The Impact of the Global Liquidity Crisis on Ukraine and the Road to Recovery

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Macroeconomic Performance

From 2000 to Sept. 2008, Ukraine enjoyed excellent economic results.

<table>
<thead>
<tr>
<th></th>
<th>2000-07 average</th>
<th>2008</th>
<th>2009 (f)</th>
<th>2010 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Growth, % yoy</td>
<td>7.5</td>
<td>2.1</td>
<td>-14</td>
<td>3</td>
</tr>
<tr>
<td>Fiscal Balance, % GDP</td>
<td>-0.8</td>
<td>-1.5</td>
<td>-8</td>
<td>-8</td>
</tr>
<tr>
<td>Consumer Inflation, %, eop</td>
<td>11.3</td>
<td>22.3</td>
<td>13</td>
<td>12-15</td>
</tr>
<tr>
<td>UAH/$ Exchange Rate, eop</td>
<td>5.2</td>
<td>7.7</td>
<td>8 ± 0.2</td>
<td>8 - 10</td>
</tr>
<tr>
<td>Current Account, % GDP</td>
<td>5.7</td>
<td></td>
<td>-7.1</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>2006-07</td>
<td></td>
<td>-1</td>
<td>0.5</td>
</tr>
<tr>
<td>Gross Int. Reserves, $ bn</td>
<td>1.5</td>
<td>32.5</td>
<td>31.5</td>
<td>27</td>
</tr>
<tr>
<td>Foreign Gov’t Debt, % GDP</td>
<td>21.3</td>
<td>8.7</td>
<td>9.2</td>
<td>22</td>
</tr>
</tbody>
</table>

From 2000 to Sept. 2008, Ukraine enjoyed excellent economic results.
The International Liquidity Crisis Hit Ukraine Hard

• PFTS stock index: -74% (2008)

• UAH/$ Exchange Rate: Depreciated by 58% (4Q 2008)

• Drop in GDP: -18% yoy (1Q-3Q 2009)

• Export of goods: -46% yoy (Jan-Oct 2009)

• Industrial production: -26% yoy (Jan-Oct 2009)

• Unemployment: 9% (1H 2009; 6% in 2008)

• Real households’ income: -10% yoy (1H 2009)
The Crisis Affected Ukraine Harder

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP, % yoy, average for the period</th>
<th>Local Currency Depreciation vs.</th>
<th></th>
<th>period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>US Dollar</td>
<td>EURO</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>-18.0 (9M 2009)</td>
<td>58 %</td>
<td>55%</td>
<td>(4Q 2008)</td>
</tr>
<tr>
<td>Latvia</td>
<td>-18.4 (9M 2009)</td>
<td>7 %</td>
<td>(peg)</td>
<td>(1Q 2009)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-16.0 (9M 2009)</td>
<td>7 %</td>
<td>(peg)</td>
<td>(1Q 2009)</td>
</tr>
<tr>
<td>Estonia</td>
<td>-15.5 (9M 2009)</td>
<td>7 %</td>
<td>(peg)</td>
<td>(1Q 2009)</td>
</tr>
<tr>
<td>Russia</td>
<td>-9.5 (9M 2009)</td>
<td>35 %</td>
<td>24%</td>
<td>(Oct.08-Mar.09)</td>
</tr>
<tr>
<td>Mexico</td>
<td>-9.3 (1H 2009)</td>
<td>26 %</td>
<td>23%</td>
<td>(4Q 2008)</td>
</tr>
<tr>
<td>Romania</td>
<td>-7.5 (1H 2009)</td>
<td>23 %</td>
<td>13%</td>
<td>(Oct.08-Mar.09)</td>
</tr>
<tr>
<td>Hungary</td>
<td>-6.7 (9M 2009)</td>
<td>38 %</td>
<td>27%</td>
<td>(Oct.08-Mar.09)</td>
</tr>
<tr>
<td>Taiwan</td>
<td>-6.3 (9M 2009)</td>
<td>4 %</td>
<td>-3%</td>
<td>(1Q 2009)</td>
</tr>
</tbody>
</table>

Source: The Economist, Central banks of the respective countries, The Bleyzer Foundation
Real Sector Performance in 2009

- Real GDP fell by 19% yoy in 1H 2009.
- Major declines in export-oriented industries and credit-dependent sectors (construction, machine-building).
• World commodity prices fell sharply from Aug 2008 to mid-2009.
• Ukraine’s exports of goods dropped by 46% yoy (Jan-Oct 2009).
• Industrial production declined by 30% yoy (Jan-Oct 2009).
Why Ukraine Was Affected More Severely?

1. Open but undiversified economy:
   - 50% export share in GDP
   - Metals, Minerals and Chemicals account for ~60% of exports
   - Narrow geographic export diversification, with EU-27 share during 2003-2009 declining from 38% to 26%; while CIS share increasing from 25% to 35%.

2. A second reason for the severity of the crisis was the combination of three vulnerabilities, as explained below.

- This lack of diversification is due to lack of past economic reforms.
Vulnerability # 1 – Large Current Account Deficits

• Over 2003-2008:
  • Exports grew by 25% pa
  • But imports – by 30% pa
  • CA deficits emerged in 2006 and widened to 7% of GDP in 2008

• 2009 forecast before the crisis: CA deficit - $ 24 billion, or 13% GDP.

• Uncertain foreign financing of the CA put pressures on the Hryvnia.

Source: NBU, SSC, The Bleyzer Foundation

Ukraine’s Foreign Trade in Goods Performance and Current Account Balance

<table>
<thead>
<tr>
<th>Year</th>
<th>CA Balance, left scale</th>
<th>Import of Goods, right scale</th>
<th>Export of Goods, right scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>-8</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>2004</td>
<td>-4</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>2006</td>
<td>-14</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>2007</td>
<td>-14</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>2008</td>
<td>-28</td>
<td>42</td>
<td>42</td>
</tr>
</tbody>
</table>

% GDP % yoy
Vulnerability # 2 – Large External Debt Repayments

- External private debt tripled in three years (2006-08)…
- …mainly to finance consumption and investments.
- As of mid-2008, ~ $40 billion of debts was due to repay in <1 year.
- International reserves stood at $35 billion.

- Debt rollover became very difficult during the initial stages of international liquidity crisis, exerting pressures on the Hryvnia.

Source: NBU, The Bleyzer Foundation
Vulnerability # 3 – Banking Sector Weaknesses

- Bank lending grew by 70% pa over 2006-08.
- This growth was supported by:
  - improved access to foreign capital
  - the entrance of foreign banks
  - loose domestic monetary policy.
- 50% of total loans were issued in foreign currency.
- But the share of non-performing loans (NPLs) increased to 14.5% in 2008 and around 30% currently.
- This weakened the banking sector

**Non-performing Loans in Selected Emerging Markets as % of Total Loans, 2008**

Banking Sector Weaknesses (cont.)

- During the crisis, commercial banks faced:
  - fast growth of NPLs
  - closed access to international credit markets
  - large debt repayments needs
  - high currency risks

- The combination of the above led to bank runs.

- From October 2008 to April 2009, about \( \frac{1}{4} \) of bank deposits were lost.

Source: NBU, The Bleyzer Foundation
Banking Sector Weaknesses (cont.)

- Before the crisis, the credit-to-GDP ratio grew from 20% (2002) to 77% (2008).
- After the crisis, bank lending sharply decelerated due to:
  - tight access to foreign capital and domestic funds
  - deposit withdrawals
  - rising NPLs
  - tight money supply

- Although liquidity support was provided to a number of banks ..... 
  .....it appears that it may not have been used to increase lending.
- But Progress was made in supporting systemic banks and developing non-systemic bank resolution programs.

Source: NBU, IMF, The Bleyzer Foundation
Hryvnia Depreciation – One of the World’s Largest

- During last quarter of 2008, the Hryvnia lost more than 50% of its value to US Dollar.
- Sharp depreciation was due to:
  - Intense vulnerabilities (CA deficits, debt repayments, weaker banking sector)
  - Inadequate monetary policies
  - Fragile political situation
  - Conflicting statements about the future exchange rate
  - Loss of competitiveness

**Foreign Exchange Market Performance**

- Average UAH/USD interbank exchange rate, left scale
- Net NBU Interventions, $ billion, right scale

Source: NBU, The Bleyzer Foundation
**Hryvnia Exchange Rate and Ukraine’s Competitiveness**
*(based on Purchasing Power Parity - Medium Term View)*

- High inflation in Ukraine – 12.5% pa on average over 2000-2008.
- Virtually stable exchange rate.
- Normally, loss of competitiveness adjusts through exchange rate depreciation.

### PPP with Base Year 2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflation Diff Index Ukr-Us</th>
<th>REER - US</th>
<th>Inflation Diff Index Ukr-MTP</th>
<th>REER - MTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>100</td>
<td>5.7</td>
<td>100</td>
<td>5.4</td>
</tr>
<tr>
<td>2003</td>
<td>106</td>
<td>6.2</td>
<td>101</td>
<td>5.6</td>
</tr>
<tr>
<td>2004</td>
<td>115</td>
<td>6.5</td>
<td>105</td>
<td>5.8</td>
</tr>
<tr>
<td>2005</td>
<td>123</td>
<td>7.1</td>
<td>109</td>
<td>6.1</td>
</tr>
<tr>
<td>2006</td>
<td>134</td>
<td>8.0</td>
<td>115</td>
<td>6.6</td>
</tr>
<tr>
<td>2007</td>
<td>150</td>
<td>9.7</td>
<td>124</td>
<td>7.5</td>
</tr>
<tr>
<td>2008</td>
<td>182</td>
<td><strong>11.2</strong></td>
<td>141</td>
<td><strong>8.2</strong></td>
</tr>
<tr>
<td>2009</td>
<td>210</td>
<td><strong>12.6</strong></td>
<td>154</td>
<td><strong>8.9</strong></td>
</tr>
<tr>
<td>2010</td>
<td>237</td>
<td></td>
<td>167</td>
<td></td>
</tr>
</tbody>
</table>

**REER - Real Effective Exchange Rate**
Nominal Exchange Rates (per US dollar) and Inflation Differential with the US, 1972-2000

Percentage change in Nominal Exchange Rate

Inflation Differential with the US

Source: Mankiw, Macroeconomics, IMF International Financial Statistics
Over the **Medium Term**, as inflation in Ukraine continues above international inflation, the Hryvnia Exchange Rate should depreciate.

But in the **Short-Term**, the exchange rate will be driven mainly by expected risks-returns from holding the assets (US$ versus Hryvnias).

Risk-return differentials will depend on differentials in interest rates between US$ & Hryvnias and expectations on future exchange rates.

But given concerns about political & other risks, **expectations on exchange rates** are more important than differentials in interest rates.

The main actors that can affect expected exchange rates are:

- Foreign Creditors who will need to roll-over about $30 billion of private foreign debt in 2010
- International Institutions (IMF/World Bank/EC/EBRD) which may or may not provide close to $10 billion in 2010
- The NBU which may use its international reserves to intervene or take administrative measures to hold the exchange rate.
Hryvnia Exchange Rate Over the Short-Term (based on Asset Models)

- The Ministry of Finance which may continue to issue T-Bills to finance fiscal deficits -- but subtract Hryvnia liquidity, crowd out private sector credits and reduce Hryvnia depreciation pressures.
- The Ukraine population which holds about $25 billion in foreign exchange

- The likely behaviors of these agents in the short term, up to the January/February elections are likely should be as follows:
  - Foreign Creditors may be prepared to roll-over most of their debt until the elections because of:
    - the large investments already made in Ukraine,
    - the better financial position of their home offices,
    - possible concerns with contagion effects,
    - long-term potential of local banks, which may regain their solvency with support from international institutions and,
    - the prospects that after the elections the country could recover its stability and growth.
...Hryvnia Exchange Rate Over the Short-Term
(based on Asset Models)

- The International Agencies might wait until after the elections to determine the commitment of the new authorities to sound policies.
- The NBU will try to use all means to maintain stability for as long as international reserves will allow it to intervene.
- The Ministry of Finance will continue to issue T-Bills, subtracting Hryvnia liquidity.
- The population may want to increase its holding of foreign exchange during the pre-election period due to political uncertainties.

• On balance, we believe that the most important actors are the foreign creditors -- who may want to wait-and-see and roll-over their debt up to the elections -- and the NBU/Ministry of Finance -- who would push for FX stability or even some appreciation.
• On this basis, the exchange rate is likely to be stable and even appreciate somewhat until January/February 2010.
Hryvnia Exchange Rate After the Elections

• During 2009, considerable progress was achieved in reducing Ukraine’s main vulnerabilities:
  – The current account deficit is no longer a problem, thanks to the devaluation and lower domestic income – the current account deficit is forecasted at about 1% of GDP in 2009 and a small surplus in 2010.
  – The banking sector has stabilized thanks to adequate support to systemic banks and developed non-systemic banks resolution program.
• Therefore, Ukraine main vulnerability for 2010 is its large external debt ($100 billion), of which about $30 billion* is due within one year.
• In 2009, about 75% of external private debt was rolled-over. We forecast similar or higher roll-over will be needed to contain depreciation pressures.
• Hence, the exchange rate after the elections will depend on the **degree of confidence** that the new government will create, principally in the minds of foreign creditors, international institutions, and population.

* According to the NBU, short-term private sector debt (by original maturity) stood at about $20 billion at end-June 2009. Assuming 6-year average maturity for MLT debt, which stood at $61.5 billion, total private external debt due during next year is estimated at around $30 billion.
• In order to build confidence the new authorities will need to:
  – Implement sound fiscal and monetary policies (sustainable fiscal deficit, improved financial conditions of the Pension Fund and Naftogaz, and avoid printing of money)
  – Continue improvement in the balance-of-payments
  – Continue improvements in the banking sector (re-capitalization, dollarization, resolution of NPLs, loan & security recovery, loan classification and provisioning, NBU role and independence).
  – Secure large financial support from international institutions
  – Secure the roll-over of 2010 debt by foreign creditors
• This is a hard agenda to do, given the current political difficulties.
• Without doing it, large devaluations may follow after the elections.
Medium-Term Prospects

- Past sources of economic growth (exports and domestic consumption) will be limited in the future: exports prices are unlikely to increase as in the past and credit will not be available to boost consumption.
- Therefore, Investments must become the new GDP growth engine, not only to induce growth but to diversify output and exports.
- For this, Ukraine’s economic outlook is still bright:
  - Exports should be stimulated by membership in the WTO
  - The proposed EU-FTA would encourage FDI and exports
  - FDI will also be supported by abundant and educated labor
  - Labor wages are 1/3 of those in Eastern Europe
  - Ukraine’s 46 million population is an attractive market
  - Ukraine’s agricultural potential is quite high
  - Ukraine’s infrastructure and technological base are reasonable
Measures to Revive Economic Growth

• But realization of this outlook requires major improvement in the business climate.

• For this, political will be required to:
  • Improve public administration (the current administrative system has proven to be incapable of implementing reforms)
  • Bring stability and predictability to the legal environment
  • Reform the judiciary
  • Reduce the costs of doing business, by de-regulation and by improving tax policies and administration
  • Reduce corruption
  • Reach an Enhanced Free Trade Agreement with the EU
  • Support energy and other efficiency and productivity growth