Private foreign borrowing and credit growth in Ukraine: Trends and policy recommendations

Executive Summary

Private foreign borrowing has increased sharply in Ukraine since 2006. While the level of private foreign debt is still moderate by international comparison, the rate of growth is very high. From July 2006 to July 2007, the gross stock of foreign debt increased by 53.5%. The banking sector played a major role in these developments; its gross foreign debt grew by a massive 171.6% in this period.

The funds attracted by the banking sector are primarily used to finance a rapid increase in domestic lending ("credit boom"), mainly to households. The combination of a sharp credit growth and its financing through foreign borrowing entails significant risks to banking sector stability, which has led the National Bank of Ukraine to consider and to implement restrictive measures. In this paper we analyse the appropriateness of applying reserve requirements to foreign loans attracted by banks, the introduction of an interest rate cap for foreign borrowings by residents and the debated prohibition to provide foreign currency loans to private households. Among these instruments, we prefer the application of minimum reserve requirements, since this market-based instrument is well-targeted and relatively cost-effectively to implement. Interest rate caps, as well as a general prohibition of foreign currency lending to households have serious drawbacks, which do not support in our view their introduction.

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Appendix
1 Introduction

Private foreign borrowing in Ukraine has risen very strongly in 2006 and 2007, a fact which continues to cause concern to regulators and policy makers. The National Bank of Ukraine (NBU) is particularly vigilant about the growth in foreign borrowing by commercial banks, which has been often “blamed” for fuelling an unsustainable and risky growth in lending to private households (i.e. the current “credit boom”). These worries are understandable, especially taking into account current problems for commercial banks in Kazakhstan, which relied heavily on foreign borrowing to finance domestic credit activities.

In an attempt to reduce the risks linked to these developments, the NBU considered introducing a numbers of measures and has also passed some concrete regulations. In the period 2006-2007, the NBU considered practically prohibiting bank loans in foreign currency to private households. This extremely harsh proposal met with strong opposition from the side of commercial banks and was not implemented. In November 2007, the NBU decided to apply reserve requirements for loans received by domestic banks from non-residents. Furthermore, starting from 1 January 2008, an interest rate cap for foreign borrowings by residents will come into effect, though it is still not clear whether this regulation is legally binding or not.

In Part 2 of this paper we analyse recent developments to find out whether Ukraine’s banks are borrowing too much abroad and to assess whether the current credit boom has a clear correlation with foreign borrowing. Part 3 identifies the risks related to foreign borrowing by banks and credit growth in Ukraine. In Part 4, we evaluate the appropriateness of policy instruments, which have been recently discussed or implemented. In Part 5 we summarize and conclude.

2 Private foreign borrowing and credit growth in Ukraine: An overview

2.1 General trends

As of 1 July 2007, the gross foreign debt stock of Ukraine amounted to USD 65.4 bn (47.6% of forecast GDP). The private sector accounted for USD 51.9 bn, i.e. for almost 80% of total gross debt.

Flows of foreign private borrowing have risen strongly in recent years. While the inflows\(^1\) amounted to USD 4.8 bn in 2004, the corresponding figure for 2006 was USD 15.8 bn (Figure 1). Despite the current turmoil on world financial markets, inflows continue to rise; for 2007 inflows are forecast\(^2\) at USD 22.4 bn.

**Figure 1**

Net flows of private foreign borrowings, USD bn

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflows (USD bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>4.8</td>
</tr>
<tr>
<td>2005</td>
<td>7.2</td>
</tr>
<tr>
<td>2006</td>
<td>15.8</td>
</tr>
<tr>
<td>2007*</td>
<td>22.4</td>
</tr>
</tbody>
</table>

Source: NBU, IER forecast

* Own forecast

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\(^1\) Inflows are measured as the change in gross foreign debt.

\(^2\) The forecast for 2007 is based on the assumption of a doubling of the inflows in 1H07, which amounted to USD 11.2 bn.
2.2 Sector developments

(i) Banking sector

The banking sector is the main contributor to the sharp recent rise in the private foreign debt stock. The heavy increase in total debt by 53.5% from July 2006 to July 2007 can be explained to a large extent (58.8% of total rise) by the bank sector, whose gross foreign debt has reached USD 21.2 bn as of 1 July 2007. As a result, the share of the banking sector in total gross foreign debt has increased to 32.4%, as shown in Figure 2.

Figure 2
Foreign debt structure, % of gross debt

![Foreign Debt Structure](image)

Source: NBU, Derzhkomstat, IER forecast
*Data as of 1 July 2007

According to statistics, 70% of the USD 7.1 bn of foreign borrowings attracted by banks in the first half of 2007 is considered as “long-term” debt. But “long-term” is defined in Ukrainian statistics as debt with maturity of over one year (i.e. more than 365 days), a definition that does not coincide with international standards or economic principles. In reality, most foreign borrowings seem to be short-term (or medium-term at best) and/or have the economic characteristics of short-term debt. In most cases, “long-term” syndicated loans have a put option from the foreign lender, i.e. the foreign lender can discontinue the loan after one year. Besides, “long-term” loans taken up by Ukrainian banks most commonly bear a flexible interest rate (e.g. LIBOR plus a certain spread, representing the risk premium). Consequently, we can conclude that foreign borrowings by banks are to a large extent short-term or have short-term characteristics.

Regarding the motivation for banks to take up foreign debt, it is useful to take a look at Figure 3. As shown in the chart, there is a strong correlation between credit growth and foreign debt of the banking sector in the last years. From this correlation we can conclude that banks attract foreign borrowings as a mean of financing the currently existing credit boom in Ukraine.
As a result of these developments, the foreign debt of Ukrainian banks has not only increased in absolute, but also in relative terms. As shown in Figure 4, the share of foreign liabilities in total liabilities of banks has increased significantly. Thus, foreign financing is getting more important for domestic banks from day to day. A fact which might explain this development is the growing presence of foreign banks, which are attracted by the immense future growth (and therefore profit) potential of the sector. This in turn implies access to lower funding costs through the parent bank and a more stable foreign funding.

To put Ukraine into an international perspective, we shall take a look at data for other credit boomers in Eastern Europe. According to DB Research\(^3\), Ukraine is among the TOP-5 credit boomers in Eastern Europe. Real private sector credit growth in the CIS-countries Kazakhstan, Ukraine, and Russia were 66.9% yoy, 55.0% yoy and 42.9% yoy respectively as of 1 September 2007. The information of foreign funding shares in total banks liabilities of those countries are given in Table 1.

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\(^3\) Eastern Europe: Funding & liquidity risks have risen. DB Research. Credit Monitor Eastern Europe, 6 November 2007.
Table 1
Share of foreign funding in total bank’s liabilities, in %, as 1 July 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>1H2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>41.0</td>
<td>35.6</td>
<td>51.7</td>
<td>58.4</td>
</tr>
<tr>
<td>Russia</td>
<td>10.2</td>
<td>12.8</td>
<td>15.7</td>
<td>16.9</td>
</tr>
<tr>
<td>Ukraine</td>
<td>12.2</td>
<td>16.4</td>
<td>23.9</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Source: Moody’s

(ii) Real sector

The real sector is the major foreign borrower in Ukraine. As of 1 July 2007 gross external debt of the real sector amounted to USD 28.6 bn, compared to USD 21.2 bn by the banking sector. Foreign borrowings by the real sector are increasing significantly (gross foreign debt rose by 36.0% from July 2006 to July 2007), but at a much lower speed than in the banking sector (171.6% in the same period).

3 Potential risks due to foreign borrowing and credit growth

3.1 Identifying potential risks: Level vs. growth rate of foreign borrowing

In this part we will assess whether the developments and trends described above pose any significant risks to the financial stability of the country. In a first step it is important to identify the sector facing potential risks. In our view, foreign borrowing in the real sector does not pose major risks. Borrowings are not increasing at a very high rate; more importantly, they are used to finance investments, which will very likely yield a decent rate of return. The situation is different in the banking sector. Here the speed of growth is very high and the funds are used mainly for expanding retail loans to households, which is in general considered a risky business and feeds mainly consumption. According the latest available NBU-data from end-November 2007, household loans were expanding at a rate of 101% yoy, while enterprise loans showed a more modest rate of growth of 62% yoy. At the same time, the relative importance of household loans is growing in bank’s overall loan portfolios, from 17% in January 2005 to 36% in November 2007.

Conclusion: The main risks concerning private foreign borrowing lie with the banking, not the real sector.

In a second step it is important to distinguish between the level and the rate of growth of foreign borrowings by banks. As shown in Table 1, the level of external funding of Ukrainian banks (27.5%) is not very high, especially when compared to Kazakhstan (58.4%). Thus, the current level of external debt of the Ukrainian banking sector should be not considered as a financial risk. The picture changes dramatically if we look at the current speed of change of external funding. As shown in Part 2, foreign borrowing by Ukrainian banks is increasing at an extremely high rate, which could entail significant risks.

Conclusion: The main risks related to foreign borrowings by banks are not due to the level, but to the high growth rate of borrowing.

3.2 Risks of refinancing credit growth through foreign borrowing

As shown above, commercial banks use foreign borrowings (liability side) for financing loans to mainly households (asset side). When the risks on the asset side do not match those on the liability side, the solvency of a bank could be in danger. In our view, two major mismatches between assets and liabilities require strong attention: indirect currency risk and the maturity mismatch.

(i) Indirect currency risk

At a first glance, banks do not face major currency risks in Ukraine, in line with existing strict prudential regulations on open currency positions. Foreign borrowings are fixed in foreign currency, but also a large share of loans is fixed in foreign currency. Thus, no significant currency mismatch seems to exist in the Ukrainian banking sector.

However, there is an indirect currency-related credit risk present in such operations. Even though a number of domestic borrowers receive a certain share of their income or revenue in
foreign currency, there exists exposure to domestic borrowers with limited income/revenue in foreign exchange, or with insufficient hedging in place. The aforementioned growth of household loans in foreign currency (i.e. to a sector typically associated with limited access to foreign exchange earnings or hedging) has further contributed to growing indirect currency-related credit risk.

(ii) Maturity mismatch

On the liability side of banks, most of foreign borrowing is short-term in economic terms, i.e. it has a short-term maturity, or it contains prolongation clauses with the possibility of interest rate changes or it features flexible interest rates. On the asset side, banks have increased maturities, especially for mortgage loans. Thus, there is a potential maturity mismatch here, which might put into question the ability of foreign debt repayment in the future. This risk is directly related to the currently observed turmoil in global financial markets, as shown by recent developments in Kazakhstan (see Box 1 below).

**Box 1**
When the music's over: Sudden stop of external finance in Kazakhstan in 2007

As was demonstrated in Table 1, commercial banks in Kazakhstan relied heavily on foreign borrowings to refinance the current credit boom, placing the country on top in terms of real credit growth in CIS and CEE countries. However, in the wake of the international financial crisis, which originated in the US during the summer of 2007, and quickly spilled over into the global financial system, it appears that Kazakhstan was hit hardest among transition countries. The high dependence on foreign funding, coupled with rapid credit growth became a structural risk for the banking system. How can this sudden increase in banks' vulnerabilities be explained?

Sound macroeconomic fundamentals in this politically stable and resource-rich country can be considered an important background for the previous boom in credit growth and foreign funding. The banking-sector was regarded as well supervised and regulated and attracted therefore cheap foreign funding, supported by high credit ratings. The high and rapidly increasing dependency on foreign funding raised concerns by the regulator in the beginning of this year, which tried to limit these borrowings abroad by linking them to a multiple of banks' capital and an increase in reserve requirements. The announcement of these regulatory measures, however, did not succeed in slowing down the pace of foreign debt accumulation.

US sub-prime mortgage crisis in the middle of this year sparked a re-assessment of risks taken on by international investors and suddenly the sentiment for the country changed dramatically. The outlook for the economic situation worsened and high banking exposure to the booming property market raised concerns about asset quality. An initial sell-off in Eurobond markets spilled over to the local market, with rising interest rates and concerns in the population about a depreciation of the Tenge. This caused heavy intervention by the central bank, which lost roughly a quarter of its reserves to support the market and counter capital outflows. In this situation, the low level of foreign ownership meant that no stable funding by parent banks could be obtained, and instead the whole burden of support was placed on the government.

Going forward, the current lack of access to international funding is not a critical near-term risk, since the bulk of refinancing is due end-2008 and later. However, the impact on credit growth can already be seen, with a decrease in real credit growth from 82% yoy in August to 67% yoy in September 2007. The main question will be how the real economy - especially the real estate sector - performs, and how this affects bank loan and asset quality. A dramatic deterioration of balance sheets creates the danger of a credit crunch, which could turn into a vicious circle, causing a steep decline in economic performance.

3.3 Risks due to a very strong credit growth

(iii) Quality of new credits

The rapid credit growth in a very competitive market could involve a loosening of lending standards by banks. Faced with ambitious profit targets, the wish to increase market shares is big and the quantity and quality of existing staff is almost constant in the short-term. Thus, there is a significant risk that the rapid credit growth would lead to an increase in bad debt in the future and to make repayments to foreign lenders difficult. This risk could be increased by the still prevailing low credit culture in parts of the population.

(iv) Mortgage loans and valuation of property

The very high property prices in Ukraine coupled with the lack of independent valuation of property for the provision of mortgage loans pose significant risks for the Ukrainian banking

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4 As the crisis evolved, the increase in reserve requirements was postponed until 15 January 2008. Similarly, the borrowing limit linked to banks' capital will also become fully effective in early 2008.

5 Financial soundness indicators like the share of non-performing loans tend to lag behind the credit cycle. This implies that the currently observed high credit growth is likely to hide problem loans.
sector. Should property prices go down, then banks might end up with a high number of bad mortgage debt and therefore a deterioration in banks’ asset quality.

4 Policy instruments to deal with the identified risks

As explained in Part 3, the credit boom and its refinancing mainly through foreign borrowing pose serious risks for the banking sector in Ukraine. As shown in the Appendix, academic research has identified many cases where rapid credit growth led to subsequent periods of financial instability. This insight raises the question on how to react to these risks. In this part, we will assess the appropriateness of instruments, which have been recently discussed or implemented by the NBU to slow down bank credit growth and foreign borrowing.

Ideally, policy instruments should target only the rapid change, not the level of crediting and foreign borrowing. Also, the administrative cost of the instrument should be as low as possible. Part 4.1 looks at instruments which target the liability side of banks (foreign borrowing or international capital transactions) and Part 4.2 examines an instrument tackling the asset side of the balance sheet (credits).

4.1 Instruments to control private foreign borrowing (liability side)

(i) Reserve requirements on foreign borrowings

On 8 November 2007 the NBU issued a regulation according to which reserve requirements of 4% do not only apply to bank deposits in foreign currency, but also to all loans from non-residents. The new regulation came into force on 20 November 2007.

This measure makes foreign borrowing de facto more expensive and will thus contribute to a reduction of foreign borrowing and the credit boom. At the same time, a shift in refinancing towards domestic sources can be expected, which would imply a much-needed diversification of the funding base. Besides, the administrative cost of this measure is negligible. All in all, we think that this instrument can be considered as an appropriate market-based instrument.

(ii) Interest rate cap on foreign borrowing

Following a resolution by the NBU, starting from 1 January 2008 residents (i.e. not only banks) will only be allowed to take up foreign debt, if the interest rate does not surpass a maximum rate ("interest rate cap"). This capital control instrument might reduce foreign borrowing, but also reduce the risks linked to such operations: The lower the interest rate paid to non-residents, the lower the risk for defaulting on this debt.

But this instrument has also significant drawbacks. First, it is not completely clear how the interest rate cap will be calculated in practice. While theoretically this cap is established taking sovereign Eurobond yields, interest rate spreads between private and sovereign foreign borrowings, and credit ratings of Ukrainian enterprises into account, it is questionable whether these instruments have sufficient liquidity to provide reliable data; thus, the practical implementation seems somewhat discretionary. Second, the application for permission for each transaction will create high administrative costs, both for banks and for the NBU. Besides, such a cap could discriminate against smaller and not foreign-owned banks (as well as non-bank enterprises). Especially, medium-size banks providing loans to small and medium enterprises (SME) might be hurt. In many cases, banks finance their SME lending through loans from foreign development banks with a relatively high interest rate, given the risks involved in SME lending. If the interest rate cap is set too low, then such loan programmes from development banks might not be feasible anymore and SME lending could decrease...
significantly. As a consequence of these drawbacks, we think that this instrument is not very appropriate to deal with the described problems and risks.

4.2 Instruments to control credit growth (asset side)

(iii) Limitations on loans in foreign currency

In 2006 and in early 2007, the NBU considered the possibility of practically prohibiting loans in foreign currency to households. Such a measure would have a very strong effect on credits. Most likely, it would lead not only to a decrease in the growth rate of credits, but also to a decrease in the level of credits. Besides, this instrument would create significant problems for rolling over existing loans in foreign currency into loans in national currency; this could have a destabilising effect on the banking sector, and most likely lead to a slow-down in consumption and real sector activity. Because of these deficiencies and a strong, but legitimate lobby by banks against it, the NBU has abandoned plans to introduce this – in our view – excessive measure earlier this year.

5 Conclusions and policy recommendations

Ukraine is facing a very rapid expansion of credit (“credit boom”), which is mainly financed by foreign borrowing. Both the high rate of credit growth and its financing should be considered as risky and require a policy reaction. But this policy reaction should not try to reduce the level of crediting and foreign borrowing, since these levels are not a problem. The only problem relates to the excessive speed of change.

In order to reduce risks, and avoid thereby financial distress, the regulator (i.e. the NBU) should use appropriate instruments. These instruments should be appropriately targeted and cause low administrative costs to have the desired effects.

Recommendation 1: We support the introduction of reserve requirement on loans from non-residents, since this will contribute to a lower growth rate of foreign borrowing and credit growth. Besides, the administrative cost of this instrument is not very high.

Recommendation 2: Regarding the foreseen introduction of an interest rate cap for foreign borrowing starting from 1 January 2008, we acknowledge that this instrument can be effective, but the administrative, information and monitoring cost of this measure is far too high. At the same time, a level playing field for all market participants cannot be guaranteed and SME lending might be hurt. Thus, we do not support the introduction of this instrument.

Recommendation 3: We do not support a prohibition of foreign currency loans to private households, as was discussed in 2006 and at the start of 2007, since this measure would reduce not only growth, but also the level of banking activity.

Away from these concrete prudential requirements, it is necessary to remind about the paramount importance of enhancing and improving banking supervision in an environment of rapidly expanding balance sheets, mainly driven by foreign borrowing. This would increase the ability of banks to assess and manage their exposure to risks, and maintain credit quality at comforting levels. In particular, a shift from checking formal compliance with standards towards more risk-based principles is needed in banking supervision.

Authors: Ricardo Giucci, Robert Kirchner and Yuliya Poletaeva

Lector: Veronika Movchan

Kyiv/Berlin, December 2007
Appendix

The relationship between credit booms and subsequent financial crises

While the general process of financial deepening is welcome and will promote economic growth in the phase of transition, periods of too rapid credit growth can lead to episodes of financial fragility and distress. A growing number of academic studies therefore try to identify possible links between financial sector distress and preceding credit booms, characterized by rapidly growing credit to the private sector. This financial instability can come in the form of a banking crisis, possibly in combination with a currency crisis, i.e. a “twin crisis”.

Indeed, in a number of countries which experienced such crises over their recent past, such developments were preceded by a bank lending boom, caused by financial liberalisation and deregulation. In Latin America, Mexico (1994) serves as such an empirical example, while among the Asian “Tiger countries” Thailand, Indonesia and Korea (1997/98) fit well into this picture.

However, more formal econometric studies which try to answer this question come naturally to more differentiated results, even though a positive (but weak) link between lending boom and financial crisis can be established in most cases. A rapid growth in credit raises the probability of a future crisis by a certain percentage, even though not all booms are automatically followed by crises. Extreme credit booms, however, are very likely to lead to a crisis, i.e. the incidence of having a crisis depends also on the size of the previous excess in lending. In such situations, a firm policy response by the authorities is needed most, as the possible economic costs of a future crisis can be substantial. This crisis can be triggered by both external events (e.g. similar to the ones we currently observe in international financial markets) or internal ones (e.g. an increase in bad debt due to the previous boom). The challenge for policy makers is to distinguish which part of the empirically observable growth in credit is a (welcomed) trend of catching-up and financial deepening, and which part is the transitory “excessive” expansion component, making a future crisis more probable.