ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES
ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2020 Volume 8 Number 1 (September)
http://doi.org/10.9770/jesi.2020.8.1(25)

ENTREPRENEURSHIP AND SUSTAINABILITY CENTER
Publisher
http://jssidoi.org/esc/home

ISSUES OF FINANCIAL LIQUIDITY OF SMALL AND MEDIUM-SIZED TRADING COMPANIES: A CASE STUDY FROM POLAND

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Received 10 January 2020; accepted 25 June 2020; published 30 September 2020

Abstract. Most often, the victims of financial crises are small and medium-sized enterprises. Very often, even short-term payment gridlocks can lead to their bankruptcy. All over the world, managers of such enterprises are trying to introduce solutions that will improve their financial security. Branch group purchasing organizations (GPOs) are a very popular method to improve the financial security and financial situation of small and medium enterprises. They are multi-stakeholder organizations using the effect of scale. It allows them to reduce costs, increase sales and gives many opportunities to build a policy of managing liquidity. The purpose of the article is to present the impact of branch GPOs on the financial liquidity of small and medium-sized enterprises. The research was conducted on a group of 96 Polish small and medium-sized commercial enterprises operating in the construction industry. The study showed that the analyzed units do not have problems with financial liquidity, due to the use of a strong scale effect.

Keywords: liquidity; SMEs; group purchasing organizations

Reference to this paper should be made as follows: Grzegorz Zimon. 2020. Issues of financial liquidity of small and medium-sized trading companies: a case study from Poland. *Entrepreneurship and Sustainability Issues*, 8(1), 363-372. http://doi.org/10.9770/jesi.2020.8.1(25)

JEL Classifications: G32, G35, L22

1. Introduction

From the point of view of small and medium enterprises, their development depends on two factors of profit and financial security. In the area of corporate financial management, profits are the result of an appropriate revenue and cost management policy, while financial security is mainly equated with the results of financial liquidity ratios. In the case of financial liquidity management, basic components appear which create its size, such as receivables from customers, inventories, short-term investments or liabilities to suppliers. An important element strongly related to maintaining the financial security of enterprises is also profit. Entities whose financial result is a loss slowly lose financial liquidity and go bankrupt in the long run. In the case of small enterprises, competition with powerful enterprises in the area of costs, increasing the scale of sales, and credit policy of supply organization is very difficult. Therefore, among the many tools that can be used and which are a great opportunity for gradual and sustainable development and, above all, help maintain the financial liquidity of these smaller units, included in the group of small and medium-sized enterprises, is joint activities within the purchasing groups. Companies of various sizes operating in virtually every industry can take advantage of this opportunity.

And the obtained benefits are highly likely to have a positive impact on financial liquidity, which is the basis for building an enterprise strategy based on sustainable development.

2. Literature review

The global economic crisis caused by the banking crisis in 2008 was a major event that particularly affected small and medium-sized enterprises. This is confirmed by insolvency statistics, where SMEs were the largest share. Managers of such units, learned by experience, must secure funds for their functioning, or create some financial reserves to alleviate future financial shortages (Bates et al., 2009; Palazzo, 2012, Simutin, 2010).

A very important element, which is often referred to as the basic factor leading to the fall, are shortcomings in the management of the company. Bad management, unskilled staff is an important factor often leading to bankruptcies of enterprises (Oooghe & De Pricker, 2008; Ma et al., 2014; Asem & Alam, 2014; , Özbayrak & Akgün, 2006, Cicea et al., 2019). Baldwin also confirms that weakness of management was the main reason for bankruptcies of enterprises in Canada (Baldwin, 1998).

A big problem in managing SMEs, especially when they have to compete with market leaders, is the lack of high purchasing power. The larger the scale of purchases, the better the price and other transaction conditions. A good solution to increase the purchasing power of small units is to cooperate and try to increase your purchasing power in order to increase your position in negotiations with the supplier. Such opportunities for small and medium-sized units give the activity within the framework of purchasing organizations.

Group purchasing organizations are multi-stakeholder organizations created in every industry. Group purchases are becoming increasingly popular in both the private and public sectors (Essig, 2000; Nollet & Beaulieu, 2003; Polychronakis & Syntetos, 2007; Tella & Virolainen, 2005, Schotanus et al., 2010). Group Buying (GB) is an evolving business model where companies receive reduced prices. This practice is observed in various product categories, from consumer electronics and furniture to dental services and museum visits (Edelman et al., 2016: Trana & Desiraju, 2017).

Purchasing groups are mainly for small and medium enterprises an opportunity to successfully compete with leaders and large enterprises on the market. A group purchasing organizations (GPO) can be defined as a group of enterprises from the same or another industry that combine to make joint purchases.(Schotanus & Telegen, 2007; Lambe et al., 2002) The group purchasing organizations is a group of cooperating enterprises that jointly controls and improves material, information and cash flows from suppliers to final recipients. Participants of such a system form a separate central unit, whose main task is to achieve the goals set by enterprises operating in a given system (Zimon, 2018a). Relationships between individual group participants have a great impact on its success, because enterprises should trust each other (Schotanus et al., 2010). The literature states that trust and cooperation between individuals in a group can be one of the most-discussed success factors (Nollet & Beaulieu, 2005; Quayle, 2002; Vangen & Huxham, 2003, Marvel & Yang, 2008). A purchasing group is an entity that uses collective purchasing power to obtain a discount (Yang et al., 2107).

A purchasing group is an organization consisting of enterprises and a group holder called an integrator. The integrator is a central unit that manages the entire organization, most often it is a specially created company by the companies forming the purchasing group (Zimon, 2018b). The strength of purchasing groups is the scale effect and close cooperation of group members. The consolidation of members of a given group, building purchasing power is the basis in negotiations with producers (Blair & Durrance, 2014; Chipty & Snyder, 1999). The purpose of purchasing groups is to defend individual companies against strong competition and to increase negotiating power. This is possible because joint operation and economies of scale gives companies many opportunities to improve their financial condition. There are many divisions of purchasing groups (Schontanus & Telegen, 2007), but one of the most important divisions is the division into industry and multi-branch (Zimon, 2018b). This division has the large impact on what is most important in the case of groups' activity on purchasing power and scale effect. If companies operate in branch group purchasing organizations, there are no additional divisions into different types of activities in the group. The ordered goods and materials are from a narrow group of suppliers, which facilitates the functioning of the central unit and allows obtaining high discounts and favorable trade credits, the purchasing power in such a group is large, which allows increasing the competitive position of small units on the market. In the case of multi-discipline, divisions appear in the group and not all enterprises purchase the same goods, materials. Several groups of suppliers appear, divided into groups of recipients. The scale effect is reduced, in addition, the central unit must be more powerful because it supports many manufacturers. These are additional costs and the benefits resulting from additional divisions within the purchasing group are smaller.

However, in both cases, working together within this type of organization brings benefits. The most frequently mentioned benefits are: cost reduction, sales increase and financial standing improvement as well as obtaining a favorable trade credid (Zimon & Zimon, 2019, Burns et al., 2008, Safaei et al., 2017).

When analyzing the functioning of purchasing groups, it is clear that they have the large impact on credit policy and financial results of enterprises. Figure 1 below presents a diagram showing the basic areas of enterprise finance with the largest share of the impact of purchasing groups.

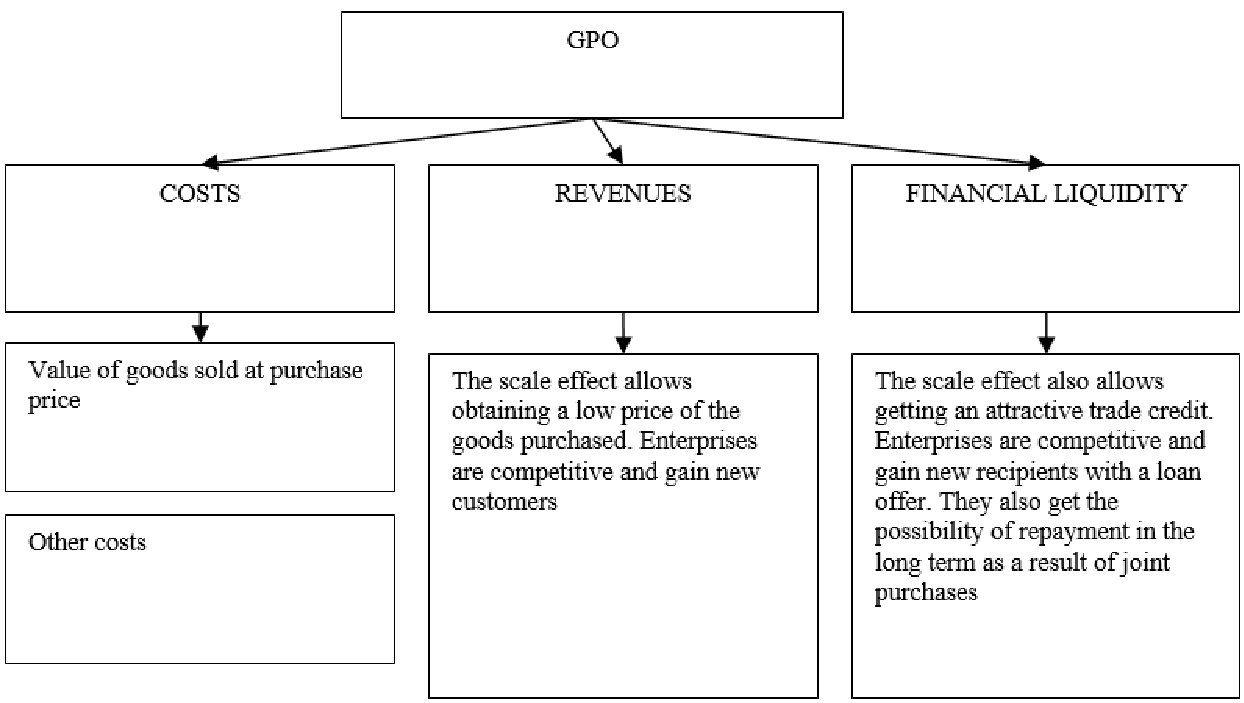

Fig. 1. Basic areas of the impact of purchasing groups on SME's finance

The figure presented shows how important the role of trade credit is. This is confirmed by recent years when small and medium-sized enterprises faced during the global financial crisis in the face of increased difficulties related to the use of bank loans, trade credit was often the only chance for them to finance their current operations (Degryse et al., 2018; Atanasova & Wilson, 2004). The role and importance of trade credit in company management is confirmed by numerous studies carried out all over the world (Wilner, 2000; Bougheasa et al.,

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2009, Kontus & Mihanovic, 2019) and its impact on financial liquidity is indisputable and largely depends on the strategy of managing receivables from customers. In the literature one can find many analyzes and explanations that the trade credit offer has an impact on financial security, quality of offered products, and behavior of recipients (Biais & Gollier, 1997; Mateut et al., 2006; Jain, 2001; Cunat, 2007; Frank & Maksimovic, 2005; Burkart & Ellingsen, 2004; Daripa & Nilsen, 2007). Many authors indicate that commercial credit has the direct impact on profitability and is an important criterion for selecting suppliers when it is difficult to decide from whom to buy products (Ukaegbu, 2014; Lazaridis & Tryfonidis, 2006; Sartoris & Hill, 1983). In general, it can be seen that cost reduction, sales increase and improvement in trade credit management policy are those elements that strongly affect the financial security of small and medium-sized enterprises.

Joint purchases within purchasing groups allow obtaining attractive prices of the goods purchased. This positively affects the costs of basic operating activities. Enterprises can offer attractive prices to attract new contractors, or offer extended payment periods. These activities allow to expand the sales market, as well as to keep existing customers. This should be confirmed by the increase in sales volume

3. Methodology

The literature on the subject presents a number of studies on financial liquidity management in SMEs or large units operating independently in the market (Huang & Mazouz, 2018). The article presents how economies of scale and interrelationships, cooperation of entities operating in purchasing groups allows improving the financial security of units and optimizing the level of financial liquidity of enterprises. The research was conducted on a group of 98 Polish trade enterprises operating in the construction industry. The units, which are referred to as trade gropu purchasing organizations, operate in multi-stakeholder entities, and they were selected for research because in recent years in Poland a large number of bankruptcies were recorded in this area. This was mainly due to the emergence of payment gridlocks, which very often led to a loss of financial liquidity in SMEs operating in the construction industry. Selected enterprises form purchasing groups whose task is to improve the financial results, management efficiency and financial security of individual group participants. In addition, they operate in trade purchasing groups, where strong economies of scale increase the competitive position of individual enterprises. In Poland, the first purchasing groups were created in the construction industry, and they currently have a very strong position in the Polish market and are an exemplary example of multi-entity organizations. At present, there are 5 industry purchasing groups of 112 enterprises operating inn the market related to the construction industry in Poland. The analysis was carried out on a group of 96 enterprises.

The research was conducted using appropriate statistical methods. The level of financial liquidity was assessed using appropriate financial measures derived from the ratio analysis and appropriate statistical methods.
In order to make the research more detailed, it was analyzed how the joint operation within the branch GPOs affects financial liquidity, on individual elements building financial liquidity. Based on the research, the following elements were identified that are significantly affected by the scale effect that appears in purchasing groups. The analysis was based on financial data for 2015-2017. In the article, the author tries to prove that acting within purchasing groups allows small and medium-sized enterprises to reduce costs, increase sales, improve the use of trade credit, which will positively affect the level of financial security of enterprises.

4. Results

In the case of enterprise management, it is most difficult to maintain a safe level of financial liquidity and high profitability. Generally, managers must decide whether to run a business safely or to conduct a high-profit, aggressive policy. Operating in groups, however, allows to a large extent maintain high financial liquidity and profitability. This is confirmed by the results presented in Tables 1 and 2.

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Table 1. Average results for current financial liquidity ratios

Current financial liquidity ratio	$\bar{x}$	Me	*s*	min	max
2015	3.26	1.70	2.90	0.95	15.0
2016	3.08	1.97	3.03	1.25	17.0
2017	3.69	2.05	3.90	1.00	18.0

Source: author's own research

It can be clearly seen that the analyzed enterprises have high financial liquidity and excess liquidity. From the cost point of view, this should be assessed negatively, it would be worth reducing the level of current assets. However, there are authors who believe that a company with a large excess of cash attracts customers (Huang & Mazouz, 2018, Huang et al., 2013). The units analyzed have such surpluses which is confirmed by the results of the second analyzed indicator, quick liquidity. The detailed results are presented in Table 2.

Table 2. Average results for quick liquidity ratios

Current financial liquidity ratio	$\bar{x}$	Me	*s*	min	max
2015	1.94	1.01	1.60	0,60	5.20
2016	2.00	1.00	2.95	0.80	4.40
2017	2.15	1.15	3.33	0.70	7.10

Source: author's own research

Generally, high liquidity is low profitability (El Kalak et al., 2017; Zimon, 2018b). In the case of the units analyzed, due to the effect of scale, enterprises obtain a low price of purchased goods. This is confirmed by the most important cost item in commercial enterprises, the value of goods sold at the purchase price. This item, thanks to additional discounts, is certainly lower than the value that would appear if the goods were purchased individually by the company. Thanks to this, units can realize a high commission, have free cash, which has a key impact on the implementation of the trade credit management policy. The average results for the return on sales ratio are presented in Table 3.

Table 3. Average results for sales profitability ratios

Sales profitability	$\bar{x}$	Me	*s*	min	max
2015	0.06	0.05	0.03	0,01	0.10
2016	0.06	0.04	0.03	0.01	0.12
2017	0.09	0.06	0.04	0.01	0.16

Source: author's own research

Free cash allows buildking an effective trade credit management policy. In this situation, trade credit becomes a very effective weapon in the fight against competition. This is confirmed by the results of the rotation of receivables from customers and liabilities to suppliers in days. In the analyzed enterprises, faster rotation in days appears in the case of receivables. So the money flows earlier compared to the repayment date. This is a very good strategy for companies, they can reduce the use of bank loans, which are expensive. Tables 4 and 5 present detailed results.

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Table 4. Average results for receivables turnover in days.

Receivables turnover in days	$\bar{x}$	Me	*s*	min	max
2015	57.9	61.0	17,0	30.1	90.6
2016	60.0	63.2	21,9	22.5	80.1
2017	62.4	64.8	20,3	24.6	77.2

Source: author's own research

Table 5. Average results for liability turnover in days.

Receivables turnover in days	$\bar{x}$	Me	*s*	min	max
2015	60.1	63.3	14,8	39.4	93.2
2016	62.8	65.1	19,5	41.6	100.7
2017	66.2	66.9	20,5	40.1	122.9

Source: author's own research

The results of liabilities turnover in days are at a low level, this is due to the fact that often the purchasing unit's central unit negotiates additional discounts with the producer for earlier payment. If enterprises have the means, they take advantage of such an offer and settle the obligation in advance, then they receive the goods at an even lower price. These are very profitable transactions for units operating in purchasing groups. However, they negatively affect the liabilities turnover in days, which is low. However, the low level of this indicator may build the image of a strong enterprise that regulates its liabilities quickly.

The analysis of correlations between individual indicators in 2015-2017.

The analysis was carried out for data from 2016-2017, determining the matrix of Spearman's rank correlation coefficients (R) between pairs of indicators. Below are the most important conclusions from the analysis:

• Financial liquidity is very strongly linked to the level of liabilities (R =-0.91), the negative sign of the first of the ratios results from the negative significance of the level of liabilities.
• There is also a strong correlation between the liability ratio and Quick ratio (R = 0.88).
• The receivables turnover ratio has little impact on the level of liquidity (R=0.62).
• The inventory ratio does not affect the level of liquidity.

When assessing the years analyzed, an increase in sales revenues was recorded in all enterprises. Comparing 2015 to 2017, only 3 enterprises recorded a decrease in revenues, but in their case a decrease in core operating costs was also recorded. Therefore, it was characterized by greater dynamics compared to revenues. In the case of cost management, the largest decrease in costs was recorded in the value of goods sold at purchase price item.

5. Conclusions

The analysis showed that for small commercial enterprises cooperation and functioning together within purchasing groups is a chance for sustainable development. The enterprises analyzed have a high level of financial liquidity, which is confirmed by the ratios of current financial liquidity and quick financial liquidity. In the units, some solutions should be sought to reduce the level of liquidity, because excess liquidity costs. However, this is difficult to implement in the case of purchasing groups because, to a large extent, the central unit of the group decides whether to accelerate the repayment date or not. This information allows building a policy of receivables management, if the deadline for payment of liabilities to producers is extended, then the companies operating in the group can do the same with their customers. Enterprises manage their own receivables management policy. The central unit does not interfere in the internal arrangements of enterprises operating in purchasing groups.

The research confirmed that joint operation within trade purchasing groups allows improving financial security and reduces the risk of losing financial liquidity of entities forming such groups.

High financial liquidity in the analyzed enterprises is obtained due to the use of scale effect, which is strong in industry purchasing groups. Thanks to joint purchases, enterprises will receive a low price, which is confirmed by the costs of basic activity, and exactly in the item value of goods sold at the purchase price. In addition to reducing costs, a long trade credit allows extending the repayment deadline for suppliers. Repayment is accelerated only if there is a possibility of an additional discount for earlier payment. If several dozen enterprises are involved in the transaction, an additional discount can mean a serious price reduction. The decrease in operating expenses has a positive effect on profits and profitability. Faster receivables turnover in days compared to liabilities turnover in days is another element indicating a safe policy of managing liquidity in the units.

To sum up, today during the emerging financial crises, trade wars, the slowdown of the world economy, working together as part of multi-stakeholder organizations such as industry purchasing groups is an opportunity for small and medium-sized enterprises to survive on the market. The use of economies of scale allows you to create an optimal policy for managing sales, costs and financial liquidity. Effective actions in these areas are the key to the sustainable development of small and medium-sized enterprises.

The analysis conducted is an introduction to broader research related to financial liquidity management in multi-stakeholder organizations. The next step is to extend the research sample to include companies operating in other industries and functioning as part of classic purchasing groups and clusters.

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