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# Features and concretising objects of assessing the cash flow of an enterprise

Abstract: Temporarily available funds separate as building blocks, forming important parameters of economic actor, namely profitability and financial sustainability. Like such assets, as part of a study, address all accumulated resources in cash and the non-cash form, namely (a) contribute to the achievement of strategically important parameters, which are characterized by repayment capacity reserve (spare monetary); (b) are formed quantitative and qualitative effectiveness cash flow movement. In doing so, repayment capacity reserve interpreted as the ability of economic actor to continue its activities (not even after instantaneous liquidation of all obligations). article aims to examines the features estimation of cash-flows of an enterprise and specifying means such an assessment. The specific topics are (1) characterisation of transformation conventional approach to the grouping cash flow and (2) the studies of balance generated, distributed and used net cash flows, is seen as specifying means such an assessment. The study aims to focus on application of technique the balancing book-keeping capacity form of elements that form variance between the amounts receipts and disbursement of resources. As part of a study form of quantitative goals and qualitative balancing generated, distributed and used net cash flows, is seen as specifying evaluation tool. The fundamental purpose of balances will be to filling of schematised, cognitive cash flow createpaintings sectional division on the form their capacity to pay. It been possible through this movement from one schemes spare monetary to another (that is more optimal to achieve strategically important parameters). The assessment of cash flow an enterprise should be based on establishment of realistic amount of spare money capital. It is feasible using specifying means such an assessment, namely balance generated, distributed and used net cash flows. The illustrate the findings of the assessment could be achieved if the framework specifying means such an assessment to form on 2-way table, in which (1) left side consolidates information on ratio expressing net cash flows and changes in financial resources (with the availability of credit) according to balance sheets and (2) the right part presents elements, that make up difference between receipts and disbursement of resources and is kept of solvency reserve. These results can be used to build a budgeting system cash flow which abuts off the operating analytics. The technique representation the variance between receipts and disbursement of resources will lead to expansion analytical processes to support strategic and tactical decisions on return on financial assets and financial viability.

Keywords: profitability, financial sustainability, spare monetary, cash and the non-cash form, instantaneous liquidation of all obligations, strategically important parameters, balancing and balance method.



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# Особливості та конкретизуючі об'єкти оцінки руху грошових потоків підприємства

Анотація: Вільні грошові активи відділяються у якості базових складових, що формують стратегічно важливі параметри суб'єкта економічної діяльності, якими є прибутковість та фінансова стійкість. Під такими активами, у межах дослідження, розглянуті всі акумульовані в готівковій та безготівковій формах ресурси, що сприяють досягненню стратегічно важливих параметрів, які характеризуються наявністю резерву платоспроможності (вільного грошового капіталу); формуються кількісною та якісною ефективністю їх руху. При цьому резерв платоспроможності інтерпретовано нами як здатність суб'єкта економічної діяльності продовжувати свою діяльність, навіть після одномоментного погашення всіх зобов'язань. Мета статті полягає в дослідженні особливостей оцінки руху грошових потоків підприємства та конкретизуючих засобів такої оцінки. При цьому завданнями дослідження є (1) окреслення особливостей трансформації загально прийнятого підходу до групування грошових потоків; (2) дослідження балансу утворення, розподіл і використання чистих грошових потоків, що розглядаються як конкретизуючий засіб їх оцінки. Модель дослідження передбачає орієнтацію на застосування технік балансування та балансових методів окреслення форм платоспроможності елементів руху, що утворюють різницю між сумами надходжень і виплат грошових коштів. У межах дослідження форм кількісного та якісного балансу утворення, розподілу і використання чистих грошових потоків, розглядається як конкретизуючий засіб їх оцінки. Основне призначення балансу полягатиме у наповненні схематизованої когнітивної картини руху грошових коштів приватними ознаками щодо форм їх платоспроможності, за рахунок чого виявляється можливим рух від однієї схеми формування вільного грошового капіталу до іншюї, більш оптимальної для досягненню стратегічно важливих параметрів. Оцінка руху грошових потоків підприємства має базуватися на встановленні реальної величини вільного грошового капіталу. Це доцільно, за допомогою конкретизуючого засобу такої оцінки, а саме балансу утворення, розподілу і використання чистих грошових потоків. Максимального унаочнення результатів оцінки можна досягти, якщо структуру конкретизуючого засобу формувати у вигляді двосторонньої таблиці, де: (1) ліва частина узагальнює дані щодо співвідношень, що відображають рух чистих грошових потоків та зміну фінансових ресурсів (за наявності кредитних надходжень) при дотриманні балансу активів і пасивів; (2) права частина забезпечує конкретизацію елементів руху, що утворюють різницю між сумами надходжень і виплат грошових коштів та формують резерв платоспроможності. Отримані результати можуть бути використані для побудови системи бюджетування грошових потоків, поєднаних з операційною аналітикою. Наявність окресленої техніки відображення різниці між сумами надходжень і виплат грошових коштів дозволить домогтися достатнього рівня збільшення аналітичних процесів для підтримки, як стратегічних так і повсякденних тактичних рішень щодо досягнення прибутковості та фінансової стійкості.

*Ключові слова*: прибутковість; фінансова стійкість; вільні грошові активи; готівкова та безготівкова форма; одномоментне погашення всіх зобов'язань; стратегічно важливі параметри; балансування та балансові методи.



Abbreviations:

AIP is accrued income payable – ДН

AP is accounts payable – K3

DI is disposable income – PA

EG is equity growth – ΔH

*ER* is equity reduction – 3BK

*GDP* is gross output –  $B\Pi$ 

*IC* is intermediate consumption –  $\Pi\Pi$ 

*IDP* is internal debt payment –  $\Delta C$ 

*NCF* is net cash flow –  $\Psi\Gamma\Pi$ 

 $NCF_{DDP}$  is part of the net cash flow that passes from the enterprise to its domestic debt –  $\Delta 3KC$ 

OC or M is own capital – CK

SR is solvency reserve – BFK

 $\Delta CC$  is changes in the company's capital –  $\Delta EAC$ 

 $\Delta CG$  is capital gains –  $\Delta CK$ 

 $\Delta DDP$  is domestic debt payment –  $\Delta 3KB$ 

 $\Delta I$  – changes in the portion of cash flow remaining as property in the form of assets

 $\Delta IW$  is increase in wear –  $\Delta I3$ 

## Introduction

Free monetary assets are separated as basic components that form strategically important parameters of an economic entity, which are profitability and financial stability.

Under such assets, in the framework of the study, all resources accumulated in cash and non-cash forms are considered, which:

- favour the achievement of strategically important parameters, characterised by the presence of a reserve of solvency (free monetary capital);
- they are formed by the quantitative and qualitative efficiency of their movement.

At the same time, the solvency reserve is interpreted by us as the ability of an economic entity to continue its activities, even after simultaneous repayment of all obligations.

Analysis of the latest scientific research on the problem under study and identification of issues that have not been resolved. Traditionally, the valuation of monetary assets is presented as an abstract concept and is explored through impersonal movement operations, namely what to use and involve them. Examples are the methods proposed in the works of M. Y. Chik (2015), G. K. Koshelok (2013), Richard Lot (2007), I. Artyukh (2009). All of them assess the degree of synchronization of positive and negative cash flows in an impersonal form. The assessment results characterise monetary assets' balance, but not the quantitative and qualitative expression of movement iterations, affecting the strategically significant parameters of economic activity subject.

Due to the fact that quantitative data are insufficient to assess the degree of participating monetary assets in total current assets, existing estimates are worth supplementing with qualitative details of the mobile cash flow on accounting accounts, like additional non-systemic accounting and non-accounting indicators.

Among the scientists who actively sought to minimize abstraction in the assessment of monetary assets (due to the quantitative and qualitative balance of education, distribution and use), one can single out: Ya. Titarenko (2012), A. I. Khrolenko and T. P. Lobodzinskaya (2017), purse (*Skashko*, 2018), etc. the specific thing is that these scientists paid attention to free money capital as a result, forming strategically significant parameters of the subject of economic activity, and not to the balance of education, distribution and use of cash flows

The study aims to research the features of assessing the cash flow of an enterprise and specifying the means of such an assessment. At the same time, the objectives of the study are:

- outline the features of the transformation of the generally, accepted approach to grouping cash flows;
- study the form of the balance of education,
- distribute and use of net cash flows, considered as a concretising means of their assessment.

# The results of the study

Within the framework of the study of the forms of quantitative and qualitative balance of formation, distribution and use of net cash flows, it is considered as a concretising means of their assessment. The main purpose of the balance sheet will be to fill the schematised cognitive picture of cash flow with private features relative to the forms of their solvency, due to which it is possible to move from one scheme for the formation of free money capital to another, more optimal for achieving strategically significant parameters. At the same time, in order for processing identifying forms of solvency to receive quantitative and qualitative expression, it is advisable (*Artyukh*, 2009; *Krylova*, 2019; *Skashko*, 2018):

- (1) transform the generally accepted approach to grouping cash flows. Thus, to assess their movement, instead of the traditional grouping of flows by type of activity (by current activity, investment activity, financial activity), it is advisable to switch to the directions of movement that affect the state of the solvency reserve (by the stage of formation, the stage of distribution and use of the solvency reserve) with a focus on the ratio that reflects (*Table 1*) the direction of net cash flow and changes in financial resources (if there are credit receipts) while maintaining the balance of assets and liabilities;
- (2) ensure the allocation of forms of cash flow to indicate forms of solvency. At the same time:

- monetary form of flows (*mf*) or transformation of its non-monetary form into monetary (e.g., repayment of receivables) or settlements focused on the use of money to pay obligations;
- non-monetary form of flows (nmf) exchange of its monetary form into non-monetary (acquisition of fixed assets and intangible assets) and settlements that do not involve the use of money;
- (3) provide identification of transition operations (software) that involve a specific exchange within the basic ratios, which do not just change the structure of assets or liabilities, but transform the designation of forms of solvency. As an example, we can cite the second basic transition operations: payment of accounts payable (*AP*), namely "obligations money property"; AI payment (*AIP*), namely "accrued income to payments money reduction of domestic debt". In the presence of such operations, a system of inequalities are worth providing within the evaluation framework (1, 2) (*Koshelok*, 2019):

$$NCF_{mf} = DI_{mf} + AIP_{mf} + AP (1)$$

$$NCF_{nmf} = DI_{nmf} + AIP_{nmf} - EG$$
 (2)

- $DI_{mf}$  and  $DI_{nmf}$  are disposable income in monetary and non-monetary forms;
- $AIP_{nmf}$  and  $AIP_{nmcf}$  are accrued income payable in monetary and non-monetary forms;
- AP is transition operations of the enterprise.

According to the specifics of identifying forms of solvency, it is appropriate to illustrate a concretising tool for assessing the movement of net cash flows of an enterprise at the stage of forming a solvency reserve (*Table 2*).

As long as the cash flow is formed without defining the forms of solvency, it is possible to determine only the net resources and financial resources formed. The resulting solvency reserve formed by cash flow is not just its own financial resource, but only its incremental monetary form, which is also replenished by borrowed capital (BC). Since the primary solvency Reserve as part of the generated financial resources can be fully consumed during distribution and use, it can be identified as a preliminary reserve for continuing operations.

An illustration of a concretising tool for assessing the movement of net cash flows of an enterprise at the stage of distribution of the solvency reserve (*Table 3*).

Thus, the cash flow of an enterprise, at the stage of distribution of net cash flows, is formed on the basis of disposable income and accrued income to payments. However, it is the solvency reserve that arises provided that these flows are carried out in monetary forms. The outlined provision is worth adjusting for a portion of negative net cash flow, which means that:

- (1) passes from the enterprise to its internal debt  $\Delta ID$  (the solvency reserve is replenished by attracting additional borrowed capital);
- (2) leads to a decrease in equity, in which the solvency reserve is adjusted by  $\Delta ID$ ;
- (3) leads to a decrease in equity, in which the solvency reserve is adjusted at the expense of  $\Delta CRC$  (this leads to an increase in  $\Delta CRC$  and  $\Delta ID$ ).

An illustration of the concretising effect of the collapse of the pure penny flows of the cash flow on the stage of the reservoir of the plateaus is introduced in the appendix (*Table 4*).

Thus, the collapse of the penny flows of the cash flow on the stage of the pure penny flow of the Kintsevo begins with a reserve of plateaus ( $\Delta I_{mf} > 0$ ), which positively means I am strategically significant. This is due to the fact that the  $\Delta I_{mf} > 0$  allows the enterprise to use opportunities that increase its value (if you can, you can start, as EV/Sales (revenue), EV/EBITDA, EV/EBIT, EV/Net Income).

## Conclusion

The assessment of the company's cash flow is worth basing on determining the real amount of free money capital. This is advisable by means of a concretising means of such an assessment, namely, the balance of formation, distribution and use of net cash flows.

Maximum visual clarity of the evaluation results can be achieved if the structure of the concretising tool is formed in the form of a two-sided table, where:

- (1) the left-hand side summarises data on ratios that reflect the movement of net cash flows and changes in financial resources (if credit receipts are available) while maintaining the balance of assets and liabilities;
- (2) the right-hand side provides specification of the movement elements that form the difference between the amounts of cash receipts and payments and form the solvency reserve.

Prospects for further scientific developments in this area. The results obtained can be used to build a cash flow budgeting system combined with operational analytics.

Practical significance. The presence of a well-defined technique for reflecting the difference between the amounts of cash receipts and payments will allow achieving a sufficient level of increase in analytical processes to support both strategic and everyday tactical decisions to achieve profitability and financial stability.



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# Додаток

Table 1. ratios reflecting the direction of net cash flow and changes in financial resources

Basic ratios	Formalising the ratio		
Direction of net cash flow	$NCF = GDP - IC = DI + EG = \Delta CG + \Delta IW + \Delta EG$		
(NCF)	if		
	$NCF = FR_{mf} + FR_{nmf}$		
	and		
	$NCF_{nmf} = DI_{nmf} + EG_{nmf} - AP_{mf}$		
	$NCF_{mf} = DI_{mf} + EG_{mf} - AP_{nmf}$		
Changes in financial	$FR = NCF_{app} + \Delta DDP = DI + EG + \Delta DDP = \Delta M + \Delta IW + \Delta IDP$		
resources in the presence	··· r		
of credit receipts (FR)			

Note: Developed based on (Artyukh, 2009; Koshelok, 2019; Krylova, 2019; Skashko et al., 2018)

Table 2. illustration of a concretizing tool for assessing the movement of net cash flows of an enterprise at the stage of forming a solvency reserve

Characteristics of the data collection principle	Formed financial resources of the FR or NCF	Solvency reserve (SR)	Purpose
The cost of processing products created at the enterprise or the cost of goods sold	The difference between gross output $(GDP)$ and intermediate consumption $(IC)$ generates net cash flow $(NCF)$ Calculation algorithm: $NCF_{app} = GDP - IC$ $= NCF_{nmf} + SR_{mf}$ If there are credit receipts: $FR_{app} = SR + \Delta DDP$	$SR_{app} = NCF_{mf} + \Delta DDP_{mf}$	Reserve standby mode for continuing operations

Note: Developed based on (Koshelok, 2019; Titarenko, 2012)

Table 3. Illustration of a concretizing tool for assessing the movement of net cash flows of an enterprise at the stage of distribution of the solvency reserve (developed based on (*Koshelok, 2019*; *Titarenko, 2012*; *Chick, 2015*))

Characteristics of the data collection principle	Formed financial resources FR or NCF	Distributed solvency reserve	Purpose
The cost of processing products created at the enterprise or the cost of goods sold is divided into disposable income and accrued income to payments	Calculation algorithm $NCFexp = DI + EG$ If there are credit receipts: $FR_{exp} = DI + EG + \Delta DDP$	$SR = DI_{mf} + EG_{mf} + OB1$ For negative values $NCF_{epx.mf}$ and growth $ER$ and $NCF_{DDP}$ reserve is 0.	Mode of forming a reserve for continuing operations. In case of unprofitable activities, the actual loss is formed

Note: this element is formed by the increase in wear and tear ( $\Delta IW$ ) and equity  $\Delta OC$ .

Table 4. Illustration of a concretising tool for assessing the cash flow of an enterprise at the stage of using the solvency reserve (developed based on (Koshelok, 2019; Skashko et al., 2018))

Characteristics of the data collection principle	Generated financial resources $FR$ or $NCF_t$	Solvency reserve	Purpose
Reflection of final changes in the company's capital, taking into account all changes in liabilities <i>NCF</i> <sub>t</sub>	Calculation algorithm $NCF = \Delta OC + \Delta DDP \\ + \Delta NCF_{DDP}$ If there are credit receipts $FR_t = \Delta M + \Delta IW + \Delta D$	$\Delta I_{mf} > 0$ Provided that the balance is met $\Delta M = \Delta CC$	Definition of the part of cash flow that remains in the form of property in the form of assets in monetary terms.