



FUNDAMENTAL ANALYSIS OF THE ENERGETIC SECTOR AT BUCHAREST STOCK EXCHANGE

Titus SUCIU

titus.suciu@unitbv.ro

Transilvania University of Brasov, Romania

Abstract: The fundamental analysis respond to the question: which company is best for investment? This article analyses six companies in the pharmaceutical sector that quotes at Bucharest Stock Exchange, from the point of view of fundamental analysis. For investing in one of seven companies, the author analyses the following indicators: ROE, ROA, leverage rate, current liquidity, SPS, P/BV, DY, effective dividend and dividend per share. Following the fundamental analysis the author concludes that one company has the best financial situation to invest in it.

Key words: *fundamental analysis, investment, energetic sector*

Introduction

Everything is energy, and the energy sector plays a key role in the national economy. . The importance of this sector is given by the fact that there is a sectoral stock market index (BET-NG) which brings together the 10 most important companies in this sector. That is why this paper aims to identify the best performing companies on the Bucharest Stock Exchange for a possible investment. In recent years, the dominant trend has been the shift to green energy.

Does fundamental analysis answer the question of where to invest? In this sense, we start from the balance sheet of the companies and calculate the following indicators: SPS, ROA, ROE, leverage ratio, current liquidity.

These indicators express how healthy a company is. After that, the dividend-related indicators count: EPS and DY. In the end, we are interested in BV and P / BV. The last one shows the best time to invest, using value-based investment.

Perišić et al. consider that a novel framework should comprise principles and criteria for a sustainable bioeconomy, and involve ecological, social, and economic aspects as an input for regulation, science, and broad society. (Perišić et al., 2022) Por this situation, the stable base can be solved by connecting these power plants and by using flexibility measures



provided by demand response technology, smart grids, large scale energy storage capacity. (Klitkou et al., 2022)

The article of Pires et al., shows the growing interest in offshore wind power generation and highlights how recently the interest in the studies that assess the technical–economic feasibility of this source has grown. (Pires et al, 2022) The ratio of 80% of the total emissions over the life cycle using electric energy, can be reduced by half in the case of a house with thicker external wall insulation and an eco-biomass boiler. (Grygierek et al., 2022)

The Energetic Sector

The companies in the energetic sector are: SNP Petrom, Romgaz SA, Transgaz SA, SN Nuclearelectrica, Transelectrica SA, Electrica SA, Rompetrol Refinery, Conpet SA, OIL Terminal, Rompetrol Well Services.

Petrom SA (SNP) is the largest energy company in South East Europe, being active along the entire energy value chain: from oil and gas exploration and production, to refining and fuel distribution, and further, to the generation of electricity, as well as the sale of natural gas and electricity. The company is organized into three operationally integrated business segments - Upstream, Downstream Oil, Downstream Gas. OMV Petrom Group also benefits from OMV's expertise and international exposure, with the majority shareholder holding 51.01% of the shares.

Romgaz SA (SGN) carries out the following activities: geological exploration in order to discover new gas fields, methane gas production by exploiting the deposits in the company's portfolio, supply and distribution of natural gas, special operations and well services, production and supply of electricity . Based on concession agreements, ROMGAZ currently carries out oil operations in exploration-development-exploitation perimeters, as owner, with a 100% participation quota, within 8 perimeters. The company's shares support global certificates of deposit (GDRs) issued by The Bank of New York Mellon, GDRs traded on the London Stock Exchange (SNGR symbol). <https://www.romgaz.ro/organizare> .

SN Transgaz SA (TGN) is the technical operator of the National Natural Gas Transmission System which ensures in safety conditions and in compliance with European performance and environmental standards, the transport of over 90% of the natural gas consumed in



Romania. Since 2003, Transgaz has been a member of GIE (Gas Infrastructure Europe). Being a transmission operator, TRANSGAZ has been a member of ENTSOG (European Network of Natural Gas Transmission System Operators) since July 2010.

S N Nuclearelectrica S.A. (SNN) is the only producer of nuclear energy in Romania and fuel related to the technology used, CANDU 6, the company was founded in 1998. The company is based in Bucharest and has two branches: Cernavoda Nuclear Power Plant which operates Units 1 and 2 and produces electricity and supplies thermal energy to the Pitesti Nuclear Fuel Factory, which is a qualified producer of CANDU 6 nuclear fuel.

CN Transelectrica SA (TEL) is a Transmission and System Operator, ensuring the permanent improvement of the technological performance and adequacy of the Electric Transmission Network. The company launched in December 2013, the issue of corporate bonds worth 200 million lei, the securities entering trading on the domestic capital market at the beginning of the current year. The Company's efforts were reflected in the rating agency Moody's Investors Service, which maintained Transelectrica's rating at Ba2 and improved its outlook from 'negative' to 'stable'.

Electrica SA (EL) is the only company in Romania listed in the field of electricity distribution and supply, having as main object of activity the sale of electricity, and as secondary objects other services. Electrica Furnizare SA is traditionally present in 18 counties of the country, but also in other 7 through the work points established by it. With an experience of over 120 years on the electricity market, the company Electrica Furnizare SA is part of the Electrica Group and has a portfolio of over 3.2 million customers. Electrica is a company with majority private capital, successfully listed on the Bucharest Stock Exchanges and the London Stock Exchange, since 2014.

Rafinaria Petromidia (RRC) Noua capacitate a rafinariei Petromidia asigura KMG International premisele necesare consolidarii si dezvoltarii activitatilor de retail si trading in regiunea Marii Negre, atat in tari unde sunt statiile Rompetrol (Romania, Bulgaria, Republica Moldova, Ucraina si Georgia), cat si in alte state precum Turcia, Serbia sau Grecia.

SC Conpet S.A. (COTE) ensures the transport through pipelines and by rail of domestic and imported crude oil, gasoline, condensate and liquid ethane to refineries in Romania, with an existence of over 110 years.



OIL Terminal S.A. (OIL) is the largest terminal for import / export of crude oil, petroleum and petrochemical products nationwide, offering services are: storage and shipment of crude oil, fuel oil, petroleum products.

Rompetro Well Services (PTR) provides technical support for its operations in Europe and Central Asia, offering a wide range of specialized services for oil and gas wells. PTR has a branch in Kazakhstan, active in Central and Eastern Europe, and in Turkmenistan (for oil equipment sales).

Because petromidia Refinery, Transeletrica and Electrica nu dot have net profit, we stall analyse the other 7 companies.

The Fundamental Analysis

We give too much importance to dramatic events that have a low probability, and we overlook things that happen frequently. Uncompensated costs and losses are understood differently, even if they have the same impact on capital. (Bernstein, 2014, 276-278).

Rosario & Mazundar demonstrate that „high sales and profits need not necessarily result in high VAIC”. (Rosario & Mazundar, 2022, 212) Samaras et al. consider that „multicriteria decision analysis provides the methodological framework”. (Samaras et al., 2006, 1382)

The fundamental analysis takes into account a large volume of information which includes: the main economic and financial indicators per company and by comparison with similar companies in the same branch, company strengths, hotspots, international context, government policies, global economic context, the main competitors and their financial performance. The main indicators of fundamental analysis are:

1. The profit per share shows the amount of a share held by shareholders from the profit obtained by that firm during an accounting period:

$EPS = \text{Net profit} / \text{No. of existing common shares}$

**Table 1: The profit per share indicator for energetic sector**

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
EPS	0,2	3,14	5.28	2.46	6.51	0.01	0.01
Scoring	2	4	5	3	6	0	0

Source: www.bvb.ro/companii

As we can see in the previous table first company is COTE which receives 6 points, second is TGN which receives 5 points, third is SNG which receives 4 points, fourth is SNN which receives 3 points, fifth is SNP which receives 2. For PTR and Oil who have the same score, they do't receive any point.

2. Apart from the gains obtained in a certain period, it is interesting to know the value of the own capital that returns on a share. An indicator of this activity is the carrying amount of equity per share, briefly called the carrying amount per share:

$BV = \text{Equity value} / \text{Number of existing common shares}$

Graham's school "considers the balance sheet as an element of study in the evaluation of actions, but the evaluation should not be reduced to the simple calculation of the BV".

(Hurduzeu, 2006, 39)

Table 2: The BV indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
BV	0,60	23,25	336,21	2,67	76,69	0,49	0,77
Scoring	1	4	6	3	5	0	2

Source: own calculation

As we can see in the previous table first company is TGN who receives 6 points, second is COTE who receives 5 points, third is SNG who receives 4 points, fourth is SNN who receives 3 points, fifth is OIL who receives 2, sixth is SNP who receive 1 point. For PTR that is least and Oil who is least, it do't receive any point.

3. The effective return on shares held by shareholders can be expressed as follows:

$R_a = \text{dividend per share} * 100 / \text{market value of the share}$ (Stancu, Stancu, 2012, 381)

DY (Dividend Yield) characterizes the efficiency of a security investment.

**Table 3: The DY indicator for energetic sector**

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
DY	6.51	2.18	3.33	3,48	8.96	20.11	1.85
Scoring	4	1	2	3	5	6	0

Source: www.bvb.ro/companii

4. Price / Book Value (P/BV) is the ratio between the market price of shares and their book value. In the balance sheet, the carrying amount is identified by equity.

In these circumstances, if P / BV is supra-unitary, the company has created value for the shareholders, because the amount that the market investors would be willing to pay is higher than the amount that they would receive anyway from the liquidation of the assets, in time. what if P / BV is subunit it destroyed part of the value that the shareholders brought. The calculation formula is: price / book value per share.

Table 4: The P/BV indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
P/BV	0.83	2.18	0.76	1.82	1.06	1.58	0.18
Scoring	2	6	1	5	3	4	0

Source: www.bvb.ro/companii

5. Sales per share (SPS sales per share) express the value of sales per share, the indicator being especially useful for small companies in the launch phase or for those that record losses.

$SPS = \text{turnover} / \text{Average number of ordinary shares outstanding during the year.}$
(Gheorghiu, 2011, 70)

Table 5: The SPS indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
SPS	4,62	15.18	0,27	10,62	47,67	0,16	0,35
Scoring	3	5	1	4	6	0	2

Source: own calculation

6. The return on assets (ROA) reflects the performance of using the total assets of an enterprise, respectively the capital invested to maintain these performances. Calculated:



operating profit * 100 / total assets. It expresses the efficiency of using the company's assets in operational activity, respectively the degree of profitability of the entire capital invested in the company. (Helfert, 1987, 3)

Table 6: The ROA indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
ROA	7.42	22.59	2.06	12.67	7.68	-0.17	1.75
Scoring	3	6	2	5	4	0	1

Source: own calculation

7. Return on equity (ROE) expresses the ability of equity to create a surplus, after the return on borrowed capital that will allow the return on shareholder capital and self-financing of the enterprise. Calculated: net profit * 100 / equity. Financial profitability expresses the ability of a company to generate net profit as a result of using the company's equity.

Table 7: The ROE indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
ROE	8,37	21,16	4,17	12,62	0,05	1,18	3,29
Scoring	4	6	3	5	0	1	2

Source: own calculation

8. The degree of indebtedness (leverage ratio) reflects the degree to which equity ensures the financing of the company's activity or the degree to which the company's short- and long-term commitments are guaranteed by its equity. To be calculated: total debts * 100 / equity. (Helfert, 1987,48)

Table 8: The Leverage ratio indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
LR	46,05	381,39	101,15	15,12	16,18	11,71	28,44
Scoring	2	0	1	5	4	6	3

Source: own calculation



9. Current liquidity measures the company's ability to meet short-term obligations and reflects the ability to quickly convert current assets into cash (cash). Calculated: $\text{current assets} * 100 / \text{current debt}$. (Gheorghiu, 2011, 51)

Table 9: The Current liquidity indicator for energetic sector

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
CL	211,16	381,39	145,06	520,29	286,35	911,21	149,76
Scoring	2	4	0	5	3	6	1

Source: own calculation

A subunit amount means that the company needs to borrow or sell some of the fixed assets in order to pay its debts and avoid bankruptcy.

If liabilities grow faster than assets, it means the company is borrowing money to stay afloat. Similarly, a situation in which long-term debt decreases from year to year as assets increase indicates that the company generates excess cash, which it uses to pay off its debt, which is an indication healthy for years to come. It is also useful to examine the relationship with cash. When we subtract current liabilities from current assets, we obtain working capital. Here, the basic rule is simply the more, the better. (Browne, 2007, 119-122)

What factors determine the price we should be willing to pay for a share?

- a. Long-term perspectives.
- b. The quality and conduct of managers.
- c. Financial strength and capital structure.

Most investors look first at the results of the past, then at the reputation of the manager, then at the risk level of the fund and, finally, at its expenses. The smart investor looks at the same things, but in reverse order. (Graham, 2010, 255-265).

Wafi et. demonstrate that „the best model that can be relied upon to predict stock prices, is Residual Income Model”. (Wafi et al., 2015, 946) Bouselmi et al., found strong evidence that „shocks affect negatively the volume of transactions, positively the difference of opinions and that they tend to mitigate mispricing”. (Bouselmi, 2019, 102)

**Conclusion**

We consider that ROE, ROA, leverage rate, current liquidity are hard indicators of a company because they tell us if a company is good or bad, and SPS are P/BV soft indicators because they help us when to invest in a company.

Table 10: Final scoring

	SNP	SNG	TGN	SNN	COTE	PTR	OIL
Points	23	36	21	38	31	23	11

Sources: own calculations

So, first place is SNN (38 points), second SNG (36 points) and third COTE (31 points). SNP and PTR have the same ranking and the least is OIL. If I want to invest 5000 euro, I shall invest 2000 in SNN, 1800 in SNG and 1200 in COTE.

Capital market gains come from: the difference between the selling and the buying price, the income in the form of dividends (DY, effective dividend and dividend per share), the purchase of shares at a lower exchange rate than the market, the sale of shares at a higher exchange rate than that of the market.

To sell the bull, and to buy the bear, that is, to sell a stock when it is strong, and to buy it when everyone wants to get rid of it. (investment based on value: buy cheap and sell expensive)

References

- Berstein, P., 2014. Impotriva zeilor. Remarcabila poveste a riscului, Humanitas: București, pp.276.
- Blinder, D., Zubeldia, L., Surtayeva, S., 2022. Covid-19 and Semi-Periphery, Argentina and the Global Vaccines Research and Development, *Journal of World-Systems Research*, Vol. 27 Issue 2 , jwsr.pitt.edu DOI 10.5195/JWSR.2021.1049
- Bousselmi, W., Sentis, P., Willinger, M., 2019. How do markets react to unexpected fundamental value shocks? An experimental analysis, *Journal of Behavioral and Experimental Finance* 23: 90–113.
- Browne, C. H., 2007. Minighid de investitii bazate pe valoare, Publica: București. pp. 119-122.



- Gheorghiu, A., 2011. Diagnostic bursier, Victor: București, pp51-70.
- Graham, B., 2010. *Investitorul inteligent*, CH Beck: București, pp.255-265.
- Grygierek, K.; Ferdyn-Grygierek, J., 2022. Analysis of the Environmental Impact in the Life Cycle of a Single-Family House in Poland. *Atmosphere* , 13, 245.
<https://doi.org/10.3390/atmos13020245>.
- Helfert, E.A., 1987. *Techniques of financial analysis*, Irwin, Homewood, Illinois, pp. 3-48.
- Hurduzeu, Ghe., 2006. *Piete și burse internationale de valori*, Pro Universitaria: Bucuresti, p.39
- Klitkou, A.; Fevolden, A.M.; Andersen, A.D., 2022. EU R&D Funding for Electricity Grid Technologies and the Energy Transition: Centralised versus Decentralised Transition Pathways. *Energies* **2022**, 15, 868. <https://doi.org/10.3390/en15030868>.
- McDermott O., Antony J., Sony M., Daly S. , 2022. Barriers and Enablers for Continuous Improvement Methodologies within the Irish Pharmaceutical Industry. *Processes* 10, 73.
<https://doi.org/10.3390/pr10010073>
- Perišić, M.; Barceló, E.; Dimic-Misic, K.; Imani, M.; Spasojević Brkić, V. 2022. The Role of Bioeconomy in the Future Energy Scenario: A State-of-the-Art Review. *Sustainability*, 14, 560. <https://doi.org/10.3390/su14010560>
- Pires, A.L.G.; Rotella Junior, P.; Morioka, S.N.; Rocha, L.C.S.; Bolis, I. 2022. Main Trends and Criteria Adopted in Economic Feasibility Studies of Offshore Wind Energy: A Systematic Literature Review. *Energies*, 15, 12. <https://doi.org/10.3390/en15010012>
- Rosario S., Mazundar C.S., 2022. A Study of the Impact of Value-Added Efficiency on Profitability and Market Value in the Indian Pharma Industry, *Academic Journal of Interdisciplinary Studies Vol 11 No 1 January* ,DOI: <https://doi.org/10.36941/ajis-2022-0019>
- Samaras G.D., Matsatsinis N.F., Zopounidis C., 2008. A multicriteria DSS for stock evaluation using fundamental analysis, *European Journal of Operational Research* 187 :1380–1401
- Stancu I., Stancu D., 2012. *Finante corporative cu Excel*, Economica: București, p.381.
- Wafi A.S., H. Hassan H., Mabrouk A., 2015, *Fundamental Analysis Models in Financial Markets – Review Study*, *Procedia Economics and Finance* 30 : 939 – 947
www.bvb.ro/companii
<https://www.romgaz.ro/organizare> .