

SOLVING MODERN PROBLEMS IN FINANCIAL FLOW MANAGEMENT OF ENTERPRISES: A SYSTEM APPROACH IN NEW ECONOMY REALITIES

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Enterprises, banks and other financial institutes have always been run together in one system. Each subject plays its own role in the market stability. Low level of solvency of one enterprise or bank causes decrease in the general economic growth. In order to keep sufficient level of stability, and, in the future, create conditions for higher profitability, there must be a high-quality financial flow management system. In some countries, a system based on plenty of indexes is used, which may characterize the quality of a company financial management through capital and liquidity. The survey, which was held in 48 large foreign companies, aimed to determine three main methods of financial flow management which can be considered as the most effective ones. According to the survey results, companies consider using internal stress-testing and Basel Committee advanced approaches based on capital and liquidity as elements of a general financial flow management system. But according to the European and American research, capital and liquidity are not the best risk buffers nowadays. The current aspects of domestic financial flow management of economic entities have been analyzed in the article. According to the results of the study, in order to prevent such a situation in the future, enhanced use of insurance services has been proposed. In addition, the dynamics of the amount of the gross profit of Ukrainian enterprises and the volume of the bank legal entities' credit portfolio have been analyzed. The results of the analysis proved the characteristics of the general dynamics of relatively high level of low-quality credits in Ukraine and necessity for solving the problem of ineffective system of financial flow management at enterprises.

Keywords: financial flow management, capital, liquidity, Basel Committee standards.

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ВИРІШЕННЯ СУЧАСНИХ ПРОБЛЕМ УПРАВЛІННЯ ФІНАНСОВИМИ ПОТОКАМИ ПІДПРИЄМСТВ: СИСТЕМНИЙ ПІДХІД У НОВИХ РЕАЛІЯХ ЕКОНОМІКИ

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Підприємства, банки та інші фінансові інститути утворюють єдину економічну систему, кожен суб'єкт якої відіграє важливу роль у забезпеченні її стабільності. Низький рівень платоспроможності будь-якого підприємства або банку призводить до зниження можливостей загального економічного зростання. Для того щоб зберегти достатній рівень стабільності та в подальшому створити умови підвищення рентабельності компаній, необхідна наявність високоякісної системи управління фінансовими потоками. У деяких розвинутих країнах використовують систему показників, засновану на безлічі індексів, які можуть характеризувати якість фінансового менеджменту компанії, у тому числі на основі капіталу та ліквідності. Опитування, проведене серед фахівців 48 великих зарубіжних компаній, було спрямовано на визначення трьох основних методів управління фінансовими потоками, які можна вважати найбільш ефективними. Результати опитування свідчать про те, що менеджмент компаній вважає за найкраще використовувати внутрішні стрес-тестування

та вдосконалені підходи Базельського комітету на основі капіталу й ліквідності як елементів загальної системи управління фінансовими потоками. Але, згідно з європейськими та американськими дослідженнями, капітал і ліквідність у сучасних реаліях не є найкращими буферами ризику. У роботі проаналізовано сучасні аспекти вітчизняної практики управління фінансовими потоками економічних агентів. За результатами дослідження, із метою недопущення такої ситуації в майбутньому, було запропоновано заходи щодо активізації використання страхових послуг. Окрім цього, було проаналізовано динаміку показників рівня валового прибутку українських підприємств та обсягу кредитного портфеля банків – юридичних осіб. Результати аналізу підтвердили наявні характеристики загальної динаміки щодо високого рівня проблемних кредитів в Україні та необхідності у вирішенні проблеми неефективного управління фінансовими потоками суб'єктів господарювання.

Ключові слова: управління фінансовими потоками, показники рівня капіталу, ліквідності, стандарти Базельського комітету.

РЕШЕНИЕ СОВРЕМЕННЫХ ПРОБЛЕМ
УПРАВЛЕНИЯ ФИНАНСОВЫМИ ПОТОКАМИ ПРЕДПРИЯТИЙ:
СИСТЕМНЫЙ ПОДХОД В НОВЫХ РЕАЛИЯХ ЭКОНОМИКИ

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Предприятия, банки и другие финансовые институты образуют единую экономическую систему, каждый субъект которой играет важную роль в обеспечении ее стабильности. Низкий уровень платежеспособности любого предприятия или банка приводит к снижению возможностей общего экономического роста. Для того чтобы сохранить достаточный уровень стабильности и в дальнейшем создавать условия для повышения рентабельности компаний, необходимо наличие высококачественной системы управления финансовыми потоками. В некоторых странах используется система показателей, основанная на множестве индексов, которые могут характеризовать качество финансового менеджмента компании, в том числе на основе капитала и ликвидности. Опрос, проведенный среди специалистов 48 крупных зарубежных компаний, был направлен на определение трех основных методов управления финансовыми потоками, которые можно считать наиболее эффективными. Результаты опроса свидетельствуют о том, что менеджмент компаний считает лучше использовать внутренние стресс-тестирования и усовершенствованные подходы Базельского комитета на основе капитала и ликвидности как элементов общей системы управления финансовыми потоками. Но, согласно европейским и американским исследованиям, капитал и ликвидность в современных реалиях не являются лучшими буферами риска. В работе проанализированы современные аспекты отечественной практики управления финансовыми потоками экономических агентов. По результатам исследования с целью недопущения такой ситуации в будущем, были предложены меры по активизации использования страховых услуг. Кроме этого, была проанализирована динамика показателей уровня валовой прибыли украинских предприятий и объема кредитного портфеля банков – юридических лиц. Результаты анализа подтвердили существующие характеристики общей динамики относительно высокого уровня проблемных кредитов в Украине и необходимости решения проблемы неэффективного управления финансовыми потоками субъектов хозяйствования.

Ключевые слова: управление финансовыми потоками, показатели уровня капитала, ликвидности, стандарты Базельского комитета.

The efficiency of financial flow management of enterprises has always been relevant for market economy in which financial institutes and companies cooperate. Economic instability leads to declining of quality management at the microeconomic level that negatively influences the general process of financial flow management. The result of this cooperation has been built according to the synergetic aspect [1]. Nevertheless, frequent financial crises

and increased dynamics of development of integrated structures cause the need for placing emphasis on financial flows and providing complex system analysis and resource optimization [2].

The aspect of analyzing the financial flow management efficiency was considered by many Ukrainian and foreign scientists. A significant contribution was made by such economists as M. Bilyk, T. Zarevchatska, B. Khairov,

V. Biryukov, L. Karpenko, I. Kyrychenko, A. Lebedieva, T. Patienko, I. Khaykin, U. Koyluoglu, D. Elliott, D. Morelato and others.

The research has analyzed modern problems of financial flow management at enterprises, generalized them based on the system approach to develop methods designed to increase the financial flow management efficiency.

Based on the analysis of specialized literature, different approaches to the definition of essentiality of the financial flow management efficiency have been considered. F. Sokhanych considered financial flow management as a process which covers stable development. It means complex use of incomes and expenses and getting profitable cash flows [3, p. 220].

H. Koshelok considers that the quality of enterprise management will be high if there are positive operational cash flows and total net cash flows [4].

In the circumstances of crisis processes, the system of financial management in financial institutes, as well as at enterprises was limited by the indexes which might be influenced and predicted – capital and liquidity. Ukrainian scientists consider the financial index method as the most effective one for analysis of financial flows. I. Kyrychenko offers to use the following indexes in order to analyze financial flows [5]:

- sufficiency of operational cash flows;
- liquidity of operational cash flows;
- effectiveness of financial flows.

Apart from these indexes, Ye. Mnykh and M. Bilyk consider analyzing financial flows using such indexes as:

- reinvestment of operational cash flows;
- solvency of financial flows;
- duration of financial flow turns [6; 7].

Yu. Tsai-Tsalko proposes to analyze the investment trend of financial flows using the level of raising their own resources of investment assets and the level of investment in property and asset growth [8; 9].

T. Zarevchatska also uses profitability of income and expenses of each activity and profitability of net cash flows [10].

Other scientists consider using different indexes to analyze effectiveness of financial flows, but they do not help to draw any valid conclusions, which may improve financial flow management. All indexes are based on income, expenses and capital which are combined in different ways [8].

However, today there is a question about the increasing role of market and strategic decisions. Therefore, the process of financial flow management may involve not only the capital and liquidity as basic components for providing financial stability, but also quality of management, market risk and counterparty risk.

In order to manage cash flows in an efficient way it is important to remember some principles (Fig. 1). Thus, inflow of funds in full capacity is provided based on realization of production plans and other measures. Control of timing of this process must be carried out with the help of

short-term forecasts specified in accordance with market conditions, changes in other economic parameters. Economic activity of a company is associated with the transformation of the value of money. Cash funds received from the sale are directed to purchasing raw materials, creating reserves. Thus money becomes a prerequisite for the organization activity [11].

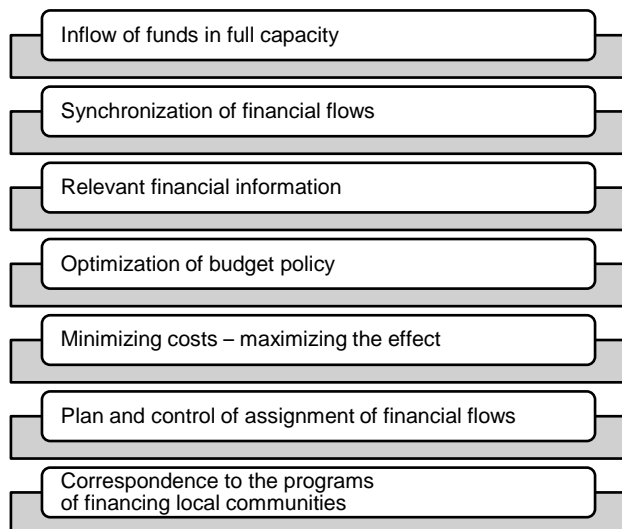


Fig. 1. The main principles of financial flow management [5; 12]

At the present stage, a special role belongs to the principle of effectiveness of each operation associated with the expenditure of money. In addition to the accuracy of determining the directions of financial resources, the practicability of decisions on their implementation, considering the achieved economic effect is of no less importance. This effect depends on the way of financing of the proposed works, types of raw materials, supply conditions, prices which is provided by the choice of the most rational decisions.

The synchronization of financial flows throughout the economic turnover is important for maintaining solvency. The cash management system depends on the continuous development of financial flows, organization of control of spending and impact assessment and rational management of all resources as well. Increasing the system efficiency is achieved by increasing the financial incentives of all participants in the chain to accelerate funds turnover and increase equity [5].

The availability of relevant and reliable financial information for an enterprise provides the opportunity to take into account the interests of parties. This approach allows establishing trusting relationships between business entities, banks, insurance companies, identifying corporate reserves in order to efficiently use them and increase profits.

Optimization of budgeting procedures ensures the development, implementation and analysis of budget execution, optimization of resource flows, provides savings, improves processes of cash management, increases the

level of investment attractiveness and competitiveness of the enterprise.

The principle "minimizing costs – maximizing the effect" means that the minimum production costs of an entity need to ensure the maximum output of products and services.

Planning and controlling the distribution of funds involves comparing item-based cash receipts and expenditures for a particular period, as well as calculation of the total need for short-term financing [12].

Enterprises operating within individual regions may intensify their interaction with local communities through decentralization opportunities. Thus, it is possible to introduce joint production programs, the provision of social services that will strengthen the position of enterprises in the region's market, as well as increase revenues of both local budgets and enterprises.

Managing financial flows in many cases allows reducing the gaps between revenues and expenditures, it smoothes out the negative effects of these phenomena and accelerates the fund turnover. It suggests a "map" of thoughtful implementation of financial solutions that can eliminate contraventions within revenue delay, minimize irrational financial use, etc. In order to assign and optimize expenses there can be implemented logistics changes, banking credit services, reviewed supply terms that will be more profitable for an enterprise.

An exceptional feature is the simultaneous decision-making about strategic development of the company along with effective decisions on financial flow management. Nowadays, it is important to run a company and manage financial flows, trying to use the mentioned principles at one time. In this case attention should be also paid to ways how to fasten and synchronize the flows in order not to lose liquidity. Banks and other financial institutes are the subjects which help enterprises to manage their financial flows in an effective way.

As banks are main creditors of real economy, credit managers should focus attention on the process of financial flow management of enterprises. There are several problems in the companies, which are common for the process of decision-making [13]:

1. Analysis is built based on retrospective data which is outdated because of high speed of changes in the environment.

2. A tendency to the use of universal models of solvency analysis with further forming of short reports (e.g. without mentioning main counterparties, their financial state, etc.)

3. Irregular and seldom monitoring of methods of financial flow management according to the changes in terms of cooperation with counterparties, time frames of the product cycle, etc.

4. Low diversification of methods of management of different types of financial resources.

These problems were caused by the unwillingness to change approaches to achieving the main aim of running a business. Thus, special emphasis of economists and government has been placed on problems of capital

raising since the end of the 20th century. Capital was a means for declining the risk – first, credit risk, then market and operational risks. However, leading financial institutes all over the world don't pay much attention to compliance with economic regulation, concerning raising the capital.

Commonly used in European companies is the method which provides income and loss analysis of each primary activity, of each product, service, for financial flow analysis. This method is called Funds Transfer Pricing – FTP. The essence of this method is individual estimation of the influence of changes in financial resources' value on profitability, and individual estimation of the value of each activity and each process elements of an enterprise [14].

Using both methods (capital standards and FTP), financial institutes and enterprises can analyze an unbiased amount of financial resources, which are needed for company functioning and for choosing strategy, risk level and minimization, etc.

In the second half of 2016 a survey was held by the International Association of Credit Portfolio Managers among 48 world banking representatives from Asia, Europe, North America and other continents (Fig. 2). One of the tasks was to choose 3 the most important characteristics which describe the quality of the financial flow management system.

The survey results evidence that main characteristics of the financial flow management quality are in accordance with expanded capital standards, according to the Basel Committee, liquidity level and stress-testing results. The conclusions are nearly the same for all countries. But these factors are the result of separate changes, which may allow banks to make right credit decisions.

Thus, the following factors may influence changes in profitability:

1. A declining amount of high- or low-risk assets because of

- repo/reverse repo;
- investments in liquid and low risk securities.

2. Increased attractiveness of fee-based activities.

3. Performance differentials due to differences across home country capital rules, according to the Basel recommendations for the USA and Europe.

The process of adaptation to changes in each factor may be different within countries, fields, enterprises, etc. Top-management must analyze particular situations that appear in the process of enterprise functioning and may influence the financial flow management of the enterprise. These situations are the causes of negative financial state. Financial indexes are indicators and consequences. However, it is important to find out the causes instead of moving beyond the symptoms.

In order to discover inconsistency between the options in building financial flows of banks and enterprises in Ukraine, the main characteristics of in- and out- cash flows have been analyzed [15].

Fig. 3 shows the comparison of credit and deposit portfolios of Ukrainian banks.

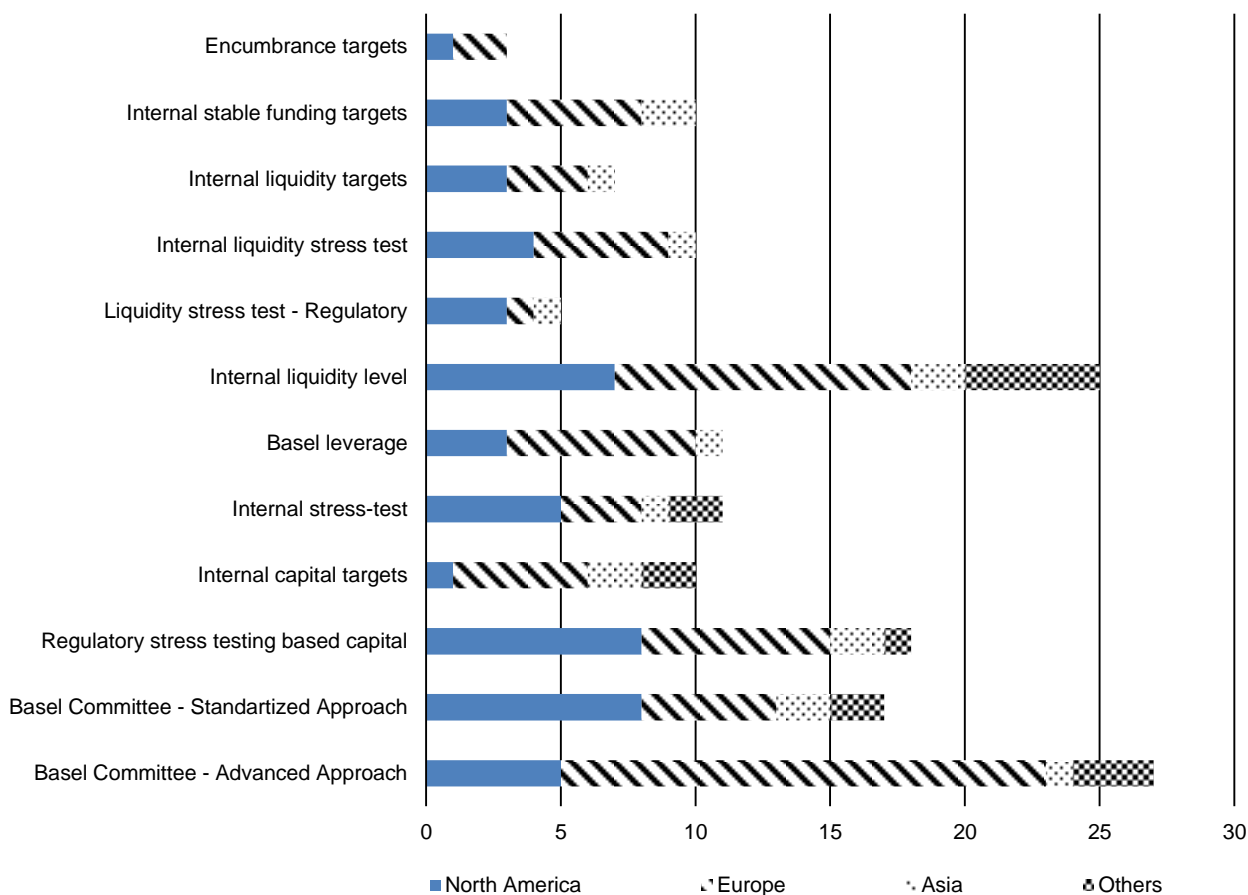


Fig. 2. The results of the survey among 48 world banks about three main characteristics of the financial flow management efficiency [11]

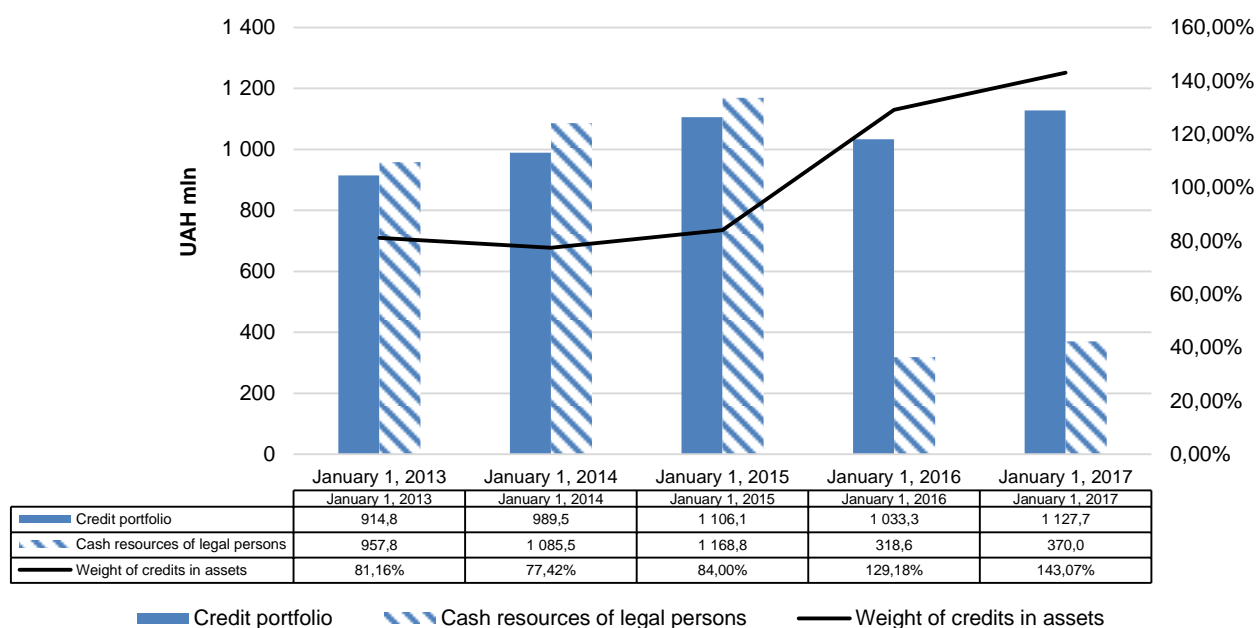


Fig. 3. Comparing characteristics of credit and deposit portfolios of Ukrainian banks in January 1, 2013 – January 1, 2017

According to the analysis of the results, the authors affirm that till 2016 the deposit portfolio had been higher than the amounts of credit, but in recent years the situation has changed significantly – the credit portfolio is three times larger than banks' liabilities, but the weight of credits in assets is more than 100 %. Credit policy of banks has been always considered as active; in 2014 – 2015 it may be considered as aggressive, but in 2016 – 2017 the amount of credits was larger than the total amount of assets. That may be explained by increased provision of assets which are included in the credit portfolio and are built according to the credit class.

According to the analysis presented in Table 1, which aims to determine the compliance of financial flows with activities, a scheme of the banking income and expenses structure was built (Fig. 4).

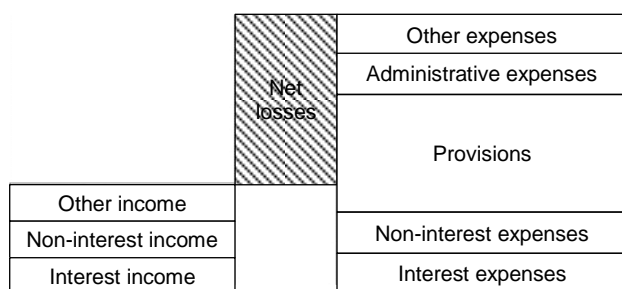


Fig. 4. The comparative scheme of the Ukrainian banks' income and expenses

Therefore, positive balance is considered in interest and non-interest incomes and losses of banks during 2013 – 2017, as shown in Table 1 [1]. But other losses, which include administrative, rent, raising provisions and others, are much higher than other income. The most essential structure element is raising provision of active operations of banks. Such sort of thing proves, that, in general, banking activity focuses mainly on the credit portfolio and subsidiary services (payment services, bill negotiating, etc.). But because of the low level of diversification of banking and financial activities and because of deterioration of clients' solvency, banks have to raise large provisions, which significantly decreases their net profit. According to the analysis of the financial flow management efficiency of enterprises, a conclusion was drawn, that operational activity has not been profitable yet. Therefore, other necessary expenses (e.g. financial or tax expenses) lead to high losses. Thus, in Table 2 the types of financial flows of enterprises of Ukraine in January 1, 2013 – October 1, 2016 [16] are indicated.

It is interesting to compare the amount of the credit portfolio with operational financial results of enterprises, in other words, their capability to pay a loan and interests.

Fig. 5 presents a histogram comparing the mentioned indexes. Thus, the amount of free financial resources after paying all necessary expenses for operational activity demonstrates incapability of Ukrainian enterprises to face their liabilities.

Table 1

The dynamics of income and outcome financial flows of Ukrainian banks in January 1, 2013 – April 1, 2017 (bln UAH)

Indicators	Period					
	January 1, 2013	January 1, 2014	January 1, 2015	January 1, 2016	January 1, 2017	May 1, 2017
Interest income	10 588	12 047	12 917	11 271	10 563	63 020
Interest expenses	6 485	7 580	8 701	8 082	2 699	24 526
Net interest income	4 103	4 467	4 216	3 189	7 864	38 494
Non-interest income	1 722	2 042	3 707	2 113	6 432	11 624
Non-interest expenses	255	355	450	434	621	2 696
Net non-interest income	1 467	1 687	3 257	1 679	5 811	8 928
Other income	845	1 014	1 158	-1 259	1 189	10 952
Other expenses	5 935	3 994	3 994	3 150	3 720	16 764
Total revenue	-5 090	-2 980	-2 836	-4 409	-2 531	-5 812
Income	13 344	15 331	17 920	12 180	14 557	63 020
Expenses	12 764	14 521	26 424	13 070	14 219	53 603
Net profit	580	810	-8 504	-890	338	9 417

Table 2

The dynamics of income and outcome financial flows of Ukrainian enterprises in January 1, 2013 – April 1, 2017 (bln UAH)

Indicators	Period				
	January 1, 2013	January 1, 2014	January 1, 2015	January 1, 2016	October 1, 2016
Net income	738 039.9	732 039	918 647.3	5 164 124.3	3 104 045.8
Other operational income	53 528.3	92 201.7	261 058.8	731 429.6	262 424.2
Operational expenses	781 765.2	900 547.2	1 289 356.8	5 849 212.3	3 196 899.3
EBITDA	9 803	-76 306.5	-109 650.7	46 341.6	169 570.7
Other income	56 050.2	56 485.2	155 135.6	516 820	162 808.5
Other expenses	71 074.4	160 529.5	396 103	911 633.3	292 004.2
EBT	-15 024.2	-104 044.3	-240 967.4	-394 813.3	-129 195.7
Income	847 618.6	880 725.9	1 334 846.3	6 412 388.4	3 529 281.2
Expenses	856 396.6	1 065 278.2	1 688 831.9	6 785 904.4	3 519 287.9
Net profit	-8 778	-184 552.3	-353 985.6	-373 516	9 993.3

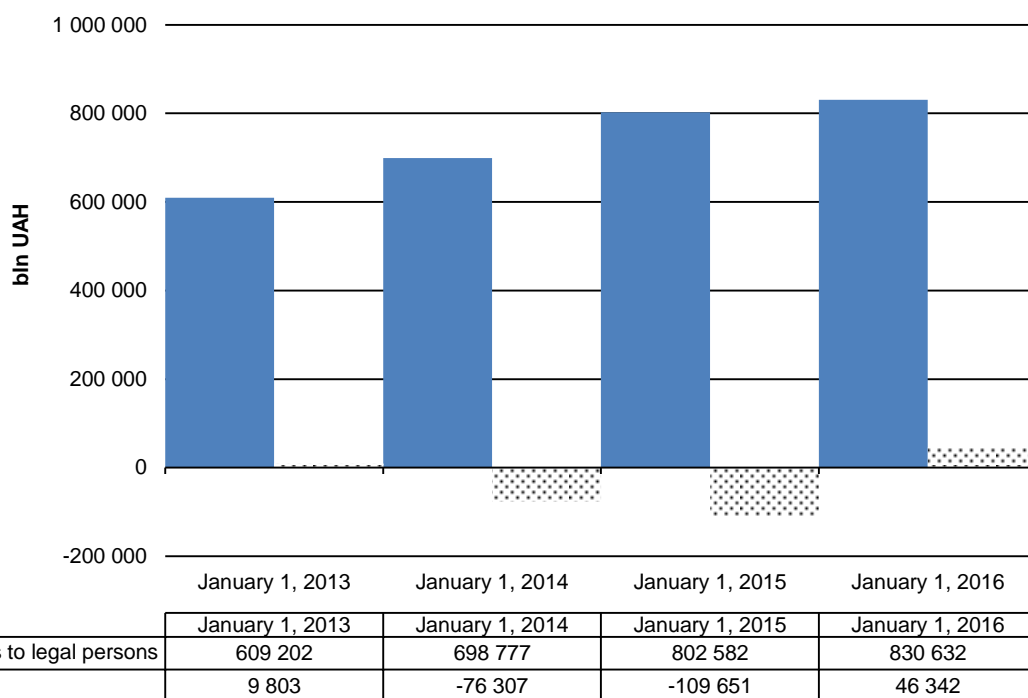


Fig. 5. Comparative analysis of EBITDA and credits to legal persons

At the same time the banking sphere is characterized by high volatility of credit interests, which is evidence of focusing attention mainly on high income for banks, but not for their clients. This situation causes transgression in the financial system during the crisis and draws financial resources away from other financial institutes, such as insurance companies, non-governmental pension funds, etc. According to the results of comparison of credit rates of banks of

Ukraine and EU, a conclusion may be drawn, that volatility of this index abroad is higher (Fig. 6 and 7) [14; 15].

The system approach is important for financial flow management of both enterprises and banks. Firstly, companies should increase their operational incomes through active use of marketing tools and advertising. Secondly, companies should focus attention on their solvency and ability to be a borrower. The use of credit sources without

having high profit is possible just in the first stages of setting up a business. However, it is still necessary to analyze a business-plan for the nearest time. Thirdly, banks should cooperate with insurance and stock companies in order to increase investment incomes and decrease the amount of provisions.

requirement of their time synchronization, as well as to develop the necessary methodology.

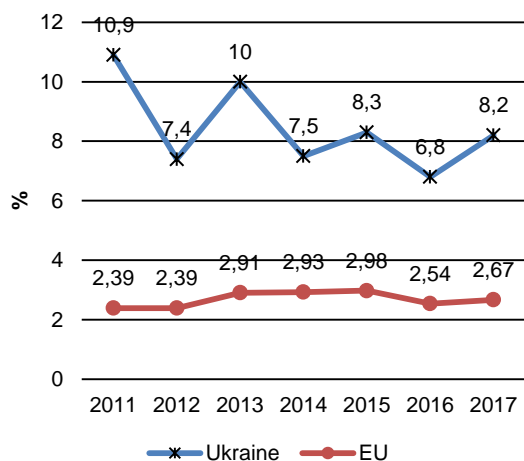


Fig. 6. Average short-term credit rates for enterprises in 2011 – 2017 in the banks of Ukraine and the EU (US dollars)

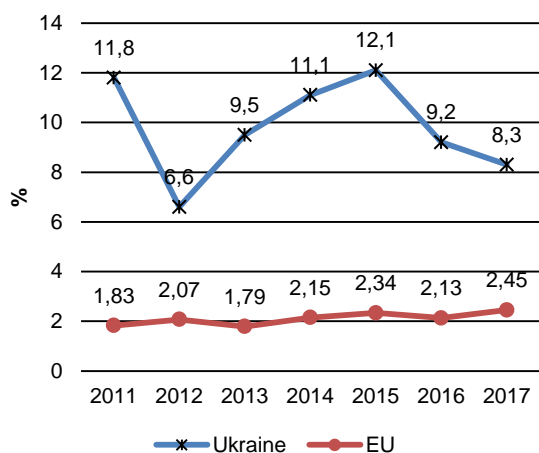


Fig. 7. Average long-term credit rates for enterprises in 2011 – 2017 in the banks of Ukraine and the EU (US dollars)

This will increase the bank's resistance to changes in the legal field and ensure correspondence to market changes. It will help banks to avoid high volatility in the future, provide adequate lending rates, and increase customer flow. This fact will also have a great positive impact on the credit capacity of enterprises in the real economy.

Such an approach allows managers to provide systematic optimization of parameters of financial flows of business entities in the framework of the system of transparent economic relations of the country, observing the

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