

# Macroeconomic Forecast Ukraine

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- The real GDP growth is estimated at 6.3% in 2006 backed by growth in private consumption and investments.
- In 2007 the real GDP is forecast to grow by 5.9%.
- Private consumption growth will reach 18.1% in 2006, but decelerate to 8.9% in 2007 due to slower growth of disposable income of households.
- Despite political uncertainty, investments revived and expected to increase by 10.2% in 2006.
- In 2007 the growth rate of real investments is forecast to exceed the growth of private consumption and reach 15.1%.
- Imports will continue growing faster than exports stimulated by strong domestic demand.
- Consumer price inflation is forecast to stay around 8% in 2006 and in 2007.

## Forecast Period:

Q3-2006 to Q4-2007

## Forecast Variables:

GDP and components, inflation

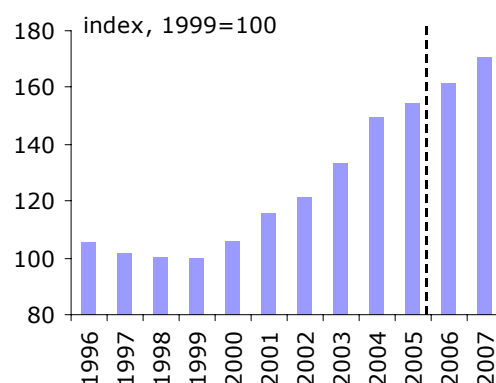
## GDP: Real GDP growth was revised upwards to 6.3%

The Institute of Economic Research and Policy Consulting revised upwards its estimate of the real GDP growth in 2006. It is estimated that real GDP growth will reach 6.3%, considerably accelerating compared with a 2.6% rise a year before. The major reasons for the revision are much stronger than expected growth of investments and the upturn in external demand. Also, the supply shock provoked by higher imported gas prices appeared to be less detrimental for the economy in the short run than it was initially expected.

There are several factors that might explain why higher gas prices did not result in the expected deceleration of the economic growth in 2006. First, one may mention a growth in world prices for metals and chemical products that followed the gas price growth pace and compensated it. Second, enterprises seem to have the high initial capacity for energy saving without introducing costly technologies. Also, enterprises sacrificed the part of their profits for the sake of preserving their market share. However, the further capacity of the Ukrainian economy to sustain the shock is unknown.

In 2007 the economic growth will remain stable with the rate of the real GDP increase at 5.9%. It is forecast that domestic demand will stay as a key contributor to the GDP growth, although the accent will shift from private consumption to investments. The expansion of the domestic demand will be satisfied by both growing domestic production and imports, especially of investment-oriented products. As a result, the growth rates of imports will continue surpassing the growth of exports, causing the maintenance of the trade deficit.

## Gross Domestic Product



Source: Derzhkomstat, own calculations

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## Assumptions:

- The border gas price will remain unchanged at USD 95 per thousand cubic meters (tcm) till the end of 2006.
- In 2007 the border gas price will increase to USD 130-140/tcm.
- The world prices for metals and chemicals will remain high.
- The growth of minimum pension and minimum wage will slow compared to the previous years.
- In 2007 personal income tax rate will be increased from current 13% to 15%.
- Ukraine will become the WTO member in the mid-2007.
- The average nominal exchange rate will be 5.05 UAH/USD and 5.10 UAH/USD in 2006 and 2007 respectively.

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## Private Consumption: The growth of households' final consumption will decelerate in 2007

According to preliminary figures of the Derzhkomstat, in the first half of 2006 the final consumption of households increased by record 19.8% yoy, signalling about the continuation of the consumption boom in the country. Such a high growth in households' spending is attributed to stable growth of their incomes, as well as fast proliferation of consumer credit. The terms and conditions of small credits to households for consumption purposes became more attractive, stimulating borrowings and, thus, expansion of current consumption. It is expected that the growth of private consumption will remain high till the end of the year, although it will be a bit slower than in the first half of 2006. The increase in administratively regulated tariffs on electricity, gas, transport, and utility services will reduce the net income available for other purchases. The final consumption of households is estimated to increase by 18.1% in real terms in 2006, remaining the key contributor to the overall GDP growth on demand side.

In 2007 the private consumption growth will return to its trend growth pace, with the rate of growth at 8.9% yoy in real terms. The slowdown is backed by several changes. First, the personal income tax rate is to be raised by 2 percentage points to 15%, thus reducing the net disposable income of households. Also, the Government foresees slower growth in minimum pensions and wages that will be translated into slower development of households' incomes. Finally, the strong investment needs in the country are likely to contribute to the redistribution of the value added from wage bills to the profits and thus investments.

## Government Consumption: Moderate growth expected

The growth of real final government consumption is expected to stay very moderate compared to the final households' consumption. It is expected that in 2006 it will increase by 3.8%, thus continuing the previous-year trend. The biggest share of government consumption is payments for individual services like education and health. In 2007 the growth of final government consumption is forecast to decelerate to 2.7% in real terms alongside with the slowdown with the fiscal expansion.

## Investment: Revival of investments in 2006-2007

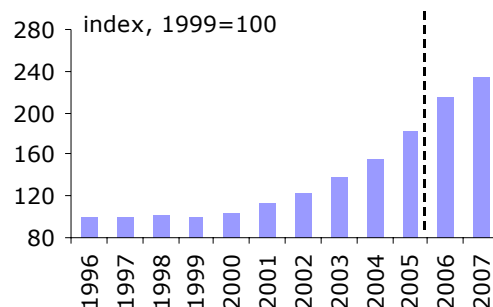
Despite high political uncertainty that accompanied the parliamentary elections in March 2006 and subsequent formation of the majority coalition and the new Government, investments accelerated against the background of previous year drop. According to the Derzhkomstat, in the first half of 2006 the gross fixed capital accumulation increased by 9.5% yoy in real terms compared to 1.2% yoy reduction a year before. The acceleration of investment activity may be attributed to a pressing need for investments in energy-saving technologies, as well as the booming domestic consumption that created ample opportunities for development of service sector. It is expected that the growth of investments will further accelerate by the end of the year, and in 2006 the real gross fixed capital accumulation will rise by 10.2%.

In 2007 the investments are forecast to accelerate further. The obsolete equipment, the need to enhance energy-efficiency against the background of high world energy prices, and the need to increase the competitiveness on the eve of the WTO accession will stimulate investment activity in the country. As a result, the real gross fixed capital accumulation will increase by 15.1%.

## External Sector: Strong domestic demand will continue stimulating imports

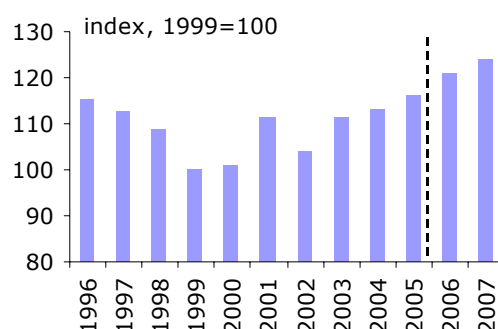
According to the Derzhkomstat, real exports of goods and services reduced by 19.9% yoy in the first quarter of 2006 against the background of higher external competition and thus reduced demand. However, already in the second quarter the reduction of

### Households' Consumption



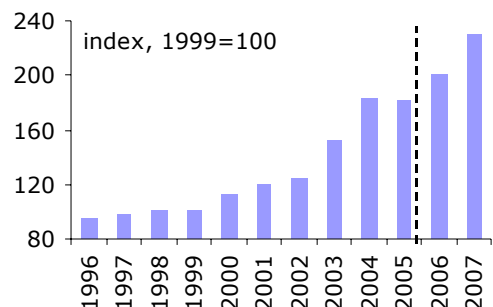
Source: Derzhkomstat, own calculations

### State Consumption



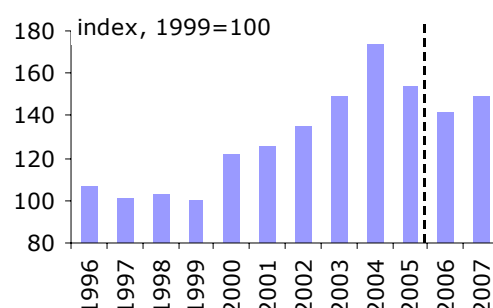
Source: Derzhkomstat, own calculations

### Gross Fixed Capital Accumulation



Source: Derzhkomstat, own calculations

### Exports of Goods and Services



Source: Derzhkomstat, own calculations

exports slowed as the external demand for Ukrainian metal and machinery products significantly increased. It is expected that high external demand will help to considerably hold up the reduction in the exports. As a result, annually real exports will reduce by 7.9%. On imports side, the sharp growth of imported gas prices caused a decline of its consumption and, thus, imports volume. At the same time, growing consumption and investment demand stimulated imports of other products. As a result, in 2006 real imports is estimated to grow by 2.8%. The trade balance will remain negative.

It is expected that the growth rates of imports continue surpassing the growth rates of exports in 2007, causing the preservation of trade deficit. The major determinants of increase in real exports at 5.3% is low statistical base of previous years, high world prices for key Ukrainian export commodities backed by stable development of emerging economies, and better access to the markets after Ukraine will become the WTO member in mid-2007. Besides, high world commodity prices will help partially compensating for further increase in imported gas prices expected in 2007. At the same time, further trade liberalisation accompanying the WTO accession and the strong domestic, especially investment, demand will stimulate further growth in real imports that is forecast to reach 11.8%.

### **Production: The manufacturing industry restored its growth rates in 2006 after the slowdown a year before**

The value added in *agriculture* is expected to increase by 1.0% in 2006. The grain harvest, one of the key determinants of agricultural growth, seems to be slightly lower than in 2005. However, this decrease will be compensated by developments of other sub-sectors of agriculture. The same growth pace is forecast to be kept in 2007.

After a reduction in the beginning of 2006, the value added in *manufacturing* revived later on and now continues accelerating. The recovered external demand helped industry to overcome the consequences of the gas price shock. It is expected that in 2006 the manufacturing will increase by 7.2%. In 2007 the growth is forecast at 6.9% assuming high world prices for key Ukrainian export commodities, in particular metal and chemical products.

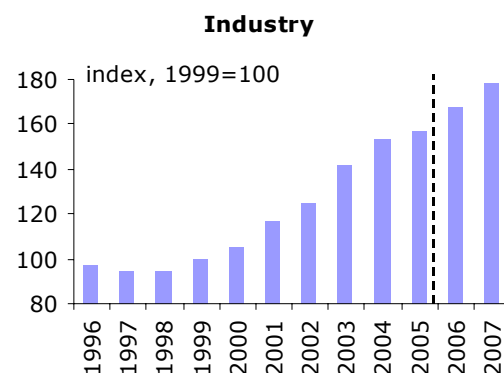
In 2006 the value added in *construction* is expected to grow by 9.2% thanks to the revival of investment activity. In 2007 the construction will increase by 12.3%.

Services are expected to maintain the high growth pace in 2006 and 2007, backed by the growing domestic demand. The value added in *trades* is expected to increase by 15.2% in real terms in 2006 and by 11.4% in 2007. In *transport*, the growth is forecast to reach 8.8% in 2006 and 9.3% in 2007.

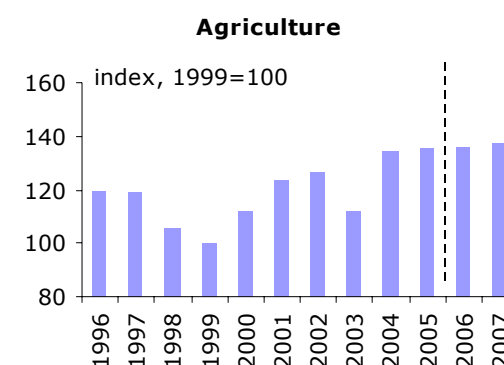
### **Inflation: Consumer prices inflation will slightly accelerate in 2007**

Inflation in 2006 is expected to remain in single digits. On the demand side, growing household consumption fueled by expansionary social policies, growing consumer credits and retail network expansion exerted pressure on consumer prices, though a significant part of demand growth is concentrated in traded goods sector where the price growth is limited by stable nominal exchange rate. On the supply side, moderate growth of agricultural prices helped subdue inflation pressures stemming from higher gas price and subsequent aggressive administered prices increases. Overall, inflation is expected to be around 8.4% in 2006.

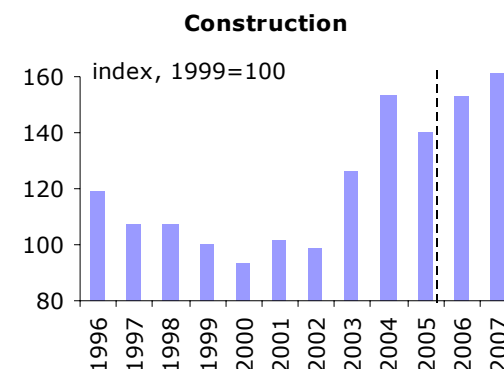
In 2007 effects of further import gas price increases and associated administered prices hikes will fuel inflation, although in the second half of the year the expected WTO membership may help limit a bit consumer prices growth. Thus inflation is expected to accelerate slightly to 8.6% in 2007, though there are upward risks to inflation such as greater than expected energy prices increases, stronger pass-through of energy prices changes to overall prices than in 2006 as well as supply disruptions on agricultural product markets.



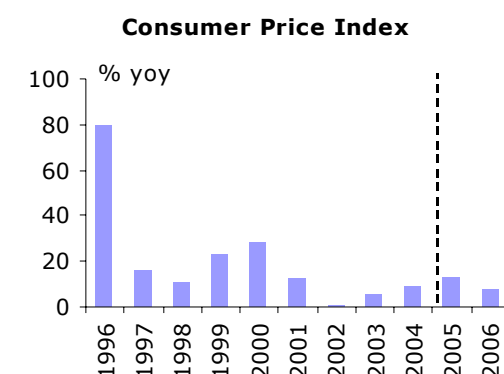
Source: Derzhkomstat, own calculations



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

	2003	2004	2005P	2006E	2007F
Household consumption	11.5	13.5	16.6	18.1	8.9
State consumption	6.9	1.8	2.7	3.8	2.7
Gross fixed capital formation	22.5	20.5	-0.3	10.2	15.1
Exports of goods and services	10.3	16.2	-11.2	-7.9	5.3
Imports of goods and services	16.4	10.5	2.1	2.8	11.8
<b>Gross Domestic Product</b>	<b>9.6</b>	<b>12.1</b>	<b>2.6</b>	<b>6.3</b>	<b>5.9</b>
<b>Gross Domestic Product (UAH bn)</b>	<b>267.3</b>	<b>345.1</b>	<b>424.7</b>	<b>512.9</b>	<b>608.3</b>

Note: P – preliminary official data; E – estimate; F – forecast

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

	2003	2004	2005P	2006E	2007F
Agriculture, hunting and forestry	-11.0	19.8	0.4	1.0	1.0
Extractive industry	5.4	3.5	3.9	6.8	5.4
Manufacturing industry	17.4	12.4	2.1	7.2	6.9
Production/distribution of electricity, gas, water	4.5	-3.6	2.1	6.9	3.2
Construction	28.2	21.3	-8.8	9.2	12.3
Wholesale and retail trade, repair services	21.5	13.4	-9.8	15.2	11.4
Transport	11.1	11.4	5.7	8.8	9.3
Education	10.4	0.0	0.8	2.5	1.2
Health care	9.0	1.6	1.6	1.8	1.6
<b>Gross Domestic Product</b>	<b>9.6</b>	<b>12.1</b>	<b>2.6</b>	<b>6.3</b>	<b>5.9</b>

Note: P – preliminary official data; 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):

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

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  $\Theta_{t_i}^{X_i}$  of component  $X_i$  to real growth can be calculated as (2):

$$\Theta_{t_i}^{X_i} = \left( \frac{X_{it}^* - X_{it-1}}{X_{it-1}} \right) \cdot \frac{X_{it-1}}{\hat{Y}_{t-1}} \cdot 100$$

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**