Systematic And Un-Systematic Factors Influencing Profitability Of The Energy Sector In Pakistan

Sikandar Hayat[1,] Bilal Idress[2], Dr. Jawad Karamat[3], Naseer Muhammad[4], Muhammad Subhan[5], Dr.Arshad Iqbal[6]

ABSTRACT

The purpose of the study is to investigate the Micro and Macro Dynamics that affect the energy sector during the study period of 2018-2023 by using the most reliable models of the panel data analysis. The factors of financial leverage and age are positive while liquidity, risk, GDP, growth, and size significantly affect financial Performance. Moreover, tangibility, market share, interest rate, and inflation rate have insignificant impacts on return on assets (ROA).On the other hand, analyze the influence of factors that determine financial performance on return on equity (ROE).Financial leverage, growth, risk, tangibility, liquidity, GDP, and INF are positive and significantly related, while risk, tangibility, and INF have an insignificant influence on ROE. Thus, ROE is significantly and positively influenced by financial leverage, growth, liquidity, and GDP. The factors of size, age, market share, and interest rate are not statistically significantly related to return on equity (ROE). The energy should be focused on internal factors that will enhance the efficiency of the industry by providing valuable services. It also recommended that systematic factors must be considered while making major decisions.

Introduction

The energy industry significantly influences the economic prosperity of a nation. The increase in energy consumption is strongly related to economic growth and plays a role in the stability of a country (Stern, 2021). Additionally, the production of energy facilitates the optimal utilization of natural resources. Industrialization necessitates energy availability, generating employment opportunities for individuals (Usman, 2022). The development of infrastructure is contingent upon the availability of energy resources. State revenue will also increase due to the energy industry's expansion.

[1] Graduated in Business Administration, University of Malakand Email: Sikanderhayat3140@gmail.com

[2] PhD Scholar CUST University, Idressharis571@gmail.com

[3]Assistant Professor, Center for Management Science and Commerce, University of Swat

[4] PhD scholar university of Malakand, Department of Management Sciences,Email:naseerahmadmaju@gmail.com

[5] Department of Management Sciences, Islamia Collage University Peshawar, muhammadsubhanicp2020@gmail.com

[6] Lecturer Iqra National University Peshawar Email: Arshiqbal1985@gmai.com(Corresponding Author)

The clean energy sector stands at the forefront of global efforts to combat climate change and transition towards sustainable energy sources (Joel, 2024).The efficient administration of the global economy is predicated on energy. The economic advancement of a nation is contingent upon its ability to access energy resources. All companies that produce, distribute, transmit, and sell energy are in the energy business. The economic development of a nation is significantly influenced by its energy consumption. The energy sector is essential for promoting sustainable economic growth, as all economic activities depend on energy resources. Investors,stakeholders, policymakers, and the economy prioritize an organization's financial performance. Investors especially benefit from the return on investment. In addition to employee income, a company's financial performance enhancements also enable it to operate more environmentally friendly manufacturing facilities and offer its customers superior products. The creation of additional employment and higher personal revenues directly results from increased profitability, which in turn encourages further investment. Furthermore, it guarantees the efficient payment of taxes and adherence to state regulations. Industrial expansion and population growth have substantially increased Pakistan's energy consumption over the past few decades. Regrettably, Pakistan is experiencing an energy crisis because the expansion of energy production has yet to maintain pace with the expansion of energy demand. This has emerged as a substantial impediment to thenation's energy supply.Organizations' strategies are the primary indicator of their distinct missions and objectives. Scale, profitability, and expansion comprise several of the primary objectives. The primary cause of increased profitability is a long-standing debate regarding which factor, growth or scale, is more significant. A substantial amount of research has been conducted to resolve this controversy. It is a critical factor in the success of a business in terms of growth and the source of a country's economic evolution and development (Asimakopoulos et al., 2019). According to Vijayakumar and Devi (2021), profitability significantly influences continuous, orderly, and organized growth.

Despite vast studies on profitability, the micro and systemic elements affecting profitability in Pakistan's energy industry should be studied more. Pakistan'senergy industry needs to be studied more due to previous research focusing on advanced economies or rising markets. Financial leverage, growth, and liquidity are significant drivers of profitability in many industries (Al-Alawi & Sousa, 2022; Gupta et al., 2021), but their effects on Pakistan's energy industry have yet to be studied. This sector's relationship between GDP, inflation, and profitability must be clarified. Sector-specific elements, including regulations, energy policies,and market dynamics, interact with firm-level factors to affect profitability, but little is known. According to studies, market share and tangibility might differ by industry (Khan et al., 2020; Wieczorek-Kosmala et al., 2021). In Pakistan's energy industry, these linkages have not been fully investigated. This gap underlines the need for thorough research incorporating micro and systemic elements to understand performance drivers in this vital industry. This gap must

be closed to improve Pakistan's energy businesses' financial performance and sustainability, boosting economic growth and energy security.

This research that determine the economic condition of Pakistan's energy industry. Financial growth and other factors are distinct aspects of firm performance. A company's financial performance is assessed by examining its revenue, profits, and value growth, which may be shown in a rise in its stock value. Moreover, Joel (2024) investigates the other factors that affect the performance and efficiency of the energy sector. A company's financial performance is evaluated using parameters such as profitability, dividend increase, turnover of sales, investment base, and capital utilization. The financial success may be evaluated by competitiveness.

Statement of the Problem

Although there have been many studies conducted on corporate financial performance, there is a dearth of definitive findings identifying the broad aspects that impact financial performance in Pakistan's energy sector. Current research fails to use all available indicators of financial success fully and tends to prioritizethe analysis of major corporations while neglecting smaller ones. Moreover, the relation between individual elements unique to a business and larger macroeconomic variables and their collective influence on financial performance has not been examined collectively. This study fills this gap by analyzing individual business characteristics and macroeconomic factors that affect Pakistan's energy sector's financial performance.

Research Objectives

1. To examine factors (financial leverage, age, liquidity, Tangibility, Risk, Market Share, and Size) related to a company and broader economic factors (Inf, GDP, Tax rate) that influence the financial performance, as calculated by the returnon assets (ROA).
2. To examine factors related to a company and broader economic factors that affect the financial performance, specifically assessed by return on equity (ROE).

Hypotheses of the Study

H1: Firm specific to the company and macroeconomic factors has impact onthe financial performance, as calculated by the return on assets (ROA).

H2: Firm level and macroeconomic factors has impact on the financial performance, as calculated by the return on equity (ROE).

Review of Literature

Four studies on this subject specifically investigate the elements that impact the financial performance of non-financial sector organizations. The panel data regression approach was used for data analysis. In 2017, Tariq, Ali, and Usman undertook a comparative research of Pakistan's food and textile industries toidentify the variables that influence the financial performance of these sectors. The findings indicate a detrimental correlation between long-term debt and company performance. Pakistan's food sector benefits from scale,

Unpredictability, physical assets, and the opportunity to lower taxes without debt. Al-Jafari and Samman (2018) examined Oman's profitability factors. In 2019, Hunjra, Chani, Javed, Naeem, and Ijaz examined how microeconomic factors affect Pakistani cement companies' financial performance. The research found that their size, duration, growth, and borrowing affect cement enterprises' financial performance. Leverage improves an organization's return on assets.

In contrast, size, age, and growth improve return on equity (ROE) performance. Abbas et al. (2017) explored how leverage, growth, and company size affect corporate profitability. This study uses linear regression to analyze panel data from different businesses from 2020 to 2010. The data show that leverage hurts corporate profitability, whereas scale helps. Growth and liquidity hardly affect corporate profitability. Chhapra and Asim (2019) explored how capital structure affects corporate development. Analysts created a linear regression model using 2020–2010 data from 90 organizations. Financially leverage was examined about fixed assets, firm size, taxes, and profitability. The study indicated that fixed assets, size, taxes, and net profit do not affect the financial leverage of the textile industry, spinning units, and composite units. The authors conclude that corporate scale reduces power.

Hermelo and Vassolo (2018) examined many factors that influencethe expansion of companies. To do this, they gathered data on small and medium- sized enterprises (SMEs) in Tucumán, Argentina. Using survey methodologies, they collected data on growth, technology, financial capacities, investments, regional markets, and product diversity. Data was gathered from 34 organizations spanning various sectors such as sugar, paper, textiles, grain, meat, food and drinks, citrus processing, equipment production, and dairy processing. The authors use growth as the dependent variable, which is quantified as the sales increase between 1994 and 1996. (The authors use opening and closing inventories for some independent variables). This research employs a linear regression model and the general least squares approach for estimate. The study findings indicate that the size of the company (according to its resources) does notsignificantly influence its development. However, investment in technology has a notable adverse effect on the organization's growth. The F value also suggests thatthe model lacks significance. For growth promotion to succeed, workers and employers must behave formally in the workplace, which might take time. It requires ending informal contacts, which reduces firm profitability. Alternative: Workers are motivated to expand by the anticipated future rewards of firm profitability and expansion. Dedication boosts employee performance, boosting growth and profit (Serrasqueiro, 2019). A corporation grows gradually via increasing revenue, expanding with acquisitions or mergers, profit growth, product innovation and diversity, and headcount. Many studies estimate progress by removing this year's sales from the previous year's revenue and splitting by previous year's sales. Simple sales growth analysis is common. Demand predicts growth and changes in demand for a business's products or services may affect sales (Vijayakumar& Devi, 2021).ROA is a metric that quantifies a company's successful utilization of assets to produce profits. ROS is the short-term performance of a corporation, as it represents the revenue earned per rupee of sales. ROE is a metric that quantifies a company's profit from its shareholders'

investments. ROA and ROE provide a long-term perspective on a company's performance (Vijayakumar& Devi, 2021).

According to Greiner (2020), profitability and growth may have either a positive or negative correlation, depending on the behavior of managers. According to his analysis, when managers motivate their staff, the personnel demonstrate improved performance, leading to the growth and profitability of the organization. Bartel (2019) highlighted that enhancing productivity leads to higher job performance, and one way to do this is by providing staff with suitable training. Enhanced work performance directly correlates with higher corporate profitability. Roper (2019) and Gschwandtner (2020) discovered no correlation between the two nouns. In research done by Serrasqueiro (2019) on Portuguese enterprises, it was shown that there is a direct correlation between profitability and growth. Small enterprises often depend on internal funding to grow their activities and circumvent external finance needs. This fosters a favorable correlation between expansion and financial gain. When organizations fail togenerate profits from their current markets due to diversification and reduced profit margins, the expansion they accomplish may harm profitability (Glancy, 2019).

In their research, Mirza and Javed (2017) examined the variables that influenced 60 Pakistani commercial businesses listed on the Karachi Stock Exchange between 2018 and 2021. The organization experiences an increase in financial profitability. In a research undertaken by Nikolaus (2018), a comparison was made between the financial performance variables of non-financial listed firms in the Netherlands and Indonesia. The research examined data collected between 2019 and 2017. The research used return on equity (ROE) to evaluate the profitability of construction enterprises. The results suggest a direct correlation between the size of a company and its liquidity and success. Nevertheless, an inverse relationship exists between the capital structure and return on equity (ROE). Macroeconomic variables, such as GDP, economic cycles, and interest rates, do not substantially impact the financial success of Malaysian construction enterprises. Organizations prioritize growth and profitability. However, there needs to be a universally established correlation between the two. Several research has been undertaken to investigate this correlation, but they still need to be reached. Various research has yielded divergent findings, a selection of which is shown here. Jang and Park (2021) conducted a study to determine the correlation between the profitability and growth of a company. They contend that although rising profits may foster growth, pursuing expansion can impede profitability. Some scholars contend that corporate profits contribute positively to economic development (Goddard et al., 2018; Coad, 2018, 2019). Bottazzi et al. (2018) use productivity as a metric to assess profitability and contend that there is no correlation between profits and growth. Chandler and Jansen (2017), Mendelson (2017), and Cowling (2018) use sales growth as a means of predicting growth and discovering a favorable correlation between profits and sales growth. Markman and Gartner (2017) assert no correlation between growth andprofitability. According to Reid (2019), expansion has a detrimental impact on profitability.

3-Research Methodology

This research is characterized by its quantitative methodology. This study used published Secondary data, classifying it as secondary research. The study population comprises all Energy sector businesses listed on the Pakistan Stock Exchange. This research only focused on the energy sector. The energy industryin Pakistan comprises four key sectors: refineries, Electricity generating and distribution firms, oil and gas exploration companies, and oil and Gas marketing organizations. Out of a total of 35 firms, 29 companies were chosen from The four sectors within the energy industry. We gathered yearly data about the variables from 2.18 to 2023 to achieve this objective. Hence, the significance of the data is subordinate. This research employs panel data analysis. The financial data has been Extracted from financial statements of the insurance companies, includes Insurance Books,

State Bank of Pakistan and Annual reports. The Panel data model was used Fixed, Random and Polled OLS model. The Dignostic test were used Hausman, Brush Pagan Lagrange Multiplier test (LM). The most suitable test were found Random effect Model for ROA, and ROE.

3.1.1 Variables of the Study

This research examines 11 variables to analyze the factors that influence the financial performance of Pakistan's energy business, both internally and externally.

GDP	Gross Domestic Product	ROA	Return on assets	TANG	Tangibility
MK TSH	Market share	G	Growth	LIQ	Liquidity
AGE	The Age of the firm	Risk	Risk	Lev	Leverage

Equation-------------1

$$ROA_{it} = \beta_{0i} + \beta_1 Lev_t + \beta_2 LIQw_{it} + \beta_3 SIZE_{it} + \beta_4 Grow_{it} + \beta_5 B.Risk.r_{it} + \beta_6 Tan_{it} + \beta_7 Mkt Sh_{it} + \beta_8 Age + \beta_9 GDP + \beta_{10} INf + \beta_{11} Int$$

Equation--------------2

$$ROE_{it} = \beta_{0i} + \beta_1 Lev_t + \beta_2 LIQw_{it} + \beta_3 SIZE_{it} + \beta_4 Grow_{it} + \beta_5 B.Risk.r_{it} + \beta_6 Tan_{it} + \beta_7 Mkt Sh_{it} + \beta_8 Age + \beta_9 GDP + \beta_{10} INf + \beta_{11} Int$$

Table No1:

Profitability Calculated in Terms of Return on Assets (ROA)			
Factors	**Beta (β) Value**	**P-Value**	**Results**
Financial Leverage	-0.215788	0.0000	H_1 Accepted
Growth	0.192596	0.0362	H_1 Accepted
Size	4.849900	0.0445	H_1 Accepted
Age	-0.153206	0.0411	H_1 Accepted
Risk	-0.099439	0.0000	H_1 Accepted
Tangibility	-0.333619	0.1901	H_1 Accepted
Liquidity	0.533599	0.0001	H_1 Accepted
Market Share	-0.203980	0.7269	H_1 Accepted
Gross Domestic Product	1.982620	0.0491	H_1 Accepted
Rate of Inflation	-2.043311	0.0170	H_1 Accepted
Rate of Interest	1.649308	0.5127	H_1 Accepted

Table No 2:

Profitability Calculated in Terms of Return on Equity (ROE)			
Factors	**Beta (β) Value**	**P-Value**	**Results**
Financial Leverage	0.395167	0.0012	H_2 Accepted
Growth	0.114003	0.0098	H_2 Accepted

Profitability Calculated in Terms of Return on Equity (ROE)			
Size	0.015904	0.3218	H$_2$ Accepted
Age	0.245869	0.0456	H$_2$ Accepted
Risk	-0.306512	0.0468	H$_2$ Accepted
Tangibility	0.305677	0.4328	H$_2$ Accepted
Liquidity	-0.966940	0.0021	H$_2$ Accepted
Market Share	-1.567331	0.2428	H$_2$ Accepted
Gross Domestic Product	6.022212	0.0399	H$_2$ Accepted
Rate of Inflation	-8.408602	0.0437	H$_2$ Accepted
Rate of Interest	5.148011	0.1813	H$_2$ Accepted

Regression Analysis
Table No 3 Random effect Model

Factor	Beta (β) Value	T-Value	P-Value	Significance ($p < 0.05$)
Financial Leverage	-0.215788	-4.32	0.0000	Yes
Growth	0.192596	2.10	0.0362	Yes
Size	4.849900	2.01	0.0445	Yes
Age	-0.153206	-2.05	0.0411	Yes
Risk	-0.099439	-4.50	0.0000	Yes
Tangibility	-0.333619	-1.32	0.1901	No
Liquidity	0.533599	3.88	0.0001	Yes
Market Share	-0.203980	-0.35	0.7269	No
Gross Domestic Product	1.982620	1.98	0.0491	Yes
Rate of Inflation	-2.043311	-2.39	0.0170	Yes
Rate of Interest	1.649308	0.66	0.5127	No

The table above shows regression analysis findings for Return on Assets (ROA) elements impacting profitability. The effect of each component is calculated by its beta (β), t-value, p-value, and significance level. Financially, leverage has a negative beta of -0.215788 and a significant p-value of 0.0000, affecting ROA. Growthsignificantly boosts ROA with a beta of 0.192596 and p-value of 0.0362. A beta of 4.849900 and a p-value of 0.0445 show that size positively affects ROA. Agesignificantly impacts ROA, with a beta of -0.153206 and a p-value of 0.0411. Risk negatively impacts ROA, as evidenced by a beta of -0.099439 and p-value of 0.0000.Tangibility's beta of -0.333619 and p-value of 0.1901 shows that it does not affect ROA. The beta of 0.533599 and p-value of 0.0001 show that liquidity positively affects ROA. ROA is unaffected by market share, with a beta of -0.203980 and a p- value of 0.7269. GDP positively and significantly affects ROA, with a beta of 1.982620 and a p-value of 0.0491. Inflation adversely affects ROA, with a beta of - 2.043311 and a significant p-value of 0.0170. Finally, ROA is unaffected by interest rate, with a beta of 1.649308 and p-value of 0.5127. Growth, financial leverage, age, size, liquidity, risk, GDP, and inflation influence ROA, although tangibility, market share, and interest rate do not.

Table No 4 Random Effect Model

Factor	Beta (β) Value	T-Value	P-Value	Significance (p < 0.05)
Financial Leverage	0.395167	3.24	0.0012	Yes
Growth	0.114003	2.60	0.0098	Yes
Size	0.015904	0.99	0.3218	No
Age	0.245869	2.02	0.0456	Yes
Risk	-0.306512	-2.01	0.0468	Yes
Tangibility	0.305677	0.79	0.4328	No
Liquidity	-0.966940	-3.10	0.0021	Yes
Market Share	-1.567331	-1.17	0.2428	No
Gross Domestic Product	6.022212	2.08	0.0399	Yes
Rate of Inflation	-8.408602	-2.04	0.0437	Yes
Rate of Interest	5.148011	1.35	0.1813	No

Finally, ROA is unaffected by interest rate, with a beta of 1.649308 and p-value of 0.5127. Furthermore, tangibility, market share, and interest rate do not significantly influence ROA; growth, financial leverage, age, size, liquidity, risk, GDP, and inflation rate are major determinants. Age increases ROE with a beta of 0.245869 and a p-value of 0.0456, showing significance. Risk negatively impacts ROE, as shown by a beta of -0.306512 and p-value of 0.0468. Tangibility has a beta of 0.305677 and a p-value of 0.4328. However, it does not affect ROE. Liquidity negatively affects ROE with a beta of -0.966940 and a p-value of 0.0021. A beta of - 1.567331 and a p-value of 0.2428 shows that market share does not affect ROE. GDP positively affects ROE, with a beta of 6.022212 and a p-value of 0.0399. Inflation negatively affects ROE, with a beta of -8.408602 and a p-value of 0.0437. The interest rate does not substantially affect ROE, as evidenced by its beta of 5.148011 and p-value of 0.1813. Financial leverage, growth, age, risk, liquidity, GDP, and inflation influence ROE, whereas size, tangibility, market share, andinterest do not.

Results of the Study
4.1.1   Financial leverage and Growth
In hypothesis one, financial leverage has a negative coefficient, and its P value suggests rejecting the null hypothesis. The financial leverage variable coefficient is positively associated, and its P value rejects the null hypothesis for hypothesis two. Therefore, financial leverage positively influences return on equity (ROE).In hypothesis one, the growth correlation coefficient is positive, and the growth P value rejects the null hypothesis. Thus, growth boosts return on assets, which is good. In hypothesis two, the growth variable coefficient is positively correlated, and thegrowth P value recommends rejecting the null hypothesis. The result is standing in line with Abbas et al. (2017) and Bottazzi et al. (2018).

4.1.2 Size and age

The size P value rejects the null hypothesis in hypothesis one because the size variable coefficient is positive. Hypothesis two's size variable coefficient is positive, and its P value accepts the null hypothesis and is not highly significant support the result by Abbas et al. (2017).The negative age variable coefficient rejects the null hypothesis in hypothesis one. Important P values support this denial. In hypothesis two, the age factor coefficient of correlation is positive, and the size P value is not statistically significant.Mirza and Javed (2017) support the results.

4.1.3 Risk and Tangibility

The positive risk variable coefficient and the risk P value suggest rejecting the null hypothesis for hypothesis one. The risk P value in hypothesis two contradicts the nullhypothesis as the risk variable coefficient is negative.The P value of the unfavorable correlation coefficient of tangibility suggests that hypothesis one should be accepted.Risk, however, has minimal bearing on ROA. The P value in hypothesis two indicates that the null hypothesis should be rejected since the correlation coefficient of the observable variable is negative.

4.1.4 Liquidity and Market share

The coefficient of the liquidity variable is positive, and the P value for the financial leverage indicates that we should reject the null hypothesis for hypothesis one.Hypothesis two posits a positive correlation between the liquidity coefficient and the P value, indicating that the null hypothesis should be rejected.The market share coefficient has a negative value, and the P-value provides evidence in favor of the null hypothesis for hypothesis one. Hypothesis two posits that the market share coefficient has a negative value, and the P-value provides evidence in favor of the null hypothesis.

4.1.5 Gross Domestic Product, Inflation rate and Interest rate

Since the economic output variable's coefficient is positive, the P-value of GDP rejects the null hypothesis for hypothesis one. Due to the positive coefficient of the economic output variable, the second hypothesis's P-value rejects the null hypothesis. The null hypothesis supports the first hypothesis since the rate of inflationcoefficient is negative and the P-value is low. Therefore, the return on assets is mostly unaffected by inflation. With a negative rate of inflation coefficient and a correspondingly large P-value, the null hypothesis is rejected in the second hypothesis. Return on equity (ROE) is severely damaged by inflation. With a positivecoefficient and a correspondingly small P-value, the null hypothesis (H1) is supported by the rate of interest variable. The null hypothesis supports the second hypothesis due to the positive correlation coefficient and P-value of the rate of interest variable.

Conclusion

This research aims to examine the factors that influence financial success. Thechosen industry for this research is the energy sector. The findings are derived using panel data analysis. The data suggest that some elements favor financial success while others have an adverse effect. ROA is significantly influenced by financial

leverage, age, liquidity, risk, GDP, and growth size. ROA is significantly negatively impacted by financial debt and age. ROA is positively influenced by growth, size, risk, liquidity, and GDP. The research concluded that tangibility, market share, interest rate, and inflation rate do not substantially impact return on assets (ROA). The second aim is to analyze the influence of factors determining financial performance on return on equity (ROE). ROE is significantly influenced by financial leverage, growth, risk, tangibility, liquidity, GDP, and INF. The research revealed that risk, tangibility, and INF had a noteworthy adverse influence on ROE. ROE is significantly and positively influenced by financial leverage, growth, liquidity, and GDP. The research concluded that the influence of size, age, market share, and interest rate on return on equity (ROE) is not statistically significant.

Recommendations
Financial managers in the energy business must effectively handle internal variables that need attention. To develop comprehensive strategies for Pakistan's energy business, policymakers must consider these variables. When making investment choices, decision-makers and investors should thoroughly analyze the issues above. Other sectors in Pakistan should carefully analyze significant internal and external aspects that impact firm success when making financial choice

REFERENCES
1. Abu-Tapanjeh, D. A. (2019) An Empirical Study of Firm Structure and Profitability Relationship: The Case of Jordan. Journal of Economic & Administrative Sciences, 41-59.
2. Akhtar, S., Javed, B., Maryam, A., &Sadia, H. (2019) Relationship between Financial leverage and Financial performance: Evidence from Fuel & Energy Sector of Pakistan. European Journal of Business and Management, 7-17.
3. Akinlo, A. (2020). Energy consumption and economic growth: Evidence from 11 Sub-Sahara African countries. Energy Economics, 2391-2400.
4. Al-Alawi, A. N., & Sousa, M. J. (2022) The impacts of geopolitical risks on the energy sector: Micro-level operative analysis in the European Union. Economies, 10(12), 299. https://doi.org/10.3390/economies10120299
5. Al-Jafari, M. K., &Samman, H. A. (2018) Determinants of Profitability: Evidence from Industrial Companies Listed on Muscat Securities Market. Review of European Studies, 303 311.
6. Ana-Maria,&Ghiorghe. (2019) The Determinants of Financially Performance in the Romanian Insurance Market. International Journal of Academic Research in Accounting, Finance and Management Sciences, 299-308.
7. Aqeel, A., & Butt, M. S. (2018) The Relationship Between Energy Consumption and Economic Growth in Pakistan. Asia-Pacific Development Journal, 101-109.
8. Asafu-Adjaye, J. (2017) The relationship between energy consumption, energy prices, and economic growth: time series evidence from Asian developing countries. Energy Economics, 615-625.
9. Asimakopoulos, I., Samitas, A., &Papadogonas, T. (2019) Firm-specific and Economy-Wide Determinants of Firm Profitability Greek Evidence Using Panel Data. Managerial Finance, 930-939.

10. Belke, A., Dobnik, F., &Dreger, C. (2021) Energy consumption and economic growth: New insights into the cointegration relationship. Energy Economics, 782-789.

11. Bhayani, S. J. (2010) Determinant of Profitability in Indian Cement Industry: An Economic Analysis. South Asian Journal of Management, 6-20.

12. Boadi, E. K., Antwi, S., &Lartey, V. C. (2017) Determinants of Profitability of Insurance Firms in Ghana. International Journal of Business and Social Research, 43-50.

13. Çekrezi, A. (2018) Determinants of financial performance of insurance companies: A case of Albania. International Journal of Economics, Commerce and Management, 1-10.

14. Chontanawat, J., Hunt, L. C., &Pierse, R. (2020) Does energy consumption cause economic growth?: Evidence from a systematic study of over 100 countries.Journal of Policy Modeling, 209-220.

15. Ehi-Oshio, O. U., Adeyemi, A., &Enofe, D. A. (2017) Determinants of Corporate Profitability in Developing Economies. European Journal of Business and Management, 42-50.

16. Enekwe, C. I., Agu, C. I., &Nnagbogu, E. K. (2019) The Effect of Financial leverage on Financial performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. IOSR Journal of Economics and Finance, 17-25.

17. Garcia, M. T., &Guerreiro, J. P. (2016) Internal and External Determinants of Banks' Profitability The Portuguese case. Journal of Economic Studies, 90-107.

18. Gupta, R., Bastian, A., &Ghosh, S. (2021) Panel data analysis to investigate factors influencing profitability in the energy sector. Energy Economics, 96, 105064. https://doi.org/10.1016/j.eneco.2021.105064

19. Hunjra, A. I., Chani, M. I., Javed, S., Naeem, S., &Ijaz, M. S. (2019). Impact of Micro Economic Variables on Firms Performance. International Journal of Economics and Empirical Research, 65-73.

20. Joel, O. T., &Oguanobi, V. U. (2024). Leadership and management in high- growth environments: effective strategies for the clean energy sector. InternationalJournal of Management & Entrepreneurship Research, 6(5), 1423-1440.

21. Khan, M., Ahmad, S., & Ali, R. (2020) Economic and financial determinants of profitability in Pakistan's energy sector. Journal of Energy Management, 11(4), 67-89.

22. Kiran, S., Kakakhel, S. J., &Shaheen, F. (2018). Corporate SocialResponsibility and Firm Profitability: A case of the oil and gas sector of Pakistan. City University Research Journal, 110-119.

23. Kiruri, R. M. (2017) The effects of ownership structure on bank profitability in Kenya. European Journal of Management Sciences and Economics, 116-127.

24. Kumar, N., &Kaur, D. K. (2016) Firm Size and Profitability in Indian Automobile Industry: An Analysis. Pacific Business Review International, 69-78.

25. Le, T., &Chizema, A. (2021) State ownership and firm performance: Evidence from the Chinese listed firms. Organizations and markets in emerging economies, 2021, 72-90.

26. Lee, C.-C., & Chang, C.-P. (2020) Energy consumption and economic growth in Asian economies: A more comprehensive analysis using panel data. Resource and Energy Economics, 50-65.
27. Malik, H. (2021) Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan. Academic Research International, 315- 321.
28. Masood, O., & Ashraf, M. (2019) Bank-specific and macroeconomic profitability determinants of Islamic banks. Qualitative Research in Financial Markets, 255-268.
29. Mirza, S. A., &Javed, A. (2017) Determinants of financial performance of a firm: Case of Pakistani stock market. Journal of Economics and International Finance, 43-52.
30. Mwangi, M., &Murigu, J. W. (2018) The determinants of financial performance of general insurance companies in Kenya. European Scientific Journal, 288-297.
31. Nikolaus, V. (2018) Determinants of firm financial performance in Indonesia and the Netherlands: A comparison. 5th IBA Bachelor Thesis Conference. Enschede, The Netherlands: University of Twente, The Faculty of Behavioural, Management and Social Sciences.
32. Omondi, M. M., &Muturi, W. (2017) Factors Affecting the Financially Performance of Listed Companies at the Nairobi Securities Exchange in Kenya. Research Journal of Finance and Accounting, 99-105.
33. Pratheepan, T. (2019) A Panel Data Analysis of Profitability Determinants Empirical Results from Sri Lankan Manufacturing Companies. International Journal of Economics, Commerce and Management, 1-9.
34. Qureshi, M. A., &Yousaf, M. (2019) Determinants of profit heterogeneity at the firm level: evidence from Pakistan. International Journal of Commerce and Management, 25-39.
35. Sheikh, N. A., & Wang, Z. (2010) Financing Behavior of Textile Firms inPakistan. International Journal of Innovation, Management and Technology, 130.
36. Soytas, U., & Sari, R. (2003) Energy consumption and GDP: causality relationship in G-7 countries and emerging markets. Energy Economics, 33-37.
37. Stern, D. I. (2021) The role of energy in economic growth. Ecological Economics Reviews, 29-51.
38. Tailab, M. M. (2019) Analyzing Factors Affecting Profitability of Non-Financial U.S. Firms. Research Journal of Finance and Accounting, 17-26.
39. Tariq, W., Ali, I., &Usman, H. M. (2017) Empirical Identification of Determinants of Firm's Financially performance: a Comparative Study on Textile and Food Sector of Pakistan. Business and Economic Research, 487-497.
40. Tayyaba, K. (2017) "Leverage" – An Analysis and Its Impact On Profitability Concerning Selected Oil And Gas Companies. International Journal of Business and Management Invention, 50-59.
41. Usman, M., &Balsalobre-Lorente, D. (2022). Environmental concern in the era of industrialization: can financial development, renewable energy, and natural resources alleviate some load?