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## FINANCIAL SITUATION OF ENTREPRISES IN THE TSL SECTOR IN POLAND IN THE YEARS 2018-2022

# Agnieszka PIOTROWSKA-PIĄTEK<sup>1\*</sup>, Krzysztof ŁUSIAKOWSKI<sup>2</sup>

<sup>1</sup> Kielce University of Technology; apiotrowska@poczta.tu.kielce.pl, ORCID: 0000-0002-6620-5485 <sup>2</sup> Kielce University of Technology; klusiakowski@tu.kielce.pl, ORCID: 0009-0001-5770-2949 \* Correspondence author

**Purpose:** The aim of the article is to analyse and evaluate the financial situation of TSL enterprises in Poland in the years 2018-2022 in terms of such issues as: revenues from overall activities, revenues from sales of products (services), costs of generating revenues from overall activities, own costs of sold services, net financial result, financial surplus, depreciation, net sales profitability and the size of investment outlays.

**Design/methodology/approach**: The article uses a review of the literature on the subject and desk research, in which reference was made to the Statistics Poland data on enterprises from section H - Transport and storage. Selected methods of descriptive statistics were used. The time series takes into account the perspective before and during the Covid-19 pandemic.

**Findings:** The presented results indicate that between 2018-2022 we observe changes in levels and dynamics of the analysed categories and economic indicators, which was associated with a deterioration in the financial stability of TSL enterprise's. The presented analysis confirms the sensitivity of financial results of TSL enterprises to the impact of the Covid-19 pandemic.

**Research limitations/implications**: To obtain a complete picture of the economic and financial situation of TSL sector enterprises, the study should be expanded to include an analysis of a larger number of categories and indicators. In particular, exploring issues related to accounting liquidity and the efficiency of enterprise operations would be helpful.

**Originality/value:** The study should be seen as a contribution to the scientific discussion in the issue of growth and development of TSL sector.

Keywords: TSL sector, section H, financial rating.

Category of the paper: research paper.

### 1. Introduction

The aim of the article is to analyse and assess the financial situation of Transport-Spedition-Logistics (TSL) sector enterprises in Poland in the years 2018-2022. The selected time series takes into account the perspective before and during the Covid-19 pandemic in order to further attempt to determine the impact of this phenomenon on the variables under consideration. The financial situation is the basis for assessing the effects of management in a given enterprise. This assessment includes many economic categories, including: revenues from overall activity, revenues from the sale of products (services), costs of generating revenues from overall activity, cost of services sold, net financial result, financial surplus, depreciation, net sales profitability or the size of investment outlays. It allows for an objective assessment of an enterprise's financial situation, considering various managerial and economic aspects. The content of financial analysis is the assessment of certain economic quantities expressed in monetary terms. Focuses on the preliminary and advanced analysis of the balance sheet, income and loss account, sources and directions of revenues and expenses, analysis of the financial result and its determinants, and analysis of the financial situation of the examined unit (Jerzemowska, 2018, p. 14).

TSL sector are considered one of the key service markets of the Polish economy<sup>1</sup>. K. Grucki sees the sources of the increase in demand for this type of services from large manufacturers and retail chains primarily in (2006):

- the technical complexity of supply chains, which is increasingly difficult for manufacturing companies and trade networks to meet,
- requirements for handling integrated logistics chains, which enforce the demand for increasing financial resources to maintain an appropriate level of services,
- of the globalisation of manufacturing companies and trade networks and the need for their coordination on a global scale.

Meanwhile, in the B2C market, an undoubted factor in the growth of the analysed sector is the development of e-commerce. Only in the period 2013-2022, the number of on-line stores in Poland increased by over 36,000, and the average annual growth rate was at  $12.0\%^2$ . In this period, the value of this market increased by 130 billion PLN, and the average annual growth was at the level of  $23\%^3$ . The percentage of enterprises conducting sales through websites, apps, online trading platforms, and auction services increased from 9.5% to 15.9% (Wykorzystanie technologii...).

#### 2. Research methodology

To achieve the formulated goal, a literature analysis was conducted, as well as *desk research*, in which data from the Statistics Poland concerning Polish enterprises classified under section H - Transport and storage were used. As the PKD 2007 classification does not include

<sup>&</sup>lt;sup>1</sup> In 2022, the share of employees in the *Transport and storage* section in the structure of employees in nonfinancial enterprises was 8.3% (GUS, 2023a, p. 21), while the share of enterprises in this section in the creation of Gross Value Added was 6.6% (own calculations based on the GUS Macroeconomic Data Bank).

<sup>&</sup>lt;sup>2</sup> The average annual rate of change for chain indices.

<sup>&</sup>lt;sup>3</sup> Annual average rate of change for chain indices.

the section – *Transport, Spedition and Logistics*, it is assumed in the literature that the closest to these services is section H (cf: Mankowski, 2012, p. 214; Gryko-Nikitin, 2010, p. 42). According to the Polish Classification of Activities 2007, this section is divided into the following divisions: land and pipeline transport, water transport, warehousing and support activities for transport, postal and courier activities, air transport and includes: activities related to the transport of people or goods carried out by rail, pipeline, road, water or air transport; support activities for transport provided by stations, ports, railway stations, bus stations, etc., terminals in terms of traffic control, passenger service, baggage and cargo handling; rental of transport equipment with driver or crew; postal and courier activities.

Due to the limited scope of the article, the presented considerations focus on selected economic categories. In the analyses, variable<sup>4</sup> and constant basis of comparisons indicators were used. The results are presented in tabular and graphical form.

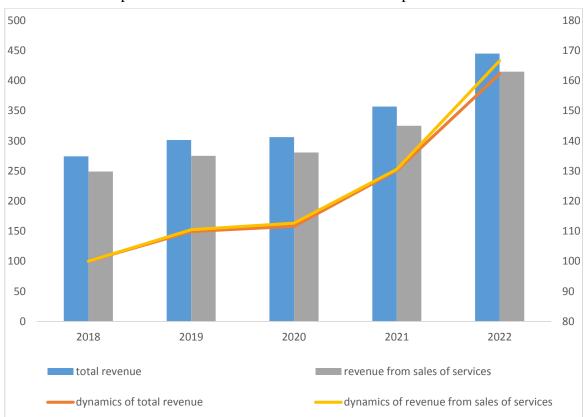
#### 3. Results

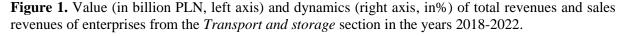
The first economic variables analysed are respectively, the revenues from overall operations and revenues from service sales. The size of the generated revenue streams speaks volumes about the financial condition of the sector and its potential for self-financing and development. The total revenue category includes net revenue from the sale of products (services), goods and materials, other operating income, and financial income. Meanwhile, net revenues from the sale of products (services), goods and materials include net revenues from domestic and export sales of finished products, semi-finished products and services produced by the unit, as well as packaging, equipment, and third-party services and net revenues from the sale of goods and materials purchased for their further resale.

Over the period under consideration, the sector under review has seen an increase in both total revenue and revenue from the sale of products (services), indicating a relatively stable financial situation (Figure 1). The dynamics of these quantities, however, varied in different years. For total revenues, it was in the years 2019 and 2020 respectively: 109.9% and 111.6% and for service revenue: 110.5% and 112.7%. In the subsequent years analysed 2021 and 2022, the dynamics were significantly higher. For total revenues, it was accordingly: 130.2% and 162.3% for revenue from the sale of services: 130.5% and 166.6%. A particularly high level of revenue dynamics from the sale of services occurred in 2022, which results from the economy emerging from the Covid-19 pandemic, but also from the level of the annual consumer goods and services price index at 114.4 (Roczne wskaźniki cen...).

<sup>&</sup>lt;sup>4</sup> Unless otherwise specified, the terms 'dynamic index'/'dynamics' refer to the chain dynamic index.

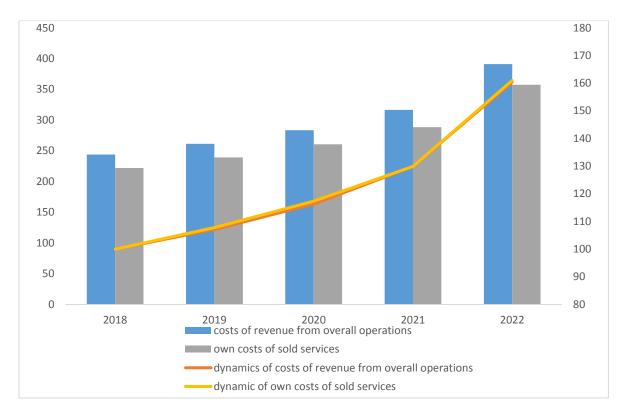
The data presented in Figure 1. further shows the variation in dynamics between the different revenue categories. In all the years analysed, we observe a higher growth rate in the category of revenue from the sale of services, which indicates an increasing share of revenue streams from core activities in total revenue. A significant change occurred in 2022 (growth rate of 166.6% for service revenue versus growth rate of 162.3% for total revenue). This indicates an improvement in the financial situation of enterprises.





Source: own calculations and elaboration on: GUS, 2019a; 2020a; 2021a; 2022a; 2023b.

During the period under review, as total revenue increased, the cost of total revenue also increased (Figure 2.). The growth rate of total revenue costs was higher than the growth rate of total revenue only in 2020 (116.3% against 111.6%). This is likely due to the negative impact of the Covid-19 pandemic on economic results. In the remaining years, the growth rate of total revenue exceeded the growth rate of costs for generating revenue from all activities. A similar situation was noted in the analysed sector in terms of the pace of revenue growth from the sale of services and the cost of services sold. The results of the analysis for the year 2022 are particularly noteworthy. In this period, we observe a clearly more favourable dynamics in the case of revenues from sales of services (166.6%) compared to the dynamics of own costs of sold services (161%).



**Figure 2.** Value (in billion PLN, left axis) and dynamics (right axis, in %) of costs of revenue from overall operations and own costs of sold services of enterprises in the *Transport and storage* section in the years 2018-2022.

Source: own calculations and elaboration on: GUS, 2019a; 2020a; 2021a; 2022a; 2023b.

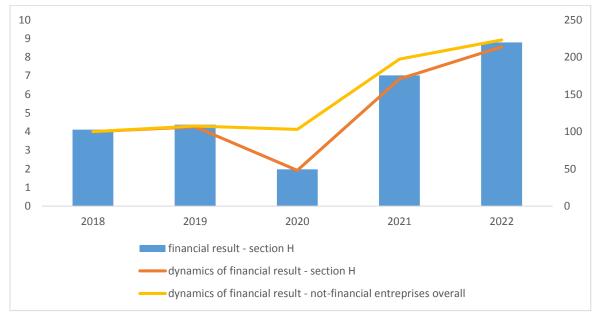
Another very important economic category in the analysis of the financial situation of enterprises is the net financial result. It represents the difference between the sum of revenues and profits achieved in a given reporting period and the sum of costs and losses incurred in obtaining these revenues, as well as charges in the form of income tax. The financial result is determined in stages. In units other than banks, insurance companies and reinsurance companies, the net financial result is composed of (Act of 29 September 1994...):

- a) result of operating activity (including from other operating income and expenses),
- b) result of financial operations,
- c) mandatory charges to the financial result due to income tax, for which the unit is the taxpayer, and payments equated with it, on the basis of separate regulations.

The net financial result is therefore a synthetic measure of the output of the conducted activity, and its level shapes the development possibilities of the enterprise.

The value and dynamics of the net financial result achieved by enterprises from the *Transport and storage* section against the dynamics of the net financial result in non-financial companies overall in the analysed period are presented in Figure 3. In the selected time series, both the net financial results of companies in the section H and the net financial results of non-financial companies as a whole showed a rising trend beyond 2020. The decrease in net financial results in both groups of enterprises was related to the deterioration of their financial situation as a result of the Covid-19 pandemic. However, in the TSL sector, the decline in net

financial result dynamics in 2020 compared to 2019 was more noticeable and amounted to almost 52 p.p. In the group of non-financial enterprises as a whole, the decrease in net financial result in 2020 was only 4% compared to 2019, and compared to the base year 2018, there was even an increase of 3%.



**Figure 3.** Value (in billion PLN, left axis) and dynamics (right axis, in%) of the net financial result of enterprises from the *Transport and storage* section<sup>5</sup> and the dynamics of the net financial result of non-financial enterprises overall<sup>6</sup> in the years 2018-2022.

Source: own calculations and elaboration on: GUS, 2019a; 2019b; 2020a; 2020b; 2021a; 2021b; 2022a; 2022b; 2023b; 2023c.

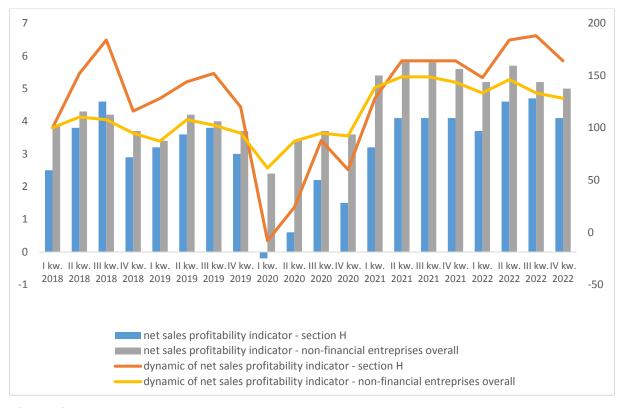
Another indicator used to analyse the financial situation of TSL companies is the profitability of net sales. This indicator belongs to a group of indicators presenting the financial efficiency of the company.

Net sales profitability, also known as the sales return rate or sales return, determines the share of the company's net profit in total revenue. The higher this indicator, the more favourable the financial condition of the economic unit. The net sales profitability ratio indicates how much net profit the company has generated from one zloty of total revenues during a given reporting period (Sierpińska, 2004, p. 319).

The formation of values and dynamics of net sales profitability indicators in entreprises from the *Transport and storage* section, as well as in non-financial entreprises in general in individual quarters in the years 2018-2022, is presented in Figure 4.

<sup>&</sup>lt;sup>5</sup> The presented data relates to companies employing more than 49 people.

<sup>&</sup>lt;sup>6</sup> The presented data concern non-financial enterprises (legal entities) conducting accounting books, in which the number of employees is 50 and more. The data does not include agriculture, forestry, hunting and fishing; financial and insurance activities; higher education institutions; independent health care facilities; cultural institutions with legal personality and trade unions; religious and political organizations.



**Figure 4.** Level (left axis) and dynamics (right axis, in %) of net sales profitability indicators for enterprises in the *Transport and storage* section<sup>7</sup> and non-financial companies in total<sup>8</sup> in the years 2018-2022.

Source: own calculations and elaboration on: GUS, 2019a; 2019b; 2020a; 2020b; 2021a; 2021b; 2022a; 2022b; 2023b; 2023c.

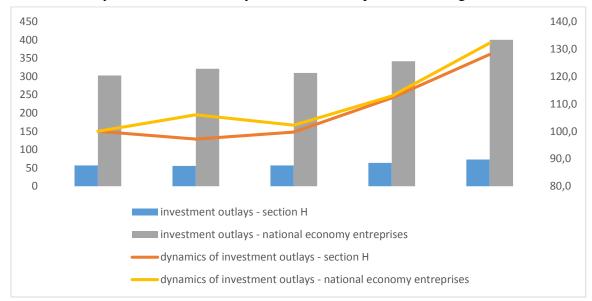
As seen in the first quarter of 2020 there was a significant decline in the level of indicators both in the TSL sector and in non-financial enterprises overall. However, for enterprises in the *Transport and storage* section, we observe a negative net sales profitability ratio of -0.2%, and in the group of non-financial enterprises as a whole, a positive value at the 2.4% level. This situation indicates the occurrence of factors that had a negative impact on the financial results of the TSL sector. The subsequent quarters of 2020 brought an improvement in the financial situation, which is reflected in the rising levels of net sales profitability indicators. Significant improvement occurred in the first quarter of 2021. In the same quarter of the following year, there was a decline in the analysed indicators, however, this decline was insignificant. And so for enterprises in the *Transport and storage section* it was 16 p.p., and for non-financial enterprises in total 10 p.p. compared to the end of 2021.

An important economic category, which was analysed in the context of this article, is investment expenditure. Investment outlays are financial or material outlays, the aim of which is to create new fixed assets or improve (rebuild, expand, reconstruct or modernise) existing

<sup>&</sup>lt;sup>7</sup> The presented data relates to enterprises employing more than 49 people.

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fixed assets, as well as outlays for so-called initial investment equipment. They are divided into outlays for fixed assets and other outlays (Pojęcia stosowane w...). Example capital expenditures include expenditures on buildings and structures, machinery and equipment, means of transport, interest on loans and loans financing development tasks during the investment period. However, examples of other categories are expenditures incurred for the initial equipment of an investment and costs associated with the implementation of the investment - these expenditures increase the value of fixed assets. The value and dynamics of the investment outlays of the analysed group of companies against the background of the investment outlays of national economy businesses were presented in Figure 5.



**Figure 5.** Level (in billions of PLN, left axis) and dynamics (right axis, in %) of investment outlays of enterprises from the *Transport and storage* section in the years 2018-2022 and of the national economy enterprises as a whole in the years 2018-2022.

Source: own calculations and elaboration on: GUS, 2019c; 2020c; 2021c; 2022c; 2023d.

As can be seen, the investment outlays of the enterprises in the analysed section constitute almost 20% of all investment outlays of Polish enterprises. In the period under review, the lowest level of investment expenditure was recorded in 2019 and 2020. In subsequent years, the level of these expenditures increased both in the analyzed section and in the entire national economy. The highest investment expenditure dynamics for TSL enterprises were recorded in 2022 (128%). This year there was an increase in expenditure by 17.57 billion PLN compared to 2019.

To complete the assessment of the financial situation of the TSL sector in Poland, investment outlays and sources of their internal financing in the analysed time series (Table 1) were presented.

0	2								
Item	2018	2019	2020	2021	2022	2022/2021	2022/2020	2022/2019	2022/2018
Investment outlays (in billions of PLN)	57,01	55,4	56,86	63,94	72,97	114%	128%	132%	128%
Financial net result (in billions of PLN)	4,11	4,38	1,98	7,02	8,79	125%	444%	201%	214%
Depreciation (in billions of PLN)	8,63	9,6	10,08	10,99	11,83	108%	117%	123%	137%
Financial surplus (in billions of PLN)	12,74	13,98	12,06	18,01	20,62	114%	171%	147%	162%
Indicators									
Financial surplus to investment outlays (%)	22	25	21	28	28	х	х	х	х
Investment outlays to depreciation (%)	661	577	564	582	617	x	x	х	х

#### Table 1.

Investment outlays and sources of their internal financing of enterprises from the Transport and storage section in the years 2018-2022

Source: own calculations and elaboration on: GUS, 2019a; 2020a; 2021a; 2022a; 2023b.

As can be seen from the presented data, throughout the entire analysis period, the extended reproduction of fixed assets is carried out, which means that the value of investment outlays exceeds the value of depreciation. The level of extended reproduction of fixed assets amounts to an average of six times the value of depreciation. The barrier to increasing the level of investment in enterprises from the analysed section is the level of generated financial surplus. In none of the periods studied did the surplus exceed 30% of the investment outlay. The result is that businesses are dependent on external sources of funding to grow. Nevertheless, we have observed a gradual increase in the level of financial surplus from PLN 12.74 billion in 2018 to PLN 20.62 billion in 2022.

## 4. Disscusion

The financial situation of TSL enterprises in Poland varied over the selected time series. The years 2018-2019 were a period during which revenue from all activities, including sales revenue, had a higher dynamic than the costs of generating revenue from all activities and the own costs of sold services. Thanks to this, the enterprises of the analysed sector realised an increase in net financial result by PLN 0.27 billion in 2019 compared to the previous year, thus achieving a net sales profitability of 3.0%. When comparing the financial situation of TSL sector enterprises against national economy entities, it's worth noting a decrease in the level of investment outlays by PLN 1.61 billion at the end of 2019 compared to the previous year. On one hand, this can be viewed negatively, but on the other, it's worth noting the positive effect of such actions. Retaining financial surplus allowed for maintaining accounting liquidity in the following year.

The next period is 2020, during which there was a noticeable deterioration in financial results, especially in terms of net sales profitability. The introduced state of epidemic Covid-19

in March 2020 likely contributed to a negative profitability level recorded in the first quarter. Negative net turnover profitability in the analysed sector was due to the necessity of incurring costs generated by the effects of supply chain disruption and the need for enterprises to adapt to safety conditions during the pandemic period. Nevertheless, there was an increase in the net sales profitability index of 32 p.p. compared to the first quarter in the next quarter of 2020. This was possible due to the increase in demand for courier services, mainly for food items and cleaning supplies. At the end of 2020, there was an increase in total revenue of PLN 4.74 billion compared to 2019. The net sales profitability in the analysed sector was 1.5% in 2020. It should be noted that this is 2.1 p.p. less compared to the total number of national economy enterprises.

The last period of assessment of the financial situation of the analysed group of enterprises covers the years 2021-2022. Both the year 2021 and 2022 are characterized by high sales dynamics of total revenues and revenues from service sales, but also costs. Analysing individual data, it's evident that the increase in revenue is higher than costs, as detailed earlier in the article. Attention should be paid to the financial results achieved in 2022. Thanks to the high dynamics of revenues from sales of services at almost 167% in the analysed sector, enterprises generated more than twice the net financial result compared to 2018. Additionally, there was a 28% increase in the size of investment outlays compared to 2018. The dynamics of investment expenditures in the last analysed year were only 4.18 p.p. lower than the dynamics of investment expenditures in the national economy as a whole.

It should also be noted that over the period under review, capital other than from financial surplus accounted for more than 70% of the financing of investment outlays. Assuming that the company paid dividends from net profit, the level of external financing was even higher.

### 5. Conclusion

In light of the results presented above of the *desk research* study in the years 2018-2022, we observe changes in the levels and dynamics of the analysed categories and economic indicators of TSL sector enterprises. The presented analysis indicates that the Covid-19 pandemic may have had a negative impact on the financial results of analysed group of enterprises. In 2020, there was a noticeable deterioration in financial results, particularly in terms of net sales profitability.

The study should be seen as a contribution to the scientific discussion in the issue of growth and development of TSL sector, however, it should be emphasised that the conducted research has certain limitations. To obtain a complete picture of the economic and financial situation of TSL sector enterprises in further studies, the Authors intend to expand an analysis of a larger number of categories and indicators. In particular, exploring issues related to accounting liquidity, profitability, debt and the efficiency of enterprises operations would be helpful.

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