УДК: 336:71:65.012.12

#### Shubina S.V.

PhD in Economics, Docent, Kharkiv Institute of Banking of the University of Banking of the National Bank of Ukraine, Ukraine; e-mail: shybina@ukr.net

### Kramarenko I. V.

Specialist Research Department, Kharkiv Institute of Banking of the University of Banking of the National Bank of Ukraine, Ukraine; e-mail: inkra@ukr.net

### Golovashko A.V.

student, Kharkiv Institute of Banking of the University of Banking of the National Bank of Ukraine, Ukraine; e-mail:golovashko@i.ua

# THEORETICAL APPROACHES TO ANALYSIS OF «MEGABANK» PROFITABILITY

**Summary:** The article focuses on theoretical and methodological approaches regarding the bank profitability analysis. The factor analysis of the economic impact of withdrawing capital on the system parameters on the example of PJSC «MEGABANK» has been offered. The study presents analysis of the research involves the ways to increase it's efficiency PJSC «MEGABANK» performance and it's profitability. Taking into account for the banking institution such an index as profitability, improvement the ways of research based on theoretical and methodological approaches of the well known home and foreign scholars is proposed (on the example of PJSC «MEGABANK») expanding the bank's effectiveness analysis based on the use of factor model of economic return on capital. The factors system proposed it's to indicate the most important economic impact concerning the formation of return on capital as an important indicator of the banking institution profitability, namely: the economic return on capital, profitability, profit margin, return on assets, multiplier of capital.

Key words: BANK, PROFIT, FACTORS, ANALYSIS, MODEL.

Formulas: 1; fig.: 0; tabl.: 2, bibl.: 12 **JEL Classification:**G 21, C 52, D 61.

### Шубіна С. В.

к.е.н., доцент, Харківський інститут банківської справи Університету банківської справи Національного банку України(м. Київ); Україна; e-mail: shybina@ukr.net

## Крамаренко І. В.

фахівець наукового відділу, Харківський інститут банківської справи Університету банківської справи Національного банку України (м. Київ); Україна; e-mail: inkra@ukr.net

### Головашко О. В.

студент, Харківський інститут банківської справи Університету банківської справи Національного банку України (м. Київ); Україна; e-mail:golovashko@i.ua

# ТЕОРЕТИКО-МЕТОДИЧНІ ПІДХОДИ ДО АНАЛІЗУ ПРИБУТКОВОСТІ БАНКУ ПАТ «МЕГАБАНК»

**Анотація:** У статті розглянуто теоретичні та методичні підходи до аналізу прибутковості банку, запропоновано факторний аналіз економічної віддачі капіталу за системою показників на прикладі ПАТ «МЕГАБАНК». Проведено дослідження ефективності діяльності ПАТ «МЕГАБАНК» і запропоновано шляхи її підвищення.

Ключові слова: БАНК, ПРИБУТОК, ФАКТОРИ, АНАЛІЗ, МОДЕЛЬ.

Формул: 1; рис.:0, табл.: 2, бібл: 12

## Шубина С. В.

к.э.н., доцент, Харьковский институт банковского дела Университета банковского дела Национального банка Украины(г. Киев), Украина; e-mail: shybina@ukr.net

## Крамаренко И. В.

специалист научного отдела, Харьковский институт банковского дела Университета банковского дела Национального банка Украины (г.Киев), Україна; e-mail: inkra@ukr.net

### Головашко А. В.

студент, Харьковский институт банковского дела Университета банковского дела Национального банка Украины (г.Киев), Україна; e-mail:golovashko@i.ua

# ТЕОРЕТИКО-МЕТОДИЧЕСКИЕ ПОДХОДЫ К АНАЛИЗУ ПРИБЫЛЬНОСТИ БАНКА ПАО «МЕГАБАНК»

**Аннотация:** В статье рассмотрены теоретические и методические подходы к анализу прибыльности банка, предложено факторный анализ экономической отдачи капитала по системе показателей на примере ПАО «МЕГАБАНК». Проведено исследование эффективности деятельности ПАО «МЕГАБАНК» и предложены пути ее повышения.

Ключевые слова: БАНК, ПРИБЫЛЬ, ФАКТОРЫ, АНАЛИЗ, МОДЕЛЬ.

Формул: 1; рис.:0, табл.: 2, библ: 12

Introduction. Banking income is one of the most important indicators of the efficiency and stability of the bank. All the participants in the economic process are interested in. Shareholders are worried by the size of the banking income, because it's an indicator of earned income on their invested capital. Depositors are guaranteed stable incomes and confidence in the future, as increased reserves and owned funds of the bank indicate its stability. Borrowers are also interested in the bank's profits, so that their own savings increase. Under the current conditions of the banking, the main task is to find real ways to minimize risks and gain enough income to save depositors' money and support the healthy bank up to the mark [1].

Literature review and the problem statement. The study of the essence, the nature of a gain and parameters and of its estimation devoted to the work of foreign and domestic scientists and economists: A. Blank, A. Dayle, B. Kolassa, E. Nehasheva, D. Han, L. Black, A. Sheremet; financial problems of strategic management within the bank: F. Butynets, I. Hitlenko, A. Vasyurenko, A. Zaruba, A. Kirichenko, O. Lavrushina, V. Mishchenko, P. Rose, J. Sinko, A. Usoskina, Y. Utkin F. Shpig etc.; to assess the efficiency of economic activities in terms of profitability A. Birman, K. Drury, P. Samuelson, W. Hoyer, P. Hein. The problems of financial analysis, forecasting and planning financial results are considered by many Ukrainian scholars, primarily by: S.I. Schebyvolok, L.A. Prymostka, I. Larionov, A. Gerasimov, O.V. Vasyurenko, K.O. Volohata etc.

Despite the significant contributions of economists to the development of the theory of profitability, methods of analysis, in the practice of banks the metrological approaches in the analysis of the financial results of the activities is paid not enough attention, including using factor models. The use of such models will allow not only to detect potential for raising the efficiency of the bank in the modern conditions of development, but also to predict profitable operation in the future.

The purpose of article is to generalize and further develop the theoretical and methodological approaches to the analysis of bank profitability, and develop practical recommendations for in-depth study of the indicator based on the use of factor analysis on the example of PJSC "MEGABANK".

**Research results.** The main goal - which is set by the owners of the bank - is its effectiveness of it's performance as yield management is one of the important tasks for the bank management. Both external and internal users of the reporting bank are interested in the analysis of the bank's indicators. Internal users are most interested in information related to the receipt of revenue and profit. External are most of all interested in the current value of the shares.

Given the above, one of the main tasks of the banking institutions are searching for effective profitability analysis areas to evaluate their activities.

The economic literature [1-5] while profitability analysis is most often used are:

- 1) analysis of changes in the average level of profitability by using the absolute figures;
  - 2) analysis of changes in the relative profitability;
- 3) factor analysis of profitability and return on capital assets (decomposition analysis of return on equity or model of Dupont).

In our opinion, while making up the analysis of the financial results the following tests should be solved [2, 3]:

- 1) evaluating the plan on profits in general and especial types of gains and losses;
- 2) tracing the dynamics of financial results for several years;
- 3) determining the influence of the main factors on different profit;
- 4) assessing the level of profitability (efficiency);
- 5) making up a factor analysis of profitability;
- 6) calculating reserves revenue growth and profitability, and identifying key areas for their implementation.

In-depth analysis of profitability should be carried out by means of factor analysis, which will allow to determine the degree of influence of individual factors on their shift, to identify the strengths and weaknesses of the banking institution fully use internal resources, time to develop management solutions for the effective development strategies.

The researchers pay much attention to the use of factor analysis in the study of the profitability of the banking institution. They produce a lot of factors that affect the revenue and profitability of the bank. To analyze the general indicators of banking practices various factors are used. We believe that the range following bank factors must be taking into account: of the banking institution and the specific purpose of the study.

Thus, for the factor analysis of profitability of PJSC "MEGABANK" select indicator economic return on equity - the ratio of net income to balance capital. The main factors affecting it, include the following: net interest margin, net spread, return on equity, return on assets, the level of other operating incomes [4].

In this way, factor model of economic return on equity would be as follows (1.1) [5]:

$$N = E * H1 * H2 * H3$$
 (1.1)

N - return on equity (net income to net worth ratio; characterizes the efficiency of tax administration);

- E profitability (the ratio of net profit to profit before tax; characterizes the efficiency of tax administration);
- H1 profit margin (ratio of profit before tax to operating income; reflects the effectiveness of cost control);
- H2 return on assets (the ratio of operating income to total assets; determines the degree of efficiency of asset utilization);
- H3 capital multiplier (the ratio of total assets to equity; demonstrates the level of effectiveness of resource management).

Comparing the change of parameters included in the calculation of rates of return on capital, the structure changes (vertical analysis) and dynamics (horizontal analysis), it can be found out which factors through output indicator - economic impact - changes and which one of them due to resulted in a significant changing economic return on capital [5]:

- 1) profitability resize, i.e. the efficiency of tax menegment;
- 2) margin change, i.e. the effectiveness of cost management;
- 3) change in return on assets, i.e. the effectiveness of asset management;
- 4) change in the financial capital structure, i.e. resource management.

Table 1.1 shows the estimates for factor analysis of the bank profitability. Table 1.1 indicators are obtained on the basis of accounting data in the Statement of Financial Position (Balance Sheet) and Statement of profit and loss and other comprehensive income (Income Statement) [6].

Table 1.1 Calculated data for factor analysis of PJSC «MEGABANK» profitability 2012-2013 vears.

		J		
№	Indicator	2012	2013	Margin, UAH,
$3/\Pi$				thous.
1	Assets, UAH, thous.	4840058	5438012	+597954
2	Owned capital, UAH, thous.	656234	675629	+19395
3	Operated income, UAH, thous.	3459	19305	+15846
4	Net profit, UAH, thous.	2005	20095	+18090
	Income before tax, UAH, thous.	5781	27376	+21595

Source: compiled and calculated according to the Financial Statements [6].

Consider calculation of economic return on capital and the impact of the factors on the figure, using methods to eliminate and ways to enhance the factor systems of:

1. 
$$N_0 = E_0 \times H1_0 \times H2_0 \times H3_0 = \frac{2005}{5781} \times \frac{5781}{3459} \times \frac{3459}{4840058} \times \frac{4840058}{656234} = 0,31\%$$
  
2.  $N_1 = E_1 \times H1_0 \times H2_0 \times H3_0 = \frac{20095}{27376} \times \frac{5781}{3459} \times \frac{3459}{4840058} \times \frac{4840058}{656234} = 0,65\%$   
3.  $N_2 = E_1 \times H1_1 \times H2_0 \times H3_0 = \frac{20095}{27376} \times \frac{27376}{19305} \times \frac{3459}{4840058} \times \frac{4840058}{656234} = 0,55\%$   
4.  $N_3 = E_1 \times H1_1 \times H2_1 \times H3_0 = \frac{20095}{27376} \times \frac{27376}{19305} \times \frac{19305}{5438012} \times \frac{3459}{4840058} = 2,73\%$   
5.  $N_4 = E_1 \times H1_1 \times H2_1 \times H3_1 = \frac{20095}{27376} \times \frac{20095}{19305} \times \frac{19305}{5438012} \times \frac{5438012}{675629} = 2,97\%$ 

The magnitude of the effects of each factor on the profitability of the bank in table 1.2 is given.

The factors' influence on th	e profitability of the PJSC	«MEGABANK» capital
Factor	Ratio, %	Specific gravity

No	Factor	Ratio, %	Specific gravity
3/П			
1	Profitability	0,34	12,78
2	Profit margin	-0,10	-3,67
3	Return on assets	2,18	81,57
4	Multiplier capital	0,25	9,32
	Total	2,67	100

Source: calculated basis of the formula (1.1) by the authors [5].

From table 1.2 data it is obviously that the return on equity or economic efficiency, increased by 2,73% due to an increase in:

- 1) profitability or efficiency of tax administration at 0,34%; this figure is the specific gravity of the impact is 12,78%;
- 2) level of return on assets, the degree of efficiency of the assets 2,18%, the specific gravity of influence is 81,57%;
- 3) capital multiplier, or the level of efficiency of resource management is 0,25%, has the specific gravity impact of 9,32%.

Reducing the profit margin indicates a decrease in the effectiveness of cost control, this led to a decrease in the return on capital of 0,1% (-3,67% in the specific gravity of influence factors). The negative impact on profit margins caused the profit margin due to lower earnings growth rates relative to the growth rate of income.

**Conclusions.** In practice, not all banks are able to stabilize their income, which is evidence of inadequate response object management to executive influence on the part of management. We agree with the author of the monograph [7], G. Azarenkova that the main reason is the inadequacy of the existing approaches to building management systems, focusing, mainly, on the financial management of banking and underestimation of the role of marketing in bank management.

Distribution of marketing in foreign banks occurred within a relatively short time, its theoretical foundations were laid by western economists [8-11]. According to French experts [12], the banks engaged in the strategy that focuses on customers' satisfaction may increase by 50-100% return on their operations.

When solving problems of efficiency of financial methods it can clearly be identified which financial indicators should be directed guiding influence to, how should the structure of bank balance be improved, how to increase bank profits (due to increased revenue and cost optimization). You can even identify the most common ways to achieve them. Thus, in order to improve profitability of banks including PJSC «MEGABANK» the volume of banking services, customer base, profitability of bank assets by rationalizing their structure should be increased; the share of income and not distressed assets, conduct prudent price policy the riskiness of the banking business should be reduced. To reduce banking costs the expensive banking activities should be reduced, primarily, through the introduction of austerity for administrative costs; the structure of borrowed funds due to cheaper sources of bank resources should be optimized. To solve these issues only analysis using factorial methods and science-based marketing is able to, which is the connecting element between the bank and its customer.

To improve the efficiency of development PJSC «MEGABANK» at the present stage of the banking sector, it is necessary to use research-based methods of investigation, analysis and evaluation of its profitability, including using factor analysis. Development prospects of a particular area of study serve to improve the efficiency of managing the profitability of the banking institution, using both traditional methods, and specific, ones including peculiarities of the bank.

#### Література

- 1. Нестеренко, Ж. К. Удосконалення методики обліку і аналізу доходів та витрат комерційного банку [Текст] / Ж. К. Нестеренко, І. В. Зоря // Економічний простір. 2011. № 48. С. 119–124.
- 2. Шубіна, С. В. Фінансовий аналіз у схемах і таблицях [Текст] : навчальний посібник / С. В Шубіна, Т. С. Пічугіна, О. Ю. Мірошник. Львів : Новий світ 2000, 2011. 326 с.
- 3. Шубіна, С. В. Фінансовий аналіз. Практикум [Текст] : навчальний посібник / С. В. Шубіна, О. Ю. Мірошник, В. О. Швадченко. К. : Центр учбової літератури, 2013. 296 с.
- 4. Вольська, С. П. Аналіз та шляхи підвищення прибутковості діяльності банку [Текст] / С. П. Вольська // Фінанси, облік і аудит. 2010. № 15. С. 23-32.
- 5. Аналіз банківської діяльності [Текст] : підручник / за ред. А. М. Герасимовича [А. М. Герасимович, М. Д. Алексеєнко, І. М. Парасій-Вергуненко та ін.]. Вид. 2-ге, без змін. К. : КНЕУ, 2006. 600 с. 6. Офіційний сайт банку ПАТ «МЕГАБАНК» [Електронний ресурс]. Режим доступу:
- 6. Офіційний сайт банку ПАТ «МЕГАБАНК» [Електронний ресурс]. Режим доступу. http://www.megabank.net/ru.
- 7. Механізми забезпечення якості рішень щодо реінжинірингу бізнес-процесів банку [Текст] : монографія / авт. кол. ; за заг. ред. д-ра екон. наук, проф. Г. М. Азаренкової. К. : УБС НБУ, 2012. 334 с.
- 8. Рид, Э. Коммерческие банки [Текст] : монография: [пер. с англ.] / Э. Рид, Р. Коттер, Э. Гилл и др. М. : СП «Космополис», 1991.-480 с.
- 9. Роуз, Питер С. Банковский менеджмент [Текст] : монография: [пер. с англ.] / Питер С. Роуз. М. : Дело ЛТД, 1995. 768 с.
- 10. Синки, Дж. Управление финансами в коммерческих банках [Текст] : монография / Дж. Синки; пер. с англ. под ред. Р. Я. Левиты, Б. С. Пинскера. М. : Catallaxy, 1994. 820 с.
- 11. Джозлин, Р. В. Банковский маркетинг. Введение в рыночное планирование [Текст] : монография / Р. В. Джозлин, Д. К. Хамфриз. М. : Церих ПЭЛ, 1995. 96 с.
- 12. Мерсье, Ж. Э. Банковский маркетинг, ориентированный на повышение рентабельности [Текст] / Ж. Э. Мерсье // Бизнес и банки. -1998. -№ 52. -ℂ. 3.

Стаття надійшла до редакції 06. 10. 2014

© Шубіна С. В., Крамаренко І. В., Головашко О. В.

#### References

- 1. Nesterenko, J. K. & Zorya, I. V. (2011). Improved methods of recording and analysis of revenues and expenses of commercial banks. *Dawn economy*. 48, 119-124.
- 2. Shubina, S. V., Pichugina T. S. & Miroshnyk, O. Y. (2011). *Financial Analysis with charts and tables*. Lviv: New World 2000, 326.
- 3. Shubina, S. V., Miroshnyk, O. Y. & Shvadchenko, V. O. (2013). Financial analysis. Workshop. Kyiv: Center of educational literature, 296.
- 4. Volska, S. P. (2015). Analysis and ways to improve the profitability of the bank. *Finance, accounting and auditing*. 15, 23-32.
- 5. Gerasimovitch, A. M., Alekseyenko, M. D., Persiy-Verhunenko, I. M. (Eds.). (2006). Analysis of Banking: Textbook. 2<sup>nd</sup> ed., unchanged. Kyiv: MBK, 600.
  - 6. The official website of Bank PJSC Megabank. Available at http://www.megabank.net/ru
- 7. Azarenkova, H. M. (Ed.). (2012). Mechanisms providing quality solutions to business process reengineering bank. Monograph. Kyiv: UB NBU, 334.
  - 8. Reed, E., Cotter, R. & Hyll, E. (1991). Commercial banks. Monograph. Moscow: SP Cosmopolis, 480.
  - 9. Peter Rose, S. (1995). Banking Management. Monograph. Moscow: Case LTD, 768.
- 10. Sinki, J., Levita, R. Y., & Pinsker, B. S. (1994). Finance Management in Commercial Bank. Monograph. Moscow: Catallaxy, 820.
- 11. Dzhozlyn, R. V., & Khamfriz, D. K. (1995). *Banking Marketing. Introduction to market planning*. Monograph. Moscow: Tseryh PEL, 96.
  - 12. Mercier, J. E. (1998). Banking marketing oriented on improving profitability. Business and banks, 52, 3.

    Received 06. 10. 2014 © Shubina S.V., Kramarenko I. V., Golovashko A.V.