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# An Analysis of the Financial Situation of Central Units of Group Purchasing Organizations

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#### ABSTRACT

Small enterprises start to cooperate with each other in order to improve their financial situation. They combine to create various types of multi-entity organizations such as group purchasing organizations (GPOs). This is to provide enterprises with an improved financial performance and operational safety in the market. In general, enterprises operating within GPOs are managed by a specially created company which can be defined as a central unit. It is responsible for the flow of supplies, cash, information on the producer - company line. In order such transactions could be carried out efficiently, the central unit must have a stable financial position. The aim of the article is to assess the financial situation of central units of selected purchasing groups. The research conducted showed that the central units had a stable financial situation. Their activity is profitable. The only disadvantage that can be observed is low financial liquidity. For the safe operation of the central units, it is necessary to maintain a faster rotation of receivables in days from the rotation of liabilities towards suppliers on days. This will allow the purchasing group's central unit to function safely in the market.

**Keywords:** Central Unit, Group Purchasing Organizations, Financial Situation **JEL Classifications:** G30; G33; L15

### **1. INTRODUCTION**

In order to survive in the market companies merge and work together in multi-stakeholder organizations, referred to as group purchasing organizations (GPOs). They are created in every industry. Most often, SMEs decide on this form of cooperation. Generally, they are forced by the market situation and high competition. Small and medium-sized enterprises that decide to operate within GPOs limit the freedom of making decisions. This is due to the fact that a purchasing group management unit appears for each purchasing group. This unit is referred to as the purchasing group's central unit or very often referred to as the purchasing group. The aim of the article is to present the role of the central unit in the purchasing group and assess the financial standing of central units operating in the construction industry.

#### **2. LITERATURE REVIEW**

The purchasing group can be broadly defined as a group of cooperating enterprises that jointly control and improve material, information and monetary flows from suppliers to final recipients. Several papers have suggested that GPOs are a way for buyers to amass bargaining power (Chipty and Snyder, 1999; Inderst and Wey, 2003, 2007, Nollet et al., 2017, Marvel and Young, 2008). Working in a group allows them to ensure financial safety, reduce costs and improve financial results (Blair and Durrance, 2014; Tella and Virolainen, 2005; Nollet and Beaulieu, 2005; Zimon and Zimon, 2019a; Burns and Lee, 2008; Cowan et al., 2016, Ates et.al. 2018). Participants of such a system form a separate central unit whose main task is to achieve the objectives set by enterprises operating in a given system (Zimon, 2018). There are several types of purchasing groups. They are usually divided into branch and

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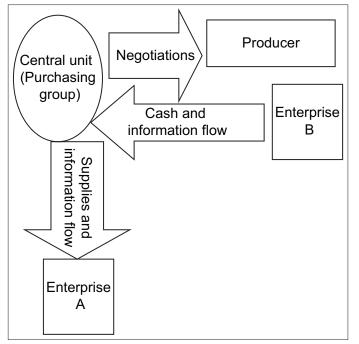
multi-branch purchasing groups. A more advantageous solution is functioning within the framework of the branch GPO since the scale effect can be used to a greater extent in such an organization. In multi-branch groups, the effect of scale weakens. In such organizations there are many smaller groups and handling their orders by the central unit is time-consuming and difficult. Another important division is the division of purchasing groups due to the central unit. One can distinguish two types of purchasing groups. The first type is the one where the integrator is an internal company, in the second case the central unit is an external company. If the central unit is an external company, then companies have a difficult control on it, because it is a foreign company that is not related to them (Zimon, 2019, Zimon and Zimon, 2019b). Its main goal is to generate profits for itself. The second option is the creation of an internal central unit by the members of the purchasing group. This is a better solution as the central unit thus created is controlled by all participants in the group, because they have their shares in the company referred to as the central unit. In addition, it is not aimed at profit, and even if it achieves it, they can return to all enterprises in the form of a dividend.

The central unit of the purchasing group is the most important element. It is a specially created company whose responsibility is to carry out tasks defined by the participants of the group. It is responsible for the flow of funds, supplies and information on the line of the producer - companies operating in the purchasing group. A detailed diagram of the operation of the central unit is shown in Figure 1.

The most important tasks to be carried out by the purchasing group include:

- Negotiations of terms of purchase with the producer, the central unit is responsible for negotiations regarding the price, discount and length of the trade credit
- Sales of goods ordered to individual group participants,

**Figure 1:** The functioning of the purchasing group's central unit



- Storage and organization of supplies of goods and materials. The next task of the central unit is to top up deliveries. It is possible in a situation where the central unit has a warehouse, thanks to which it has the possibility of selling goods to the participants of the group. Their price is increased, but it is so attractive that companies can supplement their stocks.
- It corresponds to the flow of information between group participants,
- It regulates liabilities to the producer,
- It has an option of crediting group members. It is a form of mutual transactions in the purchasing group which are designed to improve the current financial situation of enterprises threatened by loss of financial liquidity. It is about giving an attractive commercial credit to the enterprise.

### **3. RESEARCH METHODOLOGY**

The analysis was carried out on four Polish central units forming GPOs s in the construction industry. The research period covered the years 2013-2017. The research was carried out using selected financial ratios and statistical methods. The simplest method to assess the financial condition is to conduct a preliminary financial analysis and indicative financial assessment. The initial financial analysis should be carried out in two areas. In the areas of company assets and the analysis of liabilities, or sources of financing. Using the basic data from the balance sheet, managers can conduct a detailed analysis of assets and liabilities. The initial analysis of the volume of changes in assets and liabilities in the period audited should be considered on the basis of:

- Numeric data in absolute terms,
- Dynamics ratios,
- Structure analysis.

An important issue in the analysis of property resources and sources of financing is considering changes in time. On the basis of this asset analysis, one can obtain information about which resources the company increases and which decreases. If a company increases its assets, it is a symptom of its development (Gabrusewicz, 2014 Shim and Siegel, 2009). However, it should be carefully examined what the reason for the increase or decrease of individual assets is. An investigation of their correlation with other elements is necessary. For example, when the level of receivables from recipients increases when the sales revenues decrease, the debt collection process should be looked at. It may be a signal that the efficiency of debt recovery has deteriorated. It should be noted that the very look at the size of the estate and its increase is not always a positive information. When analyzing sources of financing, it is worth comparing changes in equity and foreign capital over time. As part of the initial financial analysis, one should also analyze the structure of assets. To this end, a number of operations informing about the share of individual components in assets should be used. In the case of liabilities, a growing tendency of equity and declining liabilities is desirable (Bednarski, 2007). However, too low share of liabilities to suppliers in the structure of liabilities should be assessed negatively, because the company does not fully use the cheapest source of financing, which are obligations to suppliers.

A ratio analysis is the second stage of financial analysis. It is a method of analytical research of information contained in financial statements, based on financial ratios derived from. Financial ratios enable the control of the financial condition and the financial position of the company, they can be applied both to the current assessment and to forecasting the financial condition of the enterprise (Nowak, 2017). The ratio analysis is carried out in various areas. The most typical is the distinction of the following four sets of ratios (Nowak, 2017; Higgins, 2012; Tyran, 2006).

- Liquidity ratios,
- Financial leverage ratios,
- Activity ratios,
- Rentability ratios.

### 4. RESULTS

The research was conducted on the example of four companies, central purchasing group units. They were divided according to the type of central units of purchasing groups into internal (domestic) and external (foreign) central units. All companies

# Table 1: Average results of central units of purchasing groups for current financial liquidity ratios

Financial	Ir	iternal	central	unit	External central unit				
liquidity	x	Me.	Min.	Max.	x	Me.	Min.	Max.	
ratio									
2013-2017	1.2	1.15	1.1	1.3	1.1	1.1	1.08	1.13	

Source: Author's own research

# Table 2: Average results of central units of purchasing groups for fast financial liquidity ratios

Quick	Int	ernal o	central	unit	External central unit				
financial	x	Me.	Min.	Max.	x	Me.	Min.	Max.	
liquidity									
ratio									
2013-2017	1.09	1.05	1.04	1.15	0.91	0.94	0.84	1.11	
G 4 4		,							

Source: Author's own research

#### Table 3: Average results of central units of purchasing groups for turnover ratios of receivables, liabilities and inventories in days

2013-2017	Internal central unit			External central unit				
	x	Me.	Min.	Max.	x	Me.	Min.	Max.
Receivables turnover ratio	53	57	42	62	56	58	51	60
Liabilities turnover ratio	50	55	44	62	66	68	61	70
Inventories turnover ratio	6	8	3	13	27	31	23	40

Source: Author's own research

analyzed operate in the construction industry and gather small and medium-sized trading enterprises. About 90% of construction companies involved in trade in building materials function within these four groups. These are the largest groups generating annually from 300 million PLN to 500 million PLN revenue. The research period concerned the years 2013-2017. The basic financial ratios and statistical methods were used for the research.

The first element that was analyzed related to financial liquidity. The results are presented in the Table 1.

When analyzing the results presented in Table 1, it can be concluded that the companies operating as central units of purchasing groups have low financial liquidity. Higher results are obtained by companies formed by enterprises forming a purchasing group. The results for the quick financial liquidity ratio are presented in the Table 2.

After subtracting the least liquid current assets, as in the case of financial liquidity, higher results are obtained by enterprises with an internal central unit. The difference between averages is more pronounced than in the case of normal financial liquidity. This is due to a higher inventory level in foreign companies, referred to as external central units.

Then, the turnover ratios for receivables, inventories and current liabilities were analyzed. The details are presented in Table 3.

When analyzing the individual results, it should be noted that in the purchasing groups managed by the internal center unit, the results for individual ratios were noted in comparison to the company referred to as the external central unit. The internal central unit tries not to store stocks, hence their quick rotation. The internal central unit credits the participants of the purchasing group. The receivables turnover ratio in days is higher than the liabilities turnover ratio in days. One of the tasks to be performed by the internal central unit is to support enterprises. In purchasing groups managed by the external central body, receivables are charged faster in company represent a high share, and poorly rotate compared to enterprises managed by an internal central unit. Another area of analysis concerned profitability. The detailed results are presented in the Table 4.

Higher profitability was obtained by enterprises managed by the internal central unit. The last element concerned debt. Table 5 presents the debt ratio.

When assessing debt ratios, it can be seen that in both entities foreign capital finances to a large extent the company assets. A more favorable result is obtained by the internal central unit.

#### Table 4: Average results of central units of purchasing groups for profitability ratios

2013-2017		Internal c	entral unit		External central unit			
	x	Me.	Min.	Max.	x	Me.	Min.	Max.
Sales profitability	0.003	0.003	0.002	0.004	0.001	0.001	0.001	0.001
Assets profitability	0.02	0.03	0.01	0.03	0.01	0.01	0.01	0.01
Capitals profitability	0.12	0.14	0.09	0.17	0.06	0.09	0.03	0.11

Source: Author's own research

# Table 5: Average results of central units of purchasinggroups for total debt ratios

2013-2017	Internal central unit				External central unit			
	x	Me.	Min.	Max.	x	Me.	Min.	Max.
Debt ratio	0.82	0.81	0.79	0.87	0.92	0.93	0.91	0.95

Source: Author's own research

#### **5. CONCLUSION**

The analysis conducted showed that in the financial management strategies of central purchasing group units, one can notice several common features for internal and external units. First of all, all analyzed units have low financial liquidity. However, they are not threatened by a loss of financial liquidity, in the interest of the companies making up purchasing groups, it is repaying its liabilities towards central units in a timely manner. Therefore, even if there are signals indicating a deterioration of financial liquidity, this threat should be averted quickly. However, low liquidity should be considered as a poor result and a financial management area that should be frequently monitored. An analysis of management effectiveness of the basic elements of current assets and liabilities has already shown some differences. Another approach is used by enterprises referred to as the internal units of purchasing groups. In their case, a very fast inventory turnover occurs, liabilities are repaid faster than the inflow of receivables. This is often caused by the use of additional discounts for faster payment of liabilities, which positively affects the profits of enterprises. Higher profits allow one to reduce the level of debt, which is visible when you compare this ratio in both groups of enterprises. Regarding the profitability analysis, the internal units of the purchasing groups obtained better results. It is influenced by more effective inventory management and increasing the price of goods sold from the central unit's storage, in case enterprises additionally want to replenish their stocks. As a result, the company, referred to as the internal central group of the purchasing group, has the possibility to take out bank loans, which allows them to support the commercial credit of enterprises that are in a difficult financial situation. Additionally, the use of rebates for previous payments also has a positive impact on the profits and profitability of the central unit of the internal purchasing group.

In both cases, the key to obtain favorable results in the case of central purchasing group units is to mobilize all participants of a given group to make joint purchases and to limit stocks of materials in the central units' warehouses. If this goal is met, the central units will obtain high profits.

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