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## Group Purchasing Vs. Net Working Capital

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### Abstract

Net working capital is a measure of financial security of a company. It is closely related to financial liquidity as its management is the management of current assets and current liabilities. Group purchases have a major impact on inventory management, short-term receivables and short-term liabilities as well as cash. Group purchasing is used in multi-stakeholder organizations such as group purchasing organizations (GPOs). Depending on the selected strategy of business management, group purchases have a positive impact on the company's profitability or the level of working capital, i.e., financial liquidity. Trade credit has a large role in shaping the level of working capital, which directly affects short-term receivables, short-term liabilities and the level of cash. In group purchasing organizations the managers, by organizing group purchases, can directly influence the level and structure of individual elements that build the level of net working capital.

*Keywords: group purchases, working capital, strategies*

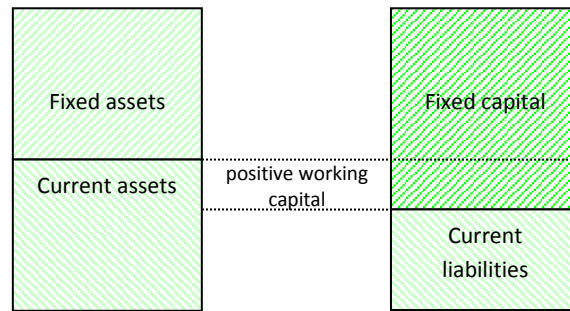
### Introduction

The basis for building a competitive advantage by a company is financial security. Enterprises should have cash at all times to repay their current liabilities. In general, there are situations in enterprises when they are missing or when their level is too high, i.e., over-liquidity occurs. Both these situations are disadvantageous for enterprises. Lack of cash may cause the production or sales to be stopped, which means large losses for the company. Unnecessary costs arise, the company may lose customers. Continuous cash shortages hamper the day-to-day operation of the company as well as the decision-making process. There are hold-ups in various company units, nervousness among employees and management. The company logistics ceases to function, the unit operates inefficiently, costs increase in virtually every area. If there is an excess of liquidity in an enterprise, individual elements influencing this high level of net working capital should be analyzed in detail. Managers should pay attention to the working capital management strategies in the enterprise as it is a buffer protecting the enterprise against loss of financial liquidity. The functioning of multi-entity organizations such as group purchasing organizations has a large impact on the level of net working capital. Enterprises operating within GPOs carry out joint transactions, which significantly affects the level of net working capital. Their clear impact is visible in the branch group purchasing organizations.

### Working Capital

Net working capital can be defined as the difference between current assets and short-term liabilities. In the literature, terms such as "net current assets" and "current capital" are often used to determine "working capital" [1]. Working capital as the individual elements of current assets "work" in the sense that they earn money [2]. Another definition defines the net working capital as a part of the long-term capital of the company that finances current assets [3]. It can be positive, negative or theoretically neutral. However, the operational security of a company is ensured by the positive net

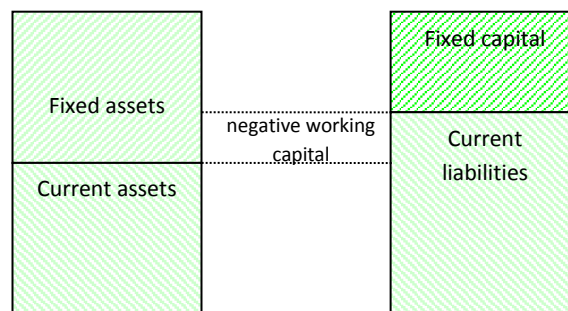
working capital. The positive working capital exists in the situation when current assets are higher than current liabilities.



**Fig. 1.** Positive working capital  
 Source: own research

Positive working capital is a sign of having financial liquidity. Current assets are financed by short-term liabilities and by fixed capital. And the part of the fixed capital that finances current assets is called positive net working capital.

The company may also have a negative net rotary capital. It appears in a situation where short-term liabilities exceed current assets.

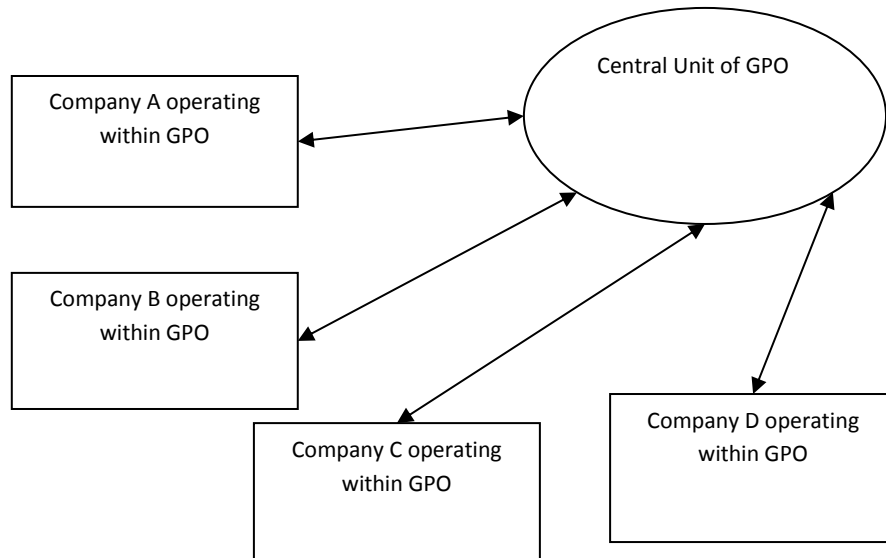


**Fig. 2.** Negative working capital  
 Source: own research

In this situation current assets are financed by short-term liabilities. There is, therefore, a risk of payment closures. This institution is disadvantageous for a company and the solution to this problem may be the use of compensation deals within the group purchasing organization. Compensation deals are the ones that support the management of financial liquidity [4]. The company managers should run their organization in such a way that the positive net working capital appears. In multi-entity organizations there are group purchases that have a large impact on the structure and level of current assets and the level of current liabilities, which shape the level of net working capital.

**Group Purchasing Organization**

First Group Purchasing Organizations (GPO) appeared in the US in 1950 [5]. A group purchasing organization can be defined as a group of cooperating companies that jointly controls and improves material, information and monetary flows from suppliers to final recipients. GPOs have a positive impact on the quality of service or goods sold. Typical defects are organizational costs and loss of flexibility [6]. To be successful a GPO must be able to foster and maintain the commitment of its members [7]. Participants in such a system form a separate central unit whose main task is to achieve the objectives set by enterprises operating in a given system [8]. The organizational chart of the GPO is shown in the figure below.

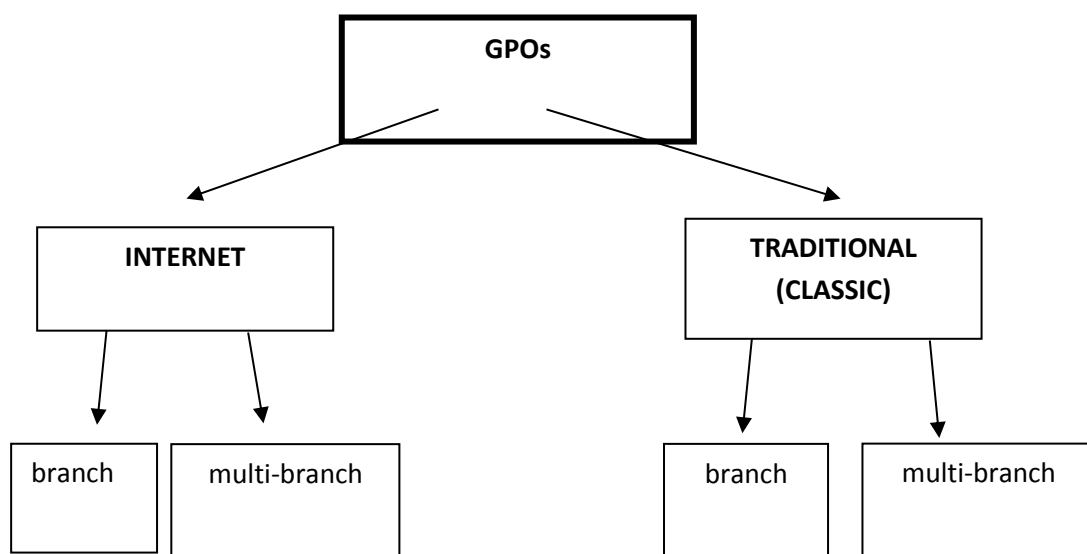


**Fig. 3.** Organizational chart of the group purchasing organization  
*Source: own research*

The group purchasing organization is thus a typical multi-entity organization managed by the central unit. The relationships between individual participants in the group have a large impact on the success of the purchasing group, and companies should trust each other [9]. The purchasing group can be described as powerful buyers. They meet important criteria characteristic for powerful buyers [10]:

- They buy large quantities,
- Products purchased in the sector are standardized,
- Products purchased in a given sector by a group of buyers constitute a significant part of its costs.

When analyzing the functioning of GPOs a division should be made due to the integrating unit, i.e. the Internet and traditional ones. The next most important division is the division into one and multi- branches groups. The details are shown in Fig. 1.



**Fig. 4.** Classification of GPOs.  
*Source: own research*

The division into multi-branch and branch GPOs is very important from the point of view of net working capital management. Functioning within purchasing groups is based on joint purchases, i.e., cooperation between all participants of the purchasing group. The central unit is responsible for the organization of group purchases. Its task is to negotiate the best terms of the deal for the purchasing group. The greater the scale effect, the greater the purchasing power, so it is important that all participants in the group are interested in the same commodity or material. Therefore, the stronger scale effect is obtained in the branch GPOs where there are no divisions into industries and organization of separate purchases for individual assortments. It is easier for the central unit to manage a GPO when it trades with a small group of producers. Enterprises operating in the purchasing group through group purchases obtain low prices and attractive trade credit. A favorable price and the trade credit give a lot of management opportunities in the field of working capital management.

### Strategies of Group Purchasing

Group purchases are the basis for the functioning of GPOs. Companies operating within the groups, if they do not use this form of organizing purchases, incur unnecessary costs. They should be removed from the organization as they probably use third-party offers, which is forbidden in purchasing groups. Functioning within GPOs is based on purchases made at the central unit of suppliers. The choice of suppliers must be accepted by the supervisory board of the central unit, that is very often by the owners of individual companies operating within GPOs.

Group purchasing strategies should be divided into two types:

- Trade credit strategies;
- Discount strategies.

The trade credit strategy occurs when the central unit of the group receives, in addition to a favorable price, a long period to settle the obligation as a part of negotiations with the producer. So there is a long time to repay the obligations, i.e. the merchant's loan. In the case of working capital management, this type of transaction will allow companies to turn over cash until the liabilities are settled. Long buy credit gives an opportunity to lend customers longer, which can increase sales because the company offers attractive trade credits. The impact of the trade credit strategy on the most important elements constituting working capital is presented in Table 1.

**Table 1.** The impact of the trade credit strategy on current assets and current liabilities

Current assets and current liabilities	The impact of the trade credit strategy
Stocks	Growth
Receivables from recipients	Unchanged
Cash in the cash box and on bank account	Unchanged
Liabilities for suppliers.	Growth

*Source: own research*

The trade credit strategy positively affects the level of net working capital because a company has stocks for which it has not paid, which it can sell and increase the level of cash. Thus, the most liquid elements of current assets, i.e., cash at hand and bank accounts or receivables from customers increase. When selling goods (stocks), a margin is calculated, which results in an increase in cash or receivables in relation to the amount of liabilities to suppliers. The level of net working capital, therefore, increases. In the case of a split payment operation, this strategy strengthens the operational security of enterprises because the payment of net receivables follows earlier, which allows the collection of funds for the payment of gross liabilities. Therefore, it is a group purchase strategy that is secure but not very profitable unless the company, using the supplier in an effective way, uses cash.

The discount strategy is to use an additional rebate that the company receives from the producer for early payment of obligations. This strategy, therefore, has the greatest impact on costs because the unit receives from the producer a low price for the goods it acquires. While assessing the level of net working capital one can observe a decrease in the level of cash, as well as the level of current

liabilities. In the case of this strategy an outflow of cash from their impact may be faster. The application of this strategy is possible in enterprises that have free financial resources. The impact of the discount strategy on the most important elements forming working capital is presented in Table 2.

**Table 2.** The impact of the discount strategy on current assets and current liabilities

Current assets and current liabilities	The impact of the discount strategy
Stocks	Growth
Receivables from recipients	Unchanged
Cash in a cash box and on bank account	Decline
Liabilities for suppliers	Decline

*Source: own research*

The discount strategy tends to reduce the financial liquidity. In the enterprise the level of cash is lowered, inventories grow and current liabilities decrease. The increase in inventories and the decrease in cash have a negative impact on financial liquidity. Payment of gross amounts and the emergence of stocks increases the need for working capital. Therefore, it is a very profitable strategy, but it requires a solid financial basis that will secure the financial gap that arises in such group purchases.

## Conclusions

Operation within group purchasing organizations is based on joint group purchases. Depending on the financial situation of the individual and the purchasing group's policy, the enterprise has a choice of two group purchasing strategies. If there are financial resources available in the unit the discount strategies should be used, which positively affects the individual's profitability. It raises profitability ratios in the enterprise, but it decreases financial liquidity, there is an outflow of cash, which also causes a drop in the level of net working capital. If enterprises decide to use the trade credit strategy then the level of net working capital increases. The increase in the level of the net working capital raises financial liquidity ratios. Trade credit strategy is a tool that improves the liquidity of enterprises.

In the branch group purchasing organizations a discount strategy is generally used. In the surveyed business enterprises in 2015 high financial liquidity was observed. The details are presented in Table 3.

**Table 3.** Financial liquidity ratios in enterprises operating in the branch group purchasing organization

Enterprise	Current financial liquidity ratio	Quick financial liquidity ratio	Level of net working capital
Enterprise 1	1,9	1,2	Positive
Enterprise 2	7	3,8	Positive
Enterprise 3	1,8	0,9	Positive
Enterprise 4	15,7	8,2	Positive
Enterprise 5	1,9	0,9	Positive
Enterprise 6	8,4	5,6	Positive
Enterprise 7	3,6	2,1	Positive
Enterprise 8	1,4	0,7	Positive
Enterprise 9	9,3	6,8	Positive
Enterprise 10	1,9	1	Positive
Enterprise 11	1,4	0,8	Positive
Enterprise 12	3,5	2,1	Positive
Enterprise 13	1,5	1	Positive
Enterprise 14	1,6	0,9	Positive
Enterprise 15	2,5	1,4	Positive
Enterprise 16	1,3	0,6	Positive
Enterprise 17	1,2	0,7	Positive
Enterprise 18	2	1,2	Positive

Enterprise 19	5,8	3,6	Positive
Enterprise 20	1,2	0,8	Positive
Enterprise 21	4,8	1,5	Positive
Enterprise 22	5,6	2,9	Positive
Enterprise 23	9,5	3,7	Positive

Source: own research

Each of the units surveyed has a positive net working capital. Financial liquidity ratios are at a high level. These results indicate the possibility of discount strategy while organizing group purchases. In the units surveyed the reduction of working capital will not have a negative impact on working capital. In enterprises the profitability of sales will improve, which is very important for managers and business owners. Reducing the level of working capital, which will not result in the loss of the ability to settle current liabilities and increase profitability, is a sign of improving the efficiency of business management.

## REFERENCES

1. Wędzki, D. (2003), *Strategie płynności finansowej przedsiębiorstwa*. Kraków: Wydawnictwo Oficyna Ekonomiczna.
2. Pluta, W. (2005), *Planowanie finansowe w przedsiębiorstwie*. Warszawa: Wydawnictwo PWE.
3. Kusak A.(2006), *Płynność finansowa. Analiza i sterowanie*, Warszawa: Wydawnictwo WWZ.
4. Zimon G. (2018). Zarządzanie kapitałem obrotowym w grupach kapitałowych [In:] *Rachunkowość zarządcza grup kapitałowych*, E. Nowak (Ed.) Warszawa, CeDeWu, pp. 93-108.
5. Weinstein, B.L. (2006). The role of Group Purchasing Organizations (GPO) In the U.S Medical Industry Supply Chain, *Estudios De Economia Aplicada*, Vol. 24-3.
6. Schotanus, F., Telegen, J. (2007). Developing a typology of organizational forms of cooperative purchasing, *Journal of Purchasing & Supply Management*, Volume 13. pp. 53-68
7. Doucett, W. (1997). Influences on member commitment to group purchasing organizations. *Journal of Business Research*, 40(3),pp.183-189 DOI: [https://doi.org/10.1016/S0148-2963\(96\)00234-2](https://doi.org/10.1016/S0148-2963(96)00234-2).
8. Zimon, G. (2014) Zimon, G., 2014., *Kapitał obrotowy brutto w przedsiębiorstwach handlowych tworzących grupy zakupowe*, In: I.D. Czechowskiej, R.Pastusiaka (ed.). *Acta Universitatis Lodziensis, Folia Oeconomica* 2(300) pp. 319-327, Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
9. Schotanus, F., Telgen, J., de Boer, L., (2010). *Critical success factors for managing purchasing groups*. *Journal of Purchasing & Supply Management* 16, pp. 51-60.
10. Porter, M. (2001). Porter o konkurencji. Warszawa: Polskie Wydawnictwo Ekonomiczne, p. 53.