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## DESCRIPTIVE AND MODEL ASSESSMENT OF EUROPEAN UNION AND UKRAINIAN BANKING MARKETS

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Summary. The article contains an analysis of competitive systems of Ukrainian and European Union banking markets carried out based on descriptive and non-structural H-statistic approaches.

Comparing calculated H-statistic values revealed a shift to monopolistic competition in Ukrainian market of banking services.

Key words: monopolistic competition, Herfindahl index, Panzar-Rosse H-statistic model.

This work is aimed at performing a comparative analysis of banking industry competition levels of Ukraine and countries of the European Union, applying both traditional descriptive structural method and non-structural Panzar-Rosse model, and determining the effect of the economic crisis on the level of competition in Ukrainian banking industry.

The modern world financial system is characterized by intensive concentration of banking capital which is observed in countries with different levels of economic development. An intensive model of banking network development gradually replaces the extensive model. Within 2005-2012 the indices of concentration of banking market were increasing in Ukraine as well as in the countries of the European Union, although the level of concentration of Ukrainian banks is substantially lower than an average European level. During this period the Herfindahl index for Ukrainian market has increased by approximately 100 points and now constitutes around 500 points, and  $CR_5$  concentration ratio approaches 40 %.

Let us complete the descriptive analysis with the results of model approaches. In his work Weill (2011) has calculated H-statistic values for the European Union for the period of 2002-2008. For our comparative analysis we will apply the same of Panzar-Rosse model specification to calculate the corresponding values for Ukraine. The econometric model is based on statistics as of the beginning of 2008. At this point the banking system of Ukraine was characterized by the best financial results and was able to accumulate a buffer stock in case of economic crisis. The calculat-

ed value of H-statisticfor Ukraine constitutes 0,459. The calculated value of Herfindahl index based on assets as of January 1, 2008 constitutes 346 points, and the aggregate assets of the banking system amount to around 81 billion EUR. Against the background of the countries of the European Union, Ukrainian banking market shows very modest values for all of the three indices. There is a special potential in banking asset accumulation, which as predicted will be accompanied by increasing H-statistic indices.

In order to compare possible changes in competitive characteristics of Ukrainian banking market we will apply another Panzar-Rosse model specification, introduced in the work of Bikker (2007). In this case the financial reports of banks at the beginning of 2007 and 2011 are used. The calculated H-statistic values constitute 0,567 in 2007 and 0,377 in 2011. Therefore, the competition in the Ukrainian banking industry, like the one of the European Union, may be defined as a monopolistic competition. However, the index of H-statistic for Ukraine is lower than the average corresponding European index. Moreover, the H-statistic index has dropped by 1,5 times, which indicates a shift to monopolistic level of competition of the banking industry of Ukraine after the financial crisis of 2008-2009. Taking in to account a Europe an orientation in development of Ukraine two variants are possible: either a slow increase of banking industry concentration with slight changes of institutional system, or accelerated increase of concentration, accompanied by a sharp decrease of the amount of banking institutions as a result of consolidation.

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