

ENTERPRISE WORKING CAPITAL MANAGEMENT STRATEGIES VS. FINANCIAL LIQUIDITY AND BUSINESS EXPANSION IN SELECTED POLISH COMPANIES

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Purpose: The aim of this paper is to analyze working capital management strategies across different types of companies (trading, manufacturing, and service enterprises). The research examines the impact of aggressive and conservative approaches on financial liquidity and business expansion.

Design/methodology/approach: The study is based on financial data analysis of selected companies operating in the Polish market. It evaluates key financial indicators, including net and gross working capital, liquidity ratios, and the golden balance rule. The research adopts a comparative approach, categorizing companies by industry type and assessing their working capital strategies.

Findings: The research indicates that trading companies, such as LPP and Dino, adopt aggressive working capital management strategies to support expansion. Manufacturing firms, where trading activities are limited, tend to follow a conservative approach. Service companies, despite lower inventory levels, often lean towards aggressive working capital management. The study also challenges the common belief that a conservative strategy is the most widely adopted.

Research limitations/implications: The study focuses on a limited number of companies, which may not fully represent broader market trends. Future research could include a larger sample size, international comparisons, or an in-depth analysis of the long-term effects of different strategies.

Practical implications: The findings provide valuable insights for business managers in selecting appropriate working capital strategies. Trading companies can leverage aggressive strategies for expansion, while manufacturing firms may prioritize financial stability. Understanding liquidity constraints is crucial for decision-making in service industries.

Social implications: Effective working capital management contributes to financial stability, employment growth, and market competitiveness. A deeper understanding of these strategies can help policymakers and investors assess business sustainability and risk exposure.

Originality/value: This paper offers a comparative analysis of working capital management strategies across different industries, providing new insights into how companies balance liquidity and growth. It is particularly relevant to financial managers, investors, and academics studying corporate financial management.

Keywords: net working capital, strategies, financial ratios, golden balance rule.

Category of the paper: research paper.

1. Introduction

The ongoing processes of globalization and constant change compel managerial staff to rapidly analyze occurring processes and respond to them accordingly. Particularly, working capital requires managerial agility and decisiveness. Thus, working capital management constitutes one of the most critical areas of financial decision-making within an enterprise, primarily aiming to ensure the maintenance of financial liquidity. Decisions in this area are complicated by the frequent contradiction between high financial liquidity and profitability. In net working capital management, it is advisable to use an approach aimed at reducing the capital tie-up period. This approach lowers financial liquidity as measured by static assessment indicators, while also depending on the type of business activity. The size of working capital illustrates a company's condition, its ability to generate financial surpluses, and can also indicate its growth potential.

This study presents preliminary research—which requires further extension in subsequent work—on the relationship between the level of working capital and the industry in which a company operates. Commonly recognized liquidity indicators and balance sheet principles were employed to assess the strategies adopted by enterprises in managing their working capital. The study used financial data for the 2020-2023 period from nine companies listed on the Warsaw Stock Exchange.

2. The Role of Working Capital in a Company

In literature, various definitions of working capital can be found. Most commonly, working capital is considered to be the portion of current assets that is not financed by current liabilities but rather by long-term capital (permanent capital). The term "net working capital" is often used to describe it. The total value of the individual components of current assets, as shown in a company's balance sheet, is referred to as its gross working capital. In other words, gross working capital includes all current assets engaged in the company's ongoing operations. Net working capital is calculated as gross working capital minus current short-term liabilities. Net working capital is often called "working capital" or "operating capital".

The demand for operational working capital is primarily influenced by operational decisions made within the company. These decisions concern operational current assets and operational short-term liabilities (Sierpińska, Wędzki, 2017).

Managing working capital is one of the key areas of financial decision-making within a company. Its primary goal is to ensure the company's financial liquidity and maximize sales.

At the same time, it aims to:

- optimize the size and structure of current assets from the perspective of minimizing maintenance costs,
- shape the financing structure of these assets in a way that minimizes financing costs (Adamska, 2004).

Working capital management encompasses all activities related to managing current assets and short-term liabilities. These activities primarily concern cash, receivables, inventory, securities, and short-term obligations.

Current assets are asset components that are consumed or converted into cash during the entity's business operations within a single operating cycle. As they circulate through economic processes, they change in value and form, generating profit. The shorter the cash conversion cycle, the higher the profit a company can achieve.

The cyclical movement of current asset components necessitates decisions regarding the selection of short-term financing sources. The way working capital is managed determines the company's level of liquidity and its ability to meet obligations on time. Effective working capital management requires proper handling of receivables, inventory, cash, and short-term liabilities.

The need for working capital arises primarily from:

- the size and liquidity of inventory,
- the level and quality of receivables and claims,
- the size of liabilities to suppliers, which depends on the ability to defer payments for delivered materials and services.

The optimal amount and demand for working capital, apart from the factors mentioned earlier, also depend on:

- the size of the company and its management practices,
- market conditions in which the company operates,
- the type of products manufactured and services provided,
- the nature of the business activity,
- the length of the operating cycle,
- the level of sales (higher sales require higher levels of inventory and receivables),
- inventory management policies,
- customer credit policies,
- the degree of utilization of working assets,
- the cost of bank and trade credit.

Net working capital can be calculated in different ways. In a capital approach, it is the difference between permanent capital (equity and long-term debt) and long-term assets (fixed assets). It can also be calculated in an asset-based approach, where it represents the difference between current assets and current liabilities. When calculated this way, it reflects the surplus of current assets over current liabilities.

3. Working Capital Management Strategies

Companies may have different levels of working capital. In practice, three scenarios can occur. However, the literature offers alternative perspectives on the number of strategies identified. For instance, in *Defined Strategies for Financial Working Capital Management* (Talonpoika et al., 2016), the authors distinguished as many as eleven different scenarios concerning the behavior of working capital within enterprises. For the purposes of this study, three of these cases will be discussed.

The first and most common scenario, especially in the manufacturing sector, occurs when working capital is greater than zero. This means that a company's current assets have a higher value than its short-term liabilities. This situation is also referred to as a conservative strategy in working capital management. It provides a company with a secure position in terms of liquidity. The effort to maintain a high level of the most liquid assets minimizes the risk of losing liquidity.

The second working capital scenario involves negative net working capital. This situation is much less common than the first and is typical for trading companies, particularly in retail. These companies often extend payment deadlines for the goods they receive while simultaneously receiving cash at the point of sale. A company's approach to such a working capital position aligns with an aggressive strategy. While it can offer significant benefits, it also carries the risk of liquidity loss due to factors such as declining sales or changes in suppliers' trade credit policies (e.g., shortening repayment terms). This strategy, in contrast to the conservative approach, involves limiting liquid assets (especially cash and inventory), which reduces financial reserves for unexpected expenses and increases liquidity risk. Companies following this strategy often aim to attract new customers by widely offering trade credit, which can lead to an increase in overdue and uncollectible receivables. Maintaining negative working capital is associated with increased value for owners, and this approach is recommended for businesses with a stable market position. However, it requires continuous financial monitoring.

The third scenario involves zero net working capital. This occurs when companies with limited financial liquidity use all incoming receivables to immediately cover short-term liabilities. It represents a balanced approach, incorporating elements of both previous strategies in managing current assets and liabilities. Companies using this strategy typically aim to maintain liquidity while ensuring a moderate level of value for owners. This balance can be achieved by combining strategies—for example, adopting a conservative approach to assets while taking an aggressive approach to liabilities (or vice versa) (Ciciorko, 2010).

Since a company's objectives are defined in two dimensions—short-term (maintaining financial liquidity) and long-term (maximizing market value)—the role of working capital and the chosen management strategy significantly influence overall financial management.

Table 1.
Working Capital Management Strategies

Types of Strategies	Characteristics	Advantages	Disadvantages
Conservative	<ul style="list-style-type: none"> - High financial liquidity, - High level of net working capital, - Significant share of permanent capital in financing current assets. 	<ul style="list-style-type: none"> - High payment stability, - Low risk level, - Low reliance on short-term loans and borrowings to finance net working capital needs. 	<ul style="list-style-type: none"> - Lower profitability, - Long cash conversion cycle, - Limited benefits from financial leverage.
Aggressive	<ul style="list-style-type: none"> - Low financial liquidity, - Low level of net working capital, - Low share of permanent capital in financing current assets. 	<ul style="list-style-type: none"> - Increased profitability, - High level of risk, - Short cash conversion cycle, - Opportunity to use financial leverage to boost profitability. 	<ul style="list-style-type: none"> - High risk of losing financial liquidity.
Moderate	<ul style="list-style-type: none"> - Average level of financial liquidity, - Net working capital close to zero, - Striving to optimize the income/risk ratio. 	<ul style="list-style-type: none"> - Reduced risk of financial liquidity loss, - High profitability, - Opportunity to use financial leverage to increase profitability. 	<ul style="list-style-type: none"> - Risk of needing to synchronize current inflows and expenditures.

Source: Kreczmańska-Gigol, 2010, pp. 91-93; Bętkowska, 2011, pp. 97-99; Jaki, Ćwięk, 2015, p. 260.

Decisions regarding working capital should primarily focus on:

- maintaining a stable financial liquidity of the company,
- optimizing the size and structure of current assets to minimize financing costs,
- shaping the structure of financing sources for these assets to support cost minimization (Urbańczyk, 1998, pp. 184-185).

For effective working capital management, companies must consider and address the following issues:

- determining the size and structure of current assets, ensuring smooth business operations and optimizing the costs of acquiring and engaging assets,
- securing the necessary funds to finance the accumulated or planned current assets (Brealey, Myers, 1999, p. 702).

The highest efficiency in managing working capital is achieved by shortening the working capital cycle. In practical business operations, this can be accomplished by reducing the inventory and receivables conversion cycle while extending the payment deferral cycle for liabilities (Urbańczyk, 1998, pp. 188-189). A company's actions in these areas may focus on individual elements or all aspects collectively.

Effective working capital management requires planning. The planning of working capital needs should be based on:

- past experiences from similar or identical industries,
- analyzing turnover ratios for various elements of current assets and liabilities.

In today's digital world, working capital requirements can be managed using artificial intelligence based on data sets (Chudzicki, Dobosz, Knop, 2022). The value of individual components of current assets usually fluctuates from month to month, or even more frequently. When sales are high, companies typically maintain high levels of inventory, receivables, and cash. Inventory levels decrease during months of lower sales. The timing of high and low inventory levels mainly depends on product specifics and seasonal sales patterns.

Data from all relevant indicators can be entered into a spreadsheet, linking them with previously obtained values such as sales and operating costs.

In general, working capital management strategies must also balance liquidity and profitability within the company. This task is extremely challenging, as every company has opposing goals: for some, maintaining financial security at the expense of profit growth is a priority, while others prioritize high profits even at the risk of increased financial exposure.

The relationship between working capital and profitability remains complex, as research does not provide a clear answer regarding the direction of this correlation. Abdul Raheman and Mohamed Nasr (Raheman, Nasr, 2007, pp. 279-300) demonstrated a positive relationship between working capital and profitability. In contrast, Sobczyk (Sobczyk, 2008, pp. 91-102) found a negative correlation in trading companies.

Effective working capital management requires that managers and business owners clearly recognize that managing working capital is not merely a financial aspect, but also a critical determinant of the company's smooth operations and financial efficiency. A central element in this regard is the credit policy, through the precise definition of the terms and conditions for granting trade credit (Thi, X.T.H., Thi, T.H.N., Chien, 2025).

The ultimate goal of working capital management is to prevent both over-investment and under-investment in a company's current assets, as both situations have negative consequences. Due to the cost of financing, over-investment in current assets can result in lower profitability due to unproductive use of funds, while under-investment in current assets can also pose a threat to the organization's liquidity. Effective working capital management is considered one of the most important tasks for financial managers, as a significant portion of funds is effectively tied up in current assets. Efficient working capital management is essential for every organization, regardless of whether it is a manufacturing, service, or retail organization (Panigrahi, 2024).

4. Evaluation of Working Capital Management Strategies

The evaluation of Polish business entities is carried out from various perspectives: economic-production and financial liquidity and profitability. However, the primary focus in these studies is on financial performance. Many financial indicators are presented in literature

and business practice. However, they do not form integrated groups of indicators that would enable comprehensive management of net working capital.

From a balance sheet perspective, net working capital management focuses on minimizing the involvement of individual current asset components or increasing short-term liabilities. In the cash flow statement, these actions translate into inflows and outflows, better reflecting the impact of managing net working capital elements on a company's ability to generate cash from operating activities, both in terms of financial liquidity and value creation.

In managing net working capital, it is reasonable to adopt the second approach, where the goal is to shorten the capital commitment period. Instead of using absolute values derived from the balance sheet or cash flow statement, management focuses on the net working capital cycle—the time during which capital remains in circulation.

To assess the impact of business type on the choice of working capital management strategy, this article utilizes the golden balance sheet rule and liquidity indicators.

The golden balance sheet rule assumes that fixed assets should primarily be financed with equity capital and, if necessary, with long-term external capital (Sawicki, 2004, p. 313). Current assets should be covered by equity, long-term external funds, and partially by short-term external capital. The golden rule can be represented by two formulas: equity application ratio and debt application ratio.

First indicator represents the proportion of equity capital to fixed assets:

$$\text{Equity Application Ratio} = \frac{\text{Equity Capital}}{\text{Fixed Assets}} \quad (1)$$

Second indicator represents the proportion of debt capital to current assets:

$$\text{Debt Application Ratio} = \frac{\text{Debt Capital}}{\text{Current Assets}} \quad (2)$$

The most crucial aspect of the golden balance sheet rule is the relationship between equity capital and fixed assets. Fixed assets must be entirely financed by equity, as this is the only principle ensuring financial independence and stability for a company. In practice, achieving this state is not always possible, especially when a company incurs significant expenditures on fixed asset investments, necessitating external funding. In such cases, it is required that the equity coverage be as high as possible.

On the other hand, current assets can be fully financed with external capital and should not be covered by equity capital. The golden balance sheet rule presents the relationships between the main asset categories and key liabilities in the balance sheet (Nowak, 2008, pp. 101-102).

A more liberal interpretation of this rule suggests that fixed assets, being in the company's possession for a long period, can be financed not only by equity but also by long-term liabilities. In this approach, equity combined with long-term liabilities is referred to as permanent capital.

Additionally, current assets can be partially financed with equity, but the most appropriate source of financing them is short-term liabilities. Under this modified approach, the equity application ratio is calculated as follows:

$$\text{Equity Application Ratio (Liberal Approach)} = \frac{\text{Equity Capital} + \text{Long-Term Liabilities}}{\text{Fixed Assets}} \quad (3)$$

Adhering to these rules means that the equity application ratio, in both approaches, should be greater than 1. Compliance also indicates the adoption of a conservative working capital management strategy. While other interpretations of the golden balance sheet rule exist (Szemraj, Czajkowska, 2020, pp. 50-54), this article limits its scope to the two indicators mentioned above.

Another set of indicators used in the analysis includes two fundamental liquidity ratios: current liquidity ratio and quick liquidity ratio.

The current ratio is widely used to assess a company's liquidity and short-term debt repayment ability. It is calculated by dividing current assets by current liabilities (Weygandt, Kimmel, Kieso, 2018, p. 10):

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \quad (4)$$

Financial analysis literature often states that this ratio should not be lower than 1. However, an optimal value ensuring sufficient liquidity is typically within the range of 1.5-2 (Kotowska, Uziębło, 2021, p. 60). A higher value generally indicates a conservative working capital management strategy.

Second of the indicators, the quick ratio, refines the current ratio by excluding inventories and short-term prepayments, as these are the least liquid current assets. A recommended value is 1 or higher, but this depends on the industry (Pinson, 2013, p. 114). The formula is:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}} \quad (5)$$

A high quick ratio combined with a low current ratio indicates excessive cash accumulation. Conversely, a low quick ratio with a high current ratio suggests excessive investment in inventories (Poniatowska, Maruszewska, 2013, p. 90).

5. Evaluation of Working Capital Management Strategies Based on Selected Companies

The research was conducted on nine companies listed on the Warsaw Stock Exchange, representing the production, trade, and service industries. The trade industry includes Dino, LPP, and Decora, while the production sector consists of Wojas, Tarczyński, and Wawel. The remaining companies (OT Logistics, PKP Cargo, and Trans Polonia) belong to the service sector. The greatest challenge in classifying companies by industry arises between the production and trade sectors, as some companies engage in both activities. The criteria for selecting the research sample, aside from the industry in which the companies operate, included

listing on the main market of the Warsaw Stock Exchange and a significant share of Polish capital ownership:

- Dino SA is a nationwide chain and a leading player in the growing and promising segment of medium-sized supermarkets located near customers' residences. It is also one of the fastest-growing retail chains in terms of store count and sales revenue in Poland's grocery retail market. Dino SA is among the most valuable companies (by market capitalization) on the Warsaw Stock Exchange.
- LPP SA is one of the most dynamically growing fashion companies in Central and Eastern Europe, managing five recognizable fashion brands: Reserved, Cropp, House, Mohito, and Sinsay.
- Decora SA is an international production and trading company specializing in technologically advanced products such as underlays, floor skirting, and profiles.
- Tarczyński SA is a producer of high-quality cold cuts, kabanos sausages, frankfurters, and protein snacks. It is the most popular brand among consumers and the market leader in the kabanos category in Poland, with products distributed to nearly 30 countries across three continents.
- Wojas SA is one of Poland's largest and most respected footwear manufacturers, operating a network of over 150 brand stores in Poland, the Czech Republic, Slovakia, and Belarus. The company produces several hundred thousand pairs of shoes annually, complemented by a leather goods collection that includes handbags, briefcases, and belts.
- Wawel SA is a well-loved Polish brand and one of the oldest confectionery manufacturers in Poland.
- OT Logistics SA provides transportation, forwarding, and logistics services in Poland and Central and Western Europe. It consists of several dozen companies of varying sizes and business profiles. The company operates not only in the inland waterway freight market but also in maritime and rail forwarding as well as port cargo handling.
- PKP Cargo Group SA offers comprehensive logistics services for both domestic and international freight transport. Its operations cover a wide range of railway freight services and additional services, including domestic and international freight forwarding, intermodal services, shunting services, terminal operations, rolling stock maintenance and repair, and land reclamation services.
- Trans Polonia SA is an international transport and logistics operator providing transportation services for liquid fuels, gasoline, diesel, and gas (LPG), liquid chemicals, liquid bituminous masses, and liquid food products.

Table 2.*Net working capital and gross working capital*

Company name	Net working capital				Gross working capital			
	2020	2021	2022	2023	2020	2021	2022	2023
DINO	-563,993	-1,020,353	-983,421	-626,128	1,516,698	1,985,184	2,706,706	3,253,165
LPP	-302,132	43,109	-457,746	-703,631	2,823,533	3,598,717	5,999,448	5,187,445
DECORA	75,894	101,248	83,775	122,230	132,117	206,334	234,907	208,116
WOJAS	9,035	33,255	5,318	67,092	125,073	133,643	180,100	168,940
TARCZYNSKI	38,857	33,174	-89,602	-131,987	213,761	274,298	417,371	357,415
WAWEL	337,534	359,637	297,127	376,075	404,918	446,604	384,934	469,042
PKP CARGO	-236,800	-600,000	-776,900	-1,043,900	1,149,300	1,139,000	1,305,800	1,289,400
TRANS POLONIA	125,099	77,031	68,000	52,268	225,137	113,897	113,183	101,409
OT LOGISTICS	-376,488	-111,712	14,154	20,488	139,945	102,288	206,516	126,389

Source: financial data of the companies.

The analysis of the previously discussed and presented values of gross and net working capital in Table 2 indicates that a typical trading company, such as Dino, implements an aggressive working capital management strategy. This is confirmed by each of the indicators and the negative value of net working capital. Despite the negative values of net working capital in the last two years, it is decreasing, which, along with the increasing gross working capital, suggests that Dino is easing its policy on working capital.

LPP SA, like Dino, follows an aggressive working capital management strategy. However, in a more liberal approach to the golden balance rule, its current liquidity ratios remain at levels generally considered appropriate.

Although Decora has been classified as a trading company, it behaves more like a manufacturing enterprise, as evidenced by the positive net working capital value. This is a result of the company also engaging in production activities. The traditional approach to the golden balance rule indicates aggressive financing of the company's assets.

Typical behavior for manufacturing companies applies to Wawel. All analyzed indicators and the positive value of net working capital suggest a conservative approach by management toward working capital.

A rather unusual behavior for a manufacturing company is demonstrated by Tarczyński SA. Its indicators and low working capital value suggest a moderate working capital management strategy. This direction may result from difficulties in selling inventory while still having to meet short-term liabilities. This is indicated by the growing gap over the three analyzed years between the current and quick liquidity ratios.

Table 3.*The Classical and Liberal Approaches to the Golden Balance Rule*

Company name	Golden balance rule				Golden balance rule – liberal approach			
	2020	2021	2022	2023	2020	2021	2022	2023
DINO	0.56	0.59	0.67	0.79	0.86	0.80	0.81	0.94
LPP	0.77	0.66	0.75	0.76	1.07	0.99	1.07	1.15
DECORA	1.62	1.59	1.11	1.16	1.65	1.69	1.35	1.47
WOJAS	0.61	0.89	1.00	1.24	1.44	1.65	1.47	1.58
TARCZYNSKI	0.53	0.50	0.50	0.48	0.95	0.93	0.90	0.89
WAWEL	1.82	1.93	1.78	2.04	1.84	1.95	1.79	2.06

Cont. table 3.

PKP CARGO	0.49	0.47	0.51	0.46	0.96	0.91	0.88	0.85
TRANS POLONIA	2.49	1.39	1.17	0.98	3.34	1.76	1.55	1.36
OT LOGISTICS	-0.12	0.01	0.30	0.33	0.48	0.79	1.03	1.04

Source: financial data of the companies.

Service companies do not have clear-cut values. The very low indicator levels of OT Logistics in the initial period of the study indicate liquidity problems for this company. This also poses a challenge in researching aggressive strategies, as it may be a result of the company's financial difficulties rather than a deliberate decision by management.

Table 4.

Current and Quick Liquidity Ratios in the Assessment of Working Capital Management Strategies

Company name	Current Liquidity Ratio				Quick Liquidity Ratio			
	2020	2021	2022	2023	2020	2021	2022	2023
DINO	0.73	0.66	0.73	0.84	0.31	0.20	0.20	0.16
LPP	1.12	0.99	1.08	1.16	0.61	0.55	0.58	0.55
DECORA	2.35	1.96	1.55	2.42	1.36	0.87	0.78	1.32
WOJAS	1.08	1.33	1.44	1.66	0.31	0.45	0.27	0.33
TARCZYNSKI	1.22	1.14	0.82	0.73	0.90	0.76	0.51	0.43
WAWEL	6.01	5.14	4.38	5.05	4.27	3.93	3.36	4.00
PKP CARGO	0.83	0.65	0.63	0.55	0.71	0.56	0.53	0.47
TRANS POLONIA	2.25	3.09	2.50	2.06	2.25	2.94	2.34	1.88
OT LOGISTICS	0.27	0.48	1.07	1.19	0.27	0.46	1.06	1.16

Source: financial data of the companies.

In service companies, the absence or very low level of inventory is noteworthy, which results in little difference between the current and quick liquidity ratios. Among the service companies, Trans Polonia demonstrates the most conservative approach to working capital. PKP Cargo follows an aggressive strategy, which is at least partially due to its strong market position.

6. Conclusion

The primary goal of every enterprise is to achieve maximum profits and maintain a strong and stable market position. One way to achieve this is through effective working capital management. However, when managing working capital, it is essential not to overlook liquidity, which often stands in opposition to an aggressive approach in this area.

Summarizing the conducted research, it can be stated that typical trading companies implement aggressive working capital management strategies. The examined trading companies (LPP and Dino), in addition to adopting such an approach to working capital management, are also characterized by expansive business growth. This expansion may be

partially financed through net working capital. Manufacturing companies, whose trading activity is carried out on a limited scale, tend to manage their working capital in a conservative manner. Service companies, although to a lesser extent, generally lean towards aggressive working capital management strategies.

It is worth noting that the common belief that a conservative strategy is the most prevalent is not supported by the conducted research. Nevertheless, these findings require further exploration, particularly by including a larger sample of enterprises in future studies. In subsequent publications, the author also intends to analyze the impact of the strategies employed by companies on the profitability of the examined entities.

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