



Relationship of receivables and creditorial duties: Impact on Financial Indicators

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ABSTRACT

In the process of financial and economic activities, companies constantly make settlements: with suppliers and contractors, buyers and customers, personnel, accountable persons, other debtors and creditors. Debt for all calculations should be within the limits of acceptable values. Doubtful accounts receivable and overdue accounts payable testify to violations of financial and payment discipline, which requires immediate taking appropriate measures to eliminate negative consequences. Timely adoption of these measures is possible only if the enterprise exercises systematic control.

The development of market relations increases the responsibility and independence of enterprises in the development and adoption of management decisions to ensure the effectiveness of settlements with debtors and creditors.

Analysis of settlements with debtors and creditors is of vital importance for any enterprise that is actively working in a market economy.

The shortage of cash in the economy and the insolvency of many enterprises have made the issues of working with debtors and creditors one of the main functions of financial managers. The problem of managing accounts receivable and accounts payable is to a considerable extent complicated by the imperfection of the regulatory and legislative framework in terms of debt collection.

Debt and payables are natural elements of the company's balance sheet. They appear in connection with the mismatch of the date of occurrence of obligations with the date of cash settlement for them. The financial condition of the company is influenced by the size of these types of debts, and the period of turnover of each of the debts.

In carrying out entrepreneurial activities, those who take part in the turnover of property assume that after full implementation of economic operations they will be able not only to return the invested funds, but also to receive benefits and revenues.

Key words: accounts receivable, accounts payable, financial indicators, liquidity, financial stability.



1. INTRODUCTION

The company's finances are monetary relations, which are directly related to the formation and distribution of financial resources. These financial resources are formed with the help of the following sources: own funds and funds equal to own means, mobilized in the financial market as a result of transactions with various securities; funds that come as a result of redistribution.

The company's finances provide the circulation of fixed and working capital and relationships with the state budget, tax authorities, banks, insurance companies and other institutions of the financial and credit system. [Official site of CJSC Algorithm Plus [Electronic resource] - Access mode: <http://algorithmplus.ru/>, free. [Date of circulation: 04/16/2017]]

One of the most important components of the organization's finances are creditor and receivables.

Effective management of accounts receivable and payable is the key to the successful operation of the company. The policy of management of accounts receivable and payable is part of the general policy of the economic entity, which is aimed at expanding the volume of sales of products and consists in optimizing the overall size of these debts and ensuring their timely collection.

2. METHODS

In order to exercise control over accounts receivable and accounts payable, the company needs their regular analysis. To this end, a balance (ratio) of accounts receivable and payable is compiled and analyzed, because accounts payable are considered a source of financing receivables. Consider the definitions of the concepts of "passive" and "active" balances.

A passive balance is the excess of accounts payable over a receivable. [eleven]

The active balance is the excess of accounts receivable over the accounts payable.

[eleven]

One of the main indicators of the successful state of the enterprise is the situation when the accounts payable do not exceed the accounts receivable. This non-fulfillment should be achieved with respect to a more discrete series of values, that is, the annual accounts payable should not be more than the annual accounts receivable, ten days 'accounts payable not more than ten days' receivables, etc.



It should be noted that balance balances of accounts receivable and payable are in fact just the initial stage of a full study of the question raised about the impact of the ratio of the company's receivables and payables on its financial position and financial performance. Then, when the receivables are many times higher than the accounts payable, it can be concluded that this is a possible factor in ensuring a high level of the current liquidity ratio. However, sometimes this position of arrears may mean that accounts payable have a higher turnover compared to accounts receivable.

In this case, over a certain period of time, debtors' debts turn into cash through longer time intervals than the intervals when the company needs funds for the timely repayment of debts already on its credit obligations. In this regard, there is a shortage of cash in circulation, which is accompanied by the need to attract additional sources of funding. The latter can take the form of either overdue accounts payable, or bank loans. [Accounting statements of OAO MOSCOW CONFECTIONERY FACTORY "RED OCTOBER" INN 7706043263 for 2015 [Electronic resource] - Access mode: <https://e-ecolog.ru/buh/2015/7706043263>, free. [Date of circulation: 15.04. 2017]]

The ratio of accounts receivable and payable to the company can be calculated using the following indicators: [Accounting statements of LLC "ATON" INN 7702015515 for 2015 [Electronic resource] - Access mode: <https://e-ecolog.ru/buh/2015/7702015515>, free. [Date of circulation: 15.04.2017]]

1. Balance sheet:

$$BS=AP/AR \quad (1)$$

Where BS – balance sheet;

AP – amount of accounts payable;

AR – amount of accounts receivable.

This balance should be drawn up taking into account the timing of these two types of arrears. At the same time, the desired level of correlation depends mainly on the strategy adopted in the company (aggressive, conservative or moderate).

2. Time factor.

$$Ft=T_{\Pi}(AP)/ T_{\Pi}(AR) \quad (2)$$

Где Ft – time factor;

$T_{\Pi}(AP)$ – average maturity of accounts payable;

$T_{\Pi}(AR)$ – average maturity of accounts receivable.



At the same time, the average maturity of accounts payable should be kept at the level that debtors of the enterprise must comply with. [Zuy N. P. 2017]

It is also necessary to note the importance of analyzing the ratio of receivables for managing current and rapid liquidity of the company.

$$CR=CA/CR \quad (3)$$

Где CR – current ratio;

CA – current assets;

CR – current responsibility.

The current liquidity ratio shows how much of the current liabilities an enterprise is able to repay from cash and cash equivalents, financial investments, and receivables. This indicator reflects the payment capacity of the enterprise to pay off current liabilities, provided timely settlements with debtors are made. [Zuy N. P. 2017]

It is logical that the current assets include accounts receivable, and current liabilities include accounts payable. Thus, the ratio of current liquidity is inversely proportional to the balance of arrears. The smaller the value of the balance of arrears, the higher will be the value of the current liquidity ratio.

$$QR=(StR+ StFI +C)/TO \quad (4)$$

Где K₆₁ – quick ratio;

StR – short-term receivables;

StFI – short-term financial investments;

C – cash;

CR – current responsibility.

This ratio demonstrates how much the company will be able to repay current liabilities if its financial position becomes really critical, while proceeding from the assumption that inventories do not have any liquidation value at all.

Based on the logic with the current liquidity ratio, it is likewise necessary to conclude that the quick liquidity ratio is inversely proportional to the balance of arrears.

Of great importance is the analysis of the ratio of accounts receivable and payable due to the close relationship of this ratio to the financial stability of the company. Let us prove this.

$$FS=(E+LR)/BC \quad (5)$$

FS – coefficient of financial stability;



E – equity;

LR – long term responsibility;

BC – balance currency.

This formula can be represented as:

$$FS = 1 - CR/BC \quad (6)$$

We have already noted that current liabilities include accounts payable, and the balance sheet can be presented as the amount of non-current and current assets, which includes accounts receivable. Therefore, we can conclude that the balance of debts is inversely proportional to the coefficient of financial stability. Therefore, the analysis of the ratio of accounts receivable and payable is extremely important for the control and management of financial stability of the enterprise. [Accounting statements of OAO MOSCOW CONFECTIONERY FACTORY "RED OCTOBER" INN 7706043263 for 2015 [Electronic resource] - Access mode: <https://e-ecolog.ru/buh/2015/7706043263>, free. [Date of circulation: 15.04. 2017]]

Thus, the assessment of the effect of balance balances of receivables and payables on the financial condition of an enterprise should be carried out taking into account the level of solvency (the coefficient of total liquidity) and the correspondence between the periodicity of the conversion of receivables into money means of the periodicity of repayment of accounts payable.

3. RESULTS AND DISCUSSION

The management of the movement of accounts payable is the establishment of such contractual relationships with suppliers that set the terms and amounts of the enterprise's payments the last depending on the receipt of funds from customers. [Accounting statements of OAO MOSCOW CONFECTIONERY FACTORY "RED OCTOBER" INN 7706043263 for 2015 [Electronic resource] - Access mode: <https://e-ecolog.ru/buh/2015/7706043263>, free. [Date of circulation: 15.04. 2017]]

As a result, in practice it is a matter of parallel management of the movement of both receivables and payables. The practical implementation of such management implies the availability of information on the actual status of receivables and payables and their turnover. An estimate is made of the movement of receivables and payables in this particular period. In this regard, as the initial data for this assessment, it is necessary to accept debts related specifically to this period. In other words, it is necessary to discard



long-term and overdue balances from the balance balances of accounts receivable and payable, that is, those elements of debts, the conversion of which into cash assets refer to other time periods. The remaining part of the accounts receivable and accounts payable is the basis for estimating the frequency of receivables from customers, sufficient repayment of accounts payable, and balances of accounts receivable and payable at the end of the period, provided that they are circulating in accordance with the contractual terms or the established procedure for settlements. [Accounting statements of OAO MOSCOW CONFECTIONERY FACTORY "RED OCTOBER" INN 7706043263 for 2015 [Electronic resource] - Access mode: <https://e-ecolog.ru/buh/2015/7706043263>, free. [Date of circulation: 15.04. 2017]]

To illustrate the effect of the ratio of debts, we consider three organizations with different ratios:

1. The organization in which accounts receivable greatly exceed the accounts payable.
2. The organization in which accounts payable exceed the accounts receivable.
3. The organization in which accounts receivable and accounts payable are approximately equal.

The first organization was «Algorithm Plus» company, whose accounts receivable and payable analysis was provided in the second chapter. Let's compile the auxiliary Table 1, where we demonstrate the dynamics of the necessary indicators.

Table 1.Dynamics of «Algorithm Plus» company for 2013-2015

Indicators	Recommended value	2013	2014	2015
Balance sheet	1-1,2	0,0053	0,1305	0,1102
Quick ratio	0,7-1	438,82	17,14	19,11
Current ratio	1,5-2,5	482,18	18,79	21,21
Coefficient of financial stability	0,8-0,9	0,998	0,95	0,96

As can be seen from Table 1, the balance of arrears is extremely small compared to the recommended value. This ratio shows that in this company accounts receivable is too much higher than the accounts payable.



We see that the values of the company's liquidity ratios are too high. Compared to 2013, they fall, but this is not enough for a stable and optimal operation of the enterprise.

The value of the fast liquidity ratio is much higher than the norm. If in 2013 the value was 438.82, then by 2014 it decreased to 17.14, and by 2015 it became 19.11, that is slightly increased. The coefficient reflects the ability of «Algorithm Plus» company to repay its current liabilities in the event of difficulties with the sale of products. Since the value of this coefficient is very high, we can conclude that «Algorithm Plus» company has such an opportunity, but only when recovering receivables.

The current liquidity ratio is also critically above the norm. At a rate of 1.5-2 in this organization, the following dynamics occurred: in 2013 the value of the coefficient was 4282.18, in 2014 it fell to 18.79, and in 2015 it increased slightly and became 21.21. This means that the current assets are not actively used because of the high share of accounts receivable. In this case, the company's managers need to improve access to short-term lending.

The coefficient of financial stability throughout the analyzed period is at a high level and practically reaches 1. This means that the enterprise exists mainly at the expense of its own funds. This is not always good, as there is no effect of a financial leverage. Let us consider in more detail: this coefficient was almost unity, in 2014, slightly decreased to a value of 0.95, and in 2015 it rose to 0.96.

Having studied in detail the dynamics of coefficients, we can clearly see the influence of the ratio of payables and receivables (balance of arrears) on the financial performance of the organization. So, if the balance of arrears in 2014 compared to 2013 increased significantly, and then in 2015 slightly decreased, then all inversely proportional coefficients in 2014 significantly decreased, and in 2015 everything increased.

In the same way, we will analyze the company "ATON" LLC, whose accounts payable exceed the accounts receivable.

Table 2. Dynamics of indicators of LLC "ATON" for 2013 - 2015.

Indicators	Recommended value	2013	2014	2015
Balance sheet	1-1,2	4,232	6,246	6,37



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Quick ratio	0,7-1	1,335	1,17	1,123
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Current ratio	1,5-2,5	1,364	1,168	1,12
Coefficient of financial stability	0,8-0,9	0,267	0,156	0,115

From this table we can conclude that only the fast liquidity ratio is normal, all other coefficients are critically below the recommended value, which already speaks of the influence of the ratio of payables and receivables. After all, the balance of arrears increases, at which time financial indicators are falling.

All indicators of the financial state of the organization have a negative dynamics. Thus, the fast liquidity ratio falls from 1.335 in 2013 to 1.123 in 2015; the current liquidity ratio decreases from 1.364 to 1.12; the coefficient of financial stability is also decreasing and from 0.267 in 2013 will become 0.115 by 2015.

Let's review the balance of debts in detail. During all three years it increases, which is logical, because the financial indicators are decreasing. Therefore, from 4.232 in 2013, it first rises to 6.246 in 2014, and in 2015 it is set at 6.37.

Thus, we showed the effect of the ratio of payables and receivables on the financial ratios that characterize the company's financial position. They proved that the excess of accounts payable over the accounts receivable leads to a decrease in the indicators.

Finally, we analyze the financial indicators of the enterprise, in which the accounts receivable and accounts payable are approximately equal.

Table 3. Dynamics of indicators of JSC "Moscow Confectionary Factory" Red October
"for 2013 - 2015

Indicators	Recommended value	2013	2014	2015
Balance sheet	1-1,2	0,943	1,245	1,052
Quick ratio	0,7-1	0,6	0,01	0,3
Current ratio	1,5-2,5	3,73	2,04	2,53
Coefficient of financial stability	0,8-0,9	0,81	0,691	0,67

As can be seen from Table 3, the values of almost all coefficients in 2013 and 2015 are in absolute norm. In 2014, there was a decline in all positions, but in 2015 the figures returned to normal. This dynamics is primarily due to a significant decrease in cash in



the current assets of the organization in 2014. By 2015, everything again came to normal, so it is advisable to consider the change in 2013 as soon as 2015.

We see that the balance of arrears in 2013 was 0.943, but by 2015 it increased to 1.052. Thus, accounts payable began to slightly exceed the accounts receivable, which is a positive trend for the company.

4. SUMMARY

Accordingly, if the balance of debts from 2013 to 2015 increased, then the financial indicators considered decreased. Thus, the fast liquidity ratio decreased from 0.6 to 0.3, the current liquidity ratio from 3.73 to 2.53 and entered the recommended value, and the financial stability of the organization decreased from 0.81 to 0.67. The coefficient of financial stability is slightly less than the norm. However deviations from the norms are not critical, which indicates the financial stability of the organization.

These situations clearly show changes in indicators due to changes in the value of arrears and their ratio.

I would also like to note that the optimal ratio of accounts receivable and payable leads to the optimal values of financial ratios, they are normal or close to the norm. For example, there are no critical deviations of indicators, as it was in the example of the first two organizations.

Thus, with the example of three enterprises, we found the dependence of the values of financial indicators of the organization on accounts receivable and payable, as well as their ratio.

5. CONCLUSION

Without operational control of receivables and payables, effective management of the company is not possible. Failure to collect data on accounts receivable and payable in time may lead to the organization being left without the necessary working capital or unable to plan cash for various future payments and liabilities. For these reasons, the relevance of the research topic explored is obvious.

One of the main tasks of the finance manager in managing receivables and payables in the company is to identify the degree of insolvency risk of stakeholders, calculate the forecast value of the allowance for doubtful debts, and provide advisory services to manage the actual or potential insolvency of customers.



A significant influence on the financial position of the organization is the state of accounts receivable and accounts payable and their ratio. They are components of the balance sheet of the enterprise, which appeared due to the mismatch of the moment of occurrence of obligations with the moment of payments on them. The financial position of the company is influenced both by the size of balances of receivables and payables on balances, and the period of turnover of each of the debts. Their analysis and integrated management, planning the dynamics of settlements with counterparties are important factors in maximizing the profit of the organization, increasing liquidity, creditworthiness and the process of minimizing the company's financial risks. Management of the ratio of accounts receivable and payable is always relevant in the practice of both domestic and foreign companies. Without the necessary control over arrears, it is impossible to achieve effective work of the organization and its sustainable financial position.

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