The Use of Financial Products in Liquidity Risk Management by SMEs

Mirosława MIODUCKA
Poznań University of Technology, Faculty of Engineering Management; Department of Entrepreneurship and Business Communication, Poznań, Poland
miroslawa.mioducka@gmail.com

Joanna MALECKA
Poznań University of Technology, Faculty of Engineering Management; Department of Entrepreneurship and Business Communication, Poznań, Poland
joanna.malecka@put.poznan.pl

ABSTRACT
Risk, which is inherent to any business activity, is an issue that should be considered as early as at its conceptual stage and the very idea of its creation. The awareness of its existence and effective risk management is one of the factors which decide whether an organization will prosper or not. Control over possible risks can be exercised in several ways, one of which is outsourcing of risk to other market participants, such as financial institutions. This option is not a widespread solution in the Polish market, which may be due to low awareness among managers in the field of both risk identification and diversification. In the era of entrepreneurial economy, SMEs, which account for 99.8% of the European population and generate about 50% of GDP, having a significant impact on international trade, should become the primary addressees of training and education initiatives to inform them about risks and possibilities of their mitigation. The purpose of the article is to indicate financial services, mainly factoring, offered by money market institutions as an opportunity to improve current financial liquidity of enterprises, and to demonstrate the importance of education in adequate understanding and promotion of those solutions.

Keywords: SME, internationalization, risk management, factoring.

INTRODUCTION
Risk has for the first time been described in the literature on the subject by Cardano (1501-1576), Italian physician, physicist, constructor, mathematician and gambler. In his book Liber de Ludo Aleae (Book on Games of Chance), as a forefather of the new science, he attempted to establish statistical rules of probability (Buchanan &O’Connell, 2012, pp.85–95). Others who followed him in tackling the topic risk and uncertainty included Pascal (1623-1662), co-creator of the method of calculating the probability of a specific random event (Buchanan &O’Connell, 2012, pp.85–95) or Halley (1656-1742), whose work served as the mathematical foundation of insurance (Krimsky & Golding, 1992, pp.7-23). Risk is also an inherent element of entrepreneurship, which is defined in the relevant literature by, for example, Knight (1921) as the profit achieved in exchange for the willingness to accept some uncertainty, or Drucker (1909) as improvement activities which lead to success (Kenworthy & McMullen, 2014, pp.20-25). In an effort to boost an entrepreneurial attitude among European society, European Parliament resolution of 21 November 2013 was passed to
provide top-down support mainly to small and medium-sized enterprises by promoting mentoring and advisory initiatives to help their development.

Every stage of running a business entails risk and uncertainty. Regardless of whether the company operates on the domestic or foreign market, both the owner and the employees should be continually educated on how to identify and eliminate threats. The survivability of new companies is low, which warrants a thesis that the level of recognition and reduction of potential risks remains low. At the end of 2017, entities in Poland which had been in operation for 12 months or less accounted for 8.7% of all active businesses. Two-year-old companies made up 6.4% of the total, while those operating for over six years constituted 67.4% (Dąbrowski, Pabijanek & Kotowski, 2018, pp.25).

There are several key reasons for such low figures, the first being focus on price competition. Nowadays, in addition to the going rate for a product or service, the customer makes purchase decisions based also on quality, ingenuity and innovation. If the owner of a company is convinced that price is the key to success, problems with financial liquidity are on the horizon – with intensified competitive efforts on the part of stronger actors aimed at lowering the price of a particular product, smaller economic entities may be forced to cease operations or sell their shares. Therefore, the quality of services is such an extremely important element, as it can showcase uniqueness and individuality.

Another reason for the lack of survival of companies is the limited awareness among their owners of the need to have a long- and short-term strategy, or, in other words, to set goals, systematically measure and possibly correct them, and communicate this knowledge to employees. It is a roadmap for the company’s activities and an analysis of its competition, helping to establish priorities and scope of business and to motivate employees as it shows them which direction the organization is heading (Pisano, 2015, pp. 44-54). Another important aspect is the ability to work in a team, especially for entrepreneurs who had for many years been self-employed, but then gained a team of employees as they grew. The role of sole decision-maker accountable only to themselves stands in opposition to taking responsibility for a team of employees, the need to manage them and the increasingly developing organization, where synergy requires consultation with the team. Being the single power-wielding party and dealing with every aspect of the company’s life themselves is a habit which may cause conflict, ultimately leading to bad decisions and financial losses.

Internal factors, such as product development, sales dynamics, service levels, and prices, as well as external macroeconomic conditions, such as political decisions, interest rate fluctuations, and exchange rate fluctuations, affect the development and behaviour of enterprises on the market. All of those risks lead to payment bottlenecks, or the possibility of losing financial liquidity (Gorzen-Mitka, 2019, pp.339-349).

The purpose of this article is – based on own research conducted in the realities of the banking offer in Poland - to indicate financial services offered by the money market which enable diversification of risk onto other market participants. It is therefore about identifying financial institutions, as an opportunity to improve current financial liquidity of enterprises. Its utilitarian purpose is to demonstrate the importance of education in correct understanding and promotion of those solutions, which continue not to be the method of choice to most SMEs.

Own research was conducted on the basis of a review and analysis of data results from national statistical offices, government agencies supporting the development of SMEs, available in the years 2010 - 2019 on the Polish market the offer of financial products and surveys carried out in January 2019 among 194 SMEs by one of the commercial banks operating in the Republic of Poland, the intention of illustrating the method of risk management in small and medium-sized enterprises in Poland.

The survey consisted of 18 questions, of which four were closed and the other questions were open character, enabling respondents to choose indicated and analyzed financial solutions or giving a different answer consistent with the preferences of entrepreneurs. Then the results were grouped according to preferences and analyzed in terms of the size of enterprises, showing the importance of barriers encountered in the ongoing business activity.
RISK MANAGEMENT PROCESS BY SMES

A well-developing economy is characterized, among other things, by the fact that an increasing number of enterprises is established with international operations in mind. Owing to the virtually unlimited possibilities of trading and transmitting information provided by the Internet, the sales market can be extended at practically no cost and without disruption. In recent years, the importance of exports among micro and small enterprises in Poland has increased. Since 2010, the number of companies selling abroad has increased from 8.6% to 16.3% in 2017 (Fig. 1).

![Figure 1: Structure of Polish companies involved in exports in 2010-2017 [%]](source: Bank Pekao 2018, pp. 136)

According to data published by OECD, the threats faced by entrepreneurs wishing to expand their operations into other countries include: (1) lack of capital to finance exports, (2) difficulty in identifying the business potential of the undertaking, (3) lack of or limited information about the selected market, (4) difficulty in reaching out to potential foreign customers, (5) lack of reliable foreign representation, and (6) lack of time among managerial staff to deal with the internationalization process (OECD, 2009, pp.8-9). Those factors were also indicated by Polish entrepreneurs surveyed in 2017 (Kasperkowiak, Małecka & Łuczka, 2017, pp. 309-404).

Furthermore, regardless of where a particular business operates, one of the key risks to which any economic activity is exposed is financial risk, which includes, in particular, (1) liquidity risk – where an enterprise may no longer be able to meet its debt obligations and purchase goods and services, for example as a result of its customers failing to make timely payments, (2) market risk – where losses may be experienced due to changes in micro and macro environment, (3) operational risk – where the company may not be able to meet its contractual obligations due to inadequate processes or resources (Florio & Leoni, 2017, pp.56-74).

From this point of view, the functioning of a company in an environment exposed to threats requires extensive knowledge and ability to make appropriate decisions, supported by experience and qualifications. What matters is not only the approach to the problems, but also quick implementation of solutions. Micro and small companies do not have the adequate resources (qualified personnel, professional analysis of reports, use of consultancy firms), therefore they struggle with correct identification and elimination or mitigation of factors that have a negative impact on their operations. Support from external companies is expensive and continues to be treated by SMEs not as an investment but as a cost. According to economic literature, the risk management process should follow these steps: (1) risk identification, (2) measurement and assessment, (3) determination of possible solutions, (4) control and monitoring (Florio & Leoni, 2017, pp.56-74). The last of those steps, which follows a detailed analysis, will secure the enterprise against potential consequences of a materialised risk, or, at least, will help mitigate them. Main risk-handling strategies include risk avoidance and risk acceptance. The latter accepts risks, with their financial and reputational consequences, which leads to risk reduction through implementation of appropriate mitigating mechanisms to lessen the effects of risks, both within the company and in its surroundings. One such mechanism is financing of risks through the purchase of financial...
instruments, which include derivatives, insurance, trade finance products, factoring, and forfaiting (Mioducka & Malecka, 2018, pp.83-93).

Such a methodical and systematic approach to company management gives owners the opportunity to (1) more effectively control the direction of enterprise development, (2) make more accurate strategic decisions, and also (3) identify unreliable contractors, not only in the domestic, but also in the foreign market. One of the added values of properly managed risk management processes is (4) maintaining financial liquidity, which allows entrepreneurs to focus on other, equally important and possibly neglected, issues such as obtaining information on potential markets or procuring new foreign customers.

**SELECTED FINANCIAL PRODUCTS TO MITIGATE THE LIQUIDITY RISK**

One risk management method is to transfer it to other participants in the economic market, such as financial institutions offering modern services. Financial liquidity, which is a determinant of survival in any turbulent economic market, means timely performance of obligations, which, in turn, puts the company in a positive light in the eyes of its current and prospective business partners as well as subcontractors and associates. Unreliable or dishonest partners may cause inability to satisfy short-term liabilities on time and cause a real risk of insolvency. The financial services market offers several solutions to support the company in timely payments. Companies are not legally obliged to use the services of one bank, therefore they can use a wide range of products available on the market of financial services.

The first of these instruments is working capital facility, which is used to finance expenses related to the current operations of the company, usually granted for less than a year and available in either current or credit account (Rahman, Rahman & Belas, 2017, pp.263-285). One instrument that does not require a specific legal agreement is trade credit, which can be provided to companies with low creditworthiness at the bank. It is extended by sellers of goods or services to their customers, and involves delivering the subject matter of the transaction and deferring payment. This gives businesses an opportunity to buy the necessary products from suppliers, who often extend the credit period in relation to that offered by other suppliers to gain client loyalty (Agostino & Trivieri, 2019, pp.576-592).

Another service is factoring, which involves purchasing of non-past-due accounts receivable of enterprises (creditors) owed to them from customers (debtors) for deliveries and services by an entity providing factoring services (a factor). Several types of factoring can be distinguished:

(1) In terms of the risk associated with the debtor’s insolvency:
- Full (proper, without recourse) – the creditor’s accounts receivable are purchased and the risk of debtor’s insolvency is transferred, which means that the factor will collect liabilities directly from the debtor.
- Incomplete (improper, with recourse) – the creditor’s trade receivables are purchased without taking over the risk of debtor’s insolvency, which means that should the debtor fail to pay their liability, the original creditor will have a liability to the factor.
- Mixed – a combination of full and incomplete factoring, which means that trade receivables are purchased along with the risk of debtor’s insolvency, but only up to a certain amount specified in the agreement; should the debtor fail to pay their liability, the factor covers the debt up to a specific limit and the remaining portion is covered by the original creditor.

(2) In terms of the moment of receiving payment for the accounts receivable sold:
- Discount-based – the factor acquires the account receivable under a contract of assignment at the time of entering into a factoring agreement (the date of payment by the debtor is irrelevant).
- Advance-based – the factor pays the creditor a specific portion of the amount due, while the remaining portion is transferred once the debtor pays the liability.
- Maturity-based – the original creditor gets its accounts receivable once the debtor makes an actual payment (Velentzas, Kartalis & Broni, 2013, pp.757-762).
Factoring, which is also addressed to small and medium-sized companies, is an important instrument for improving financial liquidity and can be used by enterprises with poor financial standing. SMEs fail to fully exploit the potential of this service, because its cost is relatively high compared to other sources of financing (with price determined individually), which is a particularly burning issue in the management of cost decisions in small organizations. As own research indicates, recent years have seen an increase in non-banking factoring providers (from 29 in 2014 to 39 in 2017). This warrants an assumption that increased competition in that market segment will bring the prices down to aquire and retain clients. Those new non-banking firms offer a simple and fast process of selling the service, however, they are exposed to high costs because of the precariousness of collecting accounts receivable, thus they may themselves be vulnerable to liquidity risk. Such a situation may, in turn, result in the necessity to sell their shares to larger organizations, including banks, which will thus gain access to their know-how and customer base (see also: Mioducka & Malecka, 2018, pp. 83-93; Malecka, 2018, pp.246-253).

From the point of view of companies involved in international commercial transactions, forfaiting is an important instrument. Then a forfaiter (a financial institution) discounts export receivables secured by the importer’s bank by making a 100% payment for the exported goods while deducting a discount rate, which can significantly reduce transaction risk (Velentzas, Kartalis & Broni, 2013, pp.757-762; Mioducka & Malecka, 2018A, pp. 64-77).

**FACTORING AS A SERVICE TO SUPPORT FINANCIAL LIQUIDITY MANAGEMENT**

Data provided by the Polish Central Statistical Office (GUS) show that over the last few years, there has been a growing interest in factoring in Poland. Between 2014 and 2017, the average number of customers using factoring increased by 2.182 companies, the number of invoices increased by 68%, and the value of debt purchased increased by PLN 69.472 million (Tab. 1).

| Table 1: Development of factoring services in Poland in 2014-2017 |
|---------------------------------------------------------------|
| **Source:** Own research based on Nowińska 2017 (GUS)         |
| **Number of customers using factoring in each year**          |
|                                                              |
| 2014 | 2015 | 2016 | 2017 |
| 10.242 | 12.336 | 11.273 | 12.424 |
| **Domestic factoring, of which:** |
| 9.300 | 11.383 | 10.230 | 11.332 |
| **with recourse** |
| 6.638 | 7.487 | 6.585 | 7.418 |
| **without recourse** |
| 2.181 | 2.284 | 2.623 | 2.821 |
| **Foreign factoring** |
| 942 | 953 | 1.043 | 1.092 |

| **Number of invoices purchased in each year ('000)**          |
|-------------------------------------------------------------|
| 2014 | 2015 | 2016 | 2017 |
| 6.803 | 7.702 | 8.336 | 10.056 |
| **Domestic factoring, of which:** |
| 6.368 | 7.240 | 7.700 | 9.313 |
| **with recourse** |
| 3.861 | 4.686 | 4.732 | 5.049 |
| **without recourse** |
| 2.091 | 2.265 | 2.530 | 3.622 |
| **Foreign factoring** |
| 435 | 462 | 635 | 743 |

| **Value of accounts receivable purchased (PLN million)**      |
|-------------------------------------------------------------|
| 2014 | 2015 | 2016 | 2017 |
| 153.018 | 171.640 | 190.032 | 222.490 |
| **Domestic factoring, of which:** |
| 132.766 | 150.086 | 166.049 | 190.076 |
| **with recourse** |
| 52.200 | 61.983 | 63.643 | 70.827 |
| **without recourse** |
| 71.641 | 80.818 | 89.235 | 104.733 |
| **Foreign factoring** |
| 20.252 | 21.555 | 23.983 | 32.414 |
The results of presented survey was conducted electronically in January 2019 to check entrepreneurs’ awareness of factoring and obtain information on barriers related to liquidity risk, as well as to categorize the consequences of absent funds for their current business operations, between entrepreneurs in Poland. 194 respondents from the SME sector took part in the survey. 190 people answered the question about the number of their employees: 75.79% employ up to 10 people, 15.79% – from 11 to 50 people, and 8.42% – more than 50 people.

Having problems with late payment of liabilities by their counterparties was declared by 70.62% of entrepreneurs, which means that 29.38% of respondents had no difficulties with recovering money for their goods or services (Fig. 2).

![Late payment of invoices to respondents [%]](source)

**Fig. 2: Late payment of invoices to respondents [%]**

**Source: Own research**

A significant portion of payments from counterparties (86.60%) is made by bank transfer, which means a high level of digitization in the society and an increase in trust in those forms of payment. 35.05% of suppliers pay their liabilities in cash, revealing the need for further building of entrepreneurs’ awareness of electronic payment options to lower the costs of running a business (e.g. no fees for using ATMs and cash deposit machines) (Fig.3).

![Preferred form of payment among respondents (multiple answers possible) [%]](source)

**Fig. 3: Preferred form of payment among respondents (multiple answers possible) [%]**

**Source: Own research**

The results of the analyzes have shown that almost half of the surveyed companies had no problems with payment bottlenecks (49.48%). On the other hand, this problem was faced daily by 6.70% of entrepreneurs (Fig. 4).

![Untimely fulfilment of liabilities by respondents [%]](source)

**Fig. 4: Untimely fulfilment of liabilities by respondents [%]**

**Source: Own research**

According to the entrepreneurs, the most important consequence of losing liquidity is the lack of funds to cover costs generated by contributions to the Social Insurance Institution (ZUS) and taxes (26.80%). Failure to pay those levies, in addition to accruing default interest, may have very harsh consequences, such as seizing debtor’s assets or collecting outstanding debts directly from the entrepreneur’s bank account. This answer was followed by ‘slowdown in the company’s development’ (18.56%) and ‘loss of business opportunity’ (15.46%). Deterioration of relations with employees is perceived by 7.22% of the respondents as the most important consequence of the loss of financial liquidity. 6.19% of the respondents chose the answer “Other”, while indicating (1) no liquidity problems (1.03%) and (2) the need to monitor payments (0.52%) (Fig.5). Such definition
and perception of risk among the entrepreneurs, leading, as a consequence, to loss of financial liquidity indicates the necessity of reviewing the market of non-banking services in order to identify the possibility of using so-called soft debt recovery by SMEs, which includes prompting counterparties about payments, sending reminders or assisting them in obtaining writs of execution.

**Fig. 5: Consequences of liquidity risk as perceived by entrepreneurs (multiple answers possible) [%]**

| Consequence                                                                 | Percentage |
|-----------------------------------------------------------------------------|------------|
| Other                                                                       | 6.19       |
| Deterioration of relations with employees                                   | 7.21       |
| Deterioration of relations with counterparties                              | 11.86      |
| Decrease in reputation on the market                                        | 13.92      |
| Loss of business opportunity                                                | 15.46      |
| Slowdown in the company’s development                                       | 18.56      |
| No funds to pay tax and ZUS contributions                                   | 26.80      |

Source: Own research

The obtained research results emphasize the importance of maintaining solvency at a solid level, which is a reflection of both the financial condition of the business and the competences and qualifications of those in charge of managing the diversification of the risk portfolio. Almost half of the respondents (41.75%) was not familiar with the concept of micro-factoring, and 23.71% knew it, but were not sure if they understood the principles of the service (Fig. 6).

**Fig. 6: Recognition of the concept of micro-factoring [%]**

Source: Own research

The obtained research results indicate the importance and role of educating entrepreneurs on modern financial services, as well as the need for institutions which offer this product to ensure a clear and transparent sales process and modify the pricing to allow the offer to be extended also to small and medium-sized enterprises, for which the current pricing is simply too high. It turned out, that factoring is not used at all by 83.58%, while 4.48% declare using this service often (Fig. 7).

**Fig. 7: Use of micro-factoring [%]**

Source: Own research

A separate issue is the possibility of background-checking the institutions offering this service. It is not a circumstance which influences the decision on choosing a particular offering, but the credibility of the firm which takes over the invoice may be crucial for the business partner whose financial document has been transferred to a factor. Another important issue is the minimization of administrative and bureaucratic formalities, which are indicated by SMEs as a barrier to development in third place, indicating further direction of research.
CONCLUSIONS

The study reveals the significance of the issue of liquidity risk and knowledge of financial instruments to mitigate it. Factoring, although its history goes back to ancient times, remains a little-used instrument supporting the day-to-day management of SMEs. Half of the respondents did not know that service at all, while one-fifth have used that product. The results of our own research lead to the conclusion that non-financial risk-mitigating products are extremely important. In this context, education, which helps understand, identify and reduce potential threats, becomes an essential and critical element of effective entrepreneurship. Educated entrepreneurs will be aware of the opportunities offered to them by factoring, and their choices aimed at diversifying the financial portfolio will be better suited to the volatile economic environment. A useful contribution would be a transparent offering written in an understandable language, clearly expressing the principles of operation and the added value of factoring. Another important recommendation to factoring providers would be to reduce the formalities and documents required for a speedy process to an absolute minimum. Moreover, the research suggests that a system to provide SMEs with support as regards non-financial services which facilitate company management, such as assistance in debt recovery (soft debt collection) or ad hoc legal help, would be highly advisable.

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