

# TRANSFORMATION OF OWNERSHIP OF THE BANKING SYSTEM IN POLAND AND UKRAINE: PROBLEMS AND PROSPECTS

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**Abstract:** The article deals with the issues of transformation of ownership of the banking system in Ukraine and Poland. Poland's experience of successful privatization of the state banks has also been discussed. The place of the state banks preparing for privatization in the banking system of Ukraine has been analysed. By using the method of calculating the concentration of capital by the indicators of the share of the entity in the market ( $P_j$ ), concentration ratio  $CR_n$  and the Herfindahl-Hirschman Index (HHI), it has been found that the concentration level of the banking system in Ukraine in recent years is growing. Given the unstable situation, we can assume that the increased concentration within the normal range is a form of consolidation. However, given the current problem of hidden monopolies in Ukraine today, the transformation of ownership in the banking sector needs special attention of banking regulators to assess the possible socio-economic consequences of concentration.

**Keywords:** transformation of ownership, banking system, state bank, privatization, concentration.

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## 1. Introduction

Transformation of ownership is a process of constant and continuous changes in the system of ownership regarding possession, use, disposal, which affects all aspects of social life. The reasons for transformation are different – starting with the new policy of the government of a state, change of the dominant elite, ending with the military situation. The issue of transformation of ownership is extremely urgent and important for Ukraine, especially against the background of numerous political and economic reforms.

One of the key forms of ownership transformation is privatization. Despite the fact that privatization has long been studied both by Polish and Ukrainian as well as by world scholars, the notion of privatization has a broad meaning and has not yet been legally defined, since the very content of privatization and its efficiency are determined by analysing the results.

E. Knosala, for instance, defines privatization as a change in the way of performing both direct to indirect public tasks of the state through the involvement of individuals [Knosala 2007, p. 122, 123]. S. Lachowski believes that privatization is the process of transforming public institutions into private ones, which leads in the future to qualitative changes [Lachowski 1998, p. 60].

According to the United Nations Organization privatization is defined as the transfer from the public to the private sector of the equity interest in public properties, and is conventionally measured in terms of the reduction in the share of state-owned enterprises in gross domestic product [United Nations 1999].

Ukrainian researchers, instead, in accordance with the conditions for the formation and development of privatization processes, emphasized the reform of the public sector, corporatization of enterprises and the emergence of private property. L. Chuprina, for example, by investigating the privatization process, notes that privatization in its broad sense, as one of the aspects of a general policy of deregulation of the economy, means slowing down the rates of expansion or even reduction of the public sector, which leads to an increase in the private sector's contribution to economic development, emphasizing the complexity of privatization and conditionality of the process by the change of political and economic conditions, strengthening of the influence of market forces [Skyba 2010].

O.V. Ryabchenko, a well-known economist and public figure in the sphere of privatization, treats privatization as a long-term and systematic transformation of a larger part of the state economy on a paid or free basis through the formation of a new carrier of property relations in order to restore an effective resource filling and use of economic potential [Ryabchenko 2000, p. 20].

Although the processes of destatization and privatization have not ended yet, other processes of transformation of ownership are going to replace them, namely the change of owners as a result of financial transactions in the stock market, recognition of companies bankrupt and transition of their property complexes to the new owners.

The banking system plays its quite significant role in the processes of ownership transformation because the banks act there in their multiple roles. On the one hand, the banks are the creditors and therefore the potential bankrupts are their debtors, on the other hand – banks are the shareholders or members of the holding companies, transnational corporations, industrial-financial groups that either lose a portion of their property, or appropriate property of other owners. The banks act as the institutions, through which the relevant cash flows pass during settlements for the property, become the objects of alienation or appropriation on their own.

Today Ukraine announced a program of state banks privatization. Despite the fact that in recent years the state banks are unprofitable, the scientific community discusses the issue of expediency of transforming the property in accordance with the reforming program of the state-banking sector of Ukraine.

Among the largest IPO companies in Poland the largest share of privatization fell on the state bank PKO BP. Privatization of that state bank is one of the most

successful in Poland. Therefore, Poland's experience in the privatization of state banks is very useful for Ukraine. Poland is one of the most successful examples of post-Soviet transformation for Ukraine, which turned nonfunctioning communist system to a free market democracy

## **2. Privatization of the banking sector in Poland: experience for Ukraine**

Privatization processes in Poland began in the 90s of the last century. Ukraine was only a few years behind the procedure of corporatization and destatization, however the socio-economic implications are quite different. The privatization and commercialization of public enterprises was one of the elements of a "shock therapy" by Leszek Balcerowicz. Due to the large-scale privatization the state managed to ensure budget revenues in a very difficult period from the economic perspective, and get rid of enormous ballast of inefficient and unprofitable companies.

Plans for restructuring of some industries caused significant resistance of the labour force, however, the process continued. The largest wave of restructuring continued until the late 1990s when 80% of enterprises were privatized, commercialized or closed [Krawczyk, Lopez-Lopez 1993].

Commercialization gave impetus to the development of the Warsaw Stock Exchange (now one of the key exchange markets in the region, whose capitalization is 225 billion euro). Three major methods were used during the privatization process in Poland.

1. Mass privatization was used at the very beginning. Employee leasing programs were dominant, however, already during the Common Privatization Program, all Poles were enabled to receive ownership certificates in selected enterprises. Although the program was not financially successful, 512 SOEs were restructured and privatized as a result [Warsaw Stock Exchange 2015c].

2. Direct privatization. Early on, privatization was conducted via direct sales of small enterprises, which was later extended to sales of major enterprises to foreign and domestic strategic investors. Dominant at first, hundreds of small and medium sized SOEs got sold off in the early stages.

3. Indirect privatization. Privatization through the capital markets started taking a large-scale form.

Now this method is the most common in the practice of privatization. IPOs in the privatization process ensure transparency, improvements in financial results and improved corporate governance of the privatized companies.

Privatization of the banking system began in the late 1980s and continues till present (see Table 1). It should be noted that Poland had quite reasonable approach to the issues of privatization. Despite the criticism of drawbacks of the transformation of ownership of that period, positive changes in the management and activity of privatized objects are obvious.

**Table 1.** Privatization of the banking system of Poland

Bank name	Privatization information
Bank Śląski	IPO took place in 1994. A 25.9% stake bought by ING Group. By 2001 ING owned over 70% of the bank.
Wielkopolski Bank Kredytowy (WBK)	In 1995 Allied Irish Bank (AIB) bought 16.3% stake in WBK. By 1997 the stake increased to over 50%. In 1999 strategic 80% stake of WBK belonged to AIB.
Bank Zachodni WBK	In 2001 Wielkopolski Bank Kredytowy S.A. and Bank Zachodni S.A. were merged creating Bank Zachodni WBK.
Bank Gdański	In 1995, 23% of shares were sold to Portuguese bank Banco de Investimento Global (BIG). After the takeover in 1997 the Portuguese bank already owned a 50% stake.
Bank Przemysłowo-Handlowy (BPH)	IPO of the bank took place in 1995. The first strategic investor was German HVB.
Bank Handlowy	IPO in 1997. In 2000 Citibank became a strategic investor.
Pekao SA	IPO in 1998. In 1999 Unicredit bought a 52% stake, the bank remains in the Unicreditgroup.
PKO BP	IPO took place in 2004, as a result 39% stake was sold. Until 2012, an additional 30% was floated on the stock exchange. The state, however, retains a controlling stake, and the bank remains in the government portfolio. Today, PKO BP is the most liquid stock on the WSE.

Source: [Warsaw Stock Exchange 2015b].

The period from 1989-1992 is called the period of expansion, when the first commercial banks appeared, including foreign ones, the processes of liquidation and acquisition, restructuring of Polish banks were carried out [Warsaw Stock Exchange 2015b]. This period is important in terms of formation of the first owners and establishment of the market financial system [Patena, Błaszczuk 2016].

Subsequent years can be compared to a big privatization in Ukraine – there were the IPOs of several large financial institutions, the sale of state shares of big banks to foreign investors. However, it should be noted that the sale of shares was done gradually.

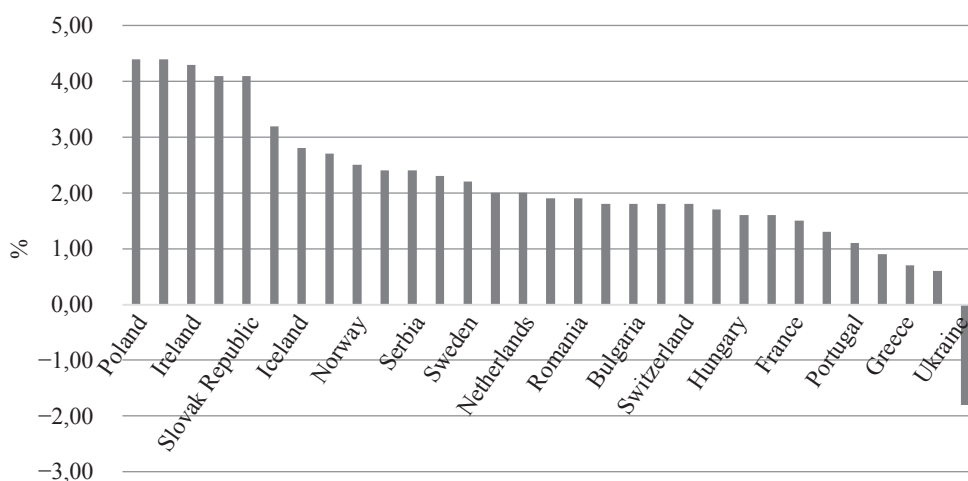
A period of consolidation has begun since 2000, when foreign investors were increasing their shares in the ownership of Polish assets, processes of mergers and acquisition intensified, a further sale of state shares took place.

After the crisis of 2008 and the bankruptcy of a number of financial institutions, including the bankruptcy of investment bank Lehman Brothers a tendency for return of the state control over the activities of previously privatized companies and partial re-nationalization appears in some countries, and Poland in particular.

Hence, a peculiar feature of privatization of one of the largest and oldest Polish banks PKO BP was the withdrawal of the bank on the stock market with the subsequent sale of a part of shares on the stock exchange, and when investors' interest became high, the state sold a controlling stake to private investors.

Poland's economic growth is ahead of most European countries. Privatization was among the factors of economic growth that Poland experienced over the past 24 years.

The Warsaw Stock Exchange (WSE) played a significant role in transparent market processes of ownership transformation. The WSE has grown to the largest stock exchange in the CEE. One of the key accomplishments of the privatization was the rapid development of the financial market. Today WSE has grown to the largest and the most active stock exchange platform in the CEE region [Warsaw Stock Exchange 2015c].



**Figure 1.** Compound annual GDP growth rate 1992-2014

Source: [Warsaw Stock Exchange 2015c].

With further development of the market, international investors have been increasingly investing in the Polish economy, including by providing liquidity of the financial market.

Major economic benefits of privatization from an economic perspective is the improvement of management effectiveness in business entities in order to improve the competitiveness and improvement of public finances-assurance of state budget revenues. Privatization ensured an inflow of foreign capital which boosts new investments and provides support for new ventures.

### 3. Transformation of ownership in Ukraine

In the process of denationalization and privatization in Ukraine during 1992-2015 period, 28,718 objects changed the public and 95,008 objects municipal form of ownership. During the same period, the number of privatized objects of small privatization (groups A and H) amounted to 113,371 units. 11,556 of joint stock

companies (hereinafter – JSC) have been created [Lartsev, Klyuchykov 2001]. These results speak of the large-scale nature of transformation of ownership in Ukraine.

The first act of law that launched the privatization process in Ukraine was the Resolution of the Verkhovna Rada of Ukraine “On the Concept of denationalization and privatization of enterprises, land and housing” as of 31 October 1991, which stipulated for the rapid pace of ownership reforming. Soon the Law of Ukraine “On privatization of property of state enterprises” dated 04.03.1991 and the Law of Ukraine “On privatization of small state-owned enterprises (small privatization)” dated 06.03.1992 were adopted. The specified legislative package contained compromise provisions that were conscious concession, an attempt to consider the political realities and public attitudes.

When we analyse the peculiarities of each period, privatization in Ukraine can be conditionally divided into the following stages. The first stage (1991-1998) is called the stage of mass privatization. The main goal there was the quickest creation of a critical mass of non-state property in the manufacturing sector of economy. The first privatization program provided for achievement of several key objectives: changing the relations of property for the means of production, creating the layer of proprietors, economic restructuring, stabilization of the economic situation, development of competition and restriction of monopoly, attracting foreign investors. However, Ukraine failed to provide the necessary pace of real economic reforms. The First State Privatization Program was not implemented. It did not have the power of the law, it was introduced by the Resolution of the Verkhovna Rada of Ukraine “On State Program of State Enterprises Privatization” as of 07.07.1992. Privatization property certificates began to be widely used during this period.

The privatization process proceeded largely at the initiative and under the conditions put forward by the labour groups. 1996 can be considered the best year of progress in the development of privatization. However, almost twice as many objects were privatized already in 1995 as compared to the previous year and more than in 600 times as compared to the first year of privatization.

However, there were problems in the privatization process of that period. The fact is that at the time of the adoption of laws on privatization (1992) 70% of the state property could be privatized for the privatization certificates offered to the population [Prokopov 2014]. However, the share of the property, which accounted for the certificates, was constantly decreasing because the rate of use of certificates by the population was significantly behind the rate of privatization in general. Therefore, privatization in Ukraine of that period intended to bring as much money from privatization to the State Budget as possible, make all citizens owners, ensure superiority to labour collective and thus raise the real owner. However, the drawback of certificate privatization was scattering of public property and its transfer to people, who could not objectively influence the processes of company management.

1999-2002 – the second stage of privatization. Cash is most often used as a means of payment at this stage. Hence, privatization of this period is often called

the cash privatization. Table 2 and for clarity Figure 2 present data on the valuation of privatized objects by the forms of their transmission, including the receipt of funds as payment for privatized objects. It is important to note that the transfer of property objects from the state to individuals, collectives of companies was carried out both for cash and certificates, as well as free of charge. This procedure was characteristic of the studies stage of privatization.

Transfer to cash privatization was caused by several circumstances. Most of the population received privatization securities and invested them into objects of privatization. Privatization of medium and large companies was coming to an end. The main advantage of cash privatization is that it has an investment focus for both enterprises (as a source of working capital financing), and the state budget (as a source of settlement of obligations, the means of implementing social programs) [Leont'ev 2010]. The use of competitive methods during cash privatization promotes transparency of the process, minimizes the possibility of violations, objects price understatement.

The cash privatization contributes to concentration of property and formation of an efficient owner. Therefore, the main objective of privatization in 1999 was the creation of conditions for private owners who have long-term interests in privatization of companies, including investors in international markets, promoting the efficiency of companies and creating a competitive environment.

Since the beginning of the “big” privatization (this is the third stage: 2003-2014), there was a serious problem of the lack of legitimacy of the created private capital which was formed in the conditions of insufficient legal framework and the numerous violations of the current legislation. Thus, an issue arose that the state without disturbing the focus on privatization as a basic principle of economic policy had to take measures to correct significant shortcomings of the privatization process as much as possible and eliminate their negative effects [Prokopov 2014].

Privatization at the third stage of large objects that are of strategic importance for the state, showed all the imperfections of the legal framework, the very process of privatization and insufficient competence or lack of desire to honestly carry out the privatization of bodies which have been assigned with this process. As a result, there was a substitution of transparency of the privatization process with making government decisions and laws for specific participants of privatization competitions (tenders). There was a certain tension in the society, one reason for which was the privatization. Worthy of emphasizing are two negative consequences of the third stage. The first is the unjust result of the privatization tender, and the second one – the occurrence of ineffective owner of the company. Both negative results raise the need for revision of privatization results. The injustice requires resolving of social tension, while inefficient management first causes economic, and then social tension. Before we consider some possible steps to eliminate these negative results of privatization from previous stages, we should define the tasks of the present stage and specify the composition of the privatization stages in terms of the current



economic and socio-political situation in the state. It is therefore possible to assume that the years 2005-2006 have to become crucial for correcting past drawbacks of privatization, and further there should be a stage of effective control for the change of form of ownership.

Speaking of trends, ways and means of correcting drawbacks accumulated during previous stages of privatization, we should distinguish them as social and economic. Regarding social drawbacks, which are mainly recognized by society as a kind of injustice to members of privatization tenders, we should solve them through legal proceedings. Only the legal way can be recognized as the one that will not give rise to new injustices, and therefore will not increase the number of deficiencies. Economic weaknesses should be corrected in a different way, without rejecting the legal solution to the problem as well [Lartsev, Klyuchykov 2001]. We can bring legal actions for failure to fulfil the conditions of privatization. One way to eliminate the negative economic consequences of privatization, especially in inefficient functioning of the business entity, can be its re-privatization or gradual restoration of state control. Such methods as re-privatization, renationalization or even nationalization can also be used.

The stage of final privatization continues today. According to the Privatization Program it is planned to privatize a part of enterprises, which were previously included in the list as such that cannot be sold. Typically, these are strategically important companies, often loss-making, but which hold a large market share in their segment. A great emphasis has been made on the stages and features of transformation of ownership in Ukraine, since they influenced the formation of the market conditions for future transformational changes.

### **3.1. Privatization of state-owned banks**

Ukraine has a two-tier banking system composed of a central bank and commercial banks, including subsidiaries of foreign banks. The main assets of the state-owned banks are loans provided to customers and securities (primarily, state bonds, corporate bonds and bonds issued by SOEs).

As of 31 December 2014, 163 commercial banks had licences from the NBU to perform banking activity. The total assets of commercial banks amounted to UAH 1.3bn [Ministry of Economic Development and Trade of Ukraine 2015].

The state controls 6 banks, including: 3 banks established by the state – PJSC State Savings Bank of Ukraine (Oschadbank), PJSC State Export-Import Bank of Ukraine (Ukreximbank), and PJSC Ukrainian Bank for Reconstruction and Development (UBRD), and 3 banks nationalized by the state following the financial meltdown in 2008-2009 – PJSB Ukgasbank (Ukgasbank), JSC Rodovid Bank (Rodovid) and PJSC JSB Kyiv (Bank Kyiv).

The Public Joint-Stock Company “State Savings Bank of Ukraine” was established in 1999. Now it is the second largest bank in Ukraine in terms of total



**Table 2.** Main indicators of state banks of Ukraine

State banks of Ukraine	Assets as of 31.12.2014 (UAH m)	Ranking by total assets as of 31.12.2014	Equity as of 31.12.2014 (UAH m)	Capital adequacy ratio as of 31.12.2014 (%)	State stake
Oschadbank	128,104	2	22,749	31.4	100
Ukreximbank	126,00	3	13,536	22.6	100
Ukr gasbank	21,028	16	1,570	22.8	93
Rodovid	8,531	27	3,331	35.2	100
Bank Kyiv	1,485	67	165	7.9	100
UBRD	106,000	158	70	–	100

Source: [<http://me.gov.ua/Documents/List?lang=uk-UA&id=40a27e1b-8234-43d3-a37f-c4c752729f-ca&tag=FinansovaZvinnistPidprimstv>].

assets. Being historically oriented on providing services to the population, Oschadbank is widely represented across all regions of the country (over 5,000 offices) serving over 4 million individuals (disbursement of pension, social aid, processing of utility payments and other banking transactions).

Oschadbank is the only Ukrainian bank where all deposits and other valuables of customers are fully guaranteed by the State. The bank is actively working in almost all sectors of the Ukrainian financial market; it provides banking services to large corporate clients, such as offices of the Pension Fund of Ukraine, Ukrposhta, members of the wholesale electrical energy market, etc. Oschadbank intends to expand the products and services offered to its clients in the food and agricultural business, energy, retail, production of natural resources such as mineral sands and clays, and other export-oriented sectors with growth potential, as well as to small and medium enterprises (SME). The government is considering privatization of 25% of Oschadbank shares by the end of 2019 [Ministerstvo finansiv Ukrainy 2016].

Ukreximbank was established in 1992, and as of 31 December 2014, it was the third largest bank in Ukraine in terms of assets. Ukreximbank operates 27 branches and 93 outlets in all regions of Ukraine. The bank services a considerable share of export and import activities of Ukrainian enterprises, providing specialized services in various areas of export-import banking. Ukreximbank acts as the sole financial agent of the Government of Ukraine with respect to loans from foreign financial institutions, which are originated, borrowed or guaranteed by Ukraine. The bank is a partner of the World Bank under the largest Export Development Project in Ukraine, a partner of the European Bank for Reconstruction and Development (the EBRD) under the EBRD Trade Facilitation Program and the EBRD Energy Efficiency Program, a partner of Kreditanstalt für Wiederaufbau (the KfW) under the SME Program. Ukreximbank is favoured with over 100 clear credit lines

from global financial institutions for short-term uncovered documentary and trade finance transactions and is the only Ukrainian bank recognized by over 30 primary Export Credit Agencies as a direct borrower/guarantor on medium and long-term financing. The privatization of 25% of Ukreximbank shares by the end of 2019 is also considered.

Ukrasbank was established in 1993 as a privately owned bank under the name of Hadjibei bank and since its inception was focused, mainly, on corporate lending. In 2008-2009, the bank suffered from liquidity and asset quality constraints leading to nationalization of the bank in 2009. During the period of 2009-2011, UAH 7.4b were injected by the state into the bank's capital. Following the nationalization, Ukrgasbank underwent a transformation from a corporate lending institution focused on financing and servicing the oil & gas sector to a bank with a diversified business model. Being a universal bank, it provides a full range of services for both retail and corporate customers. The bank's branch network includes c. 270 outlets covering all regions of the country [Ministry of Economic Development and Trade of Ukraine 2015].

Rodovid was established in 2004 as the successor of the commercial bank "Personal Computer". In 2009, the bank was nationalized by the State, following the financial crisis of 2008-2009. In 2011, the Cabinet of Ministers of Ukraine decided to focus Rodovid's activities on the collection of its own loans and work out the problematic assets of other state-owned banks, nationalized by the State. As of 31 December 2014, out of UAH 8.5 bn of total assets of the bank, UAH 7.7 bn were represented by investment property, fixed assets and other financial assets, while the net amount of loans to customers constituted only UAH 40m.

UBRD was established in 2004. The strategy of the bank is to support corporate businesses, and SMEs through financing innovation projects. It is the smallest state-owned bank with a gross loan book as of 31 December 2014 amounting to UAH 34 m (including interbank loans provided).

Oschadbank is the largest state bank of Ukraine. By significance it can be compared with PKO BP.

**Table 3.** Comparison of key indicators of PKO BP and Oschadbank

Indicators	PKO BP (pre-privatization 2003)	Oschadbank (2015)
Outlets	4362 (1 <sup>st</sup> place on the market)	4240 (1 <sup>st</sup> place on the market)
Share in loans	14.2% (1 <sup>st</sup> place on the market)	7.9% (2 <sup>nd</sup> place on the market)
Share in deposits	21.0% (1 <sup>st</sup> place on the market)	7.7% (2 <sup>nd</sup> place on the market)
Equity	1.7 USD bn (2 <sup>nd</sup> place on the market)	1.0 USD bn (1 <sup>st</sup> place on the market)

Source: [Warsaw Stock Exchange 2015a].

The reform of the financial sector is built into the Strategy of Sustainable Development "Ukraine-2020", published by the Presidential Decree No. 5 as of 12

January 2015 [Ministerstvo finansiv Ukrayiny 2016]. According to the “Principles of strategic reform of the state banking sector”, which were formed by the Ministry of Finance of Ukraine, it is planned to conduct a fundamental review of the principles and mechanisms of corporate governance. Given the quality of loan portfolios and previous experience of taking investment decisions of state banks, improvement of corporate governance should become a key priority of the Strategy.

It is planned to increase the value of banks, namely by improving the financial performance of banks, instead of additional capitalization on the part of the government, observance of the principle of sustainability, together with application by the authorities of the banks of the prudent credit policies.

Currently, the share of assets of state banks in the Ukrainian banking market is about 26%. Crisis processes of 2008-2009 influences its growth (limited crediting of the Ukrainian businesses by the subsidiaries of foreign banking groups) and economic and political situation of 2014-2015 (the actual suspension of lending by private banks).

However, it should be noted that the strategic assets of banks that can be attributed to strengths, could carry a potential threat to the competitive environment in the financial market in particular. The strengths of Oschadbank is a large customer base, the largest network of branches and experience in customer servicing in some sectors of the economy (energy, agro-industrial complex (hereinafter – AIC), infrastructure). Regarding Ukreximbank, the bank currently holds a segment of servicing of export-oriented companies, foreign trade transactions.

#### **4. Concentration of the banking system of Ukraine and the impact of privatization on its level**

The banking system of Ukraine for the past two years has been in a state of active structural transformation: the number of banks has been reduced, requirements to transparency of banks activity and bank capital have been increased. The reduced number of market participants and increased inequalities between them lead to increased concentration which, on the one hand, promotes the efficiency and capacity of the banking market, while on the other – can lead to formation of oligopolies or monopolies at the regional or food market with many negative effects or appearance of the banks “too-big-to-fail.” That is, on the one hand, the concentration generates positive results, and on the other – it may create a threat to competition. That is why there are important issues how the privatization of the backbone state banks will take place, who will be the new owners and whether the antimonopoly policy of the Government with the requirements of the regulator will be coordinated.

According to the Ukrainian antimonopoly legislation [Antymonopol’nyy komitet Ukrayiny 2015], to measure the level of concentration and monopolization tendency in Ukraine we should use the indicators of the market volume, where the monopoly

position ( $Q_{pt}$ ), the entity's share in the market ( $P_j$ ), the overall market share of several entities  $SP_n$  are determined:

$$Q_{pt} = \sum_{j=1}^n Q_j,$$

where:  $n$  – the number of entities that sell (supply, produce) or acquire (consume, use) the goods (product groups), within the commodity boundaries of the market;  $Q_j$  – the amount of goods and services sold (supplied, produced) by the  $j$ -th entity over time, which makes the market timeframe,

$$P_j = \frac{Q_j}{Q_{pt}} \times 100\%.$$

This figure is an analogue of known in the world practice  $CR_n$  ( $n$  – firm Concentration Ratio), ( $P_j < 35\%$ )

$$SP_n = \sum_{j=1}^m P_{nj} [\%],$$

where:  $m$  – the number of business entities, whose share is taken into account in calculating the aggregate market share;  $P_{nj}$  – the market share of the  $j$ -th entity.

For entities 2 or 3 – not more than 50%.

For 4 and more entities – not more than 70% [Antymonopol'nyy komitet Ukrayiny 2015].

To the increased attention of the NBU to assessing the concentration indicates the inclusion of Herfindahl-Hirschman Index (HHI) with a minimum value of 800 by the assets was included in the list of key indicators of fulfilment of the Comprehensive Program of Ukrainian Financial Sector Development until 2020 (565 is suggested until 2020), which attests to the increased attention of the NBU to assessment of the concentration [Ministerstvo finansiv Ukrayiny 2016].

HHI (Herfindahl-Hirschman index) is the sum of the squares of the market shares of each bank of the system, i.e.:

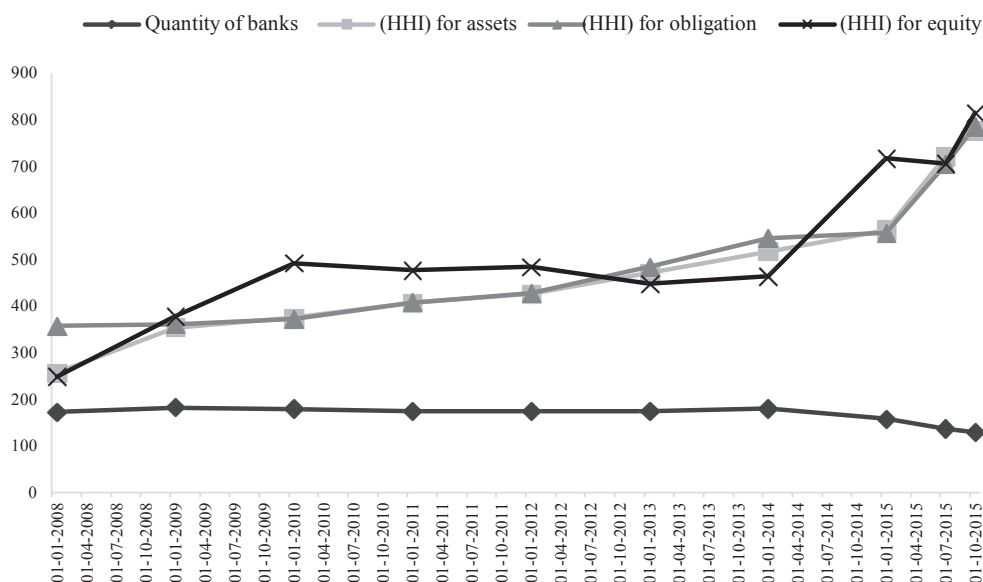
$$HHI = \sum_i P_i^2,$$

where:  $P_i$  – a market share of the  $i$ -th bank.

Given the availability of individual data for each bank of the system the authors calculated “full” HHI, whereas in case of the lack of data it is allowed to calculate them on the basis of indicators of TOP-50 firms of the investigated market [Ministerstvo finansiv Ukrayiny 2016].

In case of reduced financial stability of the banking system, the concentration of capital is increased.

Let us consider the level of concentration of the banking system in Ukraine (Figure 2, Table 4).



**Figure 2.** Dynamics of HHI (Herfindahl-Hirschman index) index in the banking system of Ukraine

Source: [<http://vashbankir.com/analytics-banking/capital-concentration.html>].

**Table 4.** Concentration index dynamics of the largest banks in Ukraine by assets, liabilities and capital in 2008-2015

Period	Index of concentration								
	for assets, %			for liabilities, %			for capital, %		
	CR3	CR5	CR10	CR3	CR5	CR10	CR3	CR5	CR10
01.01.2008	22.96	32.89	49.43	23.53	33.74	50.75	13.58	22.48	37.17
01.01.2009	21.95	33.33	52.04	21.34	33.16	52.81	26.07	34.50	46.78
01.01.2010	23.26	34.75	53.18	21.99	33.96	55.59	31.21	39.71	56.85
01.01.2011	26.07	36.81	53.86	24.82	36.00	53.23	31.45	39.19	54.29
01.01.2012	27.9	36.58	52.8	26.93	35.66	52.62	33.52	41.93	53.83
01.01.2013	30.72	38.62	52.71	30.52	38.61	52.80	31.88	38.71	52.20
01.01.2014	32.28	40.01	54.27	32.58	40.71	55.07	30.55	36.03	49.74
01.01.2015	34.83	43.41	59.74	34.2	42.94	59.21	39.83	47.14	63.96

Source: [<http://vashbankir.com/analytics-banking/capital-concentration.html>].

As we can see, during 2014-2015 there was a policy aimed at reducing the number of banks in Ukraine to 130. The continuous growth of the HHI index to 776 by assets and to 786 by liabilities points to growth of the concentration level and is positive for stability.

Concentration by the largest banks is constantly growing and indicates that the structure of the banking system of Ukraine is deformed and ineffective. Since the three banks, including the state one (PJSC Privatbank, PJSC Oschadbank and PJSC Ukreximbank) account for 42.76% of assets, 43.06% of liabilities and 39.95% of the capital of the entire banking system as on November 1, 2015.

According to the “Principles of strategic reform of the state banking sector”, the target customer segments for Oschadbank have been defined: retail, micro, small and medium business (with a focus on AIC and projects in the field of energy efficiency), big business – customers from the following sectors of economy: energy, AIC and infrastructure.

The target customer segments for Ukreximbank are export-oriented companies; companies that implement import projects; Ukrainian enterprises performing contracts abroad, servicing of interstate, intergovernmental trade and investment agreements.

According to the regulations of the Ukrainian anti-monopoly committee during privatization of Oschadbank and Ukreximbank one should thoroughly study the business history of the potential owners, whether they are affiliates and representatives of Privatbank, since the common activity in the market in many areas gives them a monopoly position.

In general, we can point out that the concentration by capital for all groups is lower than that by assets and liabilities, which indicates to insufficient capitalization level of the Ukrainian banks.

## 5. Conclusions

In 2014 Ukraine was on the 81<sup>st</sup> place among 188 countries worldwide by the Human Development Index [UNDP 2015], while in 1991 – it was on the 45<sup>th</sup> place. According to the Global Competitiveness Index, our country in 2015 was ranked 79<sup>th</sup> among 140 countries [WEF 2015, p. 7]. The low level of international socio-economic indicators suggests that an inefficient option of ownership transformation in the economic system was implemented in Ukraine, when the state and public interests were not taken into account, and the transformation of ownership took place on the basis of private interests of a separate layer of population. This resulted in deep social and economic crisis, the decline in living standards, technological backwardness, concentration of ownership.

Indicative in the process of transformation and concentration of ownership in Ukraine is the creation of financial-industrial groups based on the corporate union

of a variety of companies from different industries or regions. At the beginning of 2016, the largest financial industrial groups include “System Capital Management”, “Privat”, “East One Group”.

Continued upward trend of concentration of the largest banks will lead to the levelling of the role of other banks, because they would not be able to influence the processes in the system. And the problems of leaders of the banking system of Ukraine will automatically lead to the problem of the whole system. It means that a situation is created where these banks need to be saved by all means. Already indicative are PJSC Privatbank, PJSC Oschadbank, PJSC Ukreximbank, which can be classified as “too big to fail.”

Reducing the number of banks at the expense of the “weak” ones is a correct practice, because the big number of banks do not play a significant role and are used primarily as a “pocket” for servicing the companies of their owners, or money “laundering.” However, along with the decrease in the number of banks, the increase of the concentration level of other banks of 1 and 2 group (except for the leaders) is required, to create a competitive environment.

Control by the financial regulator is particularly important at the stage of privatization of the state-owned banks to prevent a high concentration of banks by transformation of the ownership of the state ones. Assessment of capitalization processes impact, consolidation and concentration on the dynamics of the structure of the banking market will contribute to the implementation of a complex of antitrust measures, which will help the formation of the banking market with an optimal combination of financial productivity figures and systemic risk.

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## TRANSFORMACJA WŁASNOŚCI SYSTEMU BANKOWEGO W POLSCE I NA UKRAINIE: PROBLEMY I PERSPEKTYWY

**Streszczenie:** Artykuł zajmuje się problematyką transformacji własności systemu bankowego na Ukrainie i w Polsce, w tym udaną prywatyzacją banków państwowych w Polsce. Analizie został poddany stan przygotowania ukraińskiego systemu bankowego do prywatyzacji. Korzystając z metody obliczania skoncentrowania kapitału oraz używając wskaźników udziału jednostki w rynku ( $P_j$ ), stopnia koncentracji i wskaźnika Herfindahla-Hirschmana, ustalono, że poziom koncentracji systemu bankowego na Ukrainie w ostatnich latach wzrósł. Biorąc pod uwagę niestabilną sytuację, możemy przyjąć, że zwiększona koncentracja w obrębie normalnego zakresu jest formą konsolidacji. Niemniej ze względu na występujący obecnie na Ukrainie problem ukrytych monopolii, transformacja własności w systemie bankowym wymaga szczególnej uwagi ze strony nadzoru bankowego w celu oceny możliwych społeczno-ekonomicznych konsekwencji koncentracji.

**Słowa kluczowe:** transformacja własności, system bankowy, bank państwowy, prywatyzacja, koncentracja.