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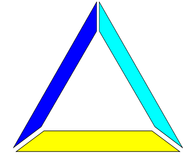

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# Credit expansion, capital adequacy ratios and the stability of the banking sector in Ukraine

## Executive Summary

In recent years, bank loans expanded rapidly in Ukraine. Regulatory capital of banks has also increased, but at a much lower pace. As a result, the capital adequacy ratio (CAR) for the aggregated banking sector dropped significantly and stood at 14.8% as of September 2005. The National Bank of Ukraine (NBU) does not publish information regarding CARs for different groups of banks. But there are good grounds to believe that CAR for the group of the ten largest banks in Ukraine is considerably lower than 14.8% and might stand below 12%, which is not far away from the minimum of 10% set by the NBU.

Should this estimation be correct, then we should consider this situation as rather dangerous. Likely events such as a drop in real estate prices, an economic recession or political instability in the context of parliamentary elections in March 2006 would further lower the CARs. As a result, the ratios for the group of large banks could get near or even below 10%, thus jeopardizing the stability of the banking sector. The problem will most certainly not be solved by banks themselves; most large banks are for sale and bank owners have no incentives to inject new capital or to restrain lending. Consequently, it is for the NBU to take action and prevent a further deterioration of CARs.

In our view, the NBU should take the following steps to prevent a further decline in CARs. Firstly, the NBU should inform banks about its concern regarding the recent trend towards low CARs. Banks should be required to take the necessary measures to improve the situation. Secondly, the NBU should introduce and publish an “administrative practice”, by which it considers banks with CARs below 12% as particularly risky. Such banks should be asked to explain the reasons for the low CARs and face frequent on-site inspections. As shown by German experience, such “soft” measures can be pretty effective. But if for any reason they turn out to be ineffective in Ukraine, then the NBU should consider the use of “hard” measures such as raising the minimum CAR to 12%.

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# 1 Introduction

In recent years, an impressive credit expansion has taken place in Ukraine. Most observers and policy makers welcome this development and hope for a continuation of this trend. Other experts believe that the expansion has been too fast and that it entails significant risks for the banking sector. Consequently, they demand decisive action by the banking supervision to avoid risking a banking crisis in the future.

In this paper we study the effect of credit expansion on the stability of the banking sector by looking at the recent development of capital adequacy ratios (CARs), a key indicator for a bank's solvency. Part 2 describes the credit expansion and the decrease in CARs since 2001. In Part 3 we ask whether the observed decrease in CARs poses a significant risk for banking stability. Part 4 entails our recommendations to tackle the problems involved with lower CARs, while Part 5 concludes.

# 2 Credit expansion and decreasing capital adequacy ratios

Ukraine's economic growth has been pretty high in recent years. In this environment, the demand for commercial loans has soared and banks have increased their provision of loans considerably (see Table 1).

**Table 1**
GDP growth and credit expansion

| | 2001 | 2002 | 2003 | 2004 | 2005* |
|---|---|---|---|---|---|
| Real GDP growth (in %) | 9.2 | 5.2 | 9.4 | 12.1 | 3.5 |
| Real credit** growth (in %) | 34.4 | 47.8 | 55.2 | 18.9 | 15.5 |

Source: Derzhkomstat, IMF.

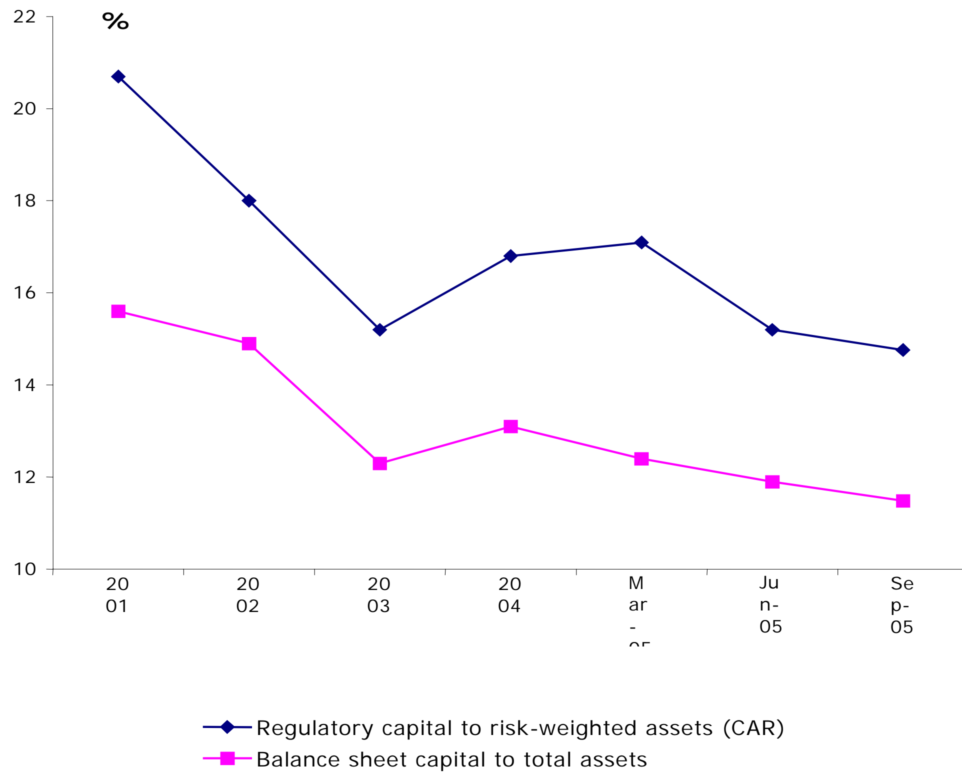
*Estimation.

**Real credit to nongovernment, deflated by CPI.

During this process of credit expansion, banks have also increased their capital in absolute terms. However, the increase of the banks' own funds has been less strong than the expansion of credit. As a result, capital in relative terms has decreased significantly. From 2001 to September 2005, the "capital adequacy ratio" (regulatory capital to risk-weighted assets, CAR) of the aggregated banking sector has gone down from 20.7% to 14.8%. The "capital to assets ratio" (balance sheet capital to total assets), a further indicator for the appropriateness of capital, decreased during the same period from 15.6% to 11.5% (see Graph 1).

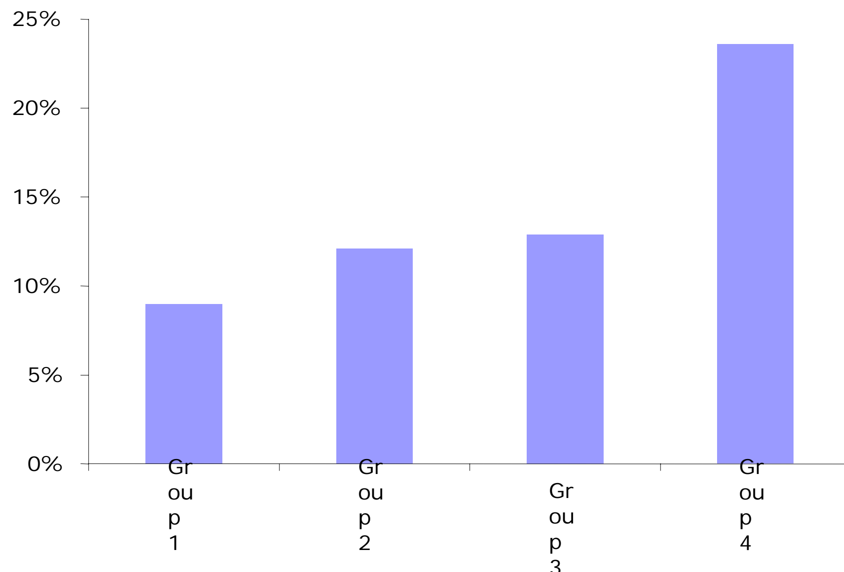
A look at disaggregated data for the capital to assets ratio reveals significant differences between groups of banks (see Graph 2). The ratio for the group of ten largest banks, which accounts for 55% of total bank assets, is 8.99%. This is 21.8% (or 2.51 percentage points) lower than the aggregated figure (11.5%). On top, the time series available for this ratio divulges a massive worsening for the ratio of the largest banks; from January to October 2005 the ratio declined from 10.73% to 8.99%.

**Graph 1**
Ukraine's banking sector capital in relative terms




Source: National Bank of Ukraine.

**Graph 2**
Capital to assets ratio by groups of banks (as of 01.10.2005)




Group 1: the largest 10 banks
Group 2: next 14 banks
Group 3: next 31 banks
Group 4: the smallest 105 banks

Source: National Bank of Ukraine.

Unfortunately, the NBU does not publish disaggregated data for CARs. But given the conceptual similarities between CAR and the capital to assets ratio, as well as the parallel development in recent years (see Figure 1), we can conclude that CAR for the group of ten largest banks is most likely to be significantly smaller than the aggregate figure of 14.8%. Assuming that CAR for the ten largest banks is also 21.8% lower than the aggregate number, as is the case for the similar indicator "capital to assets", then the CAR for the ten largest banks amounts to 11.57%, which is clearly below 12%.

## 3 Lower capital adequacy ratios and the stability of the banking sector

The capital adequacy ratio is a key indicator for a bank's solvency and for the assessment of the stability in the banking sector. While there has been a considerable decrease in aggregate CAR in Ukraine in the recent past, the current level of 14.8% in itself cannot be considered as too low. After all, the minimum CAR set by the NBU is 10%, leaving a reasonable (though not huge) buffer of 4.8 percentage points (see Table 2).

**Table 2**
CAR buffers in selected countries

| **Country** | ***Buffer*** | ***Actual CAR*** | ***Min. CAR*** |
|---|---|---|---|
| Argentina | **-2.67** | 8.83 | 11.50 |
| Azerbaijan | **12.20** | 22.20 | 10.00 |
| Belarus | **10.20** | 24.20 | 14.00 |
| Brazil | **5.40** | 16.40 | 11.00 |
| Bulgaria | **19.14** | 31.14 | 12.00 |
| Croatia | **8.50** | 18.50 | 10.00 |
| Estonia | **5.00** | 15.00 | 10.00 |
| Germany | **2.60** | 10.60 | 8.00 |
| Hungary | **7.64** | 15.64 | 8.00 |
| Philippines | **4.53** | 14.53 | 10.00 |
| Poland | **7.10** | 15.10 | 8.00 |
| Romania | **16.80** | 28.80 | 12.00 |
| Russia | **10.30** | 20.30 | 10.00 |
| Singapore | **6.40** | 18.40 | 12.00 |
| Ukraine | **4.80** | 14.80 | 10.00 |
| USA | **4.85** | 12.85 | 8.00 |
| Venezuela | **5.79** | 17.79 | 12.00 |

Source: The World Bank (2003-2004), National Bank of Ukraine (2005).

The situation looks much worse, once we shift our attention to the CAR of the group of ten large banks in Ukraine, for which we estimated a value below 12%.

The CAR buffer of less than 2 percentage points compares unfavourable with the practice in most countries (see Table 2), even taking into account that large banks can feature lower CARs than the aggregated sector. Furthermore, this low buffer is particularly worrying, as it is kept in good economic times. Negative economic developments – even external developments out of control of policy makers in Ukraine – may force the CARs of Ukrainian large banks below the 10%-threshold.

There are internal threats to the Ukrainian banking sector that should trouble us even more: Bad loans could become widespread in the near future. There are mainly two

reasons that justify the existence of this possibility. First, a rapid credit expansion as in the recent past often goes along with inappropriate internal risk assessments. Second, prices for real estate have skyrocketed; it is likely that the developments on the real-estate market show signs of a "bubble"[1]. If prices for real estate drop considerably, this will lower the value of collateral and lead to an increase of bad loans in the banking sector. In addition, some observers note that banks' own funds has been increased by questionable revaluations of assets, which could indicate an even bigger problem than shown by the official figures. This is partly due to selling intentions of owners of large banks.

To sum up, it is reasonable to conclude that large banks in Ukraine are behaving in a risky fashion and might not be able to defend the critical 10% CAR in case of an economic recession or political instabilities in the context of parliamentary elections in March 2006. Consequently, the recent credit expansion has indeed increased the risks in the banking sector.

## 4 How should the NBU react in view of lower capital adequacy ratios?

The presently low CARs within the group of ten largest banks and possible instabilities in the near future pose a threat to the financial sector and the Ukrainian economy alike. Therefore, policy makers should be interested in seeing Ukrainian banks, especially the larger ones, increase their CARs. Will this happen without any governmental intervention or measures taken by the National Bank of Ukraine? Most certainly not. After all, bank owners have no incentive to increase their bank's CARs. On the contrary, bank owners are interested in maintaining lower CARs for two main reasons:

**Reason 1:**

Most big Ukrainian banks are for sale, following the spectacular price paid by Raiffeisen Bank for Aval Bank. Owners have no interest in injecting fresh money into a bank, which is up for sale anyway. And as market share is an important factor for the price of the bank and for current and future profits, they also have no incentive to restrain lending.

**Reason 2:**

Banks might believe that they do not have to fear being punished if their CARs fall below 10%. And there are arguments backing this belief. Firstly, we are dealing with big banks. These are often considered as "to big to fail"; this limits the possibility of punishment for supervisors. And secondly, as most big banks have a low CAR, it is quite likely that several large banks fall below the threshold once the economic situation changes. In this situation the supervisors might not be able to punish such a large group of banks. Therefore, banks might believe that the supervision authorities will tolerate CARs below the required rate. They may even count on help from the NBU in times of need, as in the form of liquidity loans.

Both reasons support our belief that the problem of low CARs for the group of large banks will not be solved by itself. Consequently, the authorities will have to stop the trend towards lower CARs and prevent a fall below the crucial threshold of 10%, should some negative events occur. But how can the authorities ensure that banks maintain higher CARs? We see two main possibilities:

**Possibility 1:**

The minimum CAR is kept at 10%, but the NBU informs commercial banks about its concern related to the low CARs of certain banks, especially the largest ones, and asks banks to take the NBU's concern into account. By publishing an "administrative practice", the NBU also signalises that it will see a CAR for individual banks below 12% as inappropriate. If banks fall short of this informal threshold, they will have to fear increased on-site inspections and other sanctions supervisors are able to impose.

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[1] For example, since the beginning of 2003 the average price on the secondary market per sq. meter for a 3-bedroom apartment in Kiev rose from USD 530 to USD 1,578 (see www.realt.ua).

**Possibility 2:**

The National Bank can raise the minimum CAR to 12%. This is in line with recent recommendations by the International Monetary Fund published in November 2005.

While the first possibility is more flexible and allows taking account for troubled banks and the international competitive position of Ukrainian banks, the latter is more effective. However, the latter does not enable the supervision authorities any flexibility with individual banks.

## 5 Conclusion and recommendations

Capital adequacy ratio (CAR) is the key indicator for a bank's solvency. For the aggregated Ukrainian banking sector, CAR stands at 14.8%, which is an appropriate level. But for the group of ten largest banks CAR seems to be declining rapidly and might currently amount to less than 12%. This would imply that large banks are keeping a rather thin buffer of less than 2 percentage points, given the minimum CAR of 10% in Ukraine. Thus, large banks seem to be behaving in a risky fashion and this poses a threat to overall financial sector stability.

Given that most large banks are for sale now, owners have no incentives to increase CARs by injecting fresh capital or by limiting crediting. Consequently, action from the banking supervision is needed. We recommend that NBU publishes an "administrative practice", informing banks that CARs by single banks below 12% will be considered as rather low, leading to frequent on-site inspections and further measures. Should this "soft" measure not be effective, then a rise in minimum CAR to 12% should be considered. The NBU should inform banks that this "harder" measure would follow, should the soft measure fail to show positive results by a certain date.

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