



# Macroeconomic Forecast Ukraine

- The real GDP is expected to increase by 7.6% in 2007 backed by strong investments and recovery of exports.
- In 2008 the real GDP growth is forecasted at 6.9%.
- Private final demand is expected to remain the major source of GDP growth in 2007, while in 2008 investments will take a lead.
- The political turmoil is expected to have no significant impact on growth in investments in 2007 and 2008.
- Growth in real exports will resume after two years of decline, but real imports will continue surpassing exports in 2007 and 2008.
- Average consumer price inflation is forecasted at 10.2% in 2007 and 8.3% in 2008.

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**Forecast Period:**  
Q1-2007 to Q4-2008

**Forecast Variables:**  
GDP and components, inflation

## GDP: The real GDP growth is estimated at 7.6% in 2007

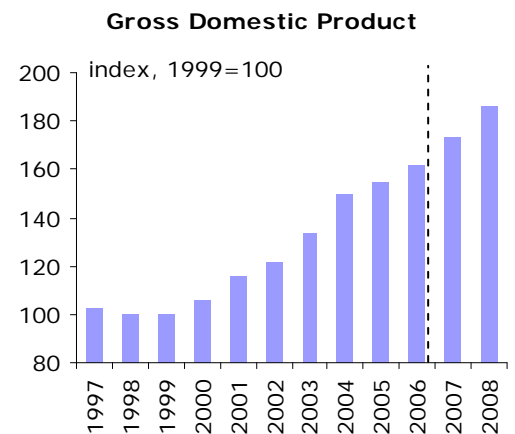
According to the preliminary estimate of the Derzhkomstat, in the first quarter of 2007 real GDP growth reached 8.0% yoy against the low statistical base of the previous year. It is expected that the economic growth will remain high during the year, and the real GDP will increase by 7.6% in 2007. While domestic private consumption will remain the key contributor to economic growth (contribution of 5.7 p.p. as compared to gross fixed capital accumulation contribution of 4.3 p.p.), the distinctive feature of the year 2007 will be the recovery of real exports. Real exports is estimated to increase by 6.8% in 2007 continuing the trend started in the third quarter of 2006. However, real imports will grow faster than exports continuing to maintain a negative trade balance.

Continued growth in natural gas import prices and political turmoil will have minor impact on economic growth in 2007. Higher natural gas prices compared to 2006 are expected to be compensated by the increase in world prices on metals and chemical products, and also energy saving techniques. As of political crisis and forthcoming early parliamentary elections scheduled for September, the expected impacts are the postponement of new laws adoption and perhaps a slight deceleration of investments in the second half of the year due to the election campaign.

In 2008 the real GDP growth is forecasted at 6.9%. This growth will be based on further expansion of investment activity, growth in private consumption and exports. It is expected that the contribution of gross fixed capital accumulation to the real GDP growth (5.3 p.p.) will slightly exceed the contribution by the private consumption (5.2 p.p.) in 2008. Strong growth of domestic demand, as well as the accession to the WTO, is expected to further stimulate real imports. The growth of real exports is expected to depend on favourable world market prices for key export products, as well as relaxation of quotas on metal exports to the EU thanks to the WTO accession.

## Assumptions:

- In 2007 the border gas price is USD 130/tcm, and it will increase by around 10% in 2008.
- The world prices for metals and chemicals remain high.
- Agricultural land sales moratorium will be lifted in 2008.
- Ukraine will join WTO not earlier than the end of 2007.
- No changes in major tax rates will be in 2007 and 2008.
- Growth in social payments, pensions and wages will be moderate in 2007 and 2008.
- The average nominal exchange rate will be 5.05 UAH/USD and 5.10 UAH/USD in 2007 and 2008, respectively.



Source: Derzhkomstat, own calculations

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## Private Consumption: The growth of household consumption will slow down

In the last two years private consumption was the major driver of the real GDP growth. It is expected that the growth of household consumption will be more moderate at 9.7% in real terms in 2007 due to a slowdown of growth in disposable income. The latter is linked to the expected moderate growth in social payments as well as slower growth of wages. In particular, the need in investments may cause a redirection of value added from wages to profits. Also, in 2007 the tax rate on personal incomes increased by 2 percentage points to 15%, adversely affecting disposable incomes. Among the factors stimulating consumption will be the continued expansion of consumption credits. This expansion of credits, especially in foreign currency, leads to accumulation of risks in the financial sector, but these risks are unlikely to burst in 2007.

In 2008 growth in real household consumption is expected to further decelerate to 8.9%. Its growth will be driven mostly by the same factors as in 2007. It is forecasted that 2008 will be the first year since 2000 when a contribution of investments to growth will be higher than a contribution of the private consumption.

## Government Consumption: Moderate growth pace is expected in 2007 and 2008

Although the state consumption has been traditionally high in absolute terms constituting 18-19% of the GDP, its contribution to the real GDP growth has been quite moderate since 2004. It is expected that the real state consumption will increase by 2.3% in 2007 and 2.8% in 2008. Government is not likely to notably change the growth in healthcare and education expenditures, the largest part of its consumption bundle.

## Investment: Growth in gross fixed capital accumulation will be high in 2007-2008

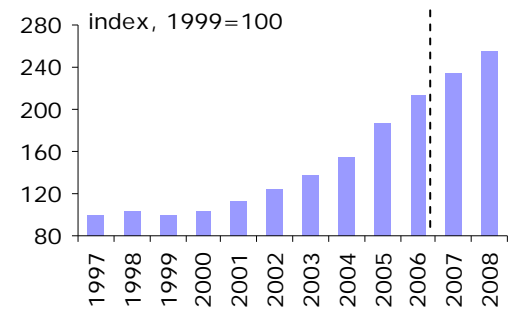
In 2006 investment activities considerably accelerated and the growth in gross fixed capital accumulation was reported by Derzhkomstat to be 18.7%. In 2007 the growth in gross fixed capital accumulation is forecasted to stay high at 17.9% in real terms. A series of natural gas price increases and a possibility of future gas price jumps will impact investments stimulating adoption of energy-saving technologies. Further, increased competition is expected to further stimulate investment activity. The political crisis and forthcoming early parliamentary elections scheduled for September are expected to have a mild impact. This will likely slightly decelerate investments in the second half of the year due to diversion of funds for the election campaign.

In 2008 investments are forecasted to further accelerate up to 20.4%. It is expected that enterprises will be forced to invest to cut energy related expenses, including natural gas consumption, as well as to replace outdated equipment and technologies. Given Ukraine finally joins WTO in 2008, this would create additional incentives to improve competitiveness and this, in turn, will stimulate investment activity in the country.

## External Sector: Real exports are forecasted to recover after two years of decline

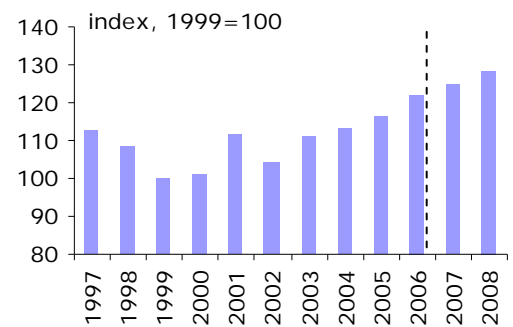
After two years of decline real exports are expected to increase in 2007 and show a growth rate at 6.8%. Metal production, chemical industry, and machine building contributed the most to the growth in exports. Improved external demand for the commodities produced in these sectors played a key role in exports revival. In terms of real imports, in 2007 they are forecasted to experience a considerable growth at 12.0%. In particular, accelerated investment activity and private demand for durables drove up the imports of machinery and equipment. As the growth rate of imports will exceed the growth of exports, the trade deficit will remain in 2007.

### Households' Consumption



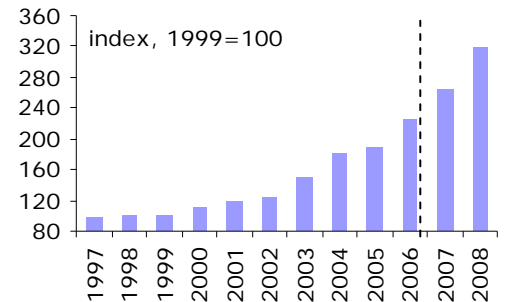
Source: Derzhkomstat, own calculations

### Government Consumption



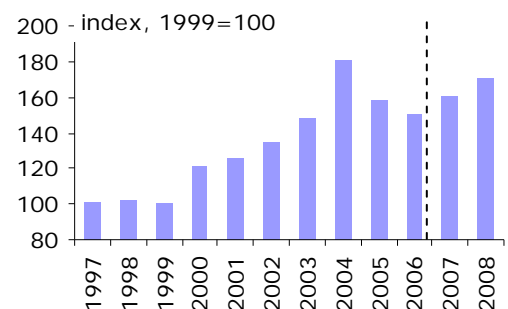
Source: Derzhkomstat, own calculations

### Gross Fixed Capital Accumulation



Source: Derzhkomstat, own calculations

### Exports of Goods and Services



Source: Derzhkomstat, own calculations

The adoption of 11 laws required to finalize the harmonization of the Ukrainian legislation with the WTO rules and regulations on May 31, if signed by the President, will become the large step towards the end of the negotiation with the WTO. Also, Ukraine still has to complete bilateral talks, and agree on the aggregate measures of support in agriculture. The WTO membership is expected not earlier than the end of 2007. Thus, the membership will affect trade only since 2008.

In 2008 real exports growth is forecasted at 5.9% while growth in imports is forecasted at 13.4%. Improved access to the Ukraine's market after accession to the WTO would account for part of this additional growth in imports. Continuing strong domestic and investment demand will account for the remaining portion of an additional import growth. An expected increase in world metal prices will mitigate energy price increase and support the growth of exports. Additional factor for export growth will be a relaxation of quotas on metal exports to the EU thanks to the WTO accession.

### Production: Strong growth in manufacturing will offset slow development of agriculture

The growth in value added in *agriculture* is expected to remain low and is forecasted at 1.0% in 2007. The grain harvest, which accounts for most of the agricultural product, is forecasted to remain the same as in 2006. In 2008 the growth in value added in agriculture is expected to slightly increase up to 1.8%. Cancellation of the agricultural land sales moratorium expected in 2008 may positively impact agricultural producers. Furthermore, possible development of biofuels industry may also positively affect agricultural production, especially rapeseed cultivation for bio diesel.

The value added in *manufacturing* continues to accelerate and its growth is forecasted at 13.2% in 2007. Strong external demand helped the industry to overcome the consequences of the gas price shock. In 2008 the growth is forecasted at 9.1%. Slowdown in the growth rate is partially explained by the necessary adjustments that manufacturers would have to implement due to energy prices increases.

In 2007 the value added in *construction* is expected to grow by 12.1% due to the accelerating investment activity and high demand for residential construction. In 2008 the construction is forecasted to increase by 14.1%.

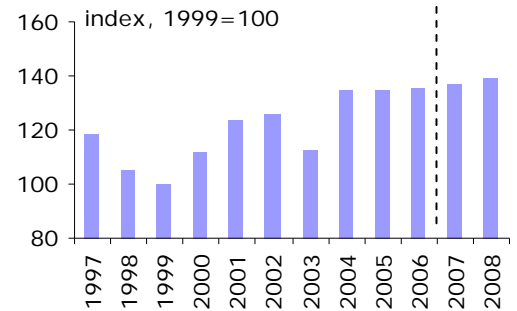
Services will continue to maintain high growth rates in 2007 and 2008 backed by the strong domestic demand. *Trade* shows the highest rates of growth: it is forecasted to reach 15.2% in 2007 and 14.6% in 2008. The reduction of pipeline transportation services observed in the beginning of 2007 is expected to be maintained during next two years. Thus, despite the fast development of other types of transportation, the growth in *transportation* is expected to decelerate to 5.5% in 2007 and 5.9% in 2008.

### Inflation: Consumer price inflation will decelerate in 2008

Consumer price inflation in 2007 is expected to reach an average of 10.2%. Price increase for imported gas in January and other cost-driven inflationary pressures will be limited by the state price policy, leading to the sharp deceleration of utilities price growth. On the demand side, the growth in household consumption will slightly slowdown and share of imported goods in household consumption will continue to grow. This will contribute to lower inflation. However, considerable risks remain as prolonged election campaign can lead to increase in state transfers to lower-income population groups. In addition, a poor harvest is possible due to bad weather conditions.

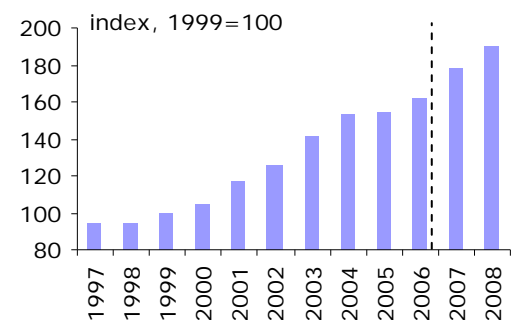
Steady slowdown of household consumption growth, decrease in inflation expectations, fairly stable exchange rate, and the WTO accession allowing cheaper imports of food products will on balance cause a decrease in consumer price inflation next year. Thus, an average consumer price inflation is expected to decelerate to 8.3% in 2008.

#### Agriculture



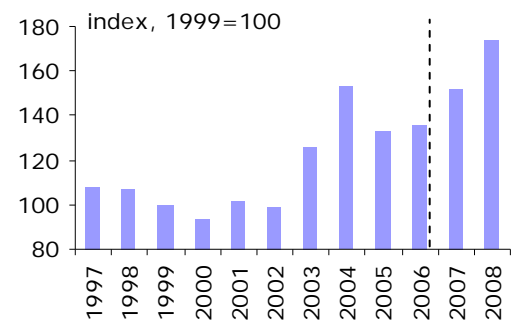
Source: Derzhkomstat, own calculations

#### Industry



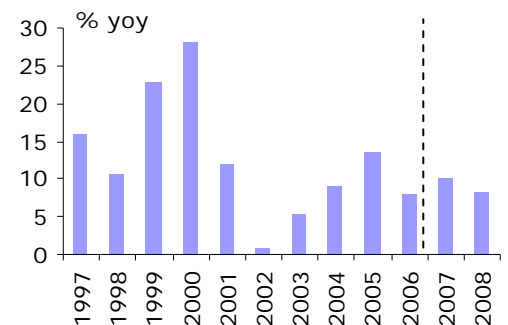
Source: Derzhkomstat, own calculations

#### Construction



Source: Derzhkomstat, own calculations

#### Consumer Price Index



Source: Derzhkomstat, own calculations

**Table 1. Forecast growth of the real GDP by expenditures (% yoy)**

	2004	2005	2006P	2007E	2008F
Household consumption	13.1	20.6	14.4	9.7	8.9
State consumption	1.8	2.9	4.8	2.3	2.8
Gross fixed capital formation	20.5	3.9	18.7	17.9	20.4
Exports of goods and services	21.3	-12.2	-4.9	6.8	5.9
Imports of goods and services	15.5	6.4	6.5	12.0	13.4
<b>Gross Domestic Product</b>	<b>12.1</b>	<b>2.7</b>	<b>7.1</b>	<b>7.6</b>	<b>6.9</b>
<b>Gross Domestic Product (UAH bn)</b>	<b>345.1</b>	<b>441.5</b>	<b>537.7</b>	<b>655.4</b>	<b>785.1</b>

Note: P – preliminary, E – estimate; F – forecast

**Table 2. Forecast growth of the real GDP by sector (% yoy)**

	2004	2005	2006P	2007E	2008F
Agriculture, hunting and forestry	19.8	0.4	0.3	1.0	1.8
Extractive industry	3.5	2.5	5.4	4.9	4.8
Manufacturing industry	12.4	0.4	5.0	13.2	9.1
Production/distribution of electricity, gas, water	-3.6	1.7	3.0	-0.2	0.0
Construction	21.3	-13.3	1.9	12.1	14.1
Wholesale and retail trade, repair services	13.4	-14.7	17.0	15.2	14.6
Transport	11.4	8.2	6.8	5.5	5.9
Education	0.0	0.0	3.1	2.4	2.7
Health care	1.6	0.2	4.8	2.1	2.5
<b>Gross Domestic Product</b>	<b>12.1</b>	<b>2.7</b>	<b>7.1</b>	<b>7.6</b>	<b>6.9</b>

Note: P – preliminary, E – estimate; F – forecast

#### Technical note

This forecast is based on iterative-analytical techniques, grounded in the system of national accounts, using different methods of GDP determination.

There are three basic methods for calculating GDP: GDP by production, GDP by income and GDP by expenditures (final uses of income). Two methods are used in this forecast – production and expenditures.

The calculations are conducted on a quarterly basis. Annual data are derived by aggregating the quarterly dynamics.

The forecasting procedure involves the following steps:

- For each method, the level of disaggregation of the GDP components is selected. The final result of the GDP forecast is based on forecasts for each component.
- The evolution of each component is forecast on the basis of historical data as well as the set of assumptions supplied with the forecast. Whenever possible, a forecast is based on a suitable leading indicator. Major work is focused on the dynamics of each component in real terms.
- The real GDP growth (for each method separately) is determined by summation of the contributions of each component. Here, contribution means the real growth of each component weighted by its share in the GDP structure in the corresponding period of the previous year (see Box 1 for details).
- The real values of GDP - determined by the two methods - are compared, and if a discrepancy is noted, another component forecasting iteration is initiated.

The forecast is built on a system of build-in indicators (proportions), which are expected to stay fairly constant. These indicators partially connect components of the GDPs by production and by expenditures. As additional instruments in component forecasting, econometric equations and input-output tables are used. The iterations continue until the two methods of GDP determination produce identical results.

#### Box 1. Calculations

To identify the contribution of each GDP component to total real growth, the following formula for growth of GDP  $\hat{Y}$  can be used (1):

$$\hat{Y} = \left( \frac{Y_t^* - Y_{t-1}}{Y_{t-1}} \right) = \left( \sum_{i=1}^I \frac{X_{it}^* - X_{i,t-1}}{X_{i,t-1}} \cdot \frac{X_{i,t-1}}{Y_{t-1}} \right)$$

for each period  $t$ ,

where  $Y$  is the GDP, and  $X$  is a component of the GDP,  $I$  is the number of components, and the sign \* indicates inflation adjustments to the respective data.

Consequently, a contribution  $\Theta_t^{X_i}$  of component  $X_i$  to real growth can be calculated as (2):

$$\Theta_t^{X_i} = \frac{\left( \frac{X_{it}^* - X_{i,t-1}}{X_{i,t-1}} \right)}{\hat{Y}} \cdot \frac{X_{i,t-1}}{Y_{t-1}} \cdot 100$$

for each period  $t$ .

In formula (2), the ratio of real growth rates of component  $X_i$  to GDP is weighted on the basis of the previous-period's share of this component in the nominal GDP.

**Note: yoy** year-on-year

**p.p.** percentage points