# PUBLIC BANKS IN UKRAINE: SUPPORTS AND CHALLENGES

# Nataliia VERSAL, PhD\*

#### **Abstract**

This paper investigates the effect of private and public ownership in banking sector of Ukraine using data from 2005 to 2015 including periods of the rapid growth of banking sector - from 2005 to the Q4 2008, the fall due to the impact of the global financial crisis -Q4 2008 - Q3 2009, the slight, very volatile growth in the post-crisis period - 4Q 2009 - 4 Q 2013, the significant reduction for almost the entire 2014. Our results confirm the high trust of households in public banks during the crises due to solid confidence to government. The full compensation plays in this context only additional role. We calculate the most important financial soundness indicators for Ukrainian banks, such as loan-to-deposit ratio (LTD), equity multiplier, share of loan loss provisions (LLP) in loan portfolio, ROE and ROA and analyze them in dynamics. We find out that all the indicators are more volatile for public banks than for private banks. The LTD ratio in public banks in 'good' periods is less than in private banks and in periods conversely. The Ukrainian public banks are overcapitalized after financial crisis 2008 - 2009. The LLP to loan portfolio ratio is much higher for public banks, especially after nationalization of troubled banks. Government as owner of troubled banks does not show quick positive results. Therefore, ROE and ROA for public banks are significantly lower in crises and slightly higher in stable periods, than for private banks. As a result, we cannot claim that public banks may effectively influence on soundness and development of Ukrainian banking system. It is necessary to provide a more in-depth research of this problem.

**Keywords:** financial intermediation; emerging markets; financial soundness; financial crisis.

JEL Classification: G18, G21, P34

\_

<sup>\*</sup> Associate Professor, Taras Shevchenko National University of Kyiv, Faculty of Economics, Department of Banking, Ukraine, nataliia versal@univ.kiev.ua.

### 1. Introduction

Public banks (state-owned banks, government-owned banks) are an ambiguous phenomenon in the economy. Such controversy is due to the specific impact of public banks on the banking system development and economic growth that can be both positive and negative. Many researchers have proved this statement since origin and evolution of public banks. In fact, the research results provide two opposite sides of the public banks role in the economy.

In our view, this is not surprising, because the role of the state in the economy is often a controversial issue. However, researchers of the first direction or the 'development' view argue that public banks have a positive effect on economic growth: Andrianova, Demetriades, Shortland (2008), Karas, Schoors, Weill (2008). Many researchers frequently refer to the study of Gerschenkron (1962), one of the first studies that pointed to the special positive role of public banks for economic growth. Moreover, in this aspect, it should be taken into account the fact that the base of the positive evaluation of the public banks was the experience of the Russian Empire.

In this regard, we should mention the study of Bunge (1852), who not only proved the positive impact of public banks on economic development at all levels (from national to municipal), but implemented these ideas into practice as Finance Minister and created Peasants' Land and Noble' Land Banks in the 1883-1885.

Of course, after the October Revolution, the situation changed dramatically, and private banks ceased to function in the Soviet Union. Public banks became financial intermediaries who had only accumulated funds from the households and passed them to the government-owned companies, and of course, it was explicit proof of 'development' view, albeit in a non-market economy.

At the same time the complexity of public banks research is precisely the fact that the functioning of such types of banks in the Soviet Union can be considered from the point of 'political' view La Porta, Lopez-de-Silanes, Shleifer (2002). If we move from the macro to the micro level and focus on issues such as bank performance and efficiency, we are again faced to two different points of view.

So, Bonin, Hasan, Wachtel (2005) find out that the government-owned banks are less efficient than private banks and Altunbas, Evans, Molyneux (2001) point to the 'slight' benefits of

state-owned banks in this context. The consideration of this set of research has only reinforced the opinion that the study of this problem is at a crossroads.

We do not put an end to this discussion by our study, but we would like to show the peculiarities of the situation with the public banks in Ukraine, and in particular in the context of crises (2008 - 2009 - global financial crisis, 2014 - 2015 - war in Ukraine, economic decline, inflation). One of the theses of Andrianova, Demetriades, Shortland (2008) is the statement that government-owned banks are more attractive for depositors than private banks. Therefore, we would like to test this hypothesis on the example of public banks in Ukraine. We also would like to answer the question of whether the public banks could stimulate the development and at the same time provide the soundness of Ukrainian banking system.

## 2. Data and methodology

We also have to highlight the disclosure of the essence of separate indicators, which are used in the research. We determine a public bank as a bank, in which government owns 50 percent or more. Therefore, we choose the following variables for the analysis:

Deposits\_total\_PrB/Deposits\_total\_PB - the ratio of deposits in private banks (Deposits\_total\_PrB) to deposits in public banks (Deposits total PB);

Deposits\_HH\_PrB/Deposits\_HH\_PB - the ratio of household deposits in private banks to households deposits in public banks;

Deposits\_HH\_PrB/Deposits\_HH\_Oschadbank - the ratio of household deposits in private banks to households deposits in Oschadbank;

T\_Deposits\_HH\_PB, T\_Deposits Oschadbank, T\_Deposits\_HH\_PrB – the growth rate of household deposits in public banks, Oschadbank, private banks;

LTD – the loan-to-deposit ratio. We calculate LTD for private (LTD\_PrB) and public banks (LTD\_PB), and LTD in foreign and domestic currencies from 2012 to show the dollarization level in banking sector;

EM - the equity multiplier is the way of examining how bank uses equity to finance its assets. We calculate equity as difference between assets and liabilities (EM\_PB - equity multiplier for public banks, EM\_PrB - equity multiplier for private banks). At the same time, we also use the indicators of stockholders' equity (EQS\_PB,

EQS\_PrB) and equity as difference between assets and liabilities (EQ PB, EQ PrB);

LLP/Loans – the LLP indicator shows the level of problematic loans. We calculate it as loan loss provisions to loans; FCA shows which part of the assets is in foreign currency (FCA\_PB/Assets\_PB, FCA\_PB/Assets\_PB);

ROE - return on equity measures a bank's profitability by revealing how much profit bank generates from each 1 unit of equity;

ROA - return on assets tells us how much profit bank generates for each 1 unit of assets.

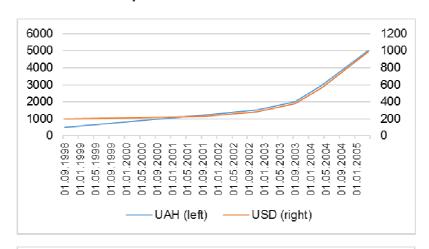
The research applied solely official data provided by the regulatory authorities on the base of financial statements of banks in Ukraine. We gathered and completed data quarterly from January 2005 to January 2015.

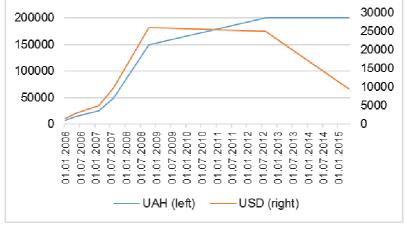
# 3. Are the public banks in Ukraine more attractive for the depositors than the private banks?

This question is quite complicated for Ukraine, and the roots of this should be sought in the recent past. After the collapse of the Soviet Union, Ukraine has started to form its own banking system. Public banks were the basis that eventually began to lose its leading position in Ukrainian banking system.

Especially painful was the question of non-repayment of deposits to the households from public savings bank - Oschadbank, as a result households deposits were impaired due to galloping inflation (in 1993 inflation in Ukraine amounted to more than 10,000%). Thus, households' confidence in the banking system was destroyed: government does not fulfill its obligations, so the private banks might do this too. To solve this problem, government decided to implement the system of guaranteeing deposits in 1998. This greatly improved the situation with confidence in the banking system. However, the rule has one exception - the Public Savings Bank 'Oschadbank' was not include in the Deposit Guarantee Fund, because its deposits are guaranteed in full amount by government. Other banks have a limit to the maximum amount of the deposit compensation (Figure 1).

Figure 1
Trends of bank deposits compensation limits in Ukraine during
September 1998 –March 2015



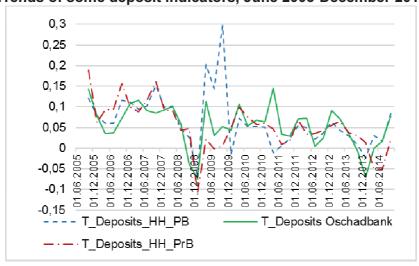


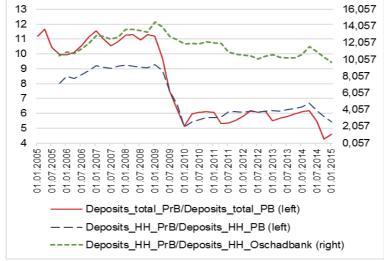
Source: Deposit Guarantee Fund of Ukraine

However, was this factor the crucial point of choosing the banks by households for placing deposits in Ukraine? To answer this question we consider indicators such as the ratio of deposits in private banks to deposits in public banks, the ratio of household deposits in private banks to household deposits in public banks, and the ratio of household deposits in key public bank in attracting

deposits from households (Oschadbank) to household deposits in private banks (Figure 2).

Figure 2
Trends of some deposit indicators, June 2005-December 2014





Source: author's calculation based on data from the National Bank of Ukraine

Thus, the analysis of Figure 2 allows us to emphasize several periods in the development of the situation in the market of households bank deposits: the rapid growth - from 2005 to the Q4

2008, the fall due to the impact of the global financial crisis - Q4 2008 - Q3 2009, the slight, very volatile growth in the post-crisis period - 4Q 2009 - 4 Q 2013, the significant reduction for almost the entire 2014. The conclusions that can be done in the context of our question are follows:

In the years of economic growth with a relatively stable banking system, private banks are more attractive than public banks due to the higher interest rates on deposits. Moreover, households prefer private banks for deposits placing despite the fact that Oschadbank guarantees to return the deposits in full, unlike private banks. In the post-crisis period, this situation repeats itself: the growth of stability in the banking system leads to the fact that households are again ready to take risks and place deposits in private banks. This conclusion is also confirmed by the high value of volatility for these indicators. Thus, the volatility of the ratio of deposits of private banks to the deposits of state banks is 2.5992.

Throughout the crisis, we can see completely different trends. At the same time, it is necessary to distinguish the difference between the crisis 2008 - 2009 and the crisis of 2014 - 2015. During both crises certainly was bank run, and money quickly ran from both public and private banks. Nevertheless, the first crisis showed households confidence in public banks, and it was indeed higher than in private banks. The situation has changed dramatically during the second crisis. We see the growing role of public banks compared with private banks in the deposit market (Figure 2). During the second crisis, we would like to draw attention to two points. First, more than 35 private banks went out from the banking market of Ukraine in 2014, so it has been reflected in the statistics of household deposits. Second, government recommended the state-owned enterprises, including the payroll segment for theirs employees, servicing in public banks, which of course greatly affected the results. If we remove these two factors, we might not get a significant strengthening of public banks in the deposit market as a whole and in the context of households deposit markets.

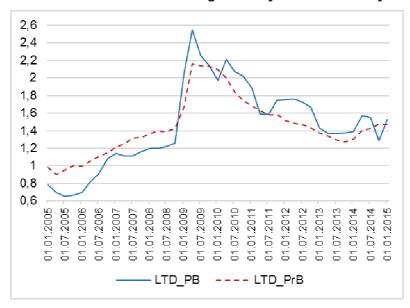
# 4. Can the public banks stimulate the development and provide the soundness of Ukrainian banking system?

Today, the question of banking systems soundness arises more and more often, and we can find a variety of tools to assess this indicator. The Bank of International Settlements and the central banks

develop specific sustainability assessment indicators. We chose those indicators that are most painful for the Ukrainian banks: LTD, EM, LLP, ROE, ROA.

First, we analyse the dynamics of LTD ratio (Figure 3). Higher values of this indicator may identify liquidity problems in banks or possibility to banks to have funding sources other than deposits.

Figure 3
Trends of LTD indicators during January 2005 – January 2015



Source: author's calculation based on data from the National Bank of Ukraine

An analysis of the Figure 3 can be interpreted as follows:

Under conditions of economic growth in 2005 - end of 2008, the LTD growth rate was rather a positive than a negative thing. So, that time was characterized for Ukrainian banks as an access to the international capital markets, which contributed to economic growth. As we can see, private banks were more successful in that situation than public banks.

The growth of the LTD ratios is rather a negative point in the crisis-period. It could be explained by several factors in the crisis of 2008 - 2009: the outflow of deposits (the increase of liquidity

### Financial Studies 2A/2015

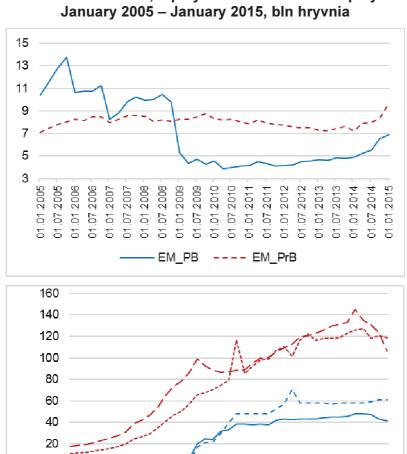
problems) and the high dollarization both loans and deposits (the devaluation of the national currency leads to the fact that the financial statements of banks are significantly distorted). Especially this growth is dangerous, if it is the result of a serious imbalance between foreign currency loans and deposits. Public banks showed stronger growth of this indicator than private banks due to the second factor. Volatility of LTD ratio is much higher for public banks - 0.4806, while for private banks is 0.3309.

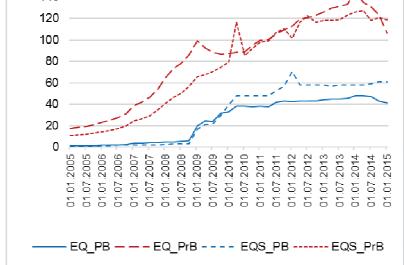
Second, the analysis of banks equity and equity multiplier shows the following (Figure 4):

Equity multiplier of public banks has dropped significantly due to the global financial crisis. On the one hand, it is positive, because before the crisis, it was possible to talk about the problems with the capitalization. However, the decline was so strong that it could cast doubt on the role of public banks as financial intermediaries. At the same time, the situation with equity multiplier in private banks was relatively stable, except the last crisis.

As for equity, we can see that the stockholders' equity usually grows in public banks, unlike private banks. It is natural because many private banks have been withdrawn from the market in a result of the two crises. Equity of public banks is recently lower than their stockholders' equity, which indicates the losses. The nationalization of three troubled banks after the crisis of 2008 - 2009 also explains this situation.

Figure 4 Trends of EM indicators, equity and stockholders' equity during January 2005 - January 2015, bln hryvnia



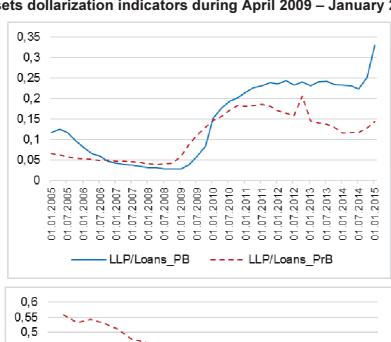


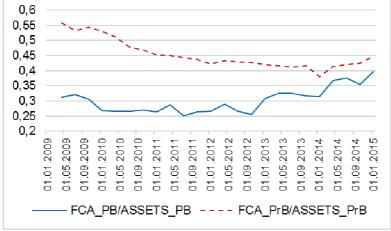
Source: author's calculation based on data from the National Bank of Ukraine

## Financial Studies 2A/2015

Third, analysis of the bank loan portfolio quality shows that public banks demonstrated a significant increase in the share of LLP in the loan portfolio (Figure 5).

Figure 5
Trends of LLP ratios during January 2005 – January 2015 and assets dollarization indicators during April 2009 – January 2015



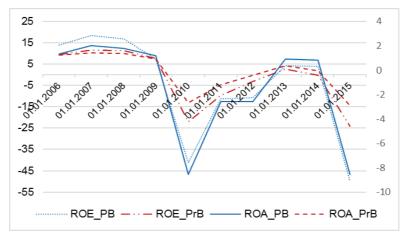


Source: author's calculation based on data from the National Bank of Ukraine

Such a strong growth of this indicator was due to several reasons: the first crisis - the nationalization of troubled banks in 2009 - 2010, the second crisis - the presence of significant amounts of foreign currency loans in loan portfolio. As for private banks, after a serious increase of the LLP share in the loan portfolio after the crisis, there was a decrease of this indicator due to sharp lending reducing by private banks, particularly retail loans were a cause of the formation of large provisions. In addition, after the collapse in 2008 - 2009, private banks have provided foreign currency loans very cautious.

Fourth, analysis of profitability indicators shows high volatility in these indicators for public banks (Figure 6). As we have already mentioned, after the first crisis this was due to the bank nationalization. In the second crisis, it can be explained by the noticeable deterioration in the quality of the loan portfolio of public banks and the losses of public bank branches in the occupied territories. We can explain such essential decrease of these indicators of public banks in comparison with private banks by the fast taking into liquidation of troubled banks. The losses of troubled banks were not into the general statistics of the banking system.

Figure 6
Trends of ROE, ROA indicators, January 2005 – January 2015, %



Source: author's calculation based on data from the National Bank of Ukraine

#### 5. Conclusion

In sum, our study shows that, actually, households tend to trust more in public banks during the crisis, but in a stable situation will prefer private banks. Thus, we can conclude that the full compensation in situation of banks liquidation is not so important in choosing a bank for deposits placement depending on ownership an important role in choosing a bank depending on ownership, as the confidence in government as a solid player in banking market in crises. As for the influence of public banks on the soundness of the banking system and its development, we cannot give a definite answer to this question. The results of the analysis show that the public banks cannot be called the locomotive of development of the banking system as well as the soundest financial intermediaries, at least in the study period. In this regard, we consider it is necessary to conduct a more in-depth research of the previously mentioned problem.

### References

- 1. Altunbas, Y., L. Evans, and P. Molyneux (2001). "Bank Ownership and Efficiency", *Journal of Money, Credit and Banking*, 33(4), pp. 926–954.
- 2. Andrianova, S., Demetriades, P., Shortland, A. (2008). "Government ownership of banks, Institutions, and Economic Growth", *Working Paper # 11/01*, September 2010, 32 p.
- 3. Bazylevych, V. (2009). "Rozvytok finansovoho rynku u suchasnykh umovakh", *Finansy Ukrayiny*, # 12, pp. 5-12.
- 4. Bonin, J. P., Hasan, I., Wachtel, P. (2005). "Bank Performance, Efficiency and Ownership in Transition Countries", *Journal of Banking and Finance*, 29, pp. 31–53.
- 5. Bunge, N. (1852). *"Teoryya kredyta"*, Kyev, Unyversytetskaya typohrafyya, 312 p.
- 6. Gerschenkron, A. (1962). "Economic Backwardness in Historical Perspective", Cambridge, 29 MA, *Harvard University Press*, 29 p.
- 7. Karas, A., K. Schoors, and L. Weill (2008). "Are private banks more efficient than public banks? Evidence from Russia", *BOFIT Discussion Papers*, 3/2008, Bank of Finland.
- 8. La Porta, R., F. Lopez-de-Silanes, and A. Shleifer (2002). "Government ownership of banks", *Journal of Finance*, 57(1), pp. 265–301.

### Financial Studies 2A/2015

- 9. Naumenkova, S. (2013). "Rozvytok kredytuvannya u postkryzovykh umovakh", *Bankivska sprava*, #1, pp. 3 19.
- 10. Tryhub, O. (2015). "Posylennya roli derzhavnykh bankiv u zabezpechenni konkurentospromozhnosti ekonomiky Ukrayiny", Konkurentospromozhnist' natsional'noyi ekonomiky: Materialy XV Mizhn. naukovo-praktych. konferentsiyi. Available from: http://www.econom.univ.kiev.ua/konf\_KNE15/docs/conf\_material s.pdf, pp. 268-274.
- 11. Vasylchenko, Z., Tereshchenko, O. (2013). "Finansova nestabil'nist" ta yiyi vplyv na protses upravlinnya kredytnym portfelem u bankivs'kykh ustanovakh Ukrayiny', *Finansovo-kredytna diyal'nist': problemy teoriyi ta praktyky*, Vyp. 2, pp. 12-23.
- 12. Versal, N. (2013). "The Global Financial Crisis and Profitability of Banks: Evidence from Russia, Ukraine and Kazakhstan", *Journal of Economy and Entrepreneurship*, Volume 7, Number 5, pp. 287 291.