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## ASSESSMENT OF NET WORKING CAPITAL MANAGEMENT STRATEGIES IN THE CONTEXT OF THE COVID-19 PANDEMIC, USING LPP S.A. AS AN EXAMPLE

### ABSTRACT

**The purpose of the article.** The main objective of the article was to identify the net working capital (NWC) management strategy of LPP S.A. The following research thesis was adopted: LPP S.A., as a trading company, pursued an aggressive NWC strategy from 2019 to 2023.

**Methodology.** Empirical research covered the period from 2019 to 2023 and was performed using economic and financial analysis tools with a focus on ratio analysis. The following companies were used as benchmark companies: VRG S.A., Etos S.A., Wittchen S.A., Wojas S.A., Monnari Trade S.A., CDRL S.A., Esotiq & Henderson S.A., Protektor S.A., VCO S.A. and Hurtime S.A.. Data was extracted from the EMIS database and LPP S.A.'s financial reports. Critical literature studies were also used in the study.

**Results of the research.** The research confirmed the thesis that LPP S.A. pursued an aggressive working capital management strategy as a commercial enterprise in the years 2019-2023. The aggressive WCM strategy contributed to the company's higher financial results and was identified on the basis of liquidity, cash cycle, inventory and short-term liabilities ratios, as well as the share of current liabilities and equity in the financing structure.

**Keywords:** net working capital management strategies, profitability, corporate finance

**JEL Class:** G30, G32, G39.



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Received: 30.09.2024 Accepted: 12.10.2025

**Funding information:** Not applicable. **Conflicts of interests:** None. **Ethical considerations:** The Author assure of no violations of publication ethics and take full responsibility for the content of the publication.

## Introduction

Financial decisions regarding the level of net working capital (NWC) are generally aimed at enabling the company to maintain financial liquidity and achieve the optimal size and structure of current assets and their sources of financing (Wasilewski & Chmielewska, 2006: 103; Setianto & Pratiwi, 2019: 4).

Financial liquidity is one of the most important criteria for assessing the financial condition of a business entity and determines its ability to settle short-term liabilities on time and maintain the continuity of basic operational processes (Comporek, 2017: 60). An improperly managed liquidity strategy is a much more common cause of business failure than a failure to achieve an adequate level of profitability (Baños-Caballero et al., 2020: 234).

The NWC strategy affects the cost of capital of a company and, consequently, its market value. An economic entity that maintains a high (positive) NWC reduces its risk of losing liquidity, as highly liquid assets (current assets) are financed by long-term capital. The literature on the subject indicates that this situation leads to an increase in the weighted average cost of capital (WACC), as short-term capital is generally a cheaper source of financing (Duggal & Budden, 2015: 79).

Net working capital is one of the main categories taken into account by banks in the creditworthiness assessment process (Apak et al., 2016: 648–655). In addition, the chosen working capital strategy affects the level of financial flexibility, which determines the company's ability to respond in a timely and appropriate manner in a changing economic environment. Research confirms that by maintaining the potential to finance new projects, a company can engage capital in the most effective investments, which significantly increases its chances for further development (Karimi et al., 2023: 207–215).

NWC strategies can be constructed in two ways: using an income-risk approach or a harmonisation approach. The first one focuses on choosing between maximising the value (profitability) of the company and minimising the risk of losing financial liquidity. The second one focuses on synchronising the maturities of assets and liabilities as closely as possible (Czapiewski & Kubiak, 2008: 22). Regardless of the approach chosen, there are essentially three types of strategies: aggressive, moderate and conservative. In the literature on the subject, strategies that aim to maximise value are referred to as aggressive (dynamic), while those that prioritise the security of operations over the level of profit achieved are referred to as conservative (Kozáková & Pevná, 2015: 288).

The issue of shaping net working capital has been addressed many times in empirical literature. In Poland, this topic has been discussed by, among others, Kuciński (2017), Łobos

and Szewczyk (2012), Bolek (2017), Kuś and Hodun (2011), Sobczyk (2008), and Bieniasz and Gołaś (2011). Furthermore, the consequences of choosing a specific NWC management strategy have been analysed by, among others: Al-Slehat, Al-Sharif (2019), Duggal and Budden (2015), Aktas, Croci and Petmezas (2015), Deloof (2003). Empirical research still does not provide a clear answer as to the impact of a specific NWC strategy on a company's performance. The situation becomes even more complicated when working capital decisions are confronted with the reaction of the capital market (Kratz & Kroflin, 2016: 21–32).

The aim of this study is to identify and evaluate the net working capital (NWC) management strategy of LPP S.A., a company operating in the retail sector and listed on the Warsaw Stock Exchange. The study uses financial analysis methods (including ratio analysis methods) as well as comparative methods (including those based on the arithmetic mean for the sector). The research approach is based on a case study.

The assessment of the company's strategy and financial condition in the period from 2019 to 2023 was made on the basis of data obtained from the EMIS database and financial reports of LPP S.A. The following research thesis was adopted: LPP S.A., as a commercial enterprise, pursued an aggressive NWC strategy in 2019–2023. Ten companies with a similar business profile and legal form, which generated the highest sales revenues, were selected as comparable companies. These included: VRG S.A., Etos S.A., Wittchen S.A., Wojas S.A., Monnari Trade S.A., CDRL S.A., Esotiq & Henderson S.A., Protektor S.A., VCO S.A. and Hurtimex S.A. The added value of the article is the empirical evaluation of the working capital management strategies of companies in the retail sector in the context of the Covid-19 pandemic.

The study consists of five sections. The first and second sections present the theoretical and empirical basis for research on net working capital management. The third section presents the financial indicators used to evaluate NWC strategies. Two last sections present the research results and contain a discussion and final conclusions.

### **Net working capital in corporate finance theory**

Working capital is a financial category that essentially covers two variables: gross working capital and net working capital (Damodaran, 2007: 614–616). The first one refers to the value of current assets that are used in the normal operating cycle of an entity and are generally divided into inventories, receivables and short-term investments (Brigham & Houston, 2005: 242). The second one is the difference between current assets (current assets) and current liabilities (short-term liabilities) and is referred to as working capital (Lukić, 2023: 50).

Net working capital in a company can be positive, negative or zero (Kuciński, 2017: 78). Generally, a positive NWC level means that some of the most liquid assets are financed with long-term capital, which has a positive impact on the security of business operations, but involves relatively high capital costs. Zero NWC occurs when current assets are equal to short-term liabilities. Working capital below zero is typical and relatively safe for commercial enterprises, which are characterised by a short collection period and the possibility of extending the repayment terms of current liabilities (Bolek, 2017: 197–198).

Company managers are forced to constantly monitor and control the level of working capital, as it is a financial category that is highly volatile during the course of business (Sierpińska & Wędzki, 1997: 73). Its size is essentially shaped by decisions concerning (Zimon, 2017: 532):

- receivables and cash management;
- trade credit policy;
- control and organisation of procurement and storage processes;
- organisation and supervision of the production and sales process.

The size of working capital also depends on factors beyond the company's control. These include, in particular, the sector in which the entity operates, as different types of activities vary in terms of their turnover cycle and capital intensity. Differences in the size of working capital are also observed within a specific industry. Companies that are characterised by high risk, high cash flow volatility and limited access to external financing, which is determined, among other things, by their size and stage of the life cycle, usually maintain a higher level of NWC (Damodaran, 2007: 630–631).

The company, pursuing a conservative management strategy, generally maintains high levels of inventory and cash reserves. The accumulated cash is primarily intended to protect against the risk of insolvency. Large stocks of materials, etc., protect the company against high fluctuations in raw material prices and supply disruptions, but incur storage costs. High inventory levels contribute to reducing ordering costs and allow the company to meet unexpected demand (Hodun, 2010: 217). A conservative NWC strategy involves, among other things, strict enforcement of receivables and granting trade credit mainly to reliable contractors. This situation increases the company's security, but it loses potential customers (Sobczyk, 2008: 94). A relatively high level of NWC is shaped by minimising short-term liabilities. In this case, the entity achieves financial stability but foregoes the positive effect of financial leverage (Hodun, 2010: 217).

An aggressive strategy is characterised by a relatively low NWC. A company that decides to pursue this strategy does not freeze its funds excessively in inventories, which results in low

inventory levels and minimises the cost of maintaining them (Afrifa, 2016: 7). In a dynamic strategy, low cash reserves and a liberal sales policy do not guarantee liquidity security and, in extreme cases, can even lead to bankruptcy (overdue and uncollectible receivables). However, thanks to a lenient receivables policy, companies can increase their turnover and attract new customers (Motlíček & Polák, 2015: 1323; Kuciński, 2017: 80). An aggressive strategy involves making the most of short-term capital, which is a cheaper and more flexible source of financing than fixed capital (Hodun, 2010: 217–218).

A moderate strategy is a middle ground between the strategies described above, which is why a company implementing it strives to achieve a balance between current assets and current liabilities. In this situation, the business entity is not exposed to the risk of losing financial liquidity and generates significantly higher profitability than when applying a conservative strategy (Sobczyk, 2008: 96).

### ***Review of empirical literature on the assessment of net working capital management strategies***

Research conducted by A. Kuciński on a sample of 20 companies from the clothing and footwear sector indicates that the implementation of an aggressive NWC strategy contributes to a significant variation in financial results measured by the ROE (return on equity) indicator. The analyses also determined that companies that chose a conservative approach achieved relatively the lowest profitability. Working capital management was determined based on the NWC to total assets ratio (Kuciński, 2017: 84–86). R. Sobczyk, analysing the commercial enterprise sector, also concluded that the NWC level is negatively correlated with the ROE, ROA (return on assets) and ROS (return on sales) ratios (Sobczyk, 2008: 100). R. Duggal and M.C. Budden examining companies belonging to the S&P 500 index, found a negative relationship between NWC and the risk-adjusted rate of return. They argued that excessive involvement of long-term capital contributes to an increase in WACC, and that companies financing themselves using trade credit create value for shareholders (Duggal & Budden, 2015: 79–82).

Research by M. Pawłowska et al., on chemical industry companies indicates a strong and positive correlation between the NWC ratio to total assets and return on equity (Pawłowska et al., 2015: 140). The significant impact of the chosen NWC strategy on the level of profitability generated is also confirmed by the analyses of M. Wasilewski and M. Chmielewska. Their research has shown that Polish dairy cooperatives should adopt a conservative approach to management in order to maximise ROE and ROA ratios (Wasilewski & Chmielewska, 2006: 108). Similar results were obtained by Z. A. F. Al-Slehat and B. M. Al-Sharif when analysing

the relationship between NWC and ROA and net operating income (Al-Slehat & Al-Sharif, 2019: 18–19). A.A.A. Abuhommous also confirms the positive effect of investment in working capital, which is that higher expenditure on working capital significantly contributes to increasing the company's growth rate as measured by the change in sales revenue. He also emphasises that small enterprises may avoid trade credit to stimulate growth because its cost is relatively high compared to the cost of other sources of financing if the entity fails to settle payments within the discount period (Abuhommous, 2017: 131–136).

In empirical literature, a commonly used measure of working capital management is the cash conversion cycle, which determines how much time elapses from the moment of cash outflow to settle liabilities (initiation of operational processes) to the moment of cash inflow from collected receivables (sales realisation)<sup>1</sup>. The research by M. Deloof conducted on a sample of 1,009 large Belgian non-financial companies suggests that economic entities that froze their funds in inventories and receivables for longer periods of time achieved lower profitability. The research also indicated a negative correlation between profitability and the period of repayment of current liabilities. This relationship was due to the fact that less profitable entities may experience payment bottlenecks, while highly profitable companies prefer to settle their liabilities more quickly because they hope to obtain a discount (Deloof, 2003: 573–588). A negative relationship between the cash cycle and profitability was found, among others, by E. Oruc and M. Sen (2009), A. Bieniasz and Z. Gołaś (2011), K. Łobos and M. Szewczyk (2012).

Research by A. Kuś and M. Hodun confirms that metal industry companies effectively meet market needs and increase their attractiveness to potential customers by increasing inventory levels and implementing a lenient receivables policy. Their research also suggests that extending the repayment period has a positive impact on profitability (Kuś & Hodun, 2011: 81). The positive effect of the current liabilities cycle is also confirmed by H. Nobanee, A.E. Haddad, and the results obtained justify the fact that trade credit allows you to save part of your cash holdings, which can be reinvested (Nobanee & Haddad, 2014: 42).

N. Aktas et al., analysing data on 15,541 American companies between 1982 and 2011, concluded that the relationship between NWC size and performance is non-monotonic (non-linear): the relationship is negative for companies with positive working capital surplus and positive for companies with negative working capital surplus. They also noted that companies that are able to operate in a situation of working capital shortage significantly increase their

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<sup>1</sup> The cash conversion cycle is the difference between the period of freezing cash in inventories (inventory cycle) and short-term receivables (receivables cycle) and the period of settling current liabilities (liabilities cycle) (Łobos, Szewczyk, 2012: 59).

investments in fixed assets. Their research also showed that companies should strive for an optimal level of working capital, as a decrease (increase) in positive (negative) working capital surplus by one standard deviation is associated with an increase in return on equity of 0.90% (0.85%) over the course of a year (Aktas et al., 2015). A similar inverted U-shaped relationship was also obtained by Baños-Caballero et al., who analysed the relationship between the size of NWC and company performance expressed by Tobin's Q ratio (Baños-Caballero et al., 2014).

### ***Research methods used***

The working capital strategy can be identified using various financial indicators, and the literature on the subject does not indicate a single universal method. In general, however, in order to properly determine a given approach to working capital management, absolute measures should not be used, and selected financial indicators should be compared with their average values in the industry. Table 1 presents the most commonly used measures for assessing the NWC strategy (Czapiewski & Kubiak, 2008).

**Table 1**

#### *Working capital strategy identification indicators*

<b>Synthetic indicators</b>		
<b>Indicator name</b>	<b>Indicator value in relation to the benchmark</b>	<b>Strategy type</b>
Share of NWC in total assets	higher	Conservative
	equal	Moderate
	lower	Aggressive
Current liquidity ratio liquidity	higher	Conservative
	equal	Moderate
	lower	Aggressive
Liquidity ratio Accelerated	higher	Conservative
	equal	Moderate
	lower	Aggressive
Cash cycle	higher	Conservative
	equal	Moderate
	lower	Aggressive
<b>Analytical indicators</b>		
<b>Indicator name</b>	<b>Indicator value relative to benchmark</b>	<b>Strategy type</b>
Share of current assets in total assets	higher	Conservative
	equal	Moderate
	lower	Aggressive
Share of current liabilities	lower	Conservative

<b>Analytical indicators</b>		
<b>Indicator name</b>	<b>Indicator value relative to benchmark</b>	<b>Strategy type</b>
in total assets	equal	Moderate
	higher	Aggressive
	higher	Conservative
Share of inventories in current assets	equal	Moderate
	lower	Aggressive
	higher	Conservative
Share of receivables in current assets	equal	Moderate
	lower	Aggressive
	higher	Conservative
Share of cash in current assets	equal	Moderate
	lower	Aggressive
	lower	Conservative
Share of trade liabilities in total assets	equal	Moderate
	higher	Aggressive
	higher	Conservative
Share of long-term liabilities in total assets	equal	Moderate
	lower	Aggressive
	higher	Conservative
Equity share in total assets	equal	Moderate
	lower	Aggressive
	higher	Conservative
Inventory cycle	equal	Moderate
	lower	Aggressive
	lower	Conservative
Receivables cycle	equal	Moderate
	higher	Aggressive
	lower	Conservative
Commitment cycle	equal	Moderate
	higher	Aggressive

Source: Own study based on Czapiewski & Kubiak, 2008: 26–33.

Correctly identifying NWC strategies is not an easy task, as in some cases the selected measures may indicate the use of completely different strategies. The use of analytical indicators allows for better identification of the factors shaping a particular management approach, but may lead to incorrect assessment. The use of synthetic measures greatly simplifies the identification of strategies, but does not provide much cognitive value for the analysed phenomenon. Therefore, researchers should first base their research on general indicators for identifying NWC, which partly allows them to exclude the problem of using multi-criteria methods (Czapiewski & Kubiak, 2008: 28).

***Evaluation of the net working capital strategy of LPP S.A.***

LPP is a Polish joint-stock company with 30 years of experience in the industry. It designs and distributes clothing. It manages a total of five brands: Reserved, Sinsay, House, Cropp, Mohito. It employs approximately 33,000 people. It has stores in 28 countries on three continents and conducts online sales in 34 countries. Its shares are included in indices such as: WIG20, WIG20TR, WIG Odzież, MSCI Poland Index, CECE index and FTSE Russell Index.

In 2023, the retail sale of clothing (PKD 47.71) and footwear and leather goods (PKD 47.72) sectors comprised a total of 1,828 entities and generated sales revenue of PLN 56.8 billion. LPP S.A. and comparable companies had an average market share of 27% and 7.5%, respectively, in the period from 2019 to 2023 (Bizraport.pl). The “clothing and cosmetics” sector listed on the Warsaw Stock Exchange comprises 22 entities, which in 2023 generated PLN 31.5 billion in sales revenue. The company under review and benchmark companies recorded revenues of PLN 17.4 billion and PLN 3.8 billion, respectively, during this period. As a result, LPP S.A. has significant bargaining power with suppliers and enjoys high brand recognition (StockWatch.pl).

An analysis of the data in Table 2 shows that LPP S.A. is the leader on the Polish clothing market in terms of profitability. Only in 2021 did the company have a lower return on assets than the largest players in the industry, which was mainly due to high investments. During this period, the company increased its fixed assets by 25.04% (from PLN 5,621 million to PLN 7,028 million), which translated into a 31.5% increase in store space (from 1,435.4 thousand m<sup>2</sup> to 1,888.1 thousand m<sup>2</sup>). LPP S.A. is gradually increasing its market share and is characterised by high revenue growth, which, excluding data from 2020, averages 24.4% per annum (revenue growth from PLN 9,222 million to PLN 17,406 million).

**Table 2***Profitability ratios of LPP S.A. and comparable companies (PP) in 2019–2023*

Specification	2019	2020	2021	2022	2023
ROE (LPP) [%]	14.9	−6.2	29.1	27.5	34.2
ROE (PP) [%]	6.7	−10.3	19.7	14.1	8.0
ROA (LPP) [%]	5.1	−1.8	6.8	8.5	11.7
ROA (PP) [%]	4.2	−3.2	9.1	7.9	5.7
ROS (LPP) [%]	5.3	−2.4	8.4	6.8	9.3
ROS (PP) [%]	3.3	−2.8	7.8	6.7	4.0

Source: Own research based on EMIS.

In 2020, the clothing industry was one of the areas of the economy most affected by the negative effects of the COVID-19 pandemic. The negative profitability of the sector, apart from the necessity to close brick-and-mortar stores, resulted from a collapse in demand, the deteriorated financial situation of customers, and disruptions in supply chains, which had a negative impact on the continuity of operational processes and forced entities to focus on maintaining financial liquidity. During this period, LPP recorded relatively better profitability thanks to the rapid development of its e-commerce channel (106.3% increase in online sales revenue), renegotiation of rental costs and a temporary reduction in salary costs (a decrease of 20 to 30%). Strong diversification of activities, accelerated deliveries from China and offering products in a moderate price range meant that LPP was less exposed to the negative effects of the pandemic. In 2021, despite problems with cotton supplies and high inflation, LPP achieved higher profitability compared to 2019 and 2021, which was mainly the result of so-called deferred demand. High customer interest allowed the company to increase its sales volume and achieve a high trading margin (57.8%), which was 5.7 percentage points higher than in the previous year. The decline in LPP's profitability in 2022 was dictated by the war in Ukraine, a decline in demand, an unfavourable dollar exchange rate and the strong growth of the Sinsay brand, which is classified as value-for-money. During this period, the company ceased its operations in Russia and lost a market that accounted for 19.1% of its total revenue. An 8.3% increase in revenue and a 9.3% decrease in operating costs resulted in LPP achieving record profitability on sales, assets and capital in 2023. An ROE of 34.2% means that the company generated 34.2 groszy of net profit from every zloty of equity capital invested.

Almost all of the values in Table 3 indicate that LPP pursued an aggressive NWC strategy during the period under review. Current liquidity ratios suggest that the company was exposed to the risk of losing financial liquidity in 2019–2023 (the optimal ratio is 1.2–2)<sup>2</sup>. Similar conclusions can be drawn based on the quick liquidity ratio (desired value 1–1.2). However, the company was ready to repay its most due liabilities, as evidenced by the cash liquidity ratio (optimal value 0.1–0.2), comparable companies at the current liquidity level in 2019, 2021 and 2023 were characterised by high excess liquidity, and the large differences between current and quick liquidity indicate that LPP managed its inventories much better. The sector's excess liquidity is most evident at the cash liquidity level. LPP has significantly improved its cash management over the last three years. The decrease in the NWC (also in relation to sales revenue) in the period 2021–2023 compared to 2019 indicates that the

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<sup>2</sup> The authors of the study took the optimal values of static liquidity ratios from the following studies (Sierpińska & Jachna, 2007: 145–153; Gabrusewicz, 2014: 327–338; Nowak, 2014: 222).

company was exposed to a high risk of losing liquidity and may have had problems related to disruptions in sales continuity.

**Table 3**

*Financial liquidity ratios of LPP S.A. and comparable companies (PP) in 2019–2023*

Specification	2019	2020	2021	2022	2023
Share of NWC in total assets (LPP) [%]	5.7	5.2	1.5	2.8	1.3
Share of NWC in total assets (PP) [%]	26.9	18.6	24.3	23.9	26.8
Current liquidity (LPP)	1.17	1.13	1.03	1.07	1.03
Current liquidity (CL)	2.23	1.83	2.04	1.91	2.29
Quick ratio (LPP)	0.57	0.64	0.47	0.42	0.49
Quick ratio (PP)	0.99	0.62	0.76	0.60	0.88
Cash liquidity (LPP)	0.43	0.31	0.20	0.09	0.19
Cash liquidity (PP)	0.28	0.31	0.45	0.28	0.41

Source: Own research based on EMIS.

Table 4 presents the calculated activity ratios of LPP S.A. and comparable companies in 2019-2023. The cash cycle indicates that the company managed its working capital aggressively. Negative values of the indicator show that LPP needed significantly less net working capital than other entities in the industry, as it received payment for goods sold even before settling its current liabilities.

**Table 4**

*Activity ratios of LPP S.A. and comparable companies (PP) in 2019–2023*

Specification	2019	2020	2021	2022	2023
Cash cycle (LPP) [days]	-44.6	-85.4	-88.1	-19.7	-37.8
Cash cycle (PP) [days]	77.6	27.2	35.6	48.4	47.3
Inventory cycle (LPP) [days]	76.0	96.5	124.4	76.9	63.8
Inventory cycle (PP) [days]	105.0	144.7	125.1	134.8	112.8
Receivables cycle (LPP) [days]	6.0	12.1	9.0	23.0	17.0
Receivables cycle (PP) [days]	62.7	61.4	51.4	43.4	35.4
Liability cycle (LPP) [days]	126.6	194.0	221.5	119.5	118.6
Liability cycle (PP) [days]	90.1	178.9	140.9	129.8	100.8

Source: Own research based on EMIS.

Throughout the entire period analysed, LPP S.A. did not excessively freeze its funds in inventories and managed them aggressively. Since 2021, the company has improved the efficiency of its inventory management and in 2023 shortened its inventory cycle by approximately 12 days compared to 2019, which had a positive impact on its financial liquidity. In 2020, LPP was the first in the fashion industry to introduce RFID (electronic tag) technology, which, together with a modified warehouse system, significantly reduced costs and increased the availability of the product range for customers by approximately 13%. LPP's receivables cycle in 2023 lengthened by approximately 11 days compared to 2019, which could have had a negative impact on its liquidity level. However, an analysis of industry indicators shows that LPP managed its short-term receivables much better and thus required less working capital. In 2019–2023, the company took a conservative approach to its customer financing policy. The liability cycle indicates that LPP took a dynamic approach to managing its short-term financing sources during the period under review. The long repayment cycle for current liabilities in 2020 and 2021 may suggest that the company had problems with timely settlement. However, given its high profitability ratios and large market share, it can be concluded that LPP has an established position, which gives it considerable leverage in negotiating the repayment of its liabilities. In addition, the company secures its financial liquidity on an ongoing basis by using reverse factoring and multi-purpose credit lines.

LPP actively manages its working capital and is ready at any time to optimise its entire supply chain and implement a just-in-time strategy. This is possible thanks to strong diversification and the use of intermodal transport. The company has supply channels on three continents, and the value of deliveries from any of its approximately 1,200 contractors does not exceed 5% of the total value of its product range.

Table 5 presents the share of individual sources of financing in total assets. The short-term debt ratio also indicates that LPP managed its current liabilities dynamically. It took the most aggressive approach in 2021, when the ratio was more than 13 p.p. higher than that of comparable companies. The capital structure ratio confirms that in 2019–2023, LPP sought to maximise the benefits of financial leverage (optimal value 33%–43%) and pursued a dynamic strategy. Unfortunately, from 2020 to 2022, it was heavily dependent on external financing, which could have had a significant negative impact on the cost of raising funds. The interest cost growth rate on loans and bonds from 2020 onwards was 145%, 117.6%, 398.3% and 79.4%, respectively. The level of long-term debt indicates that LPP took a conservative approach to its NWC strategy. During the analysed period, this measure was on average 40 percentage points lower than the overall debt ratio. This situation may indicate an inappropriate

financing structure<sup>3</sup>. However, the specific nature of the sector (average current liabilities of 34.1%) determines a lower involvement of long-term financing.

**Table 5**

*Financing structure ratios of LPP S.A. and comparable companies (PP) in 2019–2023*

Specification	2019	2020	2021	2022	2023
Short-term debt ratio (LPP) [%]	33.3	40.3	48.7	40.4	41.0
Short-term debt ratio (PP) [%]	27.8	35.7	35.3	37.7	33.7
Long-term debt ratio (LPP) [%]	32.9	30.1	28.2	28.8	24.9
Long-term debt ratio (PP) [%]	23.7	19.1	14.3	10.5	9.2
Capital structure ratio (LPP) [%]	33.8	29.6	23.1	30.8	34.1
Capital structure ratio (PP) [%]	48.4	45.2	50.3	51.7	57.1

Source: Own research based on EMIS.

Between 2019 and 2023, LPP S.A. dynamically managed its working capital and achieved higher profitability than benchmark companies. The aggressive NWC strategy was identified on the basis of liquidity ratios, cash cycle, inventories and short-term liabilities, as well as the share of current liabilities and equity in the financing structure. A similar relationship is confirmed by the results of studies by R. Sobczyk (2008), R. Duggal and M.C. Budden (2015), E. Oruc and M. Sen (2009), K. Łobos and M. Szewczyk (2012), M. Deloof (2003), A. Bieniasz and Z. Gołaś (2011) and H. Nobanee and A.E. Haddad (2014).

Clothing companies generally receive immediate payment for goods sold. Therefore, it is difficult to define a strategy for receivables policy, and the receivables cycle may have very little impact on performance. Based on the cash liquidity ratio, no significant correlation can be observed either, and its value could have been largely determined by the cash conversion cycle.

## Summary

The research conducted confirmed the thesis that LPP S.A., as a commercial enterprise, pursued an aggressive net working capital management strategy in the years 2019–2023. The analysed company is an entity in a good financial condition, which increases the wealth of its shareholders through high investments. It has strong bargaining power vis-à-vis suppliers, which has a significant positive impact on its ability to shape its working capital. A dynamic approach to management has allowed LPP to generate higher profitability than the industry

<sup>3</sup> The long-term debt ratio is a more detailed version of the total debt ratio and should not differ significantly from its value (Nowak, 2014: 254).

average. This strategy has increased the risk of losing financial liquidity. However, the company was able to settle its current liabilities on time. LPP's current liquidity ratios show that fixed capital fully covered fixed assets, and the negative cash cycle also allowed them to be financed with short-term liabilities. Therefore, LPP is able to increase the aggressiveness of its strategy, provided that it maintains high inventory turnover and continuity of procurement processes. In addition, in order to increase its efficiency, the company should (1) continue to expand into Western markets, (2) strengthen its supply channels in the EU, and (3) further develop brands that generate higher trade margins.

The period from 2019 to 2023 was a difficult time for the entire economy. The COVID-19 pandemic and the war in Ukraine caused, among other things, disruptions in supply chains, the need to renegotiate commitments, and an increase in the risk and costs of operations. The situation affected even companies operating in the same industry to varying degrees, which significantly hindered the proper assessment of the NWC strategy. Furthermore, the economic and financial analysis tools used did not allow for: determining the optimal level of NWC, confirming its non-linear relationship with profitability, and taking into account many important factors affecting the level of profit achieved. For these reasons, the authors of the study decided to select comparable entities that were as similar as possible to LPP S.A. in terms of the type of business activity and factors determining the level of working capital (size, age, revenue, risk, legal form, main area of business activity). Therefore, it is recommended to continue research using statistical and econometric methods, and also using a larger sample of companies from the commercial sector – companies listed on stock exchanges in Europe. Future research will also take into account the relationship between NWC strategy and other financial indicators.

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