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RESOURCE POLICY OF UKRAINIAN BANKS IN RELATIONSHIPS WITH NON-FINANCIAL CORPORATION: PRACTICAL ASPECTS

Summary: Specificity of formation and realization of banks resource policy in relationships with non-financial corporation (NFCs) in Ukraine during 2000-2012 is considered. The analysis of dynamics and structure of NFCs deposits as well as the evaluation of bank's lending to this category of customers are done. The dependences between money supply and NFCs deposits volume, total loans to NFCs and gross domestic product are established. Forecasts of changes in these indicators in future based on these relationships are worked out.

Keywords: bank, resource policy, deposit, loan, non-financial corporations.

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1. Introduction

Effective management of financial resources plays an important role in ensuring the sustainability of the bank. It defines the need to develop banks resource policy, which should determine the priority areas of attracting and allocating resources. In previous works [Рисін 2012] the author substantiates the determination of bank's resource policy as measures taken by the bank to identify the most effective ways of forming and expanding resource base, its optimal size and structure, placing banking resources, balancing the processes of formation and the use of resources, and the prevention of money laundering.

For long time non-financial corporations have been one of the most important customers of Ukrainian commercial banks. Therefore, deeper research should be done on building effective relationships between banks and this group of customers. This task can be viewed as one of the goals of banks resource policy in relationships with non-financial corporations (NFCs). Banks should offer customers attractive and economically justified conditions for attracting funds on deposits, as well as for granting loans.

In recent years the economic situation in Ukraine has been unfavorable for the development of the banking sector, which suffered serious financial problems in the times of the crisis 2008-2009. First of all, there was a significant outflow of deposits, which had a negative impact on the resource base of banks. Large part of the funds withdrawn from banks was removed abroad [Rysin 2011]. Lack of resources and financial instability led to the increase in interest rates on loans for all categories of customers, including non-financial corporations. The profitability of most business spheres remained low, making bank loans disadvantageous. Banking sector's recovery after the crisis was slow, and only in 2012 banks reached a profitable level of activity. However, the main problems, associated with the resource provision of banks and the high cost of loans, have not been completely solved.

Based on the above, the purpose of the paper is to investigate the specificity of banks resource policy implementation in relations with NFCs, and to elaborate changes forecasts concerning volumes of bank deposits and loans. Taking into account the features of banking sector's development our research will cover three periods:

1. 2000-2007 – a period of relative economic stability, rapid growth of banking sector assets.
2. 2008-2009 – a period of financial crisis, the outflow of resources and unprofitable bank's activity.
3. 2010-2012 – period of post-crisis recovery.

The object of the research is deposit and loan portfolios of Ukrainian banks, their structure in terms of maturity, objectives and currencies.

The main tasks of the research are: to investigate the influence of money supply on NFCs deposits volume; to evaluate the structure of loans by maturity and determine the main factors which influenced the level of interest rates; to describe the interdependence between fluctuations of NFCs loans and GDP of Ukraine.

2. NFCs deposits portfolio: dynamics and structure

Deposits of NFCs grew quite rapidly in 2000-2007. Overall, they increased 8 times. For the national currency deposits growth rate was even somewhat faster. During the period they increased 9 times, while foreign currency deposits 7.3 times. The exception was 2004, when some of the economic entities would prefer to keep their resources in foreign currency due to political instability and inflation expectations [Рисін 2010].

In addition, significant predominance of deposits in national currency was driven by the monetary policy of the National Bank of Ukraine, in particular the existence of stringent foreign exchange restrictions. Therefore, NFCs have been legally put in the frame, which forced them to use only the national currency in transactions.

The opposite trend started at the beginning of 2008. The growth of deposits in foreign currencies began despite the fact that some economic entities at the time of crisis took all their money to foreign financial institutions out of the country for fear

of losing them because of the Ukrainian banking sector instability. Therefore, the main factor that caused the nominal growth of foreign currency deposits was the devaluation of national currency. Parallel to this, in September 2008 a decrease in the amount of NFCs deposits in national currency started, which by November 2009 exceeded UAH 31.5 bn. There was some growth of them in December, but it was seasonal and associated with the end of the financial year.

Thus, during 2008-2009, we can talk about the outflow of NFCs deposits from the banking system caused by both objective and subjective factors. On the one hand, the financial crisis created challenges for companies in many areas of the economy; their financial situation worsened and sales revenue were reduced, which led to a decrease in deposits volume. On the other hand, some businesses using illegal or semi-legal methods began to withdraw funds from the official money turnover to the unofficial one [Rysin 2011]. It should be noted that an effective system of control over such activities in Ukraine has not been established yet, but taking into account the involvement of policies into economic processes management, this system can only be viewed as a long-term perspective. Therefore the inflow of funds into the unofficial cash flow can be considered as another factor reducing the amount of NFCs deposits.

In mid-2010 a trend to deposits increase appeared, but it did not mean the stability of this process, because the periods of growth and decline succeeded each other. This is especially typical of deposits in national currency. This situation is the typical reaction of economic entities to the government regulation of the economic processes, rather than to changes in banks resource policy. The situation further emphasizes the important role of political risk in the formation of banking sector's financial resources.

To determine the dependence of NFCs deposits on changes in the money supply regression equations describing their trends has been built.

From January 2008 to December 2013 the money supply increased on average by UAH 6472 mn in a quarter (1.2 % quarterly). This growth can be described by the regression equation:

$$y = 55,44x^2 + 2485,8x + 420095 . \quad (1)$$

In accordance to the regressive equation we can forecast further increase of money supply to UAH 820 bn at the end of 2014.

NFCs deposits increased by an average of UAH 1458 mn in a quarter from January 2008 to December 2013 (1.15 % quarterly). This growth can be described by the regression equation:

$$y = 32,06x^2 + 906,3x + 105339. \quad (2)$$

In accordance to regressive equation it is possible to forecast further increase of NFCs deposits volume to UAH 185 900 mn in 2014.

Thus, we can observe a similar average growth rates – 1.2% and 1.15% accordingly. It determines the need to investigate this dependence in more detail (Fig. 1).

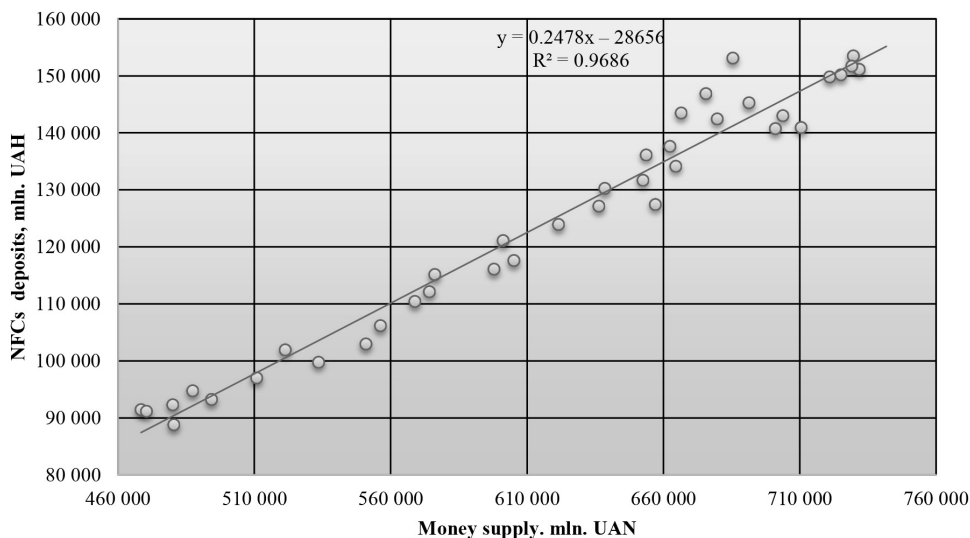


Figure 1. Dependence between NFCs deposits and money supply

Source: own calculations.

Thus, there is direct positive dependence with $R^2 = 0,97$. For the investigated period of time it is possible to state: the increase of money supply on 1 million of UAH leads to NFCs deposits growth by UAH 247800 with probability $p = 97\%$.

The assessment of the deposit portfolio by their maturity shows that in 2000-2006 there were mainly non-term deposits, and in 2007 only the share of term deposits became higher and their volume achieved UAH 47.5 bn. This demonstrates the improved financial state of Ukrainian enterprises: available resources are not used in the current payments, but also there is the possibility to remove some financial resources from the circulation and to place them on a bank deposit in order to generate additional income. However, it should be noted that most of these deposits were short-term. The same trend was typical of the period of 2008-2009 (Fig. 2).

The volume of non-term deposits increased by UAH 8.9 bn. during two years and their share in total amount increased to 58.3% (at the beginning of 2008 it was 49.6%). The volume of short-term deposits for two years increased by more than 3 bn, but compared to September 2008 it decreased by 2.5 bn. The outflow of medium and long-term funds from the banks can be observed – NFCs deposits with maturity from 1 to 2 years decreased by 6.2 bn UAH (for the period from September 2008 to the end of 2009 – 9.1 bn); deposits with maturity over 2 years – UAH 4.2 bn (about 6 bn compared with the level of September 2008) [Рисін 2010]. It is interesting to

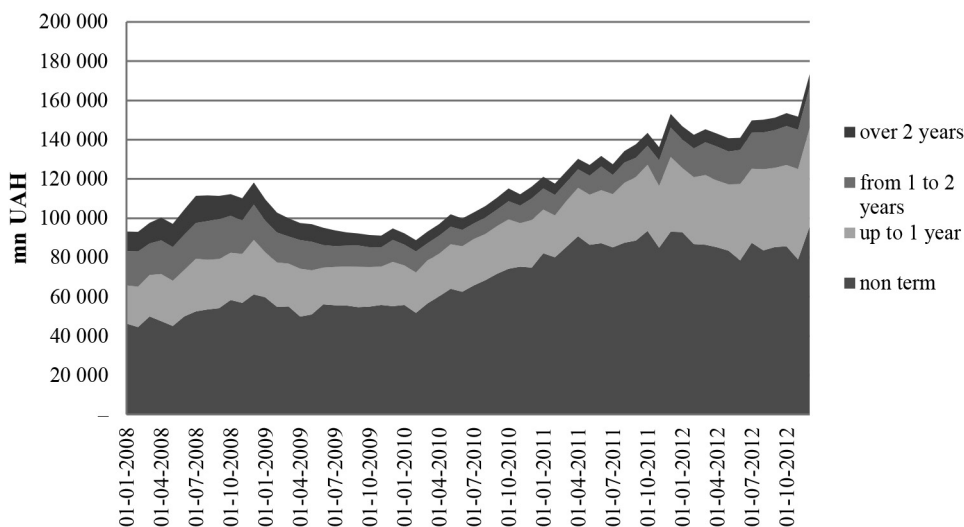


Figure 2. Structure of NFCs deposits in Ukrainian banks by maturity

Source: data of the National bank of Ukraine [Національний банк України 2013а, 2013b, 2012, 2011, 2010].

note that the volume of short-and long-term deposits of NFCs began to decline in August 2008, before the financial crisis in Ukraine. Therefore, some entities were able to predict the crisis in the banking sector and started withdrawing money from their deposits.

Mid and long-term deposits of NFCs accounted for only 17.9% of total deposits at the end of 2009. Thus, along with the outflow of funds the changes in the structure of investments should be noted. Similar trends continued in 2010-2012, when the growth of total NFCs deposits occurred due to non-term and short-term funds. The increase in deposits with maturity from 1 to 2 years in 2012 can be considered as a positive phenomenon, but this increase was partly due to the reduction of long-term deposits to 2 years.

The assessment of NFCs deposits by regions shows the presence of regional disproportions (Table 1).

In general the structure of the deposit portfolio corresponds to the regional industry development in Ukraine: about half of the deposits are made in Kyiv and Kyiv region, more than 20% in Donetsk and Dnipropetrovsk regions, about 9% in the other five large regions, and in the remaining 18 regions – 15% only.

Considering the features of NFCs deposits formation in some regions, we can make the following conclusions:

- in Kyiv and Kyiv region, Donetsk region, non-financial corporations are more motivated to invest in non-term deposits and foreign currency deposits (their share in the total is higher than the average value);

Table 1. Share of certain regions in the total amount of NFCs deposits (as at January 2013)

| | Total deposits | Including | | | |
|-----------------------|----------------|-------------------|---------------|----------------------|-----------------------|
| | | non-term deposits | term deposits | in national currency | in foreign currencies |
| Kyiv and Kyiv region | 52.15% | 55.13% | 48.46% | 49.55% | 56.97% |
| Donetsk region | 10.13% | 11.24% | 8.75% | 9.20% | 11.84% |
| Dnipropetrovsk region | 10.65% | 8.06% | 13.85% | 9.60% | 12.59% |
| Odessa region | 3.53% | 3.20% | 3.94% | 4.07% | 2.52% |
| Kharkiv region | 3.26% | 3.70% | 2.71% | 3.50% | 2.81% |
| Zaporizhia region | 1.86% | 2.14% | 1.51% | 2.10% | 1.42% |
| Lugansk region | 1.87% | 1.65% | 2.13% | 1.70% | 2.17% |
| Lviv region | 1.51% | 1.81% | 1.14% | 1.85% | 0.88% |
| Other regions | 15.06% | 13.07% | 17.52% | 18.43% | 8.80% |

Source: own calculations by the data of the National bank of Ukraine [Національний банк України 2013a].

- in Dnipropetrovsk region exceeding the share of term deposits and deposits in foreign currency is observed;
- in Odessa region the share of term deposits and deposits in national currency was higher than the average value, in Kharkiv, Zaporizhia and Lviv the share of non-term deposits and deposits in local currency was higher;
- term deposits and deposits in national currency had a larger share in other regions.

3. Features of bank lending to NFCs in Ukraine

The investigation of banking sector's assets structure has shown that non-financial corporations are the main category of borrowers for banks in Ukraine. The effectiveness of the business sector is largely dependent on the condition of money market and financial intermediaries' ability to meet the needs of business activities.

Considering the period of 2000-2007, a rapid increase in volumes of loans to NFCs should be noted. By 2004 short-term loans made up a predominant share in the total volume. In 2005, loans with maturity from 1 to 5 years exceeded the short-term ones, in 2006-2007 this trend intensified – medium term loans accounted for 55-58% of the loan portfolio. In 2007 the processes of corporate lending for more than 5 years activated. Its share exceeded 10% in the total [Рисін 2012]. The growth of bank loans to NFCs continued in 2008-2009, although it was already due to other reasons (Fig. 3).

During 2008 a steady increase in short, medium and long-term loans was observed. This process accelerated to the end of the year due to revaluation of foreign

currency loans, as well as individual cases of capital withdrawal from troubled banks by their owners through the lending to shell companies.

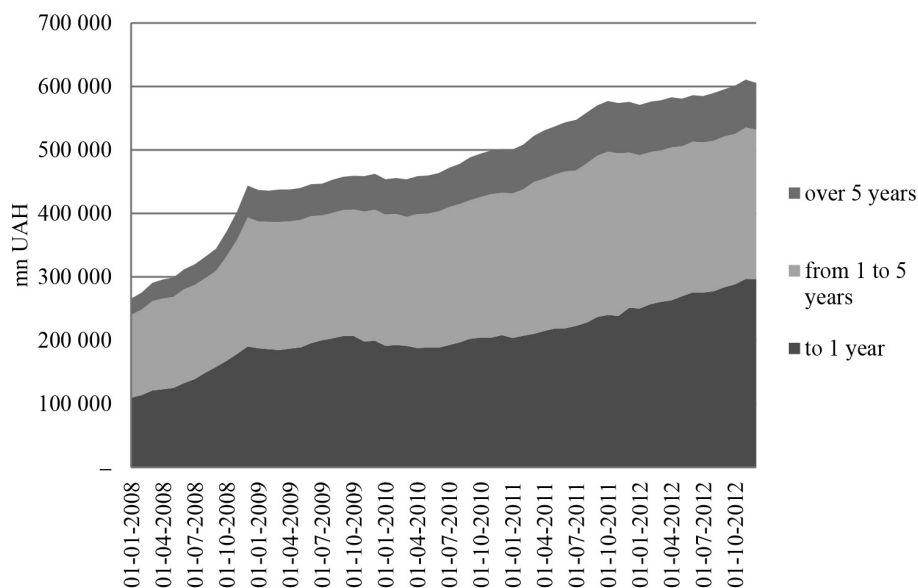


Figure 3. Loans to NFCs by maturity

Source: data of the National bank of Ukraine [Національний банк України 2013a, 2013b, 2012, 2011, 2010].

The actual suspension of credit growth in 2009 was caused by the lack of long-term resource base of commercial banks. A number of steps to stimulate lending support of economic development in the second half of 2009 were made by the NBU. Since September, the central bank began to provide refinancing loans to state banks in order to maintain their long-term liquidity in connection with the investment of nationwide projects by these banks. In November a resolution № 650 “On stimulating the economy of Ukraine” was adopted, which, in particular, liberalized the requirements for banks reserve against possible losses on credit operations and provided a number of other benefits. Such actions influenced primarily medium loans at the end of the year; in November and December, the volume of these loans increased by 7.3 billion.

In 2010-2011, there was a slow increase in the medium and long term loans to non-financial corporations. The dynamics of short-term loans was slightly different, stable growth in this segment began in 2011 and continued in 2012. At the same time, the volume of loans over 1 year decreased in 2012, which may indicate negative business expectations of economic entities in the medium term, as well as their inability to pay high prices for bank loans due to low profitability (Fig. 4).

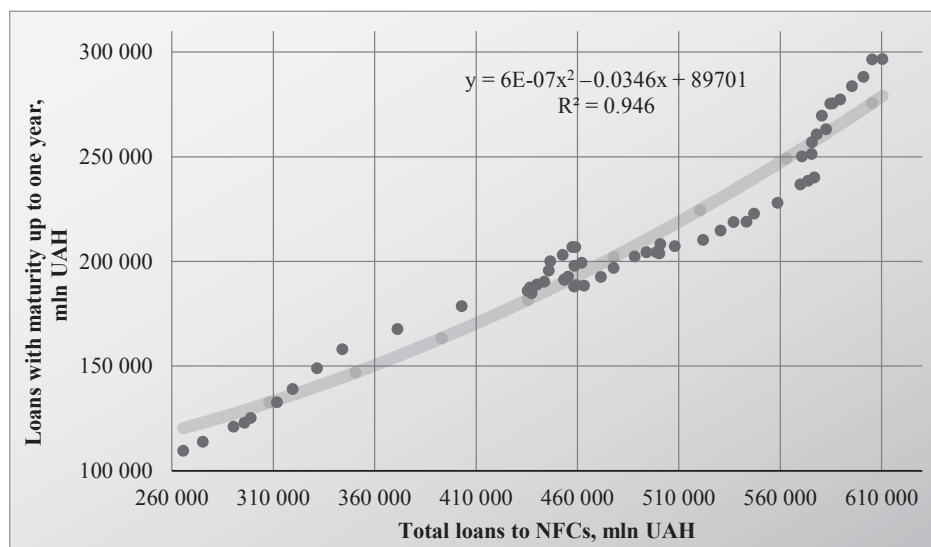


Figure 4. Dependence between volume of short-term loans (up to 1 year) and total volume of loans to NFCs

Source: own calculation.

From the end of 2011 short-term loans had only a stable trend to increase. Loans with maturity over 1 year had a tendency of insignificant decline. Proof of dependence from total loans volume is observed for loans granted for up to one year. Thereby our calculations show: the increase of total loans to NFCs by 1 million of UAH leads to short-term loans growth by UAH 472800 with probability $p = 94\%$.

Considering the process of lending to NFCs in terms of currencies, we should note that in 2000-2007 most loans were nominated in the national currency. It was caused by the existence of limitations for legal entities to obtain foreign currency loans, which were primarily imposed to prevent the outflow of capital abroad.

Loans in national currency increased particularly rapidly in 2005-2007 due to macroeconomic stabilization and stability of Ukrainian hryvnia. During this period lending in foreign currencies increased somewhat slower, which was mainly used in lending to households.

The volume of foreign currency loans in 2008-2009 had a completely opposite trend of development – in 2008 there was growth, whereas in 2009 – a decrease. The amount of foreign currency loans increased 2 times in 2008; especially rapid growth occurred at the end of the year because of the changes in foreign currencies rates. In 2009, the volume of loans obtained by NFCs in foreign currency decreased almost every month and fell by 16.9% per year.

Such a situation was caused by limited access to external financing as well as implementing restrictions on lending in foreign currency to minimize foreign exchange

risk. In addition, it can be explained by the attempts of borrowers to repay loans, which became more expensive, before the maturity date, and also by restructuring the debt of NFCs by transferring foreign currency loans into the national currency.

The effects of these factors led to a decline in foreign currency loans in 2010, but later they recovered during 2011-2012 and stayed at the level of UAH 200-210 billion. This fact indicates lack of demand for foreign currency loans from non-financial corporations, which might be caused by a reduction in foreign trade activity of Ukrainian enterprises, as well as the presence of significant external risks.

Despite the crisis of the financial sector there has been an increase in lending to NFCs in national currency in the recent years. As of the end of 2012, the balance of such loans amounted to UAH 393.1 bn, whereas the volume of foreign currency loans totaled UAH 212.3 billion.

Analyzing the activities of banks in lending to non-financial corporations, it is important to evaluate the purposes of loans. Since 2006, when the banking statistics in Ukraine began to show targeted use of loans for certain categories of borrowers, the predominant share of loans was granted for current activity. Thus, in 2006-2007 these loans in credit portfolio amounted to 86 and 83% respectively. At the same time, in 2007 there was almost 2 time growth in loans for investment, and 1.6 time – in loans for purchase, construction or renovation of real estate. Loans for current activity remained the major type for NFCs during 2008-2012. For example, their share in total amount reached 85.3% at 01.01.2013. However, the share of loans for investing activities amounted only to 13.5%.

It is impossible to develop a comprehensive overview of the features of banks resource policy to non-financial corporations without an analysis of interest rates dynamics. Whereas interest rates reflect the risk of money placing, they have always remained rather high in Ukraine.

Thus, between 2000 and 2007, the average interest rate on loans to NFCs decreased from 33% to 12.5%. In 2005-2007, there was a gradual decline of interest rates on loans. It is especially true for short-term loans in national currency. Interest rates on medium-term loans remained at a slightly higher level.

A tendency of interest rates increase on loans in national currency has been since the beginning of 2008. This new phase of interest rates rising was caused by the onset of financial crisis and instability in the banking sector. In November 2008, the rate on loans in national currency reached 22.6%. The price of foreign currency loans during the crisis did not increase so dramatically – only 0.5% from August to December 2008. In the crisis conditions granting of foreign currency loans was actually stopped, so the interest rates did not respond to the worsening of market situation. In the early 2009, due to the lack of resources in the banking sector, interest rates on loans in national currency reached 27-28% level. This trend existed during the whole year. Among the reasons of interest rates increase we can distinguish an unstable political and economic situation in the country, unchanging resource base of banks and the lack of potential sources to enlarge it.

The process of interest rates reducing on loans in national currency appeared in 2010-2012, while the rates on foreign currency loans changed sometimes chaotically. Cyclical movements in interest rates on UAH credits should be noted, which led to similar changes in the average rates. At the same time, the price of foreign currency loans was not a determining factor in the formation of an average market price.

The assessment of interest rates dynamics in terms of loans maturity generally confirms the identified trends. A steady trend towards interest rates rising has been observed since 2008. Since October 2008 a sharp increase of interest rates on loans up to 1 year has been fixed, while interest rates on medium and long-term loans have not been so sensitive to the crisis. In general, the dynamics of interest rates on loans up to 1 year completely repeats the dynamics of average interest rates on all types of loans, which may indicate the fact of granting short-term loans to NFCs only in the crisis period, so changes in their value are most demonstrative. This is confirmed by the chaotic movement of medium and long-term loans rates in 2009.

In 2010-2012 there was some reduction of the cost of all types of loans for non-financial corporations – the interest rates ranged from 10 to 15%, but in late 2012 a tendency to the increase appeared [Rysin 2013]. Given the unsolved issues with the replenishment of the banks' resources, we can predict the preservation of high loans cost to enterprises in the future.

One of the main goals of increasing the volume of loans to non-financial corporations is to ensure growth in output, employment and real income. To investigate

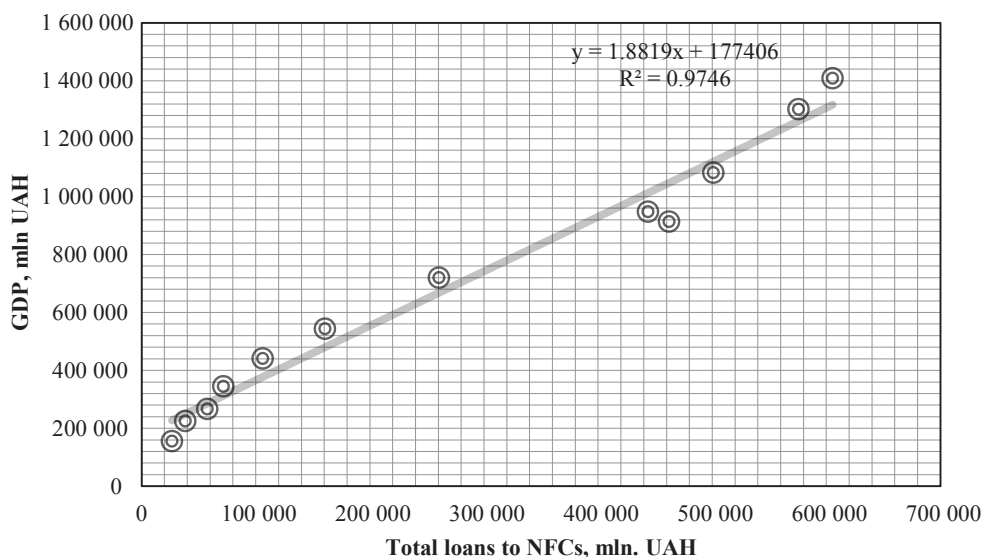


Figure 5. Dependence between gross domestic product and loans to NFCs

Source: own calculations.

the relationship between the volume of loans and gross domestic product we propose the next regression equation:

$$y = 120096,3 + 3,8x_1 - 1,2x_2 - 47,8x_3, \quad (3)$$

where: y – volume of gross domestic product, x_1 – loans to NFCs, x_2 – loans to households, x_3 – loans to other financial corporations.

As a result, only loans to NFCs have positive relationship with gross domestic product and may cause its changes (Fig. 5).

As it can be noticed GDP has a strong dependence on the volume of lending to NFCs with $R^2 = 0,97$. It is necessary to note that this connection is stronger than the GDP dependence on the total amount of bank loans to all types of borrowers. Thereby our calculations show: GDP will grow by UAH 1.88 million in case of increasing of NFCs loans volume by 1 million of UAH.

4. Conclusions

Research of specificity of banks resource policy in relations with non-financial corporations allows to determine, that the dynamics of this category of customer deposits during the crisis and post-crisis period was more dependent on general economic situation and the actions of government regulation than on the instruments used by banks to raise funds of economic entities. The structure of NFCs deposits has changed in favor of short-term investments due to the influence of political factors, currency and legal risk; and partly there was an outflow of funds in the unofficial money turnover. The recession of 2008-2009 complicates the policy implementing process in view of declining confidence in banks, the deterioration of businesses financial condition and inability to attract additional resources from abroad.

Lack of financial resources in banking sector led to the increase of loans prices. As a result NFCs demand on medium and long-term loans in national currency decreased significantly, while loans in foreign currencies were rigidly limited by the central bank. Accordingly all these measures provided a slight increase of the banking sector's loan portfolio in the post-crisis period. It was exclusively provided due to short-term loans to NFCs. However, interest rates on this loan remained very high, so a significant part of economic entities was actually cut off from the credit process because the profitability of their businesses was not been sufficient.

Given the revealed relationship between the gross domestic product and loans to NFCs regulators should take stimulation measures for banks in direction of increasing the volume of lending. It especially concerns medium and long-term loans for investment purposes. Resource policy objectives for banks are to find new sources of additional resources, expanding the resource base in order to reduce interest rates on loans. In this case the role of banks in the economic growth of Ukraine will increase and their activity will be more profitable.

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POLITYKA KAPITAŁOWA BANKÓW UKRAIŃSKICH REALIZOWANA PRZY WSPÓŁPRACY Z KORPORACJAMI NIEFINANSOWYMI: ASPEKTY PRAKTYCZNE

Streszczenie: W artykule sprecyzowano specyfikę formowania i realizacji polityki banków przy współpracy z korporacjami niefinansowymi (NFK) na Ukrainie w latach 2000-2012. Przeprowadzono analizę zarówno dynamiki i struktury depozytów NFK, jak też oceny kredytowej banku tej kategorii klientów. Ustalono zależności między podażą pieniądza a wolumenem depozytów NFK, sumą kredytów dla NFK a produktem krajowym. Przedstawiono też prognozę dalszych zmian odpowiednich wskaźników na podstawie określonych relacji.

Słowa kluczowe: bank, polityka kapitałowa, depozyt, kredyt, korporacje niefinansowe.