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IMPACT OF SPLIT PAYMENT ON FINANCIAL LIQUIDITY OF ENTERPRISES

WPŁYW *SPLIT PAYMENT* NA PŁYNNOSĆ FINANSOWĄ PRZEDSIĘBIORSTW

DOI: 10.15611/pn.2019.12.07

JEL Classification: G38, H21, H25, K34.

Summary: Maintaining financial liquidity forms the most important short-term goal of every enterprise. On the other hand, there are restrictions that reduce the liquidity level of economic entities, one of which is the taxation of turnover. As a rule, the goods and services tax should be neutral for the activities of business entities. However, in actual economic life, one may encounter situations in which the method of paying liabilities to the contractor, including VAT, leads to the deterioration of the company's financial liquidity. The objective of this article is to analyze the impact of split payment on the company's financial liquidity. The implementation of this objective will be supported by simulating the liquidity levels of the business entity with and without split payment.

Keywords: split payment, taxation, financial liquidity, value added tax, cash flow.

Streszczenie: Utrzymanie płynności finansowej jest najważniejszym, krótkookresowym celem każdego przedsiębiorstwa. Istnieją jednak ograniczenia, które zmniejszają poziom płynności podmiotów gospodarczych. Jednym z takich ograniczeń jest opodatkowanie obrotu. Podatek od towarów i usług z założenia powinien neutralnie wpływać na działalność podmiotów gospodarczych. W życiu gospodarczym można zauważyć sytuacje, w których sposób zapłaty zobowiązań wobec kontrahenta, w tym z tytułu VAT, prowadzi do pogorszenia płynności finansowej przedsiębiorstwa. Celem artykułu jest analiza wpływu *split payment* na płynność finansową przedsiębiorstwa. Realizacja celu zostanie wsparta dokonaniem symulacji poziomu płynności podmiotu gospodarczego z uwzględnieniem i bez uwzględniania *split payment*.

Słowa kluczowe: *split payment*, opodatkowanie, płynność finansowa, podatek od towarów i usług, przepływ środków pieniężnych.

1. Introduction

The most important aspect of a company's ongoing financial management is its financial liquidity. In addition to maximizing profit for the owners, financial liquidity is always listed as the ultimate objective of every enterprise. However, financial liquidity is limited by a number of factors that are not directly dependent on the business entity. One of the threats to financial liquidity is the existence of taxes on turnover. Taxation on goods and services is the largest source of revenue for the Polish budget. There is a noticeable tendency in Europe to tax turnover. The reasons for the popularity of this form of taxation should be sought in psychological terms, because the increase in this tax does not directly affect the level of income and is largely accepted by a wider public. This leads to a situation in which, year after year, indirect taxes play an increasing role. By definition, a tax on goods and services should have a neutral impact on business operations. In practice this is not always the case. The article analyzes the impact of split payment in goods and services tax on the financial liquidity of an economic entity. In addition, a simulation will be carried out to answer the following questions: can split payment affect a company's financial liquidity, and what is the direction of such impact – positive or negative? To answer these questions the authors will utilize financial statements and VAT-7 declarations of enterprises from the manufacturing, trade and service industries.

The purpose of the article is to examine the impact of split payment in goods and services tax on a company's financial liquidity. The purpose of the study required the use of appropriate research methods: methods of analysis of literature and acts of law, and methods of financial analysis. In particular, the simulation method was used to formulate the diagnosis in the field of the article's objective. The results of the study may be useful for regulatory bodies/legislators.

2. Financial liquidity as the main, short-term objective of the enterprise

A company's main goal in the long term is to maximize its market value, whilst the goal of the company's short-term policy is to maintain financial liquidity. Financial liquidity is defined in the literature as the ability of an enterprise to settle short-term liabilities [Bringham, Gapenski 2000]. Business entities apply specialized tools in the form of static and dynamic liquidity ratios, to maintain their financial liquidity. The cash flow statement also forms a very important link helping to maintain liquidity [Gabrusewicz, Remlein 2011]. Company managers must manage their finances effectively, and here maintaining an optimal level of financial liquidity plays a very important role.

Static liquidity analysis allows assessing the company's financial condition in terms of debt service. The basic source of information for the static measurement of liquidity is the balance sheet, prepared on the accrual basis and for the respective day

[Gabrusewicz 2014], which is a kind of ‘still image’ of the economic and financial situation of the economic entity. The subject literature lists the following as the most common indicators for static liquidity assessment [Sierpińska, Wędzki 2001]:

- current liquidity ratio (current ratio),
- accelerated liquidity ratio (the so-called quick ratio),
- cash (solvency) ratio.

Static liquidity ratios based on data from a company’s balance sheet do not fully reflect the company’s ability to pay its short-term liabilities. The biggest disadvantage of these indicators is the static approach to data that is reported for the respective day. Items included in the calculation formula of these indicators may have different values depending on what day the balance sheet was prepared. When measuring liquidity, dynamic methods, often called stream methods, must be taken into account. They are based on a cash flow statement prepared based on the cash principle. The category of net cash from operating activities best reflects the current condition of the enterprise. For supplier contractors, it provides an important information about the ability of the respective enterprise to settle its obligations. However, for recipients it can be a signal about the possibility of tightening the trade credit policy in the event of low or negative net cash from operating activities. The category of profit largely depends on the adopted accounting principles, which is why company managers can influence the amount of profit [Masztalerz 2008]. The category of net cash from operating activities is much less exposed to manipulation under the so-called creative accounting. It is calculated on the basis of the actual difference between the inflow and outflow of cash in the enterprise, where it is not possible to artificially create the inflows and outflows [Remlein 2014].

The ratios used for dynamic liquidity measurement are recognized in two groups as [Hamrol 2010]:

- cash performance indicators,
- cash sufficiency ratios.

Cash performance indicators show the amount of cash inflows the company acquires from completed sales and from the assets involved. From the point of view of increasing the company’s financial liquidity it is preferable to increase the value of the cash performance indicators over time. The aforementioned indicators can be compared with analogous data of other enterprises operating in the respective industry, and with mean values of the indicators, as calculated for the entire industry [Gabrusewicz 2014].

The second group of indicators calculated on the basis of cash flows from operating activities are the cash sufficiency ratios. Their idea is based on indicating whether the cash flow generated from operating activities is sufficient to cover the expenses and liabilities of the enterprise [Sierpińska, Wędzki 2001].

The level of net operating capital plays a very important role in the context of financial liquidity. Its value is influenced by the strategy of granting and taking trade credit, i.e. the level of receivables and liabilities. A positive level of net operating

capital means that liquidity in static terms is high, while in dynamic terms it is at a low level. Low dynamic liquidity results from the calculation formula of this group of indicators. All of them include net cash from operating activities. In the case of positive net operating capital, the level of cash generated from the company's core business is low because the cash is 'frozen' in receivables and inventory. In the event of a negative level of net operating capital, an enterprise generally has a positive value of cash generated from operating activities that positively affects the dynamic measurements of liquidity. This situation adversely affects the level of its liquidity in static terms. This is due to the low level of receivables and high level of liabilities [Hamrol 2010].

The assessment of the impact of split payment on the company's financial liquidity through the net operating capital may thus lead to contradictory, mutually exclusive conclusions. Therefore in this article, dynamic analysis should be considered the most reliable and reliable measurement of liquidity. Settlements related to split payment directly affect cash flows from operating activities, and the dynamic measurement of liquidity fully reflects the company's ability to repay liabilities, both taking into account and not taking into account the impact of split payment.

3. The structure of split payment mechanism in the goods and services tax in Poland

The concept of value added tax emerged in Western Europe in the second half of the 20th century. The French economist Maurice Lauré is considered the creator of this tax. Value Added Tax (VAT) is a tax subject to European Union regulations through the 2006/112/EC Directive of 28 November 2006.

The tax on goods and services in force in Poland is a modification of the original idea of value added tax developed in Western European countries. This is an indirect form of income taxation. The advantages of this tax are its neutrality in relation to: international transactions, reduced number of trading phases and tax deductible costs.

Payers of the value added tax are entities with a legal personality, organizational units without legal personality and sole proprietorships, irrespective of the purpose or result of their activity [Ustawa z dnia 11 marca 2004]. The tax on goods and services charges the value added acquired by the taxpayer in a given phase of economic turnover.

The design of value added tax should meet some basic principles. First of all, every turnover of goods or services should be taxed, as postulated by the principle of universality of taxation. Secondly, the target tax subject is the consumer who is not the taxpayer. However, it is the consumer who bears the burden of the goods and services tax. In addition, it cannot transfer the tax burden to another entity. Proportionality of taxation is another rule. Unfortunately, in practice this rule is repeatedly violated by applying reduced rates. The subsequent rules that a value

added tax must comply with are the principle of single taxation and the principle of avoiding distortions of competition. These principles are the basis for creating conditions for the proper functioning of the tax on goods and services. The taxation rules must be uniform, they must not distort the operation of enterprises and affect competition between competitors on the market. The last rule is the invoice rule, which consists in the right to deduct input tax in the previous turnover phase from the tax due on turnover made at the subsequent stage [Litwińczuk 2008].

Over the last two decades, due to the modifications introduced in the Act on tax on goods and services, the principles and ideas presented above were partly departed from, and the need to thoroughly amend the Act on tax on goods and services is increasingly being discussed.

The sale of goods or services by an economic entity leads to a tax due and an obligation to include it in the return form for the respective tax period. VAT increases the net value of a given service or good. In turn, when purchasing materials and goods for taxable activity, the tax increases the purchase price – input tax. For the seller of materials and goods it is a tax due. The taxpayer at the end of each accounting period (month or quarter) is required to submit a tax return, in which it indicates the difference between the tax due and the input tax. A positive difference creates tax liability that must be paid to the tax office by the 25th day of the month following the end of the respective tax period. A negative difference between due and input tax implies an overpayment of the goods and services tax, which can be returned to the taxpayer to the bank account or carried forward to subsequent periods. Reduction of due tax by the amount of input tax is only possible if the following taxable activities are carried out: paid delivery of goods, paid services in the territory of the country, export of goods, import of goods, intra-Community acquisition of goods for remuneration within the territory of the country and intra-Community supply of goods [Pyzel 2009]. The Act on tax on goods and services provides for situations in which, despite the occurrence of a taxable activity, it will not be possible to deduct input tax from the due tax [Ustawa z dnia 11 marca 2004, art. 88].

Tax on goods and services is one of the most commonly used to commit fraud. The specific structure and regulations resulting from the European Union Directive in the field of value added tax cause that national and international criminal organizations pursue fraudulent returns of money due to the state treasuries through the mechanism of this tax. State authorities wanting to protect themselves against fraud in the goods and services tax establish mechanisms protecting them against fraud. The first of these mechanisms was the so-called reverse charge. The construction of this mechanism consisted in the fact that the seller of a good or service issued a VAT invoice without charging due tax. In turn, the buyer of a good or service covered by this mechanism listed both the due tax and the input tax on this acquisition in its tax return. Unfortunately, this mechanism failed in practice because it was also used to commit tax fraud. The latest idea of the state authorities in the fight against VAT fraud is the split payment mechanism.

Split payment is a specific invoice payment mechanism. The application of this mechanism causes the VAT amount to be transferred to a VAT account, while the net amount goes to the current settlement account of the transfer recipient. Especially for this purpose, the enterprise bank creates a separate VAT bank account for each settlement account. This account is used to receive the VAT. Currently, the entity making the payment decides whether the payment is made in the split payment mechanism. From 1 July 2018 the so-called optional split payment has been operating in Poland.

The main advantages of the split payment mechanism include no joint and multiple liability (Annex 13 to the VAT Act), no additional tax liability charged by the Tax Office, and enterprises can get a bonus for payment ahead of schedule and also apply for an accelerated VAT refund.

However, in addition to the advantages, there are also disadvantages of this mechanism. The main disadvantages of split payment include a larger amount of data in the transfer message (NIP, or the VAT number of the contractor, invoice number, two net amounts and VAT, inability to pay several invoices with a single transfer), but above all limited access to funds on the VAT account. In order to use the funds from the VAT account for purposes other than those specified in the Act, the consent of the head of the tax authority competent for the respective enterprise is required. Currently, without the consent of the head of the tax office, the funds can be used for two purposes only:

- to pay due VAT to the tax office,
- settling VAT with your contractor on its VAT account.

Apart from these two options, the current regulations do not provide for the possibility of using split payment for other purposes, e.g. the possibility of paying import VAT, excise duty, customs duty, income tax or ZUS with monies from that account.

In addition, from 1 November 2019 the mandatory split payment mechanism will have been introduced to replace the fiscally ineffective reverse charge mechanism. This solution will cover a total of 150 groups of goods and services for transactions exceeding the amount of PLN 15,000. The goods and services covered by this obligation are listed in the new Annex 15 to the VAT Act (including construction services, scrap, steel products, all sensitive goods, car parts, motorcycle parts and tyres). This means that only a selected group of enterprises trading in goods or providing services listed in Annex 15 to the Polish Act on tax on goods and services will be covered by the split payment mechanism, which may lead to a deterioration of the financial liquidity of these enterprises. The research in the next chapter aims to determine the impact of the split payment mechanism on the financial liquidity of enterprises.

4. Split payment in goods and services tax and the company's financial liquidity – empirical approach

The optional split payment mechanism has been in operation in Poland since 1 July 2018. However, as 1 November 2019, it was planned to introduce a mandatory split payment mechanism for selected goods and services. Therefore the question arises of how does the current optional possibility of using the split payment mechanism affect the financial liquidity of enterprises, and how will it be shaped when this mechanism becomes obligatory for some industries? What values would the financial liquidity ratios present in both dynamic and static terms?

To conduct empirical research, the study used data from business entities conducting manufacturing (CNC machining), trade (trade in steel pipes) and services (transport and forwarding services) activities. All companies included in the research are small companies with up to 100 employees. Their return on sales (ROS) is as follows: production company 32%, trading company 16%, company providing transport services 5%. For the purpose of simulation the authors applied the financial statements and monthly VAT returns of the aforementioned enterprises for 2018 and the first half of 2019. This period covers the possibility of using the optional split payment, i.e. from 1 July 2018 to the end of June 2019.

The first stage of the study consisted in determining the weighted average rates of tax due, i.e. arising at the sale, the payment of which by the recipient may take place in the split payment mechanism. On the basis of data from the analyzed enterprises, weighted average tax rates were calculated for a manufacturing, trading and service enterprise. The weighted average rate was calculated by dividing the amount of tax due by the tax base of the value added tax. The weighted average tax rates are listed in Table 1.

Table 1. Weighted average tax rates

Specification	Company		
	Manufacturing	Trading	Service
2018			
Due tax	1 286 149	2 700 228	2 634 524
Tax basis	7 812 845	11 739 976	26 365 845
Weighted average input VAT rate	16.46%	23.00%	9.99%
2019			
Due tax	674 212	1 497 204	1 447 274
Tax basis	3 940 439	6 508 227	17 881 679
Weighted average due VAT rate	17.11%	23.00%	8.09%

Source: own elaboration.

A trading company is the only one of the above mentioned in the analysed period to have a 23% weighted average VAT rate. All sales of this company are subject to the basic 23% VAT rate. A manufacturing company has a weighted average due VAT rate of 16.46% in 2018 and 17.11% in 2019. The weighted average due VAT rate lower than the 23% of the basic rate results from the intra-Community supplies subject to a 0% VAT rate, which represents about 25% of the company's total sales. By far the lowest weighted average due VAT rate is attributable to a service company, which provides the vast majority of its transport services to foreign entities. This means that most of this company's sales are subject to the 0% VAT rate, which is used both in intra-Community supply of services and in the export of services to a third country.

The next stage of the study was to calculate the share of VAT payments using the split payment mechanism in total VAT payments in the respective period. For this purpose, the amounts of VAT payments were separated in the split payment mechanism and the total amount of VAT payments for two equal periods of July-December 2018 and January-June 2019. Then the percentage share of VAT payments in the split payment system in the total VAT payments in the analyzed period was calculated. The results can be found in Table 2.

Table 2. Share of VAT payments through the split payment mechanism in total VAT payments

Specification	Company		
	Manufacturing	Trading	Service
July - December 2018	0.51%	1.13%	0.71%
January-June 2019	0.96%	5.88%	1.55%
Specification	Company		
2018	Manufacturing	Trading	Service
VAT split payment	5 876.50	31 126.12	16 482.23
Total VAT payments	1 155 573.21	2 743 987.43	2 334 063.22
2019	Manufacturing	Trading	Service
VAT split payment	5 926.80	87 907.02	19 703.00
Total VAT payments	619 567.69	1 496 282.29	1 268 422.47

Source: own elaboration.

The results presented in Table 2 demonstrate that currently, payments with the use of split payment mechanism constitute a negligible part of total VAT payments. This means that a negligible part of the transactions carried out by economic operators are carried out using the optional split payment mechanism. In the production company, payments under the split payment mechanism represent less than 1% of all payments. In turn, in a service enterprise this is 0.71% in 2018 and 1.55% in 2019 of all payments in total. The largest share of payments in the split payment mechanism

in total payments occurs in the trading company, with 1.13% in 2018 and 5.88%, respectively. This is due to the type of goods the company trades in. This trader sells steel pipes, which are covered by the mechanism of joint and several liability in VAT. Since the payment in the split payment mechanism releases the payer from joint and several liability, this encourages contractors to make payments in this system.

The introduction of mandatory split payment in some industries, planned for 1 November 2019, should contribute to an increase in the number and value of transactions made in the split payment system. This may result in a deterioration of the financial liquidity of enterprises receiving payments under this mechanism. Therefore, in the third stage of research, the financial liquidity of enterprises was measured assuming the current (optional) possibility of payment in the split payment mechanism, assuming that half of the recipients will use this mechanism, and further assuming that the entire payment will be covered by split payment. In order to fully illustrate the impact of split payment on the financial liquidity of the analyzed enterprises, static and dynamic liquidity ratios were calculated. For correct calculations, the adjusted VAT-related items of the financial statements of the audited economic entity were used. A very strong assumption was used in the calculations; it consists in the fact that the amount of VAT that credits the VAT account cannot be used for any payments made by the company. This means a lack of freedom in managing these funds. When calculating financial liquidity ratios both in static and dynamic terms, the amount of cash accumulated on the VAT account is subtracted from the indicator counter. This means a decrease in financial liquidity by the amount included in the VAT account.

First, the static liquidity measurements were performed. Static financial liquidity ratios were calculated for the current conditions, and assuming a 50% and then a 100% rate of split payment VAT invoice settlements. The results of the calculations are presented in Table 3.

Table 3. Static liquidity measurement

Specification	Manufacturing			Trading			Service		
	Current	50%	100%	Current	50%	100%	Current	50%	100%
Current ratio	1.49	1.04	0.60	2.61	1.70	0.79	0.84	0.67	0.50
Quick ratio	0.74	0.30	-0.14	0.49	-0.42	-1.33	0.75	0.58	0.41
Cash ratio	0.14	-0.30	-0.75	0.10	-0.81	-0.81	0.04	-0.14	-0.31

Source: own elaboration.

The results in Table 3 prove the adverse impact of split payment on the financial liquidity of the analyzed enterprises. All static liquidity ratios adopt lower values over the period under consideration when taking into account 50% or 100% payments in the split payment mechanism. The negative value of static liquidity ratios results

from the assumption that cash on the VAT account is not liquid, therefore they are subtracted from the denominator of each of the calculated indicators.

The next stage of the ratio analysis of the impact of split payment on the financial liquidity of enterprises included the calculation and compilation of dynamic liquidity ratios using current conditions, assuming 50% and 100% payments of VAT invoices under the split payment mechanism. Table 4 presents the results of the first stage of dynamic liquidity analysis, which consisted in calculating the cash efficiency ratios of the analyzed economic entity.

Table 4. Dynamic liquidity measurement – cash efficiency ratios

Specification	Manufacturing			Trading			Service		
	Current	50%	100%	Current	50%	100%	Current	50%	100%
Receivables turnover ratio	0.14	0.06	-0.01	0.05	-0.07	-0.18	0.04	0.00	-0.05
Profit efficiency ratio	0.54	0.25	-0.05	0.47	-0.64	-1.74	3.14	-0.29	-3.72
Fixed asset turnover ratio	0.32	0.14	-0.03	3.75	-5.11	-13.96	0.23	-0.02	-0.28
Current asset turnover ratio	0.20	0.09	-0.02	0.14	-0.19	-0.53	0.10	-0.01	-0.12
Current asset turnover ratio	0.55	0.25	-0.10	0.15	-0.20	-0.55	0.18	-0.02	-0.22

Source: own elaboration.

The presented calculation results concerning the cash efficiency ratios of the surveyed enterprises confirm the thesis about the negative impact of split payment on the financial liquidity of the analyzed business entities. All the indicators in the entire period covered by the study adopt lower values after including split payments. Assuming 50% payments in the split payment mechanism, the cash performance indicators in a commercial and service enterprise adopt negative values. However, when assuming 100% payments in the split payment mechanism, then in all analyzed entities the liquidity ratios take negative values.

The last stage of the ratio liquidity analysis of the analyzed business entities was the calculation of cash sufficiency ratios, which is the second part of dynamic liquidity measurement. The results of the calculations are presented in Table 5.

The analysis of cash sufficiency ratios demonstrates that in the enterprises subjected to this audit, the split payment mechanism significantly affected financial liquidity. In the entire analyzed period this relationship was negative. As in the case of cash efficiency ratios, the cash sufficiency ratios, when assuming 100% payments in the split payment mechanism also take negative values. The reason for this is the

fact that the measurement uses both the sufficiency and cash efficiency indicators of net cash flows from operating activities, which with 100% payments to the VAT account in the simulation have negative values. For the trading enterprise, the cash sufficiency ratio for investment expenses was not calculated, as there were no investment expenses in the analyzed period.

Table 5. Dynamic liquidity measurement – cash sufficiency ratios

Specification	Manufacturing			Trading			Service		
	Current	50%	100%	Current	50%	100%	Current	50%	100%
Operating cash sufficiency ratio for repayment of short-term liabilities	0.82	0.37	-0.07	0.38	-0.52	-1.43	0.16	-0.01	-0.18
Cash sufficiency ratio for investment expenditure	1.16	0.53	-0.10	None	None	None	7.42	-0.69	-0.18

Source: own elaboration.

Both the ratio analyses in static and dynamic terms under the adopted assumptions proved the adverse impact of split payment on the financial liquidity of the surveyed enterprises. It should be emphasized here that the introduction of the possibility of using cash on the VAT account for purposes other than just payment of VAT to the tax office or the contractor, could contribute to alleviating the negative impact of the split payment mechanism. However, the introduction of a mandatory split payment mechanism only for selected groups of goods and services may lead to a drastic deterioration in the financial liquidity of enterprises that will be subject to it. The use of the split payment mechanism only for selected goods and services also directly violates the principle of tax neutrality.

5. Conclusion

The analysis and research carried out by the NBP [2019] demonstrates that at present, with the optional split payment mechanism, only about 1% to 10% of total payments, depending on the industry, are made within the mechanism. This is a very small part of the total financial transfers made by enterprises on the B2B market.

Under current legislation the significant share of split payments in the structure of transfers may have a negative impact on the financial liquidity of enterprises. This is confirmed by the research carried out on enterprises from the manufacturing, trading and service industries. It also undermines the principle of the neutrality of goods and services tax by reducing the level of liquidity, which may have negative consequences for the respective company. One of the ways to limit this negative

impact could be the introduction of the possibility to pay Social Insurance, PIT and CIT liabilities with funds from the VAT account.

The introduction of a mandatory split payment mechanism for approximately 150 goods and services with payments exceeding PLN 15,000 as of 1 November 2019 may lead to the deterioration of financial liquidity of enterprises operating in these industries. The most beneficial solution in terms of the financial liquidity of enterprises would be to introduce a universal split payment obligation. Such an action could even improve liquidity in some industries, in particular those most exposed to payment gridlocks.

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