

A FINANCIAL RESEARCH ON TRANSPORT TRADE SERVICES GROUP

M.L. ANDRONIC¹ I.C. NETCU¹

Abstract: *Transport Trade Services (TTS) Group is the leading company that offers integrated logistics services on the Danube in Romania. The paper provides a pertinent image of the company, outlining several financial analysis indicators for the 2018-2022 period. The Discounted Cash Flow model and sensitivity analysis are two methods used to assess the intrinsic value of the company's stock price, the valuation resulting in a target price of 35.7 RON and a current price of 26.85 RON. With its listing on the Bucharest Stock Exchange, the company has experienced rapid growth and a sound financial health. TTS exhibits positive long-term prospects, consolidated through its increasing profitability and sustainable practices and projects.*

Key words: *TTS, DuPont Analysis, Valuation, Investment risk, ESG*

1. Introduction

Established in 1997, The Transport Trade Services (TTS) Group provides integrated logistic services on the Danube, respectively services that include railroad, fluvial, and road transports, as well as trans-board, and storage. In addition to that, TTS Group provides auxiliary services that consist of repairing and providing maintenance to ships, as well as other services specific to logistic management. The Group employs approximately 1,754 workers, and the leadership consists of a board of directors (BoD). TTS Group consists of 15 organizations that are administratively, legally, financially, economically, and commercially independent.

The Group differentiates itself based on the multitude of services provided on the Danube, conducting its activity in 3 directions: shipping, fluvial transport, and port operation. The main commodities operated by TTS are minerals (raw materials for the steel industry and rolled products), agricultural (cereals, oleaginous products, and animal feed), and chemicals (phosphate rock and finished products of the chemical fertilizer industry). The main customers of the Group are international traders of

¹ Transilvania University of Braşov, letitia.andronic@unitbv.ro, ORCID ID 0000-0002-4069-8613, ioana.netcu@unitbv.ro, ORCID ID 0009-0008-8779-4451

agricultural products, chemical fertilizers, and the essential components of these products. Other main customers are constituted by the metallurgical and stainless-steel complexes based on the Danube shores.

The paper aims to offer a complex image of one of the most important publicly traded companies in the transportation sector, in terms of the multimodal approach of the services it offers. The article is structured into six main sections, each of them contributing to creating a complete financial, environmental, and social image of TTS for the 2018-2022 period. As already seen in the introduction, relevant issues were presented with respect to the business general description. Chapter 2 offers an overview of the industry, strengthening the company's strategy and competitive positioning. The following chapter exhibits on the one hand, the main financial analysis indicators for five years in terms of liquidity, solvency, profitability and rates of return, while, on the other hand, it provides a brief valuation of the company, emphasizing the discounted cash-flow and sensitivity analysis. Section 4 encompasses the financial risks that the company is facing, while section 5 pinpoints the environmental, social and governance (ESG) elements. The last chapter of the paper gives various relevant conclusions of the research, the limitations, and recommendations for further investigation.

2. Industry Overview

2.1. Business strategy

With an asset base consisting of 10 floating cranes, a barge fleet of over 800,000 tons, multiple port terminals in Constanta and 7 Danube ports, TTS's business model aims at the vertical integration of operations. The strategic placement of the business lines is towards the core of the value chain and strategic geographic coverage, having TTS as a focal point. As mentioned in the introduction, the company is operating in three main segments of activity: shipping, transport, and port operation (Figure 1).

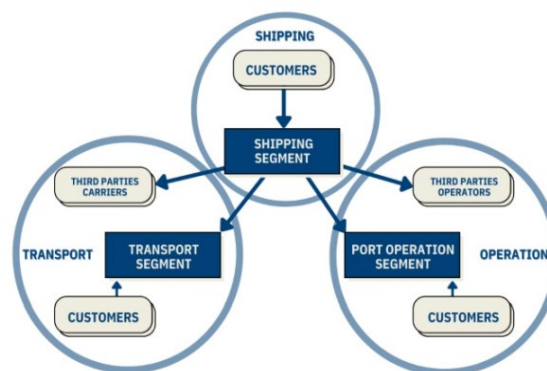


Fig. 1. *Transport Trade Services business model*

Source: *TTS Report of Board of Directors*

According to Figures 2 and 3, the minerals and the agricultural products represent about 85% of the total products that the company regularly transports.

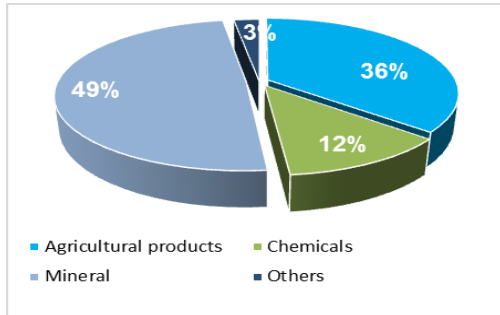


Fig. 2. Structure of the main commodities operated

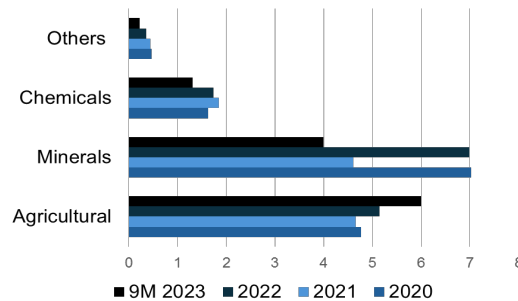


Fig. 3. Volumes transported by type (mln. tons)

Being among the carriers of the Danube with the lowest degree of CO₂ emissions, the Group is constantly investing in new capacities and improving the old ones. In 2023, investments exceeded 80 million euros and were concentrated in modernization, new barges, the acquisition of DECIROM, one of the 15 subsidiaries, investments in DECIROM’s assets for optimization, as well as decreasing the lead time of port operations. The investment policy aims at the impact on various segments, and not on the specific Internal Rate of Return (IRR) of each project. With a turnover of 934 million RON in 2022, 56% higher than in 2021, TTS is consolidating its position on the market.

Member of the PRO DANUBE Vienna logistics system, the Group plans to expand its activity and, according to the Trans-European Transport Network (TEN-T) initiative, to successfully complete the infrastructure modernization program in the port of Giurgiu.

Thus, the development strategy aims at three major objectives: organic growth, growth through acquisitions, and ESG. Listed on the Bucharest Stock Exchange (BSE) since 2021, TTS gained important international visibility, the BET benchmark index that includes its shares has had the best evolution in 2023, an excellent liquidity and a daily trading average of 350,000 euros. TTS Group shares have traded between 12.50 RON and 30.10 RON in the last 52 weeks. According to Figure 4, TTS Group has performed above the BET benchmark.

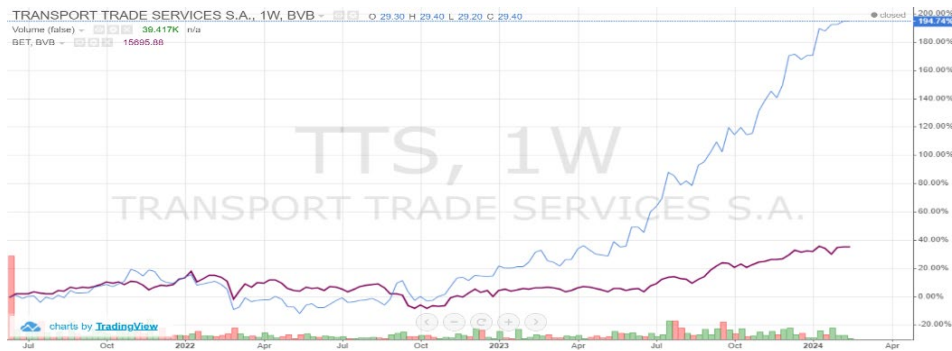


Fig. 4. TTS Group as compared to the BET benchmark

Source: Tradeville

TTS aims at sustainable growth, an aspect highlighted through the projects undertaken.



Fig. 5. *Stochastic Relative Strength Indicator (StochRSI) analysis of TTS*

Source: *Tradeville*

The evolution presented in Figure 5 shows that TTS Group's stock is overbought, based on the technical indicator, having a value above 0.8. The high value of the reading could signal a pullback of the stock. Since the technical instrument is used for taking advantage of momentum and sensitivity, it is not the perfect time to buy, and, since the company is showing high performance, it is not the right time to sell either.

2.2. Competitive positioning

In the naval transportation market, TTS holds a unique position as the leading provider of integrated logistics services addressing major customers looking for a company capable of handling large volumes of cargo. Moreover, against the background of a continuous increase in interest rates, the level of contracted loans is zero, the company's debts being mostly commercial (OCD). TTS aims at sustainable growth, an objective highlighted through the project undertaken by NAVROM Shipyard of installing a photovoltaic park, with a power of 0.25 MW, at the shipyard in Cernavodă.

Other participants in the cargo transport activity include cargo-partner Expeditii Ltd., provider of integrated logistics services and air, sea, rail and road transport, and port operators Chimpex S.A., Umex S.A., and Socep S.A.

The war in Ukraine rearranged the map of logistics chains in South-East (SE) Europe and beyond, the conflict influencing the transported volumes. As a result, flows of bauxite and raw materials for the steel industry exited the market while the flow of agricultural products increased as Ukraine redirected its import/export activity through

the port of Constanța. The tremendous volumes of transited goods generated a significant increase in the demand of river transport services and port operation, which, compared to a limited offer of working capacities, led to the increase of the tariffs applied in all segments. TTS was able to benefit from these upward trends in demand based on its operational flexibility and the opening of new routes for high value-added flows. Through prompt reactions to the challenges that have emerged in recent years, the company differentiates itself through its adaptability to change, efficiency and effectiveness of the activity of carrying important quantities of goods along the Danube (Figure 6).

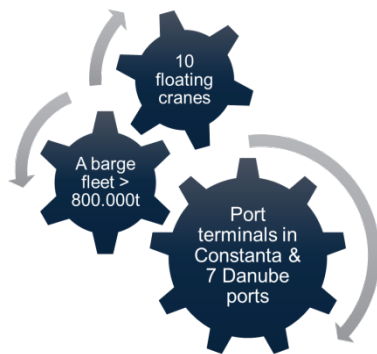


Fig. 6. TTS asset base

Source: team analysis based on TTS reports



Fig. 7. SWOT analysis

Source: the authors

Regarding the markets of the products operated by TTS, prospects are optimistic, especially regarding agricultural products whose volume is constantly heightening.

According to Figure 7, the SWOT analysis of the strategic position of the TTS Group identifies several positive and negative aspects, most of them being detailed in the next sections of the report.

Certain strong elements of the Group are the project co-financed by European funds for the modernization of the port of Giurgiu, the transparency in communication and reporting, providing integrated logistics services, and the ownership over its own fleet. The pivotal weaknesses are the high operating costs and the unqualified and deficient workforce in the field. Opportunities that would allow the development of the company are the geographical location of Romania that can expand the logistics services widely, capitalizing on similar TEN-T projects, and the possibility of using green engines to reduce fuel consumption and carbon neutrality goals. The threats to which the group is exposed are the Russia-Ukraine war, environmental regulations, increase in fuel prices,

reduction of agricultural output, and the activity dependence on the water level of the Danube.

On a scale from 0 to 5, with 0-no threat and 5-high threat, Porter's five forces are a useful tool to analyse TTS competitive environment (Figure 8).

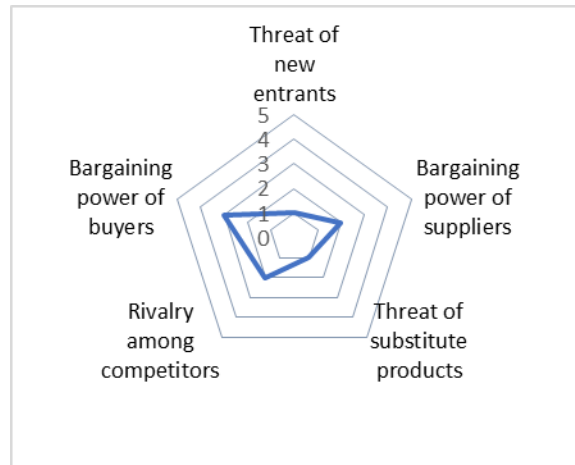


Fig. 8. Porter's five forces analysis

Source: the authors based on TTS reports

High capital requirement and an established brand name are making the transport industry less attractive, therefore there is an insignificant threat of new entrants for TTS. The bargaining power of suppliers is low based on the high number of suppliers and low input differentiation. Meanwhile, the bargaining power of buyers is moderate, based on the industry's concentration and amount of purchased volumes.

The quality and services performance, as well as the high switching costs result in a low threat of substitutes. The rivalry among existing competitors could be regarded as low in a market dominated by TTS as the main supplier.

3. Financial Analysis and Valuation

As a strong player in the waterway transport market, TTS is well positioned to benefit from the expected growth of the industry. Nevertheless, the company is dependent on upgrading its fleet to become more sustainable. To establish whether the entity is stable, solvent, liquid, or profitable enough, we performed a general evaluation of the projects, budgets, and other finance-related transactions for the 2018-2022 period.

3.1. DuPont Analysis

DuPont analysis is a technique used to decompose the different drivers of return on equity (ROE). The decomposition of ROE enables investors to focus on the key metrics of financial performance to identify the financial strengths and weaknesses of the company. Table 1 provides several main DuPont Analysis indicators including profit

margin (PM), asset turnover (AT) and financial leverage (FL).

DuPont Analysis

Table 1

Financial measures	2018	2019	2020	2021	2022
PM	3.75%	9.66%	9.21%	13.13%	19.06%
AT	71.92%	68.61%	81.65%	103.71%	108.57%
FL	160.80%	156.23%	146.59%	143.25%	136.14%
ROE	5.15%	11.17%	9.87%	15.71%	18.07%

Source: the authors based on TTS reports

For TTS, PM has increased from 2018 until 2022 by approximately 15.3 percentage points. This is based on a simultaneous increase in revenue and net income. Although the company has experienced a steady growth in 2022, revenue has increased by almost 56%, while net income has increased by 169%.

Asset turnover exhibits an increase in rate for all years, except for 2019. Such an increase implies that TTS is efficient at generating more RON per assets over time.

Equity multiplier exhibits a decrease over time, showing that the company is relying less on debt to finance its operations. The proportion of equity financing is on an increasing trend as compared to the weight of the debt. The decreasing rate shows that the company aims at financial stability, decreasing interest, restructuring the capital in the sense of relying less on debt financing. This financial tendency is consistent with the increase in retained earnings.

ROE shows that the TTS Group is generating more profit from equity, which is in line with its listing on the stock market, as well as generating return on its equity efficiently and effectively. The increase in ROE signals to the investors the effective use of capital, as well as an increased profitability, the potential for growth and expansion and positive prospects.

With respect to its profitability, the TTS Group's Return on Asset (ROA) is volatile. The return increases at a rate of 200%, decreases by 8%, then, it continues to increase by 34% and, respectively, by 131%. Therefore, from the historical data, the company exhibits uncertainty in generating revenue from its assets. This situation could also be caused by external economic factors such as the COVID-19 pandemic. It can be noticed that at the end of 2021 and the beginning of 2022, ROA started to increase at a high rate.

The net profit margin (NPM) and the operating profit margin (OPM) recorded a constant and sustainable increase during the period of five years. The ratios exhibit a stagnation during the years 2019-2020 based on the adverse market conditions caused by the COVID-19 pandemic, although the growth rate remained at sustainable levels.

Gross Profit Margin (GPM) has stayed constant during the 5-year period with a fluctuation +/- 3%. This is the result of the increase in the volume of goods sold, fluctuations in the raw material price, and changes in economic conditions and supply caused by the pandemic and the Ukraine war.

The profitability indicators mentioned are illustrated in Figure 9.

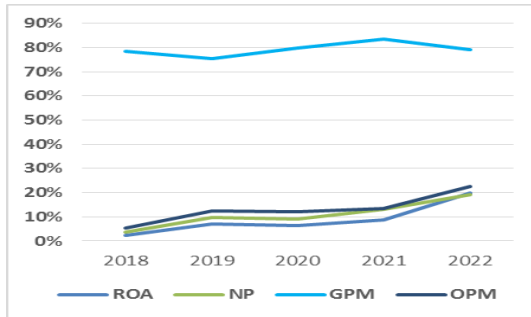


Fig. 9. TTS profitability indicators

Source: the authors based on TTS reports

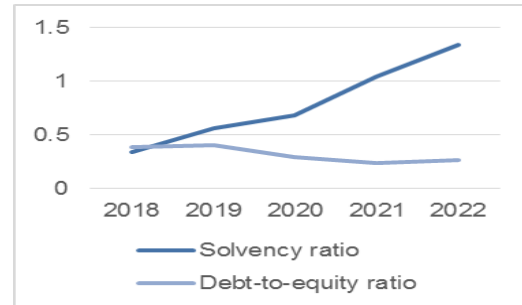


Fig. 10. TTS solvency indicators

Source: the authors based on TTS reports

The solvency analysis presented in Figure 10 shows that the company can meet its long-term debt obligations. The results are consistent with the increase in the debt-coverage ratio showing that the TTS Group can finance its long-term debt through operational earnings. The solvency analysis also solidifies the Group's position on reducing financing through debt. Besides 2022, the interest paid exhibits a decrease while Earnings Before Interest and Taxes (EBIT) record significant increases each year.

The increase in the cash ratio that TTS has experienced shows the financial health of the company. The upward trend is caused by the decrease in current liabilities and the considerable increase in current assets, which reduces financial risk and improves the liquidity of the company (Figure 11).

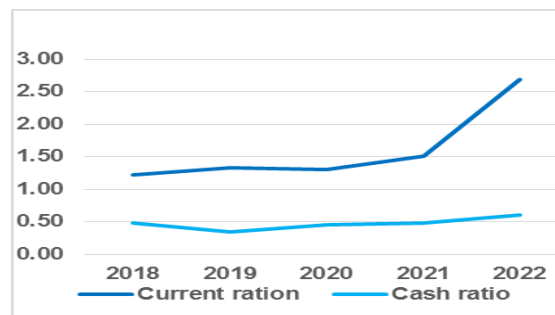


Fig. 11. TTS solvency indicators

Source: the authors based on TTS reports

The current ratio illustrates slow and constant growth, which shows that the company aims at maintaining stability and liquidity, although current liabilities are decreasing. In 2022, the cash account has increased by 148%, while current liabilities have only increased by 24%. It can be stated that the Group can meet its short-term debts.

3.2. The discounted cash-flow and sensitivity analysis

The Discounted Cash-Flow (DCF) model has been built on the 2023–2027-time frame with the terminal value calculated based on the 2027 results and the long-term growth

rate of 2%. The discount rate has been constructed as the risk-free rate based on government securities fixing with the addition of the equity risk premium of the Romanian market adding up 13.53%. Since TTS has published for 2023 only the results for the first three quarters, the values for the whole year 2023 have been estimated proportionally. Although we do not believe that the aggressive growth rate posted in 2022 and 2021 is sustainable in the future, TTS Group has, nevertheless, a robust operating model and a good geographical presence. The target price reached is 35.70 RON, with future opportunistic acquisition on price dips. The TTS stock is overbought in the market as per the Relative Strength Index (RSI) indicator.

Our DCF model is sensitive to key determinants, such as the weighted average cost of capital (WACC) and terminal value (TV) growth.

Sensitivity analysis

Table 2

35.7	11%	12%	13.53%	14%	15%
1%	40.72	37.28	33.01	31.89	29.73
2%	44.93	40.76	35.7	34.39	31.89
3%	50.2	45.01	38.9	37.34	34.41
4%	56.98	50.33	42.76	40.88	37.38
5%	66.01	57.17	47.54	45.21	40.96

Source: the authors based on TTS reports

Table 2 illustrates the sensitivity with different values for both the TV growth rate and WACC. For example, a 2% sustainable TV growth rate and a 13.53% WACC result in a target price of 35.70 RON.

4. Investment Risk

4.1. Operational risk and inflation risk

The biggest operational risk for TTS is drought, which can be also considered a natural risk. The number of drought incidents in Europe has increased steadily with the global warming, mainly affecting the south-eastern part of Romania. As such incidents have become more and more frequent, the Danube river canals become inaccessible to pass through for the cargo ships, increasing the losses for the company (Global Drought Observatory).

The company implemented an operational model that enables the use of rail transport to bypass the Danube sectors impacted by the severe drought. Thus, the fleet is split and deployed throughout the sector which allows navigation.

TTS reports also refer to the shortage of workers, which is another operational risk. The shortage of the skilled workforce causes an increase in workforce wages. The employees that require the most resources are the ship captains and the naval crane operators.

The operational risk of the oil price volatility represents a moderate market risk as demonstrated in the simulation (team consensus). From the 6th of February 2020 until the 6th of February 2024, the price of BRENT crude oil increased with a staggering 43.07% (Figure 12).

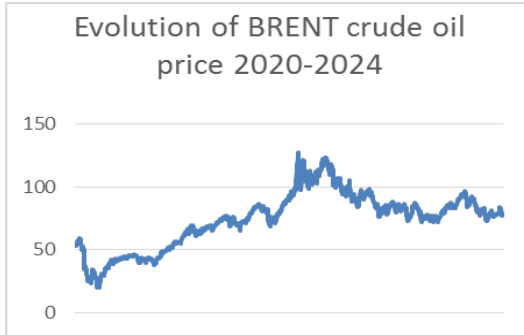


Fig. 12. *Evolution of oil price*
Source: the authors based on TTS reports

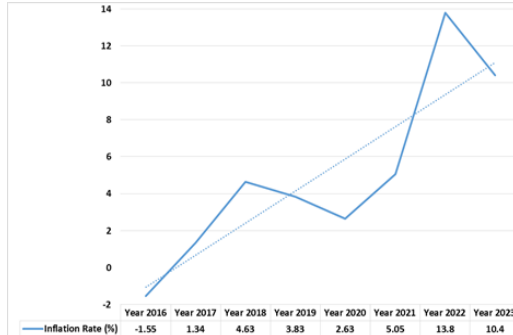


Fig. 13. *Evolution of the inflation rate*
Source: The National Institute of Statistics

As presented in the TTS's annual reports, inflation plays a pivotal role in the increase of material costs. From 2022, the inflation rate has remained in the two digits figures, with an increase of 8.7% from 2021 to 2022. Although the 2023 value is lower than the 2022 inflation rate, the investment risk may be assessed as a moderate one (Figure 13).

4.2. Cost of raw materials and cost of energy

Based on the increasing demand in raw materials in the construction and metallurgical sectors after the COVID-19 pandemic and the continuous Ukraine war, the double digit inflation and the price of raw materials grew steadily creating a burden for the company.

The cost of energy represents a market risk with a low impact. The price tends to stabilize in line with the liberalization of the energy market. Moreover, the increase in green energy offers development opportunities. The company is mitigating energy cost risk by investing in a photovoltaic park.

Figure 14 reflects the matrix of the five identified risks according to their impact and probability.

		IMPACT				
		Very Low	Low	Medium	High	Very High
Probability	Very High					
	High			Inflation	Shortage workforce	
	Medium			Drought		Cost of raw material
	Low					
	Very Low		Cost of energy			

Fig. 14. *Risk assessment matrix*

Source: *the authors*

5. Environmental, Social and Governance Analysis

Caused by its field of activity, we observed that the TTS Group delivers more ESG aspects than its peers. TTS stands out for the tremendous efforts put by the company’s management and shareholders into serving as a real model with respect to the environmental, social and governance components.

5.1. The Environmental component

Operating mostly along the Danube, the Group is working effortlessly to continue being, among its peers, one of the least polluters because of the modernization and the maintenance services operated on the NAVROM fleet. Within the naval industry, the Group stated that the environmental goals are more ambitious than those of the competitors and the company is constantly making satisfactory progress in reaching them.

One of the most important aspects to which the company pays a lot of attention is the intensity of the carbon dioxide (CO₂) emission. According to Figure 15, CO₂ direct and indirect emissions have an opposite evolution between 2018 and 2022. The direct CO₂ emission (left vertical axis), which has higher values as compared to the indirect emissions, reached its peak in 2019, the value of this year being 16.35%. For the indirect CO₂ emissions presented on the right vertical axis, we may observe that the highest level was recorded in 2018 (1,849.1 GHG tons), while the lowest level is characteristic for the year 2020 (902.6 GHG tons). The company managed to reduce its indirect emissions during this period by 104.86%. All in all, there is a significant increase in the overall direct and indirect CO₂ emissions in 2022 as compared to 2021. However, the total direct and indirect CO₂ emissions fell by 21.18% in 2022 as compared to the average of the previous analysed years. The CO₂ emission’s rate is showing a decrease of 26.2%, while the emission’s intensity decreased from 5.5% in the same period.

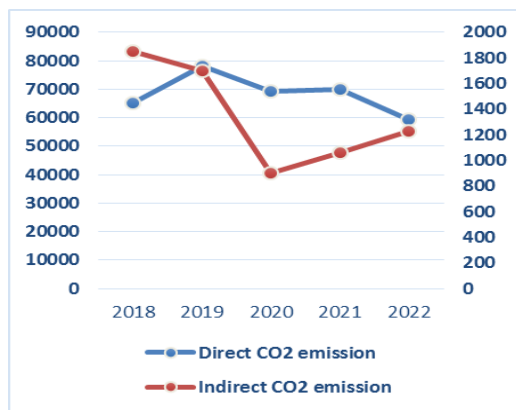


Fig. 15. Carbon dioxide emissions
Source: the authors based on TTS reports

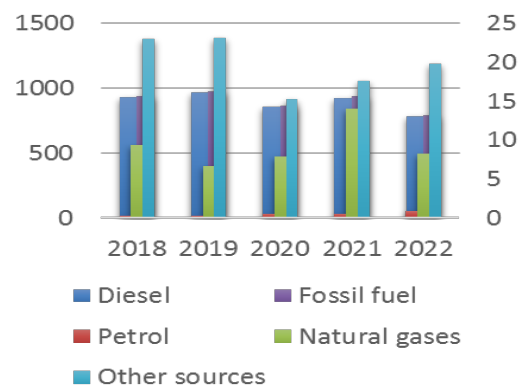


Fig. 16. Intensity of energetic consumption
Source: the authors based on TTS reports

As seen in Figure 16, the equivalent energetic consumption from diesel fluctuated over the 2018-2022 time frame. However, a significant decrease of around 18% may be observed between 2021 and 2022. With respect to the petrol source, there is a notable increase of 46.55%. In general, the energetic consumption for all types of sources (diesel, natural gases, petrol, and other sources, for example electricity) decreased by 28.7%. The chart shows the intensity of energetic consumption both for Diesel and Fossil fuel, represented on the left vertical axis, which have more significant volumes, as well as for Natural gases, Petrol, and other sources, represented on the right vertical axis, which are used in lower quantities.

Waste management and recycling (WMR) is covered by the environmental management system (EMS) certified by ISO 14001. WMR is carried out independently by each company within the environmental health and safety (EHS) perimeter, based on specific internal procedures and by specialized personnel.

5.2. The Social component

On the one hand, TTS has implemented the management system SSM, occupational and health safety (OHS) ISO 45001 covering all 1,498 employees, who represent 85.4% of the 1,754 employees in the ESG perimeter for the year 2022. On the other hand, the company has begun the process of replacing its current reporting system with an online system, stated at that time to be fully operational by the end of 2023. Each company in the group is responsible for its own management and has its own personnel policies tailored to its needs. However, the Group periodically receives activity reports from the companies and recommends measures if necessary.

With respect to the health and safety records - work accidents, the Group has recorded a total of 8 work-related accidents for salaried employees in 2019 and 2022, 2 in 2020, and 7 in 2021. As far as the workers are concerned, there were no work-related accidents during the periods in question, which is a positive remark for the company overall. The labour standards - diversity and inclusion metrics show that the 2022 number of registered employees in the ESG Perimeter was 1,754, including 1,504 employees and 250 workers in harbours and on the ships. Out of the total number of employees, about 15% are women. With the implementation of SSM and OHS, the Group ensured that for 2022, for example, no cases of occupational illness or corruption risk operations were recorded throughout the EHS report. Within this management system, the Group ensures that working conditions are respected throughout the various existing subsidiaries, and that the required working standards are applied and maintained.

The employees' training and professional development is also well controlled and supervised by the company. 381 new ESG contracts were signed in 2022, while 346 contracts were ended. Companies within the ESG Perimeter contracted 73 professional training courses for a total of over 10,000 hours, attended by 185 employees. All employees are assessed annually in terms of their performance and the way in which they fulfil their specific duties or responsibilities.

5.3. The Governance component

The TTS Group is based on a one tier governance system; three consultative committees assist the BoD: Audit Committee, Nomination and Remuneration Committee, and, lastly, a Governance and Sustainability Committee (Figure 17). There are three independent members and two non-independent members. In addition, 40% of the BoD are represented by women, a gender ratio which is non-discriminatory. Gender diversity is respected also throughout the committees, 4 out of 9 members being women. All the members of the three committees are non-executive members, and those committees are composed of an average of 2 independent members. They have most votes in the plenary, and the management is provided by the Executive directors.

The main shareholders of TTS are presented in Figure 18.

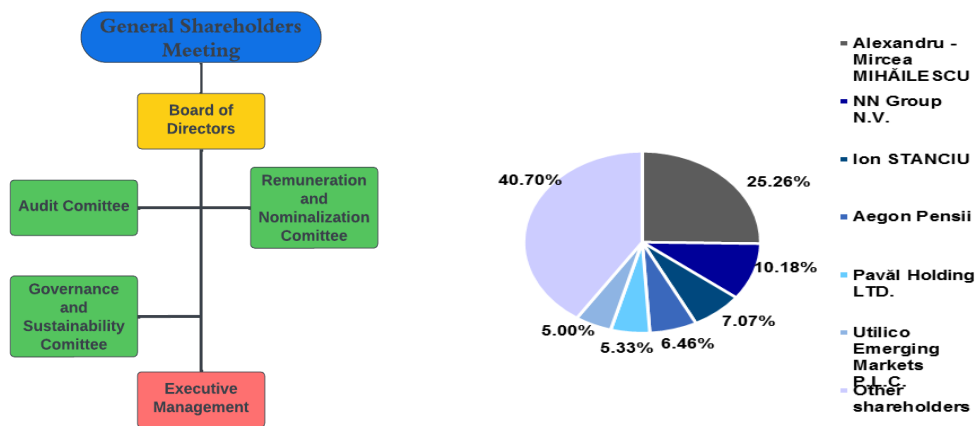


Fig. 17. Structure of corporate governance
Source: TTS reports

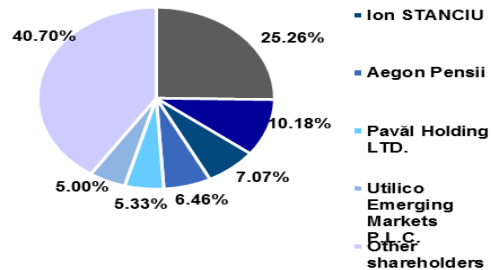


Fig. 18. Shareholders' structure
Source: the authors based on TTS reports

The voting system of the BoD is organized through a process of secret cumulative voting after each mandate; the term of office for members of the BoD is 4 years, and the elected members may be re-elected for a further term. The appointment and removal of the members is made by the Ordinary General Meeting (OGM), which is established at both the level of remuneration, and other rights and obligations set out in the management contract, in accordance with the legal provisions. The evaluation of the BoD is made annually through an evaluation report written and stated by the Nomination and Remuneration Committee.

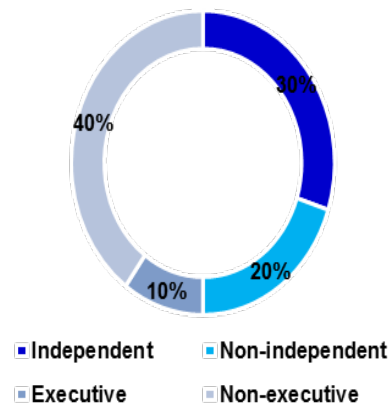


Fig. 19. Board of Directors' structure

Source: the authors based on TTS reports

The remuneration and other incentives of the BoD are clearly stated through the remuneration policy and are approved by them through the OGM. The remuneration of the members of the BoD consist of a fixed gross monthly remuneration equal to all members of the BoD set by the OGM. The Nomination and Remuneration Committee ensures that executive and non-executive directors are remunerated based on objective and pre-established criteria to avoid any potential conflicts of interest (Figure 19).

As part of its relationship with its investors and potential investors, TTS group has a policy of transparency and information. In fact, the Group ensures that it offers complete, correct, and up-to-date information based on its financial and operational performance.

Among its objectives, the Group is continuously paying attention towards achieving sustainable goals (Figure 20).




Environmental		Reduction of carbon intensity emission Maintenance and modernization of the NAVROM fleet
Social		Implementation of a sustainable management system (OHS) Labor standards and social responsibilities Health and safety priority – 0 occupancy illness recorded Gender balance among employees – 0 discrimination cases recorded
Governance		One-tier governance system – 3 consultative committees High experienced BoD Great remuneration policy OECD principles applied Excellent relation with investors

Fig. 20. ESG summary

Source: Sustainalytics and TTS reports

The policies and procedures applied are based on the OECD guidelines (Guidelines for Multinational Enterprises on Responsible Business Conduct).

Overall, we believe, according to our analysis through the ESG factors and the data retrieved from Sustainalytics, that the TTS Group is well positioned, with a risk rating score of 24.8, which is better than the average score of the competitors (Table 3).

ESG risk rating

Table 3

Peers average	26.05
TTS SA versus average	Better than average
TTS SA	24.8
Naviera Armas SA	24.5
Explorer II AS	24.7
Ocean Laurel Co. Ltd.	26.9
Mercator Ltd.	28.1

Source: Sustainalytics and TTS reports

Within all the measures taken, the Group continuously applies new ways to reduce energy consumption and CO₂ emissions. It, also has a strong intention and ongoing action to become one of the lowest CO₂ polluters in the Danube transportation market, by integrating the highest standards regarding corporate governance and social responsibility.

6. Conclusions

The TTS Group has exhibited fast growth upon its listing on the BSE market. The financial analysis of the stock shows that the Group continuously increases its efficiency and effectiveness, acquires new companies, modernizes its fleet, and is engaging in sustainable practices and projects. Such actions do not only facilitate a sustainable growth rate, which is the company's aim, but also help differentiate itself from its competitors. Although the technical indicator proved that the stock is overbought and there are high chances of a price dip, the company exhibit underlying value. The financial valuation puts TTS Group stock price at a value of 35.70 RON in 2024, although the company has traded between 12.50 RON (May 2023) and 30.10 RON (March 2024). Overall, the recommendation for the stock is to HOLD and take advantage of the price dips provided by the technical indicators.

Unfortunately, one of the limitations of the study consists of the insufficient amount of financial data provided in the reports. Financial information was available for 4 years and 3 quarters. The last quarter has been forecast. Another limitation of this study is the peer to peer comparison regarding performance and financial health. Future research could investigate other financial methods such as the Monte Carlo simulation that takes into account uncertainty and randomness. It is recommended that future research should use a larger period of time. By using a larger time frame, Dividend Discount Model could pose as a valuable analysis to assess the underlying value of the stock price.

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