Changes in the Financial Liquidity of Business Entities of the Small and Medium-Sized Enterprises Sector in Poland

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Abstract:

This research study is an attempt to analyze the changes that have occurred in the economic situation of small and medium-sized enterprises. The SMEs sector is particularly exposed to the economic, political, social and technological changes that are taking place in today's economy. The article pays special attention to financial liquidity, which is an important factor for companies to survive in difficult times.

Keywords: financial liquidity; business; SMEs; Poland.

JEL Classification: D24; M21; G32.

Introduction

Small and medium-sized enterprises are a special type of enterprise. They are characterized by unity of ownership and management, personal responsibility for business activities. Business entities today operate in an increasingly dynamic and complex environment. Small and medium-sized companies are particularly affected by rapid economic, political, social and technological changes. The development of the small and medium-sized enterprise sector depends on external factors that individuals cannot influence, as well as internal factors - determining the opportunities available to the entity and directly influenced by it (*e.g.,* in terms of its resources, level of innovation, efficiency and effectiveness of management). Companies in the SME sector face many barriers in their operations that prevent them from growing. One such barrier may be difficult access to external funding. Raising capital to start and run a business is a very important problem for today's small and medium-sized businesses. The raising of capital, and consequently the handling of that capital, are closely related to development opportunities. Small and medium-sized businesses are an important determinant of the economy in Poland, but also in EU countries and around the world.

1. Financial Liquidity. Theoretical Approach

The concept of financial liquidity is not understood unequivocally and is sometimes understood in several different dimensions. Financial liquidity can mean, among other things: the positive state of means of payment, the appropriateness of assets to convert into cash, the ratio of coverage of liabilities with the assets of the enterprise, the ability of the enterprise to meet its obligations at any time, the so-called ability to pay (Tokarski, 2014).

The most popular definition of financial liquidity defines it as a company's ability to pay its current obligations on time and make purchases when needed (Kreczmańska-Gigol, 2015). Looking at financial liquidity through the lens of assets, one can recall Wieslaw Sasin's definition of financial liquidity, who understands it as the ability to quickly turn over cash as well as the speed and certainty with which current assets can be converted into money in a short period of time (Cicirko, 2015). You can also find definitions that refer only to the rapid conversion of all assets (not just current assets) into cash without loss of value. An example is the approach of Dariusz Wędzki (2003), who defines financial liquidity as the ability to convert assets into cash in the shortest possible time without losing their value.

Financial liquidity is determined by the factors that shape an economic entity's ability to pay, as well as the activities that cause cash spending streams. Financial liquidity is affected by many factors that depend not only on the company itself, but also on its market environment. In the literature, the factors shaping financial liquidity are divided into (Tokarski, 2015):

- macroeconomic factors, named external, supra-unit factors, and therefore independent of the way the company operates. These factors include: the functioning of the monetary system in the economy, including monetary policy and the banking system (e.g., the interest rate on bank loans), the rates of taxes and fees included in production costs and charged to the financial results of enterprises (income tax), the rates of taxes charged to sales revenues (excise tax, VAT), the purchase prices of production factors and the prices of services provided for a fee (e.g. transportation, telecommunications, etc.), labor costs associated with the payment of wages and salaries and other cash and in-kind benefits related to the employment of employees, as well as financial payments to the state financial system (Social Security contributions, labor fund contributions, etc.);
- industry factors, also external and independent of the company. Among the industry (sector) factors can be identified such as: the stage of development of the industry in which the entity operates, the degree of industry risk, the modernity and prospects of industry development, the specifics of the industry;
- microeconomic factors, named internal, unitary factors, i.e., dependent on the way an economic entity operates. Microeconomic factors include the ability to generate sales, effective management of accounts receivable, effective management of inventory, effective management of short-term liabilities, effective management of cash, shaping a secure asset structure, shaping a secure liability structure, taking care of the company's reputation as a debtor, among others.

Determinants that are influenced by the company's managers include the following (Wędzki, 2003):

- technology and production organization, for the reason that they have an effects on the size of inventories, materials and raw materials,
- the type of industry in which the company operates, since manufacturing operations depend on it,
- financial strategy, which is a manifestation of management's aim to achieve the company's mission, *i.e.,* to create a favorable reputation for the company in the eyes of customers as well as its environment,
- management quality, referring to the methods and techniques of creating the given components of working capital,
- cash flow volatility, as financial stocks increase when cash flow volatility increases,
- the current expected rate of income from operating assets,
- sales profit rate.

In contrast, the determinants beyond the control of the company's managers are (Sierpińska and Rzeszowski, 2012): country's tax system, availability of specific funding sources, current and expected economic prosperity, the level of inflation and interest rates.

An important determinant of a company's financial liquidity is the effectiveness of inventory management. Maintaining inventories is essential to business, and the reasons for creating them vary depending on the type of inventory. General, the purpose of holding inventory is to maintain continuity in production, sales and service performance. Supplies are related to incurring costs - ordering and maintaining supplies and the opportunity cost when they are too high.

The goal of inventory management is not to minimize the level of inventory, but to optimize it to reduce the total cost of inventory without the effect of reducing the scale of the business and the volume of sales. Stock rationalization aims to reduce net working capital requirements and maintain short-term financial balance in the company (Kreczmańska-Gogol, 2015a, 2015b).

According to Czubakowska (2006), liquidity is the ability to direct receipts and expenditures so that revenues within a fixed period of time can compensate for costs, if there is a lack of sufficient cash, it is necessary to compensate with credit.

2. Static and Dynamic Methods of Measuring Financial Liquidity

The literature identifies two groups of financial liquidity measures: static and dynamic. In practice, static methods are usually used to determine financial liquidity measurements. Static methods of measuring financial liquidity use information from the balance sheet and therefore from the present or the past, they use information from the period for which financial liquidity is calculated. Statistical methods of measuring financial liquidity represent the level of financial liquidity only at the time of the balance sheet. The metrics are created so that they can be used to collate many types of enterprises and in such a way that the size of the entity does not matter. That way, considering a single entity, we can track the transformation of financial liquidity levels over time, even if the size of the company changes (Michalski, 2010).

The most commonly used static financial liquidity ratios include the following (Kremczańska-Gigol, 2015):

- current ratio (current ratio, 3rd degree ratio),
- accelerated liquidity ratio (quick ratio, 2nd degree liquidity ratio),
- cash ratio (cash ratio, high financial liquidity ratio, 1st degree ratio).

The 1st degree ratio relates to the most liquid assets, which are cash on hand and in the bank account. Too high a level of this indicator is not positive for the entity, since only capital involved in economic processes brings profits (Padurek, 2020). The values of this indicator are collected by the Statistical Office as part of balance sheet data, financial results and basic economic measures for non-financial enterprises.

Financial liquidity analysis of a dynamic nature reveals more accurate information about the entity's real financial situation, so it is an extension of the initial analysis based on data from the balance sheet. Liquidity is assessed based on changes in cash flow balances from the cash flow statement (Tokarski, 2017).

Cash flow statement analysis is not free of flaws. This is related to the fact that not every enterprise is imposed on the obligation to prepare this document, while the entities that are obliged to do so, do not always perform it carefully (Gołębiowski, 2005).

In the literature, a large number of indicators are used to assess the financial liquidity of an entity by dynamic methods, which are divided into two groups (Maślanka, 2008): cash performance indicators, cash sufficiency indicators. The main cash performance indicators are:

- Cash sales productivity ratio - the main indicator of cash productivity. Represents the amount of cash the entity earned from sales over a specified period of time. A low value of the indicator shows the entity's problems with payments (Gabrusewicz, 2005).
- Profit cash productivity ratio - reports the amount of cash that came in from operating profit (Jerzemowska, 2018).
- Asset cash productivity ratio - represents the ability of an entity's assets to generate an operating surplus (Kusak, 2006).
- Cash productivity ratio of current assets - shows the ability of an entity's current assets to generate funds from operating activities (Tokarski, 2017).

The main indicators of cash sufficiency include:

- Cash sufficiency ratio for repayment of total debts is related to the entity's ability to repay its commitments. Its inverse, on the other hand, represents the time in which this liability could be repaid with funds from operations (Sierpińska, Wędzki, 2017).
- Cash sufficiency ratio for repayment of long-term liabilities shows whether the cash capital derived from the core business is optimal for settling liabilities over a period of time greater than the balance sheet year. A higher value of the ratio indicates greater ability of the entity to manage the repayment of long-term liabilities (Maślanka, 2008).
- Operating cash reinvestment ratio shows the extent to which net cash provided by operating activities is encumbered by asset acquisitions. Demonstrates the entity's ability to preserve fixed assets from its income without incurring additional liabilities (Sierpińska, Wędzki, 2017).
- Dividend payout ratio indicates the portion of profit that is paid out as dividends (Tokarski, 2017).
- Ratio of the share of depreciation and amortization in cash growth shows the scale of the effect of depreciation and amortization on the result of cash flow (Nowak, 2017)

3. Financial Liquidity of the SMEs in Poland. Study Case for Period 2002 - 2020

This section will analyze basic financial data on businesses with less than 250 employees for the years 2002-2020. The information on which the analysis is based comes from a database collected by the Central Statistical Office. The data is aggregate, covering business entities operating in our country, from all industries.

It is worth looking first at the overall financial situation of SME entities. The following table presents the amounts of total revenue, total expenses and total financial result generated by non-financial entities operating in our country with up to 249 employees. Analysis of the dynamics (year-on-year) of total incomes shows an upward trend almost throughout the period, however, in the years: 2009, 2016 and 2020 there were slight decreases in total incomes. The strongest decline occurred in 2016 and was over 2%. In contrast, the strongest income growth (by more than 93%) occurred in 2004. Similarly, the directions of change in this group of entities show costs. However, it should be noted that in 2008, 2010, 2011 and 2019 their growth was slightly than the growth of incomes.

Table 1. Incomes and costs of non-financial enterprises with up to 250 employees from 2002 to 2020

Year	Income (million PLN)	Dynamics (%)	Costs (million PLN)	Dynamics (%)	Financial result (million PLN)	Dynamics (%)	Financial result/income (%)
2002	345.600		344.400		1.200		0,35
2003	392.900	113,69	383.400	111,32	9.600	800	2,44
2004	758.800	193,13	724.700	189,02	34.500	359,38	4,55
2005	785.600	103,53	752.900	103,89	32.800	95,07	4,18
2006	858.900	109,33	818.100	108,66	40.800	124,39	4,75
2007	980.300	114,13	922.100	112,71	58.300	142,89	5,95
2008	1.075.100	109,67	1.028.900	111,58	46.400	79,59	4,32
2009	1.073.900	99,89	1.022.200	99,35	51.800	111,64	4,82
2010	1.114.900	103,82	1.064.300	104,12	50.400	97,3	4,52
2011	1.269.500	113,87	1.230.600	115,63	39.100	77,58	3,08
2012	1.302.900	102,63	1.250.000	101,58	53.100	135,81	4,08
2013	1.315.900	101	1.263.400	101,07	52.600	99,06	4,00
2014	1.335.100	101,46	1.276.000	101	59.200	112,55	4,43
2015	1.350.900	101,18	1.286.300	100,81	64.800	109,46	4,80
2016	1.318.200	97,58	1.254.600	97,54	63.600	98,15	4,82
2017	1.368.600	103,82	1.301.500	103,74	67.200	105,66	4,91
2018	1.451.700	106,07	1.379.500	105,99	72.200	107,44	4,97
2019	1.507.000	103,81	1.434.700	104	72.300	100,14	4,80

Source: own compilation based on statistical data collected by the Central Statistical Office, https://bdm.stat.gov.pl/

Changes in income during the period under review do not signal any difficulties in the group of small and medium-sized enterprises. However, analyzing the financial result, it is noticed that the level of this financial category is low. In addition, its value declined in six of the analyzed periods. This was the case for the years: 2005, 2008, 2010, 2011, 2013, 2016, with the strongest decline was in 2008. This situation was related to the economic crisis occurring at the time. Comparing the value of revenues and the level of the financial result, it should be noted that the financial result, in almost the entire analyzed period, represents only about 5% of income.

The following Table 2 presents the overall level of financial liquidity, as measured by the first-level liquidity ratio. This measure represents the ratio of short-term investments to short-term liabilities, so it is the highest level of financial liquidity. The table shows the magnitudes of the indicator in the SME group against the value of this indicator calculated for all non-financial entities operating in a given year.

It should be noted that the level of financial liquidity in small and medium-sized enterprises differs only slightly from that recorded for enterprises as a whole. The lowest value of the indicator occurred in 2002, when SME entities, were able to repay 17.5% of their liabilities if they became due. In subsequent years, the level of the index increases, until 2008, when there is a decline of almost 2%. The largest decline occurred in 2011, by almost 8%. Also, in 2016-2018 there are decreases in the level of financial liquidity, while in the next two years there is an increase. It should be noted that the year 2020, is the beginning of the pandemic in Poland, the increasing level of this indicator is largely due to the conservative action of business entities in uncertain times.

Table 2. Financial liquidity level from 2002 to 2020

Year	First-degree liquidity ratio SME sector	Dynamics of change (%)	First-degree liquidity ratio total companies	Dynamics of change (%)
2002	17,5		19,5	
2003	22,6	129,14	24,2	124,10
2004	26,4	116,81	29,8	123,14
2005	29,2	110,61	32,7	109,73
2006	33,9	116,10	35,4	108,26
2007	34,0	100,29	35,0	98,87
2008	33,4	98,24	33,8	96,57
2009	38,8	116,17	39,7	117,46
2010	40,2	103,61	42,4	106,8
2011	36,9	91,79	39,7	93,63
2012	40,2	108,94	38,6	97,23
2013	39,8	99,00	39,1	101,3
2014	42,2	106,03	42,6	108,95
2015	43,1	102,13	41,4	97,18
2016	40,4	93,74	39,8	96,14
2017	39,1	96,78	39,1	98,24
2018	38,0	97,19	36,6	93,61
2019	40,0	105,26	38,8	106,01
2020	49,0	122,50	44,6	114,95

Source: own compilation based on statistical data collected by the Central Statistical Office

Conclusions

The SME sector is undeniably a very important part of the Polish economy. The pandemic and the economic effects have negatively affected many Polish entrepreneurs. The alternating opening and closing of the economy, restricting the freedom of companies in particular industries, have hit the financial situation of most enterprises. National corporate shielding programs have tried to respond to the needs of entrepreneurs during this difficult period. Almost all sectors of the economy have experienced negative effects. Problems with maintaining liquidity, rising prices, uncertainty about the further course of the pandemic are just some of the problems that entrepreneurs have. However, it should be noted that many businessmen have taken measures to offset the effects of the situation and at the same time ensure that they can continue their business in the future. Many entities benefited from shield programs, resulting in reasonably good financial results in 2020. Throughout the analyzed period, small and medium-sized enterprises tried to adapt well to the changing environment, taking into account the macroeconomic ones such as Poland's accession to the European Union, economic crises or, in the most recent period, a pandemic. The result of the effective measures taken was financial results achieved at a good level.

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