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# MONITORING OF BUSINESSES OPERATIONS WITH CASH FLOW ANALYSIS

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## ABSTRACT

*The relevance of the research topic is determined by the fact that in modern economic conditions the issue of cash flow formation and management directly influences the operation, and in some cases, the existence of a small and medium-sized business. The company needs a sufficient amount of cash for timely repayment of its obligations. However, cash excess reduces its turnover and, like shortage, negatively affects the performance of a company. The goal of this research is to develop recommendations for monitoring the operations of small and medium-sized businesses based on the analysis of their cash flows. To achieve this goal, the authors set the following objectives: to study the essence of cash flows; to evaluate the theoretical and practical methods of estimating cash flows in companies that are applied in financial management; to develop recommendations for optimizing financial decisions based on cash flow management. The subject matter of the research is Russian small and medium-sized businesses. The scope of the study is the elements of their cash flows. The following research methods were used: retrospective analysis, statistical observation method, factor analysis, principles and methods of system analysis; computational procedures involving the apparatus of financial mathematics and financial management; optimization methods and models (Excel nonlinear optimization technology). The methodological basis of the study is represented by the works of Russian and international scientists on the management of cash flows and finance of small businesses. The scientific novelty of the study includes the development of a factor model for monitoring the activities of business entities which involved evaluating the various elements of their cash flows, as well as optimizing financial decisions by the selected optimality criterion. Practical implementation of the proposed mechanism for monitoring the operations of a business entity enables to timely register the sufficiency of the cash flow and to adjust its value depending on the influence of factor indicators.*

**Key words:** small and medium enterprises, monitoring, financial analysis, cash flow management

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## 1. INTRODUCTION

For businesses, providing their financial and economic activities with cash is the most important task. Cash flows can be defined as the amount of cash that a business entity owns and which ensures its efficiency, financial stability, solvency, liquidity, and image. Financial balance ensures that the entity has the optimal amount of cash flows. Excess cash can lead to the depreciation of the financial resources of the enterprise; on the other hand, its deficit may reduce the performance indicators, worsen the financial situation and, consequently, result in bankruptcy. Therefore, to prevent crises, nowadays every company should have an algorithm for monitoring cash flows. Evaluating its financial stability is an important task for an enterprise since it ensures the company's independence and the ability to generate cash flows. The availability of financial resources determines the survival and development of an enterprise. Money is a limited resource. Thus, it is crucial to develop a model for its effective management.

## 2. LITERATURE REVIEW

In most countries of the world, state policy considers the effective operation of small and medium-sized businesses one of the priority goals of economic development. This also refers to Russia. Entrepreneurship creates healthy competition in the country, increases the level of employment, as well as opportunities for developing and implementing innovations. Any business entity, regardless of the scale of its activities, manages cash flows as one of the areas of its financial activity since solvency and stability of the company as a whole depend on their balanced functioning. At the same time, the current models of money management involve the assessment of uniformity, synchronism, liquidity, and adequacy of cash flows (Blank, 2013, Brealey, 2008, Lukasevich, 2016). However, these models can rarely be applied to Russian small and medium-sized businesses due to the lack or insufficiency of the information for their efficient application. This can be explained by different approaches to the development of financial statements by large and small businesses and a relatively low level of cash flows transparency. In previous studies, we established that to ensure the balanced development of small and medium-sized businesses, it is necessary to assess various aspects of their development potential (Soboleva, 2017, Soboleva, 2018). Among others, we highlighted the financial component of the operations of business entities. In this article, we propose recommendations for Russian small and medium-sized businesses regarding the assessment and improvement of the efficiency of their financial activities based on the analysis of indicators that influence the formation of cash flows.

The concept of cash flows was developed by such economists as Brigham (2009), Van Horne (2008), Brealey and Myers (2008). Russian researchers that worked in this field are Bocharov (2009), Blank (2013), Kovalev (2011), Stoyanova (2010), Sheremet (20) and others. Some authors explored indicators of cash flow management for companies in crisis to predict their financial difficulties (Fawzi, 2015).

### 3. MATERIALS AND METHODS

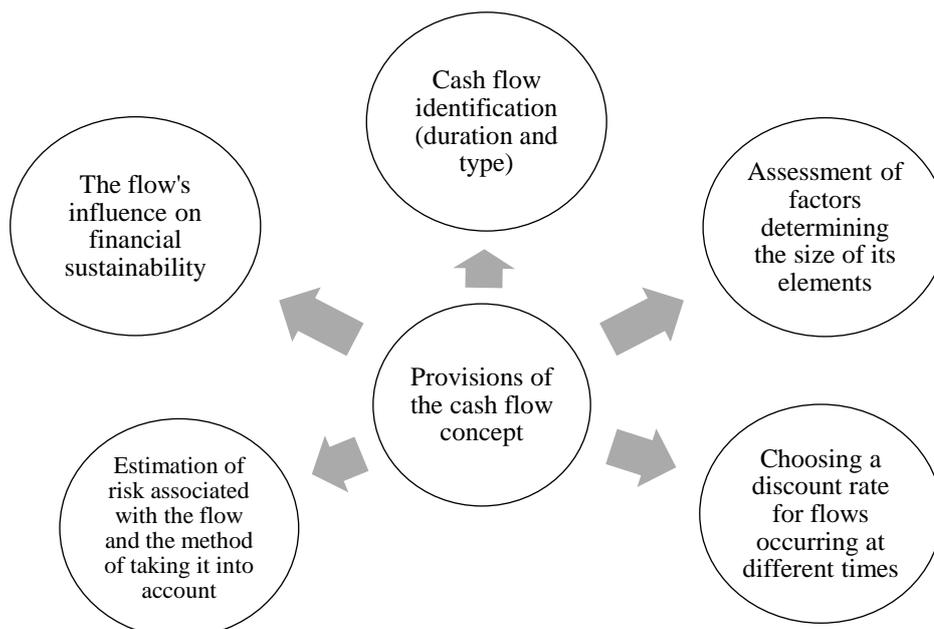
#### 3.1. Theoretical Aspects of Problem Research

In accordance with the provisions of the International Financial Reporting System (IFRS), the term "cash flows" is used as a synonym for the term "cash" and their equivalents. Cash flows are understood as cash inflows and outflows and their equivalents. The theory of cash flows has emerged fairly recently, and therefore, by present moment researchers have developed no uniform provisions that would form the concept of cash flow management. This refers to the following aspects:

1. The lack of uniform terminology.
2. Unclear definition of the goals and objectives required to analyze the cash flow of a company.
3. Insufficiently substantiated solution of problems regarding the system of indicators that describe the company's cash flows.

The main provisions of the concept of cash flows are presented in Figure 1.

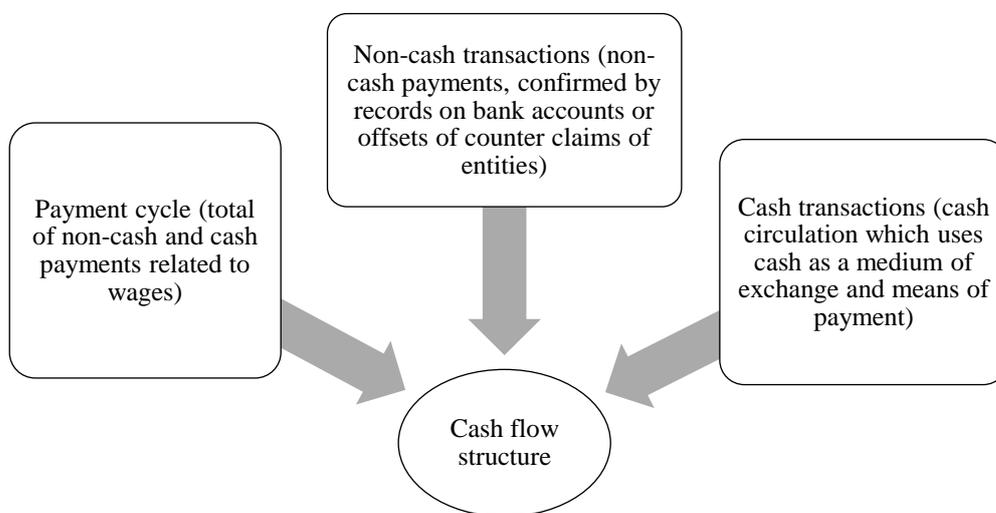
As we can see, the concept of cash flow management consists of five main elements. Its essence is as follows. To develop measures for managing cash flows and optimize their structure, above all, it is necessary to determine the nature and essence of specific cash flows that take place in an enterprise. One should identify the financial sources in the company. Then one should create a list of factors determining the size of the flow elements. This procedure provides more detailed information on the distribution of financial sources in the company. After that, it is necessary to estimate the discount rate which is used to bring all cash flows into a comparable form, that is, to the initial time point, in order to eliminate the influence of the time factor; at the next stage, the cash flow assessment involves identifying possible risks that could damage the estimated cash flow. Finally, at the last stage of the cash flow management mechanism, one conducts an assessment of the financial sustainability of the company regarding the cash flows generated in it, and this is used as the basis for developing the financial strategy of the company's activities. Thus, the concept of cash flow management includes interconnected sequential blocks aimed at developing an optimal solution for cash flows formation.



**Figure 1.** Elements of the concept of cash flow management in a company [compiled by the authors]

Now let us consider the nature of cash flows. It is known that they all are either cash or non-cash. Cash flows performing their functions in one of these forms are called circulation. Circulation includes movement of cash in both cash and non-cash forms for the purposes of commodities and materials sales as well as non-cash payments and settlements. Circulation implies a combination of all payments in both cash and non-cash forms for a specific period of time. The structure of circulation is presented in Figure 2.

In the market, transactions between the legal entities usually imply sales and purchases, which involves using financial resources. Companies also need the latter for payment settlements with budgetary and extra-budgetary funds, credit institutions, public organizations, charitable foundations, and employees. The cash flow received for the operations performed, the sale of products, the performance of works, services and the net income associated with these is the main condition for ensuring the circulation of funds and continuity of economic activity.



**Figure 2.** The structure of the cash flow in a company [compiled by the authors]

Brigham (2009) claims that "cash flow is actually the net cash that comes into the company (or is spent by it) over a certain period". Blank (2013) believes that "cash flow is the main indicator describing the effect of investments in the form of funds returned to the investor. The cash flow on investments is based on the net profit and the amount of depreciation of tangible and intangible assets". Brealey and Myers (2008) state that "the cash flow from production and business activities is estimated by subtracting the cost of goods sold, other expenses and taxes from the sales revenues". J. Van Horne (2008) notes that "a company's cash flow is a continuous process. There must be an appropriate source for each direction of funds use. In a broad sense it means that company's assets represent the net use of cash, while liabilities and equity are net sources". Bocharov (2009) believes that "cash flow is the amount of cash that a company receives or pays during a reporting or planned period".

Despite the fact that views on this issue differ, all researchers consider cash flows from the perspective of financial and economic activities of a company. Cash inflows are linked with the revenues received by the company for goods sold, services rendered, work performed, or income from participation in the share capital of other companies. However, one should differentiate between cash inflows and the net profit received by the company. Net profit is the funds available to the company after payment of taxes and other obligatory payments, while cash inflows are funds incoming from various sources. Thus, the concept of "cash inflows" is much broader than the term "net profit".

### 3.2. Specifics of the Financial Mechanism of Small and Medium-Sized Businesses

Using statistical data, we analyzed the effectiveness of cash flow management in small and medium-sized enterprises located in the Oryol Oblast of the Central Federal District of the Russian Federation. The analysis was based on studying such base values as cash inflows and outflows (Table 1).

**Table 1** Structure of cash flows of small and medium-sized businesses of the Central Federal District of the Russian Federation (in million rubles)

| Index                      | Period (year) |         |         |         |
|----------------------------|---------------|---------|---------|---------|
|                            | 2012          | 2013    | 2014    | 2015    |
| <i>CASH INFLOWS (CIF)</i>  | 100322        | 71882   | 75460   | 3067113 |
| <i>CASH OUTFLOWS (COF)</i> | 1040503       | 1069510 | 1316719 | 2190617 |

\* compiled by the authors using the materials of the Federal State Statistics Service of the Russian Federation

Table 1 demonstrates that there were significant fluctuations in the values of cash inflows and outflows over the analyzed period.

In course of the study, we surveyed the management of 46 small businesses in one of the regions of the Russian Federation – Oryol Oblast, which is 4.7% of their total number there as of September 30, 2017. The results of the survey of business structures enabled us to conclude that Russian businesses do not pay enough attention to cash management. Only some of the surveyed enterprises use the coefficient assessment method, described in detail in the works of Blank (2013), Volodin (2012), Fawzi (2015) and others. Most coefficients reflecting the effectiveness of cash flow management are too specific and focused on solving particular tasks. At the same time, managing financial resources on the basis of the existing information base is an important task of management for small and medium-sized businesses.

In this paper, we analyzed the activities of Russian business entities (Table 2).

**Table 2** Summary results of financial activities of small and medium-sized businesses of the Central Federal District of the Russian Federation

| Year | Gross profit, mln rub |                          | Share of profitable enterprises, % |                          | Profitability of sales, % |                          | Current liquidity ratio, items |                          |
|------|-----------------------|--------------------------|------------------------------------|--------------------------|---------------------------|--------------------------|--------------------------------|--------------------------|
|      | Small enterprises     | Medium-sized enterprises | Small enterprises                  | Medium-sized enterprises | Small enterprises         | Medium-sized enterprises | Small enterprises              | Medium-sized enterprises |
| 2010 | 535944                | 139387                   | 79.5                               | 76.7                     | 3.4                       | 5                        | 1.094                          | 1.178                    |
| 2011 | 474168                | 162101                   | 70.3                               | 79.5                     | 3.7                       | 4.8                      | 1.304                          | 1.242                    |
| 2012 | 950211                | 216277                   | 82.4                               | 82.3                     | 3.7                       | 4.6                      | 1.119                          | 1.203                    |
| 2013 | 1437052               | 200159                   | 80.5                               | 81.1                     | 5.3                       | 4.2                      | 2.958                          | 1.199                    |
| 2014 | 1210950               | 143145                   | 79.8                               | 79.7                     | 5.4                       | 4.6                      | 1.733                          | 1.177                    |
| 2015 | 1942100               | 292167                   | 79.8                               | 81.3                     | 5.2                       | 5.9                      | 1.257                          | 1.345                    |
| 2016 | 234962                | 503028                   | 79.4                               | 80.5                     | 5                         | 5.8                      | 1.217                          | 1.255                    |

\* compiled by the authors using the materials of the Federal State Statistics Service of the Russian Federation

We can see that the share of gross profits of small and medium-sized businesses in their totality virtually remains the same over the analyzed periods. Return on sales tends to increase. However, the current liquidity ratio is at a level that is significantly less than optimal. The sales revenue tends to decline since 2015, despite an increase in the total number of small enterprises by 6%. Taking into account the analytical information presented in Tables

1 and 2, it can be concluded that Russian small and medium-sized businesses are characterized by: insufficient liquidity of assets, negative net cash flow (except for 2015), desynchronized cash flows. Business entities mainly carry out financial activities on an intuitive basis, not systematically. Their business objectives are focused exclusively on sales growth. The financial subsystem is not monitored, which is why it cannot correspond to the optimal features. Thus, it is necessary to develop a financial management mechanism that could be implemented and understood by the management of the groups of economic agents under study.

### 3.3. Factor Model for Assessing Cash Management Effectiveness

It is clear that to assess the possibility of a crisis, companies must systematically evaluate their financial situation. A large number of models have been developed in the scientific literature for this purpose, such as the Altman (1968), Beaver (1966), Taffler (1977), Režňáková and Karas (2014) models, etc. However, none of them can be considered the only correct.

Having analyzed the existing coefficients for assessing cash flows on the basis of the reporting companies developed according to Russian accounting standards, we concluded that it is practically impossible to use them in the practice of small businesses due to the specifics of accounting and preparation of financial statements. In this paper, we chose indicators that any small and medium-sized enterprises can use. The coefficient analysis of cash flows assessment forms the basis of the proposed methodology. The resulting assessment indicator is an indicator describing the ratio between cash inflows and mandatory payments related to the company's operations to the total value of these payments ( $\frac{NCF}{COF}$ ). In other words, this indicator represents the company's share of net cash flow (NCF) in its cash outflows (COF). Let us call it the liquidity ratio of a business entity, which is different from the absolute liquidity ratio since we estimate not the degree of coverage of liabilities with monetary funds, but the degree of coverage of payments already made over the period with financial resources available on the company's balance. The critical difference lies in the fact that the coefficient proposed in this paper enables to determine how well cash payments of a business entity are covered with the most liquid assets. This approach is based on a retrospective analysis; however, any business entity can adjust its denominator to reflect major changes in the amount of cash outflows over the planned period. For instance, to calculate the factor in our proposed model, there is no need to use a cash flow statement, which quite many business entities do not prepare. It suffices to use information about the company's current cash payments obtained from the accounting data. The greater the value of this resulting indicator, the better the company can protect itself from probable non-payment of monetary obligations. It can also describe the solvency of the company on a specific date or taking into account forecasted indicators – the probability of non-payment. The model is represented by formula 1. Here, the dependent variable is defined as the share of free funds of the business entity to the amount of its monetary obligations on a specific date (Y).

$$Y = f\left(\left(\frac{NCF}{Cash}\right); \left(\frac{Cash}{CIF}\right); \left(\frac{CIF}{AR}\right); \left(\frac{AR}{AP}\right); \left(\frac{AP}{COF}\right)\right) \quad (1)$$

The proposed model contains the following factor indicators:

1) The coefficient of funds use efficiency ( $\frac{NCF}{Cash}$ ) as the ratio of net cash inflows and their payments (NCF) to the cash balance at the end of the analyzed period (Cash). At the same time, the numerator of this indicator describes the net cash flow related to the economic activities of a small or medium-sized company.

2) Cash settlement ratio ( $\frac{\text{Cash}}{\text{CIF}}$ ) is calculated as the ratio of cash at the end of the analyzed period to the total value of cash inflows for the period;

3) The coverage ratio of accounts receivable with total amount of cash inflows for the period ( $\frac{\text{CIF}}{\text{AR}}$ ) as the ratio of cash inflow to the balance of accounts receivable for the period;

4) Financial stability index of the business ( $\frac{\text{AR}}{\text{AP}}$ ) as the ratio of accounts receivable to accounts payable;

5) Coefficient of payments coverage with accounts payable ( $\frac{\text{AP}}{\text{COF}}$ ) as the ratio of the balance of accounts payable to the total cash payments over the period.

The algorithm for application of the proposed model of factor analysis for monitoring the operations of small and medium-sized businesses is presented in Figure 3.

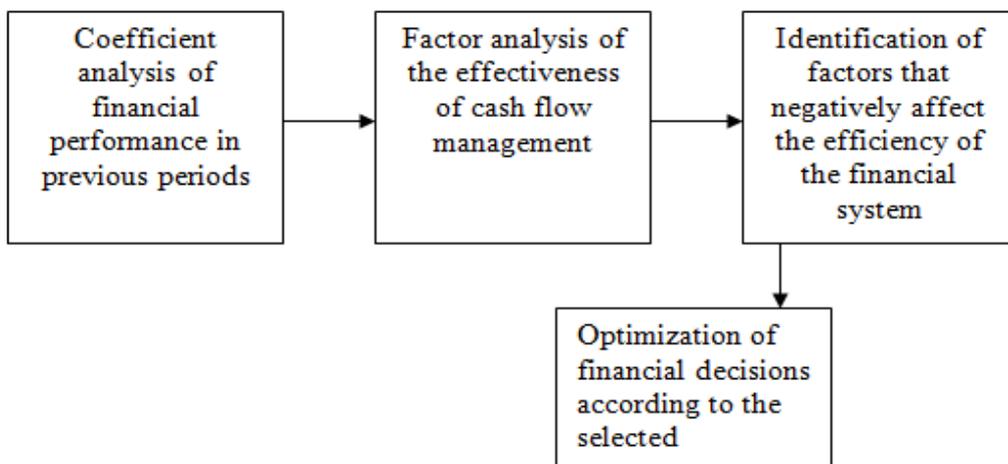


Figure 3. Stages of the factor model application [compiled by the authors]

#### 4. RESULTS

Source data for testing the proposed model are presented in Table 3.

Table 3 Source data for testing the authors' factor model for evaluating the effectiveness of managing the financial resources of the Central Federal District of the Russian Federation (million rubles)

| Year | Accounts receivable | Financial resources | Accounts payable | Outflow | Inflow  |
|------|---------------------|---------------------|------------------|---------|---------|
| 2012 | 236602              | 27981               | 237640           | 1040503 | 100322  |
| 2013 | 402975              | 45502               | 464138           | 1069510 | 71882   |
| 2014 | 338233              | 52027               | 426676           | 1316719 | 75460   |
| 2015 | 437897              | 60493               | 522362           | 2190617 | 3067113 |

\* compiled by the authors using the materials of the Federal State Statistics Service of the Russian Federation

Using the presented source data, we calculated the factor indicators set in the proposed model (Table 4).

**Table 4** Factor coefficients of the author's model, units

| Period | Coefficient                      |                                  |                                |                               |                                |                                 |
|--------|----------------------------------|----------------------------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------|
|        | $\frac{\text{NCF}}{\text{Cash}}$ | $\frac{\text{Cash}}{\text{CIF}}$ | $\frac{\text{CIF}}{\text{AR}}$ | $\frac{\text{AR}}{\text{AP}}$ | $\frac{\text{AP}}{\text{COF}}$ | $\frac{\text{NCF}}{\text{COF}}$ |
| 2012   | -33.6002971                      | 0.278916146                      | 0.424010747                    | 0.995629                      | 0.22839                        | -0.90358                        |
| 2013   | -21.9249052                      | 0.633015015                      | 0.178376947                    | 0.868224                      | 0.433972                       | -0.93279                        |
| 2014   | -23.8581487                      | 0.689460452                      | 0.223100673                    | 0.792716                      | 0.324044                       | -0.94269                        |
| 2015   | 14.48910341                      | 0.019723247                      | 7.004190761                    | 0.838301                      | 0.238454                       | 0.400113                        |

\* compiled by the authors

The influence of factor indicators on the effective indicator is presented in Table 5.

**Table 5** Factor analysis of changes in the coefficient of efficiency of financial resources use by small and medium-sized businesses in the Central Federal District of Russia

| Period, years | Influence of factor indicator    |                                  |                                |                               |                                | Change of outcome indicator     |
|---------------|----------------------------------|----------------------------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------|
|               | $\frac{\text{NCF}}{\text{Cash}}$ | $\frac{\text{Cash}}{\text{CIF}}$ | $\frac{\text{CIF}}{\text{AR}}$ | $\frac{\text{AR}}{\text{AP}}$ | $\frac{\text{AP}}{\text{COF}}$ | $\frac{\text{NCF}}{\text{COF}}$ |
| 2013-2012     | 0.313976<br>1                    | -<br>0.74853<br>8                | 0.775201<br>3                  | 0.07203<br>7                  | -<br>0.44188                   | -0.02921                        |
| 2014-2013     | -<br>0.082249                    | -<br>0.09051                     | -<br>0.277190                  | 0.12025<br>4                  | 0.31979<br>5                   | -0.0099                         |
| 2015-2014     | 1.515189<br>1                    | -<br>0.55612                     | 0.497785                       | 0.02956<br>7                  | -<br>0.14362                   | 1.34280                         |

\* compiled by the authors

Having tested the proposed multifactor model describing the influence of various components of cash flows on the adequacy ratio of financial resources of the Russian business entities, we could draw the following conclusions:

1. The greatest negative influence is exerted by the indicators of cash settlement and the ratio of cash payments by accounts payable. It can be recommended to increase the share of financial resources in the assets of business entities and to decrease the share of accounts payable, these two actions being interrelated.

2. The application of the proposed model will allow business entities or regional authorities (if the overall performance of small and medium-sized businesses in the region is to be studied) to develop an effective monetary policy that would ensure a sufficient amount of cash inflow while optimizing cash payments.

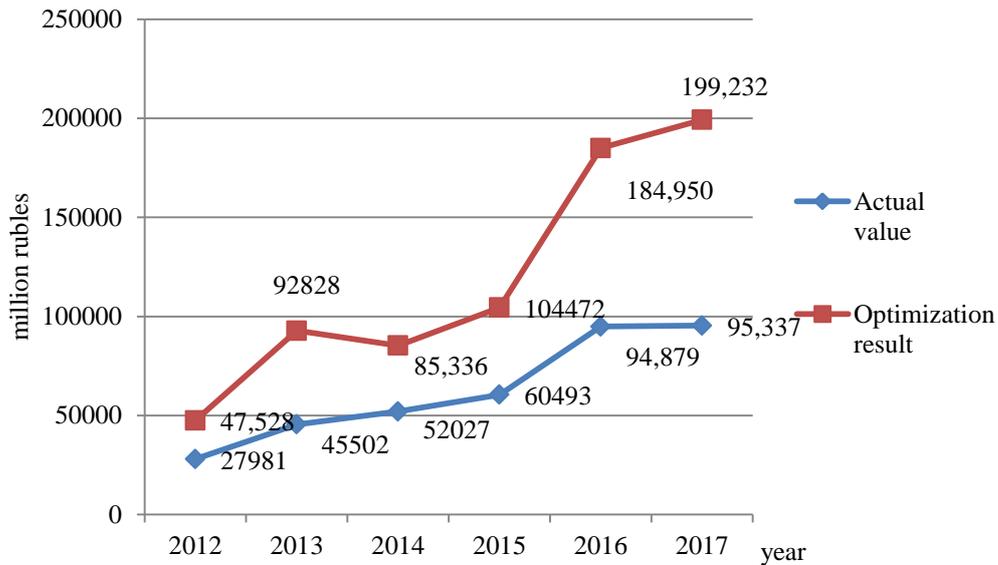
3. The proposed model can be used by any Russian business entity due to the relative simplicity of the calculations, the clarity of the results obtained and the availability of the source data for the analysis.

4. The application of the proposed model to the operation of business entities will help assess the origin and effect of various factors on the efficiency of the company's cash flow, so that it will be possible to develop practical solutions for increasing the value of this indicator in future periods.

It should be noted that the proposed factor model also enables the optimization of liquidity indicators of a business entity. With a set of source data, which are mandatory for business entities (this conclusion was made by analyzing the data from the Federal State Statistics Service of the Russian Federation), we could determine the following criteria for optimizing

the company’s activities: the absolute liquidity ratio should be at least 0.2, the ratio of accounts receivable and payable should not be less than 1. These are the minimum conditions of efficiency, the fulfillment of which will ensure the operational efficiency of a business entity. To find the optimal amount of accounts payable, which will enable the fulfillment of the given conditions, we used the Solver method. The obtained results will be considered as the optimal guidelines for the operations of a business entity.

Using the available statistical data on the activities of small and medium-sized businesses of the Russian Federation, we received the following recommendations for optimizing the amount of financial resources business entities need to achieve absolute liquidity (Figure 4).



**Figure 4.** Results of the optimization of operations of business entities in the Central Federal District of the Russian Federation regarding the indicator of financial resources optimization [compiled by the authors]

It should be noted that Baumol, Miller-Orr, and Stone models which are used in the theory and practice of corporate finance and aim to optimize the amount of financial resources, have certain limitations when applied by Russian business entities. The first model takes into account the fact that the demand for the company's cash in each period is known and is at the same level. The company clearly knows the predicted volumes of cash inflows and cash outflows. However, as we have found during the research, these limits cannot be applied for small and medium businesses. As for the second model, it is applicable to companies that may invest their free cash to purchase securities. Large enterprises are capable of carrying out tight control of cash, while small ones, due to the specifics of their structure and data available, are more concerned with maintaining solvency. In view of this, without denying the significance of existing approaches and models for cash management, we recommend using an optimization approach aimed at accumulation of the required amount of funds, which will ensure liquidity, solvency, and timely settlement of the company's obligations.

## 5. DISCUSSION

Improving the financial situation of a company is not limited to study, evaluation and optimization of factors that determine the efficiency of financial resources management in a small or medium-sized business. In addition to the issues considered in this paper, optimization of the capital structure is also a crucial one. Well-known theories and methods of

money management primarily deal with large corporations, which is why they do not find practical application in the work of Russian small and medium-sized businesses. In future, we are planning to develop an approach to managing the capital structure of small and medium-sized businesses, which, along with the optimization of cash flow management considered in this study, can improve the efficiency of financial management in companies under consideration.

## 6. CONCLUSIONS

Application of these models to small and medium-sized businesses is limited to a certain extent since, due to the nature of their financial statements; these companies do not consider most of the indicators required for the evaluation within these models, which represents an obvious challenge. That is why in this study we developed a cash flow evaluation model that is based on factor analysis and can predict the financial difficulties of such companies.

The factor model for evaluating company's cash flows proposed in this paper, along with the optimization of its liquidity criteria, will make it possible to timely identify the deterioration of the financial situation of the business and take necessary measures. It should be noted that the proposed set of measures are simple, use available source data, and do not require involving experts in financial analytics and financial forecasting, which is especially important given the lack of financial resources, uncertainty and unpredictability of the external environment, as well as the need to obtain analytical data within the shortest time possible.

## REFERENCES

- [1] Altman, E. I. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *J. Finance*, 23, 1968, pp. 589–609.
- [2] Beaver, W. Financial ratios as predictors of failure. Empirical research in accounting selected studies. *J. Account. Res. (Suppl.)*, 4, 1966, pp. 71–111.
- [3] Blank, I. A. Cash flow management: training course. Moscow: Omega-L, 2013.
- [4] Bocharov, V.V. Financial analysis: a short course. St. Petersburg, 2009.
- [5] Brealey, R. A., Myers, S. Corporate finance principles. Moscow: ZAO Olimp-Business, 2008.
- [6] Brigham, E., Erhardt, M. Financial management. St. Petersburg: Peter, 2009.
- [7] Cash flow management: Textbook. Moscow: University textbook: INFRA-M, 2018.
- [8] Fawzi, N. S., Kamaluddin, A., Sanusi, Z. M. Monitoring Distressed Companies through Cash Flow Analysis. *Procedia Economics and Finance*, 28, 2015, pp. 136-144.
- [9] Federal State Statistics Service. Official website, 2018. <http://www.gks.ru/>
- [10] Finance: Textbook. Moscow: Yurayt, 2010.
- [11] Financial management: Theory and practice. Moscow: Publishing house "Perspektiva", 2010.
- [12] International Financial Reporting Standard (IAS) 1: Presentation of Financial Statements (ed. February 04, 2013) (entered into force on the territory of the Russian Federation by

the Order of the Ministry of Finance of Russia of November 25, 2011, No. 160n), 2013.  
<http://base.consultant.ru/cons/cgi/online.cgi?req=doc;base=LAW;n=147977>

- [13] Kolyshkin, A. V. Forecasting the bankruptcy development in modern Russia: dissertation for the degree of the Candidate of Economic Sciences. St. Petersburg, 2003.
- [14] Kovalev, V. V. Management of cash flow, profit and profitability: a practical guide. Moscow: Prospect, 2011.
- [15] Panyukova, I. V. Cash flow management. *Bulletin of Taganrog Institute of Management and Economics*, 1, 2011, pp. 38-41.
- [16] Režňáková, M., Karas, M. Bankruptcy Prediction Models: Can the Prediction Power of the Models be Improved by Using Dynamic Indicators? *Procedia Economics and Finance*, 12, 2014, pp. 565-574.
- [17] Sheremet, A. D., Negashev, E. V. Methodology of financial analysis of the activities of business entities. Moscow: INFRA-M, 2013.
- [18] Soboleva, Y. P., Parshutina, I. G., Shaporova, O. A., Marchenkova, L. M., Simonova, E. V. Financial Appraisal as the Basis for Development of the Efficient Corporate Financial Strategy in the Context of Economic Instability. *Journal of Advanced Research in Law and Economics*, 8(6), 2017, pp. 1939-1949.
- [19] Soboleva, Y. P., Polyanin, A. V., Leonova, O. V., Korgina, O. A., Merkulov, A. V. Strategic approach to performance evaluation of a business entity from the position of analyzing its business potential. *Revista ESPACIOS*, 39(33), 2018, pp. 31.
- [20] Taffler, R. J., Tisshaw, H. Going, going, gone four factors which predict. *Accountancy*, 3, 1977, pp. 50-54.
- [21] Tinyakova, V. I., Timofeev, N. Yu. Management of cash flows of enterprises: problems and methods, *Bulletin of Saratov Socio-Economic Institute*, 2(46), 2013, pp. 93-97.
- [22] Van Horne, J., Vahovich, S., Jr., John, M. Fundamentals of financial management. 12th edition. Moscow: OOO I.D. Williams, 2008.
- [23] Volodin, A. A., Milyukova, D. R. Cash flow management. *University Bulletin (State University of Management)*, 3, 2012, pp. 86-89.