm represents a possible first approach to detect financial patterns in company performance. The earlier research organized the companies through their energy generation types including wind, solar and biomass while using ROE/Return on Asset (ROA) to evaluate financial results. The current study evaluates the financial performance of RE companies through

ROE while clustering deals with their ROE data to discover their performance patterns. The analysis of this study specifically selects avoidance of identifying pre-defined trends which affect company performance. Finally, the study tries to outline the fundamental of the companies.

By performing return on equity decomposition fundamental analysis evaluates how securities get mispriced momentarily before correct market valuations occur on selected 28 Indian and US RE companies. The final proper price eventually emerges on the market. Profits may be achieved by capitalizing on security mispricing followed by market price adjustments.

A. What is Fundamental Analysis?

Evaluations of security assets take place through systematic investigations which identify intrinsic values by analyzing economic data, financial data together with qualitative and quantitative factors. Security value assessment requires fundamental analysts to research all potential influences which include macroeconomic items (economic conditions and industry performance) along with specific features (company financial state fundamentals and management practices). Fundamental analysis depends on actual information for determining security worth. The main purpose of fundamental analysis is to generate a valuation figure that investors can use to compare against market prices in order to determine their security position. The fundamental analysis system operates as the complete opposite to technical analysis methods.

Understanding a company through fundamental analysis leads investors to calculate its fair market value even though the present trading price might not match this value. Pretty frequently security pricing is both above and below its actual worth.

The analysis predicts extended market direction shifts through its forecasting capabilities. Investors establish long-term investments through this approach because it shows them where their stock should price. The method permits investors to locate profitable businesses which demonstrate robust expansion potential.

B. Statement of the Problem

India deploys renewable energy for four principal targets that consist of boosting economic growth together with ensuring energy safety and providing

greater energy availability and decreasing environmental impacts of climate change. Sustainable development becomes achievable through sustainable energy along with making modern and affordable energy accessible to all citizens.

Because the renewable industry uses significant amounts of water and energy it faces escalating environmental restrictions. Obtaining or keeping their operational license requires renewable companies to reevaluate their extraction along with production and distribution techniques.

The scientific goal is to understand both historical performance results from the past five years and possible market performance predictions for 10 selected renewable energy corporations. The collection of scripts uses fundamental analysis for their evaluation. The fundamental analysis includes the evaluation of economic indicators as well as company ratios. These companies are examined to derive information that helps in making investment choices.

C. Objectives of the Study:

- To examine the financial performance of the chosen renewable firms;
- To examine the basic analysis of the chosen renewable enterprises.
- To evaluate the potential standing of certain renewable energy firms.

D. Research Methodology

1. Research Design

The present study deal with Quantitative research. A process of quantitative research consists of data collection followed by numerical analysis. The analysis method serves two purposes: detecting patterns alongside calculating averages and making predictions and conducting studies of causal linkages and establishing findings applicable to broader populations.

2. Time Period

This study is made of a period of 5 accounting years from 2018-2022.

3. Size of sample

Large Cap

- First Solar
- Gita Renewable Energy Ltd

4. Mid Cap

- TATA Power Solar Ltd
- Waa Solar Ltd

5. Small Cap

- Websol Energy System Ltd
- Ujaas Energy Ltd

II. FINDINGS OF THE STUDY

- The analysis shows that Gita Renewable Energy Ltd demonstrated the highest EPS record in 2021 which remains the highest value during five years while Ujaas Energy Ltd presented the lowest EPS performance in 2019. An organization achieves the best profitability when EPS stays at its peak because elevated EPS values increase the equity share market price in stock exchanges.
- P/E ratio evaluation reveals that Power Solar maintains the highest value at 183.4838 in 2018 while Ujaas Energy possesses the lowest measure at 0.59 during the same period. A lower P/E ratio signifies favorable stock value due to expensive share prices.
- The analysis shows that the market prices of the five years exceeded book value figures. For the year ending in 2022 the book value stands at 258.46 with a positive outcome. The current relation of stock price to book value stands at a relatively high level.
- The First Solar P/E ratio exceeds 1 while other companies listed in this study hold P/E ratios below 1 indicating that First Solar stocks possess an overvalued status. A P/E ratio exceeding 1 point to stock market overvaluation whereas the value below 1 signals stock undervaluation.
- The highest P/S ratio of 402.66 belongs to Gita Renewable Energy Ltd while Waa Solar Ltd has the lowest ratio of 2.36 during 2018. A favorable P/S ratio appears in 2022.
- The research indicates that First Solar achieved the highest ROE of 141.6856% in 2022 but Gita Renewable Energy Ltd demonstrated the lowest ROE of 0.019465 in 2018. The Return on Equity (ROE) evaluation demonstrates a company's profitability through illustrating profit levels that result from shareholder investment funds.
- First Solar holds the highest ROCE value of 5966.41 in 2021 with Websol Energy System Ltd

displaying the minimum ROCE value of 1.4 in the 2020 fiscal year.

III. SUGGESTIONS

- An investigation indicates that long-term investments produce the highest possible returns.
- The investors should choose Gita Renewable Energy Ltd because it demonstrates the highest ratio of EPS among all other renewable energy companies.
- First Solar's fundamental analysis shows moderate results from its Price to Earnings ratio.
- Investors can make substantial investments into First Solar shares because it has demonstrated strong return on equity during previous three years.
- Assessing Ujaas Energy Ltd demonstrates the company benefits from possessing the minimum P/E ratio.
- The Return on Capital Employed value at Websol Energy System Ltd stands at its most minimal point thus indicating shareholders will gain less benefit through reinvested profits.

IV. CONCLUSION

Company survival depends heavily on the satisfaction of their investor base as well as consumer base that operates as their target market. Investors who experience satisfaction will take investment risks for companies that offer advantages and reliability. The financial efficiency of organizations with positive ratio requires them to make their resources use more efficiently while improving operational effectiveness. Organizations surviving best adhere to the fundamental law of survival.

Ujaas Energy Ltd stands as the company with the minimal P/E ratio of 0.59 according to the studied businesses. A stock price becomes more advantageous for purchase when its P/E ratio decreases. A high EPS figure at Gita Renewable Energy Ltd is positive since higher EPS enhances equity share value on stock exchanges thereby making profitability assessment easier. First Solar demonstrates the best ROE among the selected firms since ROE indicates a company's ability to yield profits from shareholder investments. The companies should make long-term investments to receive high returns.

BIBLIOGRAPHY

- [1] Ahmed s Wafi, H. H. (2015). “Fundamental analysis models in financial market”.
- [2] al., G. e. (2005). Renewable energy can be used in several fields, one example being the economic sector, in terms of measuring efficiency, profitability and competitiveness.
- [3] al., Y. e. (2011). Comparing OECD and non-OECD countries, non-OECD economies use a higher proportion of RE in the total energy used, but OECD economies use more geothermal, solar, tide and wind sources.
- [4] Dr.C. Balakrishnan. (2016). The study can be analyzed with many aspects like financial facts, financial ratios, financial health, financial strength and utilization of assets, etc.
- [5] Strass, N. a. (2003). Has focused on the relationship between stock prices and dividend value model by pooling firms using cointegration forecasting models to test the long-term relationship between dividends and stocks prices.
- [6] Tiwari, H. V. (2009). “A Fundamental analysis of public sector banks in India”.
- [7] Tyagi, V. C. (2011). Venkatesh C K and Madhu Tyagi.