STABILITY OF THE FINANCIAL BALANCE OF THE COMPANY BASED ON FINANCIAL ANALYSIS OF THE CASH FLOW

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Abstract: *The research made in this article is topical because the cash flow determines the viable activity of the entity. In this article, the authors investigate how to establish a financial balance based on the correlation between real and financial flows as a result of capital movements. The concept of cash flow is investigated, since cash is the most liquid asset of the entity, ensuring its activity continuously. The financial situation of the entity is analyzed on the basis of a system of financial indicators that underpin the financial manager's optimal decisions. The research topic is actual and necessary for any entity, ensuring a viable mechanism for profitable operation.*

Keywords*: cash flow, operational activity, financial balance, budget receipts and payments, budget balance.*
JEL Classification: *B21, B26, H69.*

„The cash flow is the blood which irrigates the economic system and the measurement of the value”
(P.A. Samuelson)

1. Introduction

Money is the greatest discovery of humanity, coming after the discovery of the alphabet. Human ingenuity is the basis for the emergence of money. Money was the most important factor in the development of economic relations between people, states and continents.

Rightly, money is considered to be the blood that irrigates the economy, just as important is the cash flow for the entity's economic activity. Cash emerges as a result of numerous mutations due to endogenous and exogenous factors in the movement of goods and services, and money is instrumental in linking the process of these complicated exchange relationships.

Without the existence of economic relations between entities and even within each one, it is impossible to create cash flow.

In the literature, there are different views on the notion of cash. Thus, it is considered that cash represents, together with capital and specialization, the third major aspect of modern economic life. The cash flow is the blood that irrigates the economic system and the measure of the value (Samuelson, 1953).

The terms of cash flow, net cash flow and treasury flow are associated with the cash flow. The concept of cash flow is the difference between the receipts and withdrawals (payments) made by an entity over a period of time (day, month, quarter, semester, year).

Cash flows can arise from various activities of the entity, namely:

- Operational activities;
- Investment activities;
- Financial activities.

The basic activity of a producing entity is the operational activity. The cash flow from operating activity consists of current sales of products and services to customers, as well as recovering the value of previous sales on commercial credits, as well as flows of payments to suppliers of goods, materials and services, salary payments, payments related to tax obligations to the budget.

The contents of the *treasury* can be analyzed from two points of view, namely:

1. Organizationally, as a department of the financial direction, with tasks and duties, has specialized personnel and operates according to established rules;

2. Structural, depending on the patrimonial elements, its components. From this point of view, the treasury can be defined as a set of available funds in current and / or home bank accounts.

The main objective of the entity's treasury is to permanently optimize the relationship between cash receipts and payments, ensuring the financial balance of the entity so that it can achieve its objective of activity in a rational and efficient manner. The construction of the treasury budget finally gets the following form presented in the table below (Table no. 1).

Table no.1. Forecasts of receipts and payments

PHASES	SYMBOL	OPERATIONS
1. Forecast of receipts and payments	**A**	**Cash balance at the beginning of the reporting period**
	B	**(+) Receipts from operational activity:** • Income from sales; • Other receipts.
	C	**(-) Payments for operational activity:** • Payments for purchased stocks and services; • Payments to employees and social and medical insurance bodies; • Interest paid; • Payment of income tax; • Other payments
	D	Net cash flow from operating activity **D= B - C**
	E	**Receipts from investment activity** • Proceeds from the sale of fixed assets; • Interest received; • Dividends received; • Other receipts.
	F	**Payments for investment activity** • Payments related to fixed asset entries • Other payments.
	G	Net cash flow from investment activity **G= E - F**
	H	**Receipts from financial activity:** • Receipts in the form of credits and loans; • Receipts from capital operations; • Other receipts.
	I	**Payments for financial activity** • Payments related to repayment of loans and loans; • Dividends paid; • Other payments.
	J	Net cash flow from financial activity **J = H - I**
	K	Net flow from economic and financial activity **K= D +G+J**

	L	**Exceptional receipts** Exchange rate fluctuations favorable (unfavorable)
	M	Total net cash flow **M= K+ (-) L**
	N	***Exchange rate fluctuations favorable (unfavorable)***
2. Determination of the cash balance at the end of the reporting period	**O**	**Cash balance at the end of the reporting period** **O= A+ (-) M+ (-)**

Source: developed on the basis of the CNS "Presentation of Financial Statements"

After performing the revenue and payments forecasting operation, the two categories of flows are compared. Consequently, there is either a deficit or a cash surplus. Treasury surplus is the cash surplus resulting from the comparison of earnings with payments. The situation in which the payments are scheduled to take place over a certain period is higher than the projected earnings for that period, and the enterprise is experiencing a cash deficit that is threatening its financial steady state.

It is very important that the difference between receipts and payments is positive and high enough to cover the differences in operational, financial and investment activities.

In connection with this, it is to be noted that each commercial entity must draw up its revenue and payments budget in order to maintain its financial equilibrium.

The budget balance may be positive; this is a good financial condition of the entity. A negative budget balance demonstrates a state of financial resources shortage, which must be resolved by the entity. A budget balance of zero demonstrates a financial balance of the entity, that is, the receipts are equal to the payments.

But it is worth mentioning that the entity's cash is constantly moving, and it can very rarely happen that the inputs synchronize with the outputs (payments), that is, equality between them. This situation may be short-term.

Therefore, it is necessary to continuously perform the cash flow analysis and, based on these analyzes, the entity develops a sustainable medium- and long-term financial strategy.

2. Cash Flow Analysis

An important component of the analysis of the financial and patrimonial situation is the research of the availability flow, since in the economic practice, it is considered that any activity has to "emit money" (to generate income), to result in a surplus of capital compared to the one invested in business.

A business entity may be profitable, but not solvent, due to a lack of liquidity due to the gap between earnings and payments made within the financial cycle.

We will try to define the financial cycle, which is a succession of financial phenomena, which is carried out in the evolution of a money-moving process, returning to the original position but with an increased value.

As a classic example, Karl Marx's (1945) money-to-capital conversion formula can serve us:

$$B - M \begin{matrix} \nearrow MP \\ \searrow FM \end{matrix} \ \ldots P \ldots \ M - B^1$$

The financial money cycle, passing through coherent phases and shapes, returns to the original form of money, but has a higher value, by generating profits.

In the last 30 years, Western developed countries consider that the cash flow situation is one of the main financial statements of each entity. In the Republic of Moldova in 1998, the Cash Flow Report was implemented along with the reforms of the budgetary and accounting system. At present, the cash flow statement is prepared and presented in accordance with IAS; Presentation of financial statements, by type of activity.

The motivation for the entity to keep cash permanently is due to causes and circumstances, including:

- Ensuring current activity: paying suppliers, paying salaries, paying dividends, paying interest, paying taxes etc.;
- In order to be able to benefit from favorable circumstances: rebates granted by suppliers, cheap goods and services, profitable investments etc.;
- To make unforeseen payments: the appearance of additional orders;
- In order to have access to certain facilities granted by banks and to benefit from good scores if the entity wishes to contract bank loans;
- For caution, given the unpredictable nature of cash inflows and outflows.

Financially stable enterprises tend to form precautionary balances in the form of highly liquid and low-risk securities.

Large, dynamic entities prefer to hold liquid assets, easily negotiable than cash in the house or in the account. However, the determination of the minimum cash balance which, on the one hand, would ensure the ability of entities to pay in the event of irregularities in the revenue scheme or would make it possible to make unforeseen payments (the emergence of profitable investments), on the other hand, is a practice both in developed economies and in those in transition.

The amount of the optimal cash balance that an enterprise must own and which would minimize the losses incurred when the enterprise is experiencing cash shortages can be determined by applying the following models: Baumol and Miller-Orr.

The Baumol model (Baumol and Tobin, 1989) was developed in 1952, and balances the opportunity cost of the amount of earnings that would have been obtained if cash was invested in short-term securities with transaction costs stemming from either investment in cash in placement securities, or the sale of securities to take possession of the cash needed to operate the business. Determining the optimal cash balance begins with identifying the cost that businesses incur when acquiring cash and which may be related to obtaining a loan or making the securities.

This model balances the opportunity cost that arises as a result of having cash with the transaction cost incurred when paying out the funds.

The Miller-Orr model (Miller and Orr, 1966) was developed in 1966. The hypothesis behind this model is that the enterprise makes cash orders when the cash level is zero. In the model, the question arises: "How should an enterprise manage its cash resources so that its daily cash balances are known?". That is to say, once with the optimum cash balance and its constant consumption, day by day, up to exhaustion, immediate rebuilding of the optimal balance, and so on In reality, the daily cash-flow variations cannot be predicted, which are characterized by a random variability measurable by dispersion. The Miller-Orr model assumes that the average of daily cash flow variations is considered to be zero and their dispersion is positive and of finite size.

Practically, the Miller-Orr model aims to find the upper limit of cash changeover and to capitalize on excess liquidity. In determining it, it starts from a lower limit, preset to zero or slightly above zero, and from the normal range to the upper limit.

Validity tests of the model yielded good results, but only for unpredictable receipts and payments (sales, supplies, etc.). Payments are of a well-defined nature both in terms of volume and maturity: salaries, taxes, etc. For these, as for the earnings, the forecast is out of the Miller-Orr model.

The analysis of the patrimonial and financial situation pursues the purpose of making information clear and understood by all interested users.

Financial analysis establishes the strengths and vulnerabilities of financial management, based on certain rules and criteria, explains the reasons for unsatisfactory results and proposes measures to improve them.

Table no. 2. Structural analysis of the cash flow in terms of receipts and payments

Cash flows	2014		2015		2016		Deviations			
							2015/2014		2016/2015	
	Amount, lei	Share, %	Amount, lei	Share, %	Amount, lei	Share, %	Amount, lei	Share, %	Amount, lei	Share , %
Balance at the beginning of the period	38800	X	54122	X	72509	X	X	X	X	X
Cash receipts	**6575504**	**100**	**7676214**	**100**	**8312176**	**100**	**1100710**	**X**	**635962**	**X**
1. Cash receipts from sales	5741782	87.32	7060599	91.98	7592959	91.35	1318817	4.66	532360	-0.63
2. Other operating receipts	7499	0.11	107227	1.40	18223	0.22	99728	1.28	-8900	-1.18
4. Receipts in the form of credits	721077	10.97	508269	6.62	712990	8.58	-212808	-4.34	204721	1.96
5. Favorable exchange rate differences	10546	0,16	119	0.00	-11996	-0.15	-10427	-0.16	-12115	-0.15
6. Proceeds from the issue of own shares	94600	1.44	0	0	0	0	-94600	-1.44	0	0
Money payments	**6560182**	**100**	**7682890**	**100**	**8256091**	**100**	**1122708**	**X**	**582201**	**X**
1. Payments to suppliers	5442357	82.96	6822613	88.80	6928447	83.92	1380256	5.84	105834	-4.98
2. Payments to employees	97266	1.48	81516	1.06	142923	1.73	-15750	-0.42	61407	0.67
3. Payments on credits and loans	935792	14.26	710287	9.25	837351	10.14	-225505	-5.02	127064	0.89
5. Other operational payments	52857	0.81	40438	0.53	324485	3.93	-12419	-0.28	284047	3.4
6. Payment of interest	31910	0.49	28036	0.36	22885	0.28	-3874	-0.12	-5151	-0.08
Balance at the end of the period	**54122**	**X**	**47446**	**X**	**122772**	**X**	**-6676**	**X**	**75326**	**X**

Source: Calculations based on the Cash Flow Statement of the analyzed enterprise

Analyzing the receipts and payments in the table above, it can be concluded that the main share of the receipts is the sales receipts and the share of payments - the payments of the suppliers. In dynamics, there is a tendency to increase cash receipts.

The increased cash balance may lead to an additional production order; the granting of commercial rebates for the immediate payment of the goods, while the increased cash balance may bear the costs in the form of interest that would have been won if the funds were not blocked in the current account.

The small cash balance can avoid the opportunity cost associated with blocking cash and at the same time the cost of ordering (decision-making, brokerage, functional); increase in expenses related to the sale of securities; costs incurred in contracting a loan.

The development of the enterprise is related to ensuring financial equilibrium, which is a constituent part of the economic equilibrium expressed in value. Financial equilibrium expresses the equality and correlation between the need for financial resources and the possibilities of collecting these resources.

A tool for measuring financial equilibrium is represented by the working capital. Determining a minimum necessary working capital is a fundamental decision of financial policy, since it defines the conditions of global equilibrium and, consequently, the degree of autonomy of the enterprise.

The working capital represents the difference between permanent capital and fixed assets. The higher is the working capital the higher is the liquidity level, so it is a synthetic indicator of liquidity analysis, expressing a minimum funding.

Table no. 3. Financial Balance Analysis, lei

Indicators	2014	2015	2016	Deviations (+,-)		
				2015/2014	2016/2014	2016/2015
Net working capital	496980	254081	283456	-242899	-213524	29375
Own working capital	233902	233717	257962	-185	24060	24245
Foreign working capital	263078	20364	25494	-242714	-237584	5130
Gross working capital	787789	614487	435648	-173302	-352141	-178839

Source: Calculations based on the enterprise's Balance Sheet for the years 2014-2016.

With regard to net working capital, it is positive in all three periods, which shows us that the company has autonomy in terms of financing investments in current assets, as the equity itself fully covers the current assets.

The foreign working capital has a positive value in all periods, which shows that the company is out of the financial stability period, showing a growth trend.

The liquidity ratios of this enterprise will be analyzed below. Liquidity means the ability of an enterprise to convert its assets into cash and the degree of liquidity characterizes the ability of the enterprise to pay. The extent to which an enterprise can cope with short-term debt is called solvency, which is measured through liquidity rates.

Quick liquidity rate

The quick liquidity rate allows us to judge the debtors' ability to instantly repay, taking into account existing availability. This indicator shall be calculated according to the formula:

$$L_I = Cash / Current\ Debt$$

In the literature, it is estimated that a value of 0.2 - 0.3 would express the rationality of a well managed company. It is noted that this indicator in both years of management does not fall within the level set out above, but it is gratifying that the enterprise has receivables that can easily be converted into cash in accordance with the terms of payment of the bonds.

Relative liquidity rate

The relative liquidity ratio highlights the company's ability to pay its due debts without being forced to sell its stocks.

$$L_R = Cash + Current\ Debt / Liabilities$$

The level of this indicator should be lower than 1, but the realistic appreciation also requires a careful analysis of the achievable value in the short run, since it substantially contributes to the commercial credit policy promoted by the enterprise and to the financial standing of its clients. Incentives are the results obtained with this indicator during the 2014 and 2015 management periods.

Current liquidity rate

The current liquidity ratio reveals the company's ability to transform its current property assets into cash in the short run to make outstanding payments.

LR = Current Assets / Current Liabilities

The indicator highlights the importance and quality of the assets owned by the enterprise at a time when it can appeal when it is required to pay back the debts contracted in the short term. The level of this indicator must be greater than one. Worldwide practice considers that the minimum value of this indicator should be 1 and the values between 1.2 and 1.8 indicate a favorable financial situation that gives confidence to creditors.

Table no. 4. Presentation of liquidity indicators

Indicators	**2014**	**2015**	**2016**	**Deviation**			**Norm**
				2015/2014	2016/2014	2016/2015	
Quick liquidity rate	0.13	0.15	0.31	0.02	0.18	0.16	0.2-0.3
Relative liquidity	2.71	1.70	2.85	-1.00	0.14	1.14	< 1
Current liquidity ratio	2.71	1.70	2.86	-1.00	0.15	1.16	1.2-1.8

Source: Calculations based on the enterprise's Balance Sheet for the years 2014-2016

For the analyzed enterprise, the relative liquidity is higher than the permissible limit.

In order to avoid undesirable situations, it is necessary for the company to have an optimal level of money to avoid the financial jam, insolvency, bankruptcy. Worldwide practice has shown that the existence of 1 to 1.5% of the total assets in the company is sufficient to ensure immediate payments.

3. Conclusions and recommendations

Cash flow represents the difference between entries (receipts) and outflows (payments) made by an entity over a period of time (day, month, quarter, semester, year).

The main objective of the entity's treasury is to permanently optimize the relationship between cash receipts and payments that is to ensure the financial equilibrium of the entity so that it can achieve, under rational and efficient conditions, the strategic objective of economic development.

Achieving the financial balance by the enterprise is a fundamental goal, but to achieve it, the enterprise must have a firm position in the market, and customers must be chosen on the basis of certain criteria: responsibility, honesty and sustainability in relationships.

In the case of obtaining cash above the admissible norms, the financing manager must immediately invest these means, avoiding the freezing of capital. Capital must always be on the move, generating income.

References:

1. Baumol, W.J. and Tobin, J., 1989. The Optimal Cash Balance Proposition: Maurice Allais' Priority. *Journal of Economic Literature*, 27(3), pp.1160-1162.
2. Botnari, N., 2008. *Finanţele întreprinderii*. Chișinău: Prim.

3. Bran, P., 2011. *Dimensiunea financiar-monetară a întreprinderii*. București: Editura ASE.
4. Manole, T., 2016. *Managementul finanţelor publice*. Chișinău: Editura Tehnica-Info.
5. Marx, K., 1945. *Capitalul*, vol. 1 – Capitolul douăzeci şi patru. București: Editura Bucureşti.
6. Miller, M.H. and Orr, D., 1966. A model of the demand for money by firms. *Quarterly Journal of Economics*, August 1966.
7. Normele pentru efectuarea operaţiunilor de casă în economia naţională a Republicii Moldova, aprobate prin Hotărârea Guvernului Republicii Moldova Nr.764, din 25.11.1992, în *Monitorul Oficial al Republicii Moldova* Nr.11, din 30.11.1992
8. Samuelson, P.A., 1953. *L`economique*, tom.I, 8e Edition. Paris: Libr. Armand Colin.
9. Standardul Naţional de Contabilitate, 2013. *Prezentarea situaţiilor financiare*, nr. 118/06.08.2013.
10. Țiriulnicova, N., Paladi, V., Gavriliuc, L., Chirilova, N. and Furtună, D. 2011. *Analiza rapoartelor financiare – instrumente, metode, procedee și tehnici de apreciere a informației contabil-financiare în procesul decizional*. Ediția a II-a, revăzută. Chișinău: Asociația Obștească „ACAP RM”.