

W. H.  
M

**WSPÓŁCZESNE KONCEPCJE  
ZARZĄDZANIA W ORGANIZACJACH**

pod redakcją  
Małgorzaty Smolarek



# WSPÓŁCZESNE KONCEPCJE ZARZĄDZANIA W ORGANIZACJACH

pod redakcją  
Małgorzaty Smolarek



WYŻSZA SZKOŁA  
HUMANITAS

Sosnowiec 2016

**Recenzent**  
prof. dr hab. Piotr Pachura

**Redaktor Oficyny Wydawniczej „Humanitas”**  
Danuta Dziewięcka

**Projekt okładki**  
Bartłomiej Dudek

Copyright by  
**Oficina Wydawnicza „Humanitas”**  
ul. Kilińskiego 43  
41-200 Sosnowiec  
tel.: 32 363 12 25  
e-mail: wydawnictwo@humanitas.edu.pl  
dystrybucja@humanitas.edu.pl

ISBN: 978-83-64788-61-1

Sosnowiec 2016



Wstęp .....

*Agnieszka*  
Rozdział 1.

*Ewelina M*  
Rozdział 2.  
jako zasad

*Iwona Sam*  
Rozdział 3.  
firm zlokal

*Julija Krot,*  
Rozdział 4.  
cash flow c

*Izabela Joa*  
Rozdział 5.  
ich finansov

*Seweryn Ci*  
Rozdział 6.

*Jagoda Gol*  
Rozdział 7.  
on financial

*Piotr Janul*  
Rozdział 8.

*Robert Słon*  
Rozdział 9.  
w nowoczes

*Marcin Ma*  
Rozdział 10.  
oraz technol

*Andrzej Bro*  
Rozdział 11.  
jako źródło



## SPIS TREŚCI

Wstęp .....	7
<i>Agnieszka Kabalska</i> Rozdział 1. Innowacje w kreowaniu i modyfikowaniu modeli biznesowych .....	11
<i>Ewelina Markowska</i> Rozdział 2. Poziom innowacyjności polskich przedsiębiorstw jako zasadniczy czynnik konkurencyjności regionu .....	19
<i>Iwona Samolak</i> Rozdział 3. Innowacyjność przedsiębiorstw na przykładzie firm zlokalizowanych w Kieleckim Parku Technologicznym. Studium przypadku .....	31
<i>Julija Krot, Alla Tkaczenko</i> Rozdział 4. Features of models of organization and management cash flow contemporary economy .....	45
<i>Izabela Joachimiak, Marzena Edyta Karpińska</i> Rozdział 5. Zarządzanie uczelnią wyższą – rozwój systemów zarządzania, ich finansowanie oraz dopasowanie do potrzeb gospodarki .....	51
<i>Seweryn Cichoń</i> Rozdział 6. Zarządzanie uczelnią w aspekcie działań marketingowych .....	63
<i>Jagoda Gola</i> Rozdział 7. Typology and segmentation of households on financial market in Poland.....	73
<i>Piotr Janulek</i> Rozdział 8. Wybrane zagadnienia bibliograficzne a zarządzanie.....	87
<i>Robert Słonieć, Henryk Dębski</i> Rozdział 9. Od systemów zarządzania jakością po społeczną odpowiedzialność biznesu w nowoczesnym zarządzaniu firmą .....	95
<i>Marcin Maślak</i> Rozdział 10. Strategiczny aspekt zarządzania w branży górniczej oraz technologiach informacyjnych.....	111
<i>Andrzej Brożek, Ewelina Pawłowska</i> Rozdział 11. Asymetria informacji pogodowych jako źródło ryzyka sektora energetycznego .....	131

Julija Krot<sup>1</sup>  
Alła Tkaczenko<sup>2</sup>

## Rozdział 4

### Features of models of organization and management cash flow contemporary economy

**Abstract:** In the article the essence of models and cash flow management; The basic principles of organization and management of cash flows; defined their place and role in the formation of proposals for the effective application in practice of domestic enterprises. Sources familiar with the scientific and applicable regulatory and legal acts on this issue. The main problems of organization and management of cash flows in the company.

**Keywords:** Cash flow, organization and control of cash flow model Baumol W. And M. Miller – Orr in organization and management of cash flows in the company

### Introduction

Cash Management is an urgent problem all types of organizations because their activities are characterized by constant inflows and outflows of cash flows from operating, financial and investment company. Thus, there is a need for effective management of financial resources to achieve the main objective of the company.

Function Organization money management and cash flow is to mobilize, control and planning of financial resources. Using models to support decision-making is essential, as they provide a complete picture of the current state of cash flows and their optimization, which can hardly be obtained without the use of methodologies to achieve this goal.

### 1. Justification scientific results

The study of problems of models of cash management in the enterprise engaged in foreign and domestic scholars. However, despite the significant number of publications on the subject, there is still a need to improve the use of models in the organization and management of cash flows in the company.

The study aims to review scientific sources, existing regulations, disclosure of cash management models, determining their place and role in the organization and manage-

---

<sup>1</sup> PhD; Państwowy Uniwersytet Technologiczny w Czerkasach, Ukraina.

<sup>2</sup> PhD; Państwowy Uniwersytet Technologiczny w Czerkasach, Ukraina.



ment of financial and economic activity of the enterprise and formation of proposals for their improvement and implementation in practice of enterprises in Ukraine.

The objective of this article is to study problems of analysis and management of cash flows in the company and improve the effectiveness of cash management models in practice.

For efficient organization and management of cash flows in foreign methods of using such different models as Baumol, Miller-Orr, Beranek, Stone and others, but they can not be directly applied in practice for enterprises of all patterns of ownership of Ukraine who have many internal problems and contradictions due to the current economic and political situation and inefficient management of financial and economic activity of the enterprise as a whole.

Many domestic enterprises in the organization and planning cash flow is often reduced to determining the balance of cash and fast operational division to pay their bills. Thus, most do not manage their financial position, and as a consequence very dependent on external factors. Therefore, the main task in the organization and management of cash flows of domestic enterprises should be based on principles such as<sup>3</sup>:

1. Prediction of movement and availability of cash (forecast revenues from all sources of funds, the forecast of payments, the calculation of cash balance at end of period).
2. Check the plan cash flow (analysis of receipts and payments and cash balance).
3. Adoption of effective administrative decisions (to increase revenues, reduce costs, accelerate revenue, slow payments, taking new debt, etc.).

Thus, the current practice of organizing and managing business cash flow needs improvement. It is necessary to reform the current system of cash management company, using the international experience of economic and mathematical methods.

## **2. The effectiveness of the model W. Baumol and Miller-Orr model in the organization and management of cash flows in the company**

By carrying out an analysis of research on the organization and management of cash flows in the company, suggests that the most common methods of cash flow planning is the methods of economic-mathematical calculations mentioned earlier. Within these methods are the following algorithms and models as model B. Baumol and Miller-Orr model<sup>4</sup>.

Considering W. Baumol model, one could argue that this model shows that the demand for money depends positively on the level of income and negatively on the interest rate. This model is explained in terms of assets. Economic entity has a portfolio of assets for cash (currency and bank accounts) and non-monetary assets (stocks and bonds)<sup>5</sup>.

<sup>3</sup> V.M. Grinyova, *Investing: textbook*. [In:] V.M. Grinyova, V.A. Koyuda, T.I. Lepeyko, A.P. Koyud, Znannnya 2008, p. 452.

<sup>4</sup> W.J. Baumol, *The Transaction Demand for Cash: An Inventory Theoretic Approach*, „Quarterly Journal of Economics” 1952, Vol. 66, November, N. 4, p. 545-556; M.H. Miller, D. Orr, *A Model of the Demand for Money by Firms*, „Quarterly Journal of Economics” 1966, Vol. 80, August, N 3. p. 413-434.

<sup>5</sup> W.J. Baumol, *The Transaction Demand for Cash: An Inventory Theoretic Approach*, „Quarterly Journal of Economics” 1952, Vol. 66, November, N. 4, p. 545-556.



The optimal amount of an asset it may hold will depend on cost considerations:  
 - Refrain from interest cash balance;  
 - The cost of purchasing bonds and convert them into cash, that is, the cost of brokerage services.

The initial assumption of cash flow management model in the enterprise:

1. The amount of spending money (T, natural units) - the total amount of funds needed to maintain current operations within the scheduled period. It is resistant or constant during the planned period.

2. Costs associated with the transfer of funds from securities in the form of cash (b), - a constant, independent of the size of the transfer.

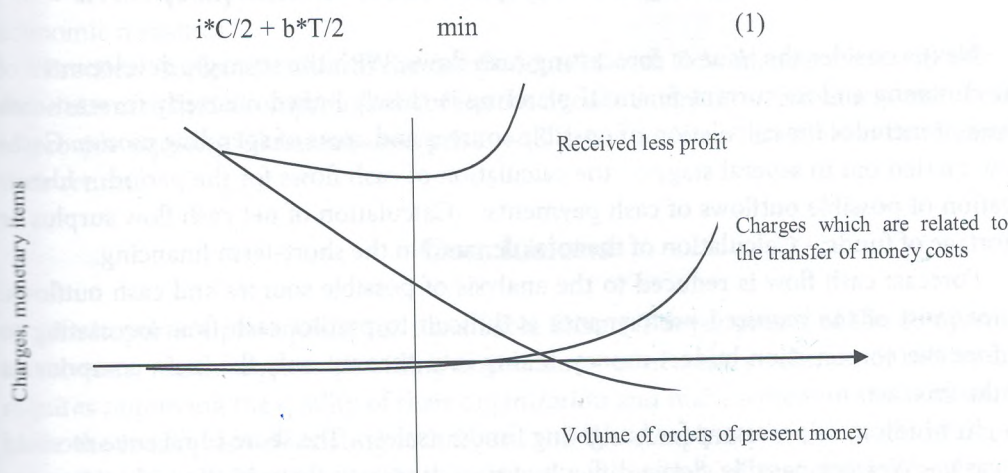
3. The interest rate on marketable securities (i) - forgone income associated with the sale of securities and transfer them into cash.

4. The average amount of cash holdings of cash (C / 2).

During the study it was found that Baumol model allows you to find the optimal order quantity of available funds (C \*). This volume, which provides the minimum value of the total costs associated with the transfer of money in cash unrealized opportunities (income from which the company refuses for storing cash).

The total costs associated with cash<sup>6</sup>.

Figure 1. Model Baumol (model optimal size order)



Source: own.

However, this model has several shortcomings, namely in cash flows provided stability is not considered seasonal and cyclical cash flow.

American economists Miller and Orr developed a model to determine the target cash balance, taking into account the uncertainties of cash payments and receipts<sup>7</sup>.

<sup>6</sup> Y.O. Yereshko, *Essence and structure of cash flow management mechanism of the enterprise*, [in:] Y.O. Yereshko, *Economic Bulletin of NTUU „KPI“*. K.: VPI MIC „Polytechnic“ 2011, № 8, p. 20-25.

<sup>7</sup> M.H. Miller, D. Orr, *A Model of the Demand for Money by Firms*, „Quarterly Journal of Economics“ 1966, Vol. 80, August, N 3, p. 413-434.



The main objectives of cash flow management model in the enterprise:

- The distribution of the daily cash balance is approximately normal;
- Actual cash balance varies by day randomly.

During the study models of organization and management of cash flows in the company, namely models W. Baumol and M. Miller, it was found that between these models, there are differences, in particular<sup>8</sup>:

- W. Baumol model provides stable cash expenditures of that cycle repeated over time, and Model M. Miller - provides completely interdependent in real-time buying and selling shares;

- W. Baumol model for the replenishment of funds required to carry at a time when fully utilized cash reserves by converting highly liquid securities; distinctive feature of model M. Miller is setting the lower limit, which does not mean a complete vytrachennya funds;

- Model M. Miller focuses on the point of returning, that a point is a normal feature of the reserve funds, unlike W. Baumol model that has only conditional average stock allocation of such funds, even if the company and selling of securities at their reduction<sup>9</sup>.

### 3. Forecasting cash flows of the company for the strategic development of the company

Next, consider the issue of forecasting cash flows. With the strategic development of the company and its current financial planning is closely linked quarterly forecast cash flows. It includes the calculation of possible sources and areas of spending money. Cash-flow carried out in several stages: - the calculation of cash flows for the period; - Identification of possible outflows of cash payments; - Calculation of net cash flow surplus or shortage of funds; - Calculation of the total demand in the short-term financing.

Forecast cash flow is reduced to the analysis of possible sources and cash outflows. Since most of the required performance is difficult to predict cash flow forecasting to reduce the construction budget money, taking into account only the main components of the forecast.

Key indicators necessary for budgeting funds: - sales; - The share of revenue received in cash; - Weather payable. Some difficulty forecasting cash flows in the early stages occurs if the revenue from sales share in cash receipts from customers and from sales on credit deferred payment. If the value of revenues cover only part of the proceeds from the sale, the proceeds from the sales are taking the forecast income from ordinary activities as the sum of the cash flow and receivables not covered in terms of revenues.

<sup>8</sup> V.M. Grinyova, *Investing: textbook*, [In:] V.M. Grinyova, V.A. Koyuda, T.I. Lepeyko, A.P. Koyud, Znannnya 2008, p. 452.

<sup>9</sup> V.V. Nahaychuk, *Cash Management company*, „Journal of Social and Economic Research” 2014, №1 (52) with. 245-249.



#### 4. The main components of the definition of state cash flow for selecting models of governance in Ukrainian realities

In order to understand the real cash flow at Ukrainian enterprises to evaluate the synchronicity of the receipt and expenditure of funds, and to combine the value obtained financial results with the state money in the company, you need to identify and analyze all areas of income (inflow) of cash and their disposal.

Effective cash flow management is defined synchronization receipts and payments, support for permanent solvency of domestic enterprises and includes the following components:

- determining the minimum amount of cash sufficient to service the ongoing business;
- constant monitoring of cash receipts from sales;
- smoothing fluctuations in revenues and cash payments to avoid payments crisis in certain periods;
- optimization of payments to suppliers and buyers that justify the policy for obtaining commercial loans and deferrals of payments;
- selection areas using temporarily free funds in order to prevent losses from inflation and profits;
- accelerate the turnover of funds through the introduction of organizational and economic measures.

Practical implementation of the components of cash flow management will help to some extent to find a compromise between the need to maintain a certain amount of cash to provide liquidity Ukrainian enterprises and desire to invest available cash to ensure their return.

#### Conclusions

An important prerequisite for sustainable financial development of the company is its solvency, which requires providing maintenance of necessary volumes of money and requires improving the quality of their organization and management in modern terms, given the inadequacy of existing techniques and the complexity of the practical implementation of individual approaches. Proposed two models of organization and management of cash flows, providing for scheduled payments required reserve funds of the enterprise, based on the characteristics of its cash flow that ensures proper calculation accuracy, validity planned stocks of liquid assets, helps optimize the position on the scale of "liquidity-yield" and has no restrictions on its implementation. Therefore, their use will promote appropriate level of solvency, which is essential for its sustainable financial development. In turn, the implementation of these models requires improvement principles and methods of planning cash flows that will be the subject of further study.



## References

- Baumol W.J., *The Transaction Demand for Cash: An Inventory Theoretic Approach*, „Quarterly Journal of Economics” 1952, Vol. 66, November, N 4.
- Miller M.H., Orr D., *A Model of the Demand for Money by Firms*, „Quarterly Journal of Economics”, 1966, Vol. 80, August, N 3.
- Boyarko I.M., *Investment analysis: teach. Guidances*, [In:] I.M. Boyarko, L.L. Gritsenko, *Center of educational literature*, 2011.
- Grinyova V.M., *Investing: textbook*, [In:] V.M. Grinyova, V.A. Koyuda, T.I. Lepeyko, A.P. Koyud, Znanannya 2008.
- Yereshko Y.O., *Essence and structure of cash flow management mechanism of the enterprise*, [In:] YO Yereshko, *Economic Bulletin of NTUU „KPI” K. VPI MIC „Polytechnic”* 2011, № 8.
- Karpenko L.M., *Optimization methods and models of cash management at the enterprise*, [In:] L.M. Karpenko, 2014. Vol. 1 (52).
- Nahaychuk V.V., *Cash Management company*, „Journal of Social and Economic Research” 2014, №1 (52).
- Kharchenko V.A., *Cash flow management system enterprise*, [In:] V.A. Kharchenko, *Formation of market relations in Ukraine*, 2011, №1.

### Cechy modeli zarządzania przepływami pieniężnymi organizacji we współczesnej gospodarce

**Streszczenie:** W artykule przedstawiono istotę modelu organizacji i zarządzania przepływami gotówki; zaprezentowano podstawowe zasady organizacji i zarządzania przepływami środków pieniężnych, które zależą od ich miejsca i roli w tworzeniu propozycji skutecznej realizacji krajowych przedsiębiorstw. Przeanalizowano źródła naukowe i skutki aktów prawnych w tym zakresie. Zbadano podstawowe problemy organizacji i zarządzania przepływami pieniężnymi w firmie.

**Słowa kluczowe:** przepływy gotówki, organizacja i zarządzanie przepływami gotówki w organizacji, model W. Baumola i M. Millera-Orra w systemie organizacji i zarządzania środkami pieniężnymi w przedsiębiorstwach