

**Yunna Serhiivna TYSIACHNA**

PhD in Economics, Associate Professor,  
Department of Banking, Department of Finance,  
Simon Kuznets Kharkiv National University of Economics

E-mail: yunna.tysiachna@hneu.net

**Kateryna Mykhailavna AZIZOVA**

PhD in Economics, Associate Professor,  
Department of Banking, Department of Finance,  
Simon Kuznets Kharkiv National University of Economics

E-mail: kateryna.azizova@hneu.net

***Introduction.*** Modern trends of development of the national banking system characterized by softer performance by banks, asset quality deterioration, reduction of the number of banks holding a banking license, indicate weakening of the country's financial security. In this situation it becomes increasingly important to designate systemically important banks in order to monitor their activities as a part of national financial security framework.

***Object.*** The object of the paper is to determine the reasons behind reduction of the number of systemically important banks within the framework of the country's financial security.

***Method (methodology).*** The study uses the dialectic method of knowledge acquisition and a systemic approach to studying economic phenomena as a methodological framework. The work involved application of the following methods: structural and logical analysis, statistical analysis, structural and dynamical analysis.

***Results.*** The results of financial analysis of assets and liabilities of systemically important banks corroborate the validity of grounds underlying the resolution of the Committee of the National Bank of Ukraine on Banks Supervision and Regulation to grant the status of systemically important banks of Ukraine, effective from February 2016, to three Ukrainian banks: PrivatBank, Ukreximbank and Oschadbank.

***Keywords:*** financial safety, the banking system, systemically important bank, equity, dynamics, obligation, growth rate; management

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**Юнна Сергіївна ТИСЯЧНА**

кандидат економічних наук, доцент,

доцент кафедри банківської справи, доцент кафедри фінансів,

Харківський національний економічний університет імені Семена Кузнеця

E-mail: yunna.tysiachna@hneu.net

**Катерина Михайлівна АЗІЗОВА**

кандидат економічних наук, доцент,

доцент кафедри банківської справи, викладач кафедри фінансів,

Харківський національний економічний університет імені Семена Кузнеця

E-mail: kateryna.azizova@hneu.net

**ФІНАНСОВИЙ АНАЛІЗ АКТИВІВ І ПАСИВІВ СИСТЕМНО  
ВАЖЛИВИХ БАНКІВ УКРАЇНИ**

*Анотація.*

**Вступ.** Сучасні тенденції розвитку вітчизняної банківської системи, що характеризуються зниженням результативності діяльності банків, погіршенням якості активів, скороченням кількості банків, які мали банківську ліцензію, свідчать про послаблення фінансової безпеки країни. У зв'язку із цим особливої важливості набуває виділення системно важливих банків з метою контролю за їх діяльністю в контексті забезпечення фінансової безпеки країни.

**Мета.** Метою статті є визначення причин скорочення кількості системно важливих банків в контексті забезпечення фінансової безпеки країни.

**Метод (методологія).** Методологічною основою дослідження є діалектичний метод пізнання та системний підхід до вивчення економічних явищ. У ході роботи використовувалися методи: структурно-логічний аналіз, статистичний аналіз, структурно-динамічний аналіз.

**Результати.** Результати проведеного фінансового аналізу активів і пасивів системно важливих банків підтверджують обґрунтованість рішення Комітету Національного банку України з питань нагляду та регулювання діяльності банків щодо надання статусу системно важливих банків України з лютого 2016 року трьом банкам: Приватбанк, Укрексімбанк та Ощадбанк.

**Ключові слова:** фінансова безпека, банківська система; системно важливий банк, власний капітал; динаміка; зобов'язання; темп приросту; управління.

**JEL classification:** C15, C44, C81, G21, M40

### **Introduction**

In conditions of financial instability, when many Ukrainian banks operate in the red, banks badly need improvement of their performance, which, in its turn, to a great degree is a function of quality asset and liability management. The Law of Ukraine "On Banks and Banking" specifically defines systemically important banks as the banks that may significantly affect the operation and stability of the banking system as a whole, should they be ailing or facing termination[1].

As of December 01, 2014 there were 8 banks in Ukraine designated as systemically important banks by the National Bank of Ukraine (the NBU), with their status valid throughout 2015. The list included the following banks: PrivatBank, Oschadbank, Ukreximbank, Delta Bank, Raiffeisen Bank Aval, Prominvestbank, Sberbank of Russia and Ukrsootsbank, with all being subject of this study [2].

It is systemically important banks ("major banks" as classified by the NBU) that require asset and liability analysis since their stability has been and remains one of the key conditions to prevent a systemic crisis of the Ukrainian banking system and to restore its stability. Though their number is few, their share of the national banking system is quite substantial and so is their influence on the banking system. Considering these factors, there is a real need in a closer financial monitoring over these institutions [3, p. 363-369].

Recent scientific research show that theoretical and practical issues of analysis of bank assets and liabilities are given a great deal of attention by local and foreign scientists, among whom mention should be made of O. Verbytska [4], Zh. Dovgan [5], T. G. Karacheva [6], O. M. Kolodiziev [7], I. V. Larionova [8], O. V. Litviniuk [9],

L. O. Prymostka [10], D. A. Rotar [11], O. V. Shvartz [12], Iv. Vagner [13], J. Marshal [14], J. Sinkey [15], P. Rose [16]. However, there are some aspects that call for a more detailed discussion: theoretical works in the field of analysis of bank assets and liabilities address the subject without sufficient regard to the specifics of the current situation in Ukraine, methodical and organizational aspects of analysis of assets and liabilities of Ukrainian banks are dealt with insufficient level of detail.

### **Research results and discussion**

Systemically important banks are designated by the National Bank of Ukraine using a multifactor mathematical model based on the criteria of systemic importance. The main criteria of systemic importance are the total amount of assets, liabilities of legal and physical persons, systemic interrelations in the banking system (the volume of interbank lending) and the volume of lending to key economy sectors. As of the beginning of 2016 the following indices were used to designate systemically important banks [17]:

1. Total assets (a weighting factor of 35%);
2. Money of physical persons, business entities, non-banking financial institutions (a factor of 35%);
3. Funds deposited with other banks (a factor of 7.5%);
4. Funds borrowed from other banks (a factor of 7.5%);
5. Loans to business entities in industry, agriculture and construction (a factor of 15%).

According to [18] as of December 01, 2014 there were 8 banks classified as systemically important: PJS CB PrivatBank, JSC Oschadbank, JSC Ukreximbank, JSC Delta Bank, Raiffeisen Bank Aval, PJSC Ukrsootsbank, PJSC Prominvestbank, JSC Sberbank of Russia.

By its resolution, the Committee of the National Bank of Ukraine on Banking Supervision and Regulation designated PJSC PrivatBank, PJSC Oschadbank and Ukreximbank as systemically important banks [17].

Therefore, in order to establish the reasons why Ukraine ended up with a smaller number of systemically important banks? we should make an analysis of assets and liabilities of the systemically important banks. The first stage should involve a structural

and dynamical analysis of the assets of Ukrainian systemically important banks (Table 1).

**Table 1. Dynamical analysis of the assets of Ukrainian systemically important banks (UAH ths.)**

Banks	Year							
	2010	2011	2012	2013	2014			
PrivatBank	113437222	145118473	172428712	214490857	204585003			
Ukreximbank	73171643	75103435	87948878	94349057	125999827			
Oschadbank	59019133	73968478	85995536	103568090	128103752			
Raiffeisen Bank Aval	55100385	51347408	47694486	43460101	46859432			
Ukrsotsbank	41603497	40206926	38829858	43056668	48258327			
Prominvestbank	34612855	38160931	41318058	39737492	52656224			
Delta Bank	13797972	23216416	29842468	55298418	60303279			
Sberbank of Russia	9924447	16932522	27025933	35094686	46740331			
	Growth rate, %				The absolute deviation, UAH ths.			
	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013
PrivatBank	27,93	18,82	24,39	-4,62	31681251	27310239	42062145	-9905855
Ukreximbank	2,64	17,10	7,28	33,55	1931792	12845443	6400179	31650770
Oschadbank	25,33	16,26	20,43	23,69	14949345	12027058	17572554	24535662
Raiffeisen Bank Aval	-6,81	-7,11	-8,88	7,82	-3752977	-3652922	-4234385	3399331
Ukrsotsbank	-3,36	-3,42	10,89	12,08	-1396571	-1377068	4226810	5201659
Prominvestbank	10,25	8,27	-3,83	32,51	3548076	3157127	-1580566	12918732
Delta Bank	68,26	28,54	85,30	9,05	9418444	6626052	25455949	5004861
Sberbank of Russia	70,61	59,61	29,86	33,18	7008075	10093411	8068752	11645645

As seen from Table 1, PrivatBank had been building up its capital, though in 2014 the bank's assets dropped by 4.62% or UAH 9905855 ths. as a result of a decrease in the volume of cash, its equivalents and other financial assets by 15.8% and 68.91% year-on-year respectively.

Ukreximbank had held to the trend of increasing its total assets over the period under review. It worth noting that over 2010-2014 loans and debts accounted for the major portion of the structure of the bank's assets, followed by securities for sale in the bank's portfolio, as well as cash and its equivalents. In 2014 lending accounted for 41.34% of the bank's total assets, while securities - for 32.39%.

As seen from Fig. 1, the volume of total assets at Oschadbank had been growing throughout 2010-2014 too. The bank's assets went up by UAH 69084619 ths. in 2014 as

compared to 2010, with significant growth in lending (by UAH 24493637 ths) and securities in the bank's portfolio for sale (UAH 31999113). The growth of the volume of securities increased their share in the assets structure from 13.12% in 2010 to 31.02% in 2014.

Starting from 2010 and up to 2013 Raiffeisen Bank Aval had shown the trend for building up its assets - from UAH 55100385 ths to UAH 43460101 ths. In 2014 the assets were still growing, yet, the volume of growth was even less than in 2012. In addition, the bank's assets were lower than those at Ukrasotsbank, Prominvestbank and Delta Bank. This situation was caused by shrinkage in lending, which accounted for the biggest share in the bank's assets structure, with the negative growth of loans by -32.26% in 2014 as compared to 2014.

From 2010 to 2012 the assets of Ukrasotsbank had been on a decline, but the trend reversed in 2013, when they started growing to reach UAH 48258327 in 2014. Naturally, the biggest share in the structure of the bank's assets belongs to loans, however, in 2014 the volume of loans granted dropped by 13.3% as compared to 2010. Cash and its equivalents had been moving up and down over the reviewed period and as of 2014 their volume slumped by 51.54%, that is by as much as UAH 1661386 ths. Among positive aspects was growth of fixed assets by 15.14% relative to the start of the reviewed period, reflecting a growth in the property of the bank.

Prominvestbank had been building up its assets throughout the analyzed period, except for 2013. In 2014 the bank boosted its assets by a hefty 32.51% year-on-year. Despite the increase in the total assets, the volume of cash and its equivalents dropped by 39.73% over 2010-2013. Loans accounted for the biggest share (73.12% in 2014) in the assets structure, however, their volume had been subject to fluctuation over the period under review. It should be noted that for this bank a part of this figure is comprised by cash in other banks (5.09% in 2010 and 3.11% in 2014).

Delta Bank was seen to evidently boost its assets, with the bank's volume of assets surging by 337.04% in 2014 as compared to 2010. An analysis showed that the surge was caused by a significant increase in lending (by UAH 32471750 or 263.72%), however, in 2014 its share (74.27%) went down relative to 2010 (89.24%). In addition, over 2010-

2014 the bank strengthened its cash position by 230% in 2014 as compared to 2010.

A similar trend was seen in Sberbank of Russia. The bank enjoyed a steady growth of assets over the period 2010-2014. Nevertheless, according to the most recent official figures Sberbank of Russia was still rated last among the systemically important banks by the volume of assets. Otherwise, the bank was no different from the others, with the biggest share of the bank's assets made by loans granted, which in 2014 was 80.64%, up 320.12 % over the period.

The analysis of the volume of liabilities of the systemically important banks is presented in Table 2.

**Table 2. The analysis of the volume of liabilities of the systemically important banks (UAH ths.)**

Banks	Year							
	2010	2011	2012	2013	2014			
PrivatBank	101557255	128371495	154127951	194179236	181888644			
Ukreximbank	55717348	57374393	70092684	76265780	112463606			
Oschadbank	42392804	56321499	67877389	83112579	105354595			
Raiffeisen Bank Aval	48659109	44875547	41348458	36223363	40711132			
Ukrsotsbank	35033310	33599153	31172772	34388930	42019699			
Prominvestbank	30023113	33079043	36044661	34353302	46580681			
Delta Bank	13190489	21766880	26832203	51973074	55553565			
Sberbank of Russia	8819255	14717661	23925340	31427900	42836228			
	Growth rate, %				The absolute deviation, UAH ths.			
	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013
PrivatBank	26,40	20,06	25,99	-6,33	26814240	25 756 456	40 051 285	-12 290 593
Ukreximbank	2,97	22,17	8,81	47,46	1657045	12 718 291	6 173 096	36 197 825
Oschadbank	32,86	20,52	22,45	26,76	13928695	11 555 890	15 235 189	22 242 016
Raiffeisen Bank Aval	-7,78	-7,86	-12,39	12,39	-3783562	-3 527 089	-5 125 095	4 487 769
Ukrsotsbank	-4,09	-7,22	10,32	22,19	-1434157	-2 426 381	3 216 158	7 630 769
Prominvestbank	10,18	8,97	-4,69	35,59	3055930	2 965 618	-1 691 359	12 227 380
Delta Bank	65,02	23,27	93,70	6,89	8576391	5 065 323	25 140 871	3 580 492
Sberbank of Russia	66,88	62,56	31,36	36,30	5898406	9 207 679	7 502 560	11 408 327

The liabilities of PrivatBank followed the same pattern of dynamics as the assets: total assets were growing from 2010 through 2013, while dropped 6.33% in 2014. Over 2010-2014 the bank showed a trend toward the increase in the volume of payables to

customers by 87.99%, with their share in the bank's total liabilities making 77.7% in 2014. Payables to banks had been declining from 2010 through 2013, however, in 2014 their volume was up by UAH 13865230 ths as compared to previous periods. It is worth noting that other financial liabilities accounted for a significant share of total liabilities, with the former growing from 2010 through 2013 to reach 18.52% of the total figure in 2013 and going down in 2014 by UAH 33120819 ths. reducing the bank's total liabilities.

The liabilities of Ukreximbank had been growing throughout the whole period under review to make UAH 112463606 ths in 2014, with the increase in payables to customers over the period (by 119.98%) and growth of other borrowed funds (by 324.84%) being the primary driver.

In 2010-2014 the trend at Oschadbank, too, was towards increasing liabilities caused by the growth of the key figures over 2010-2014 including payables to banks (by 64.89%), payables to customers (by 126.73%) and subordinated debt (by 101.2%). It were these figures that accounted for the largest shares in the structure of the bank's total liabilities.

It should be noted that the dynamics of liabilities at Raiffeisen Bank Aval mirrored the trend for assets, that is total liabilities had been decreasing from 2010 through 2013. In 2014 the bank's liabilities went up by 12.39%, however, the increase was short of covering volumes of 2012 alone. The growth came as a result of growing payables to customers by 9.01% and subordinated debt by 98.82% as compared to 2012.

Ukrsotsbank showed a negative growth of liabilities in 2010-2012 followed by a positive trend in 2013-2014, with payables to customers and payables to banks accounting for the major portion of total liabilities throughout the reviewed period and their share amounting to 53.55% and 37.65% respectively.

Prominvestbank had been building up liabilities throughout 2010-2014, except for 2013. In 2010 payables to customers accounted for most of the bank's liabilities (64.89%), while by 2014 the situation reversed and most of the liabilities fell on payables to banks (58.01%).

Delta Bank and Sberbank of Russia had been expanding their liabilities over 2010-2014 as was the case with the assets. Over the five years Delta Bank increased payables to banks by 216.51% and payables to customers by 429.51%. However, in 2014 the amount

of payables to customers decreased by 1.38% year-on-year.

The next stage of analysis of the assets of the systemically important banks involved analysis of the equity of the banks over the period of 2010-2014. (Table 3).

**Table 3. Analysis of the equity of the systemically important banks over the period of 2010-2014 (UAH ths.)**

Banks	Year							
	2010	2011	2012	2013	2014			
PrivatBank	11879967	16746978	18300761	20311621	22696359			
Ukreximbank	17454296	17729041	17856194	18083276	13536221			
Oschadbank	16626329	17646979	18118147	20455511	22749157			
Raiffeisen Bank Aval	6441276	6471861	6346028	7236738	6148300			
Ukrsotsbank	6570187	6607773	7657085	8667738	6238628			
Prominvestbank	4589742	5081888	5273397	5384190	6075543			
Delta Bank	607483	1449536	3010265	3325344	4749714			
Sberbank of Russia	1105192	2214861	3100593	3666785	3904103			
	Growth rate, %				The absolute deviation, UAH ths.			
	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013	2011/ 2010	2012/ 2011	2013/ 2012	2014/ 2013
PrivatBank	40,97	9,28	10,99	11,74	4867011	1 553 783	2 010 860	2 384 738
Ukreximbank	1,57	0,72	1,27	-25,15	274745	127 153	227 083	-4 547 055
Oschadbank	6,14	2,67	12,90	11,21	1020650	471 168	2 337 365	2 293 646
Raiffeisen Bank Aval	0,47	-1,94	14,04	-15,04	30585	-125 833	890 710	-1 088 438
Ukrsotsbank	0,57	15,88	13,20	-28,02	37586	1 049 312	1 010 653	-2 429 110
Prominvestbank	10,72	3,77	2,10	12,84	492146	191 509	110 793	691 353
Delta Bank	138,61	107,67	10,47	42,83	842053	1 560 729	315 078	1 424 370
Sberbank of Russia	100,41	39,99	18,26	6,47	1109669	885 732	566 192	237 318

As seen from Table 3, equity dynamics at PrivatBank was positive, which is a good signal as the bigger is the amount of equity the bigger is the bank and the greater risks it can withstand. The trend was a result of increase of the bank's authorized capital by 1.8% and the reserve funds by 14.69%.

The amount of equity at Ukreximbank over 2010-2013 was growing as well, though gradually, at a rate of no more than 2% each year. But in 2014 the bank's equity saw a sharp drop of 25.15%, that is by over UAH 4547055 ths. The sharp decrease in equity is a sign that the bank faced serious problems and an evidence of uncovered losses in the

period (UAH 9644125 ths).

During 2010-2014 Oschadbank had been gradually accumulating equity due to the growth of such balance-sheet items as: authorized capital (increased by 31.75% in 2014 relative to 2010) and revaluation reserves (2.01%).

It is worth noting that the volume of equity of Raiffeisen Bank Aval throughout the period tended to rise and fall to drop by 4.55% in 2014 relative to 2010, signaling certain problems of the bank that undermine customer confidence as a result. The amount of the authorized capital saw no changes over the five years and in 2014, its share made 48.4% of the bank's total equity.

Ukrsotsbank was among the banks with their standing affected in 2014, when the bank's total equity dropped by 28.02% year-on-year. Despite the fact that the authorized capital of this bank increased by 94.33% over the five years, it also saw growth in issue profit/loss (by 65.34% and reserve and other funds (by 9.55%), while the decrease of the total equity was due to uncovered loss to the amount of UAH 2413482 ths.

The situation at Prominvestbank was positive. Over 2010-2014 the volume of equity was going up, signaling the bank's financial firmness and the owners' ambitions to pursue further development of their business. From 2010 to 2012 the amount of the authorized capital of the bank had remained unchanged, while in 2013 and 2014 it was increased by 54.74% and 54.98% relative to 2010 respectively.

Delta Bank and Sberbank of Russia were the banks with the least amount of equity among those studied in this paper, though showed a trend for growth.

The authorized capital of Delta Bank went up sharply by 630.78% as compared to 2010, with its share reaching 78.48%, while reserve and other funds were growing.

Over the period of 2012-2014 Sberbank of Russia made no changes to the amount of the authorized capital, which remained on the level of UAH 3 392 461 ths. In 2014 the share of authorized capital in the total equity of the bank made 86.9%. Apart from the authorized capital, the bank was seen increasing its reserve and other funds (in 2014 the growth rate made 536.71% relative to 2010) and revaluation reserves (the growth rate of 130.92%).

Considering the number of banks studied and multiple analysis parameters, it will be

convenient to present results in a tabulated form[19] (Table 4).

**Table 4. Results of analysis of the dynamics of systemically important banks for 2010-2014.**

No.	Bank Name	Balance-sheet aggregate	Change factor	Details
1	PrivatBank	Assets	rises and falls	In 2014 the total volume went up by 80.35% as compared to 2010.
		Liabilities	rises and falls	In 2014 the total volume went up by 79.1% as compared to 2010.
		Equity	growth	by 91.05% over 2010-2014.
2	Ukreximbank	Assets	growth	by 72.2 % over 2010-2014.
		Liabilities	growth	by 101.85 % over 2010-2014.
		Equity	rises and falls	In 2014 the volume dropped by 22.45% as compared to 2010.
3	Oschadbank	Assets	growth	by 117.05 % over 2010-2014.
		Liabilities	growth	by 148.52 % over 2010-2014.
		Equity	growth	by 36.83 % over 2010-2014.
4	Raiffeisen Bank Aval	Assets	rises and falls	Over 2010-2013 the volume was falling, while in 2014 it was up 7.82% as compared to 2013.
		Liabilities	rises and falls	Over 2010-2013 the volume was falling, while in 2014 it was up 12.39 % as compared to 2013.
		Equity	rises and falls	In 2014 the total volume went down by 4.55 % as compared to 2010.
5	Ukrsotsbank	Assets	rises and falls	In 2014 the total volume went up by 16 % as compared to 2010.
		Liabilities	rises and falls	In 2014 the total volume went up by 20 % as compared to 2010.
		Equity	rises and falls	In 2014 the volume dropped by 5.05 % as compared to 2010.
6	Prominvestbank	Assets	growth	by 52.13 % over 2010-2012.
		Liabilities	growth	by 55.15 % over 2010-2014.
		Equity	growth	by 32.37 % over 2010-2014.
7	Delta Bank	Assets	growth	by 337.05 % over 2010-2014.
		Liabilities	growth	by 321.16 % over 2010-2014.
		Equity	growth	by 681.87 % over 2010-2014.
8	Sberbank of Russia	Assets	growth	by 370.96 % over 2010-2014.
		Liabilities	growth	by 385.71 % over 2010-2014.
		Equity	growth	by 253.25 % over 2010-2014.

The results of the analysis presented in Table 4 show that the most important banks for the Ukrainian banking system are PrivatBank, Oschadbank and Ukreximbank.

### **Conclusions and perspectives for further research**

The analysis of the dynamics of assets and liabilities of the Ukrainian systemically important banks offers a view of the general trend of changes. PrivatBank ended up on the top of the rating with the biggest assets, liabilities and equity and a trend for growth of these indicators.

The leader was followed by Ukreximbank and Oschadbank, both having considerable assets and liabilities, though with a drop in equity of the former.

In this way, the results of the financial analysis of assets and liabilities of the systemically important banks provide a justification for the Resolution of the Committee of the National Bank of Ukraine on Banking Supervision and Regulation that confer the status of the systemically important Ukrainian banks to the three banks on the top of our list, being PrivatBank, Ukreximbank and Oschadbank.

Mention should be made of the following banks: Prominvestbank, Delta Bank and Sberbank of Russia. The volume of assets at these banks had been growing throughout the reviewed period as they closed the year of 2014 with even better figures than those at Raiffeisen Bank Aval and Ukrasotsbank.

No doubt, Ukrasotsbank showed quite a good performance, however, the analysis indicated that its volume of its assets and liabilities had been subject to ups and downs over the reviewed period, while its equity dropped in 2014 relative to 2010, which signals problems with the capitalization of the bank.

The worst situation was observed at Raiffeisen Bank Aval since over the period of 2010-2014 the bank saw its assets, liabilities and equity going up and down, with these figures declining in 2014 relative to 2010.

A further study of the banking system of Ukraine will require a more detailed investigation into the banks' assets in terms of their ROA, liquidity and quality of asset management in order to find the trends for their dynamics, structure and composition.

### *List of references*

1. Закон України «Про банки і банківську діяльність» № 2121-III від 07.12.2000 р., зі змінами від 01.03.2016 р. – [Електронний ресурс]. – Режим доступу: <http://zakon3.rada.gov.ua/laws/show/2121-14>.

2. Постанова Правління НБУ «Положення про порядок визначення системно важливих банків» № 863 від 25.12.2014 р. – [Електронний ресурс]. – Режим доступу: <http://zakon5.rada.gov.ua/laws/show/v0863500-14>.

3. Лавринюк, В. В. Онтологія природи та сутність системно важливих банків [Текст] / В. В. Лавринюк // БізнесІнформ. – 2014. – № 5. – С. 363-369.

4. Вербецька, О. О. Комплексне управління активами і пасивами [Текст] / О. О. Вербецька // Управління розвитком. – 2014. – № 3 (166). – С. 94-96.

5. Довгань, Ж. Основи комплексного управління активами і пасивами банку [Електронний ресурс] / Ж. Довгань. – Режим доступу: [http://archive.nbuv.gov.ua/portal/soc\\_gum/Svfin/20012\\_2/15-064.pdf](http://archive.nbuv.gov.ua/portal/soc_gum/Svfin/20012_2/15-064.pdf).

6. Карчева, Г. Т. Ефективне управління активами і пасивами – необхідна умова фінансової стійкості банку [Електронний ресурс] / Г. Т. Карчева, О. Я. Карчева. – Режим доступу : [http://www.nvisnik.geci.cn.ua/uk/nissue/item/download/40\\_3c43398c1cb92f5e3d6f7f118eb1fc7d.html](http://www.nvisnik.geci.cn.ua/uk/nissue/item/download/40_3c43398c1cb92f5e3d6f7f118eb1fc7d.html).

7. Колодізев, О. М. Фінансовий менеджмент у банках: концептуальні засади, методологія прийняття рішень у банківській сфері [Текст]: навч. посіб. / О. М. Колодізев, І. М. Чмутова, І. О. Губарева. – Х.: ІНЖЕК, – 2004. – 408 с.

8. Ларионова, И. В. Управление активами и пассивами в коммерческом банке [Текст] / И. В. Ларионова. – М.: Издательство «Консалтбанкир», 2003. – 272 с.

9. Литвинюк, О. В. Методика оцінки ліквідності в контексті комплексного управління активами та пасивами банківських установ в сучасних умовах [Текст] / О. В. Литвинюк // Науково-виробничий журнал «Інноваційна економіка». – 2014. – № 3 (52). – С. 263-269.

10. Примостка, Л. О. Аналіз банківської діяльності: сучасні концепції, методи та моделі [Текст]: монографія / Л. О. Примостка. – К.: КНЕУ, 2002. – 316 с.

11. Ротар, Д. А. Концептуальні основи формування стратегій управління активами і пасивами банківських установ та напрями їх оптимізації [Текст] / Д. А. Ротар // «Young Scientist». – 2014. – № 6 (09). – С. 18-21.

12. Шварц, О. В. Інтегроване управління активами і пасивами як філософія управління сучасним банком [Текст] / О. В. Шварц // Вісник КЕФ КНЕУ імені

Вадима Гетьмана. – 2010. – № 1. – С. 55-59.

13. Vagner, Iv. Asset and liability management of banks [Text] / Iv, Wagner // Banking services. – 2002. – № 8. – С. 14-18.

14. Marshal, J. Financial engineering: a complete guide to financial innovation: lane from English [Text] / J. Marshal, K. Vipul Bansal. – М.: INFRA-M, 1998. – 784 p.

15. Sinkey, J. Financial Management in Commercial Banks [Text] / J. Sinkey. – М.: Catallaxy, 1994. – 820 с.

16. Rose, P. Bank management [Text] / P. Rose. – М.: Delo LTD, 1995. – 477 p.

17. Національний банк визначив три системно важливих банки. – [Електронний ресурс]. – Режим доступу: [http://www.bank.gov.ua/control/uk/publish/article?art\\_id=27652722](http://www.bank.gov.ua/control/uk/publish/article?art_id=27652722)

18. Національний банк України затвердив методику визначення системно важливих банків – [Електронний ресурс]. – Режим доступу: [http://www.bank.gov.ua/control/uk/publish/article?art\\_id=13264033](http://www.bank.gov.ua/control/uk/publish/article?art_id=13264033).

19. Тисячна Ю. С. Комплексна технологія бенчмаркінгу як інструмент забезпечення фінансової безпеки банку / Ю. С. Тисячна, К. М. Азізова, О. М. Рац // Актуальні проблеми економіки. – 2015. – № 5(167). – С. 427-437.

## ***References***

1. About banks and banking activity: law of Ukraine. (2016). Retrieved from: <http://zakon3.rada.gov.ua/laws/show/2121-14>.

2. Regulations on the procedure for determining systemically important banks: NBU Resolution. (2014). Retrieved from: <http://zakon5.rada.gov.ua/laws/show/v0863500-14>.

3. Lavrynyuk V. V. (2014). Ontology nature and essence of systemically important banks. *BiznesInform*, 5, 363-369.

4. Verbetska O. O. (2014). Integrated asset and liability management. *Upravlinnya rozvytkom*, 3(166), 94-96.

5. Dovhan Z. H. (2012). Fundamentals of integrated management of assets and liabilities. Retrieved from: [http://archive.nbu.gov.ua/portal/soc\\_gum/Svfin/20012\\_2/15-](http://archive.nbu.gov.ua/portal/soc_gum/Svfin/20012_2/15-)

064.pdf.

6. Karcheva H. T. (2014). Effective asset and liability management – necessary condition for financial stability of the bank. Retrieved from: [http://www.nvisnik.geci.cn.ua/uk/nissue/item/download/40\\_3c43398c1cb92f5e3\\_d6f7f118eb1fc7d.html](http://www.nvisnik.geci.cn.ua/uk/nissue/item/download/40_3c43398c1cb92f5e3_d6f7f118eb1fc7d.html).

7. Kolodizyev O. M. (2004). Financial management in banks: conceptual framework, methodology decisions in the banking sector, Kharkiv, INZHEK.

8. Laryonova Y. V. (2003). Asset management and liabilities of commercial bank, Moscow, Konsaltbankyr.

9. Lytvynyuk O. V. (2014). Methods of assessing liquidity in the context of a comprehensive asset and liability management of banks in modern conditions. *Innovatsiyna ekonomika*, 3 (52),263-269.

10. Prymostka L. O. (2002). Analysis of banking: current concepts, methods and models. Kiev, KNEU.

11. Rotar D. A. (2014). Conceptual bases of formation strategies asset and liability management of banks and ways of their optimization. *Young Scientist*, 6 (09), 18-21.

12. Shvarts O. V. (2010). Integrated management of assets and liabilities as modern management philosophy of the bank. *Visnyk KEF KNEU imeni Vadyma Hetmana*, 1, 55-59.

13. Vagner I. (2002). Asset and liability management of banks. *Banking services*, 8, 14-18.

14. Marshal J. (1998). Financial engineering: a complete guide to financial innovation: lane from English. Moscow, INFRA-M.

15. Sinkey J. (1994). Financial Management in Commercial Banks. Moscow, Catallaxy.

16. Rose P. (1995). Bank management. Moscow, Delo LTD.

17. National Bank has identified three systemically important banks. (2016). Retrieved from: [http://www.bank.gov.ua/control/uk/publish/article?art\\_id=27652722](http://www.bank.gov.ua/control/uk/publish/article?art_id=27652722).

18. National Bank of Ukraine approved the method for determining systemically important banks. (2016). Retrieved from: <http://www.bank.gov.ua/control/uk/>

[publish/article?art\\_id=13264033](#).

19. Tysyachna Y. S. (2015). Integrated technology benchmarking as a tool to ensure the financial security of the bank. *Aktualni problemy ekonomiky*, 5(167), 427-437.