

# Macroeconomic Forecast Ukraine

- According to the forecast, real GDP will grow by 4.3% in 2002 and by 4.6% in 2003 mainly due to a further increase in private consumption.
- In 2002 state consumption is expected to decrease due to revenue problems, while in 2003 no changes in state consumption is forecasted.
- Compared to 2002, next year investment is expected to increase.
- Faster growth rates of imports than exports will lead to reduction in positive trade balance.
- Value added will rise in all sectors of the economy.
- Inflation is expected to reach 1.4% yoy in 2002 and to increase to 7.6% yoy in 2003.

**No.1 (1)  
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2002**

**Forecasted Period:**  
Q3-2002 to Q4-2003

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

## GDP: Growth will continue at lower rates than in 2001

Real GDP, as forecasted, will grow by approximately 4.3% in 2002 and 4.6% in 2003 mainly due to growth in private consumption. This is consistent with the evolution of GDP by expenditures, observed in 2001. Other expenditure components of GDP, like fixed capital accumulation, will not contribute significantly to overall economic growth. Although fixed capital accumulation is expected to increase next year, lack of full-scale reforms, including tax reform, privatisation, market regulation and property right protection, as well as thin financial markets will remain the Achilles heel of the economic development in Ukraine.

## Private Consumption: Private expenditures will remain a main component of economic growth

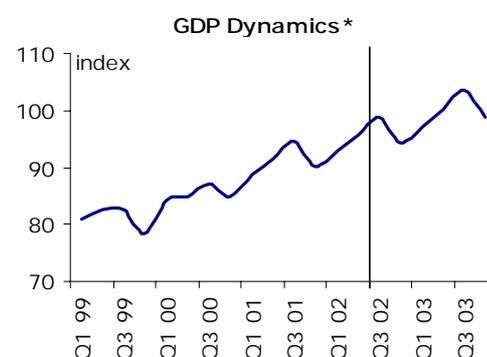
Despite some slowdown of economic activity in the first half of 2002 growth rates of wages remained fairly high, which in turn has contributed to high growth in households' income. Moreover, prices of agricultural and food industry products decreased, increasing purchasing power for households. These factors are expected to settle on high rates of growth of private consumption in 2002.

Growth of households' consumption in 2003 will be dependent on further increase in wages, including higher minimal wages. However, higher inflation may slightly reduce purchasing power of households, adjusting growth rates downwards.

## State Consumption: State expenditures will decrease

Problems with both collection of planned tax revenues and accomplishment of privatisation plans will be responsible for fiscal under-performance in 2002. These factors are expected to cause a 6.4% reduction in final state sector consumption in 2002 against a background of high growth rates of state final consumption in 2001.

Population: 48.4 m  
Industry/GDP: 30.9%  
Agriculture/GDP: 14.7%  
Investment/GDP: 20.4%  
Exports destination: Russia 22%, EU 17%  
Imports origin: Russia 34%, EU 20%



Source: Derzhkomstat, own calculations  
\* seasonally adjusted

## Assumptions of the forecast

- In 2002 the consolidated fiscal expenditures will be lower than planned at the beginning of the year.
- No full-scale tax reform or substantial modification in taxation, including changes in rates on major taxes, will be implemented in 2003.
- Nominal exchange rate will stay at average 5.3 UAH/USD level in 2002 and 5.5 UAH/USD in 2003.
- In 2003, as compared with 2002, no substantial changes in investment climate will occur.
- No major changes in world economy occur.

Authors:

Veronika Movchan  
Ricardo Giucci

Institute for Economic Research  
and Policy Consulting  
Reytarska St. 8/5-A, 01034 Kyiv  
Tel. (+38044) 228-6342  
Fax (+38044) 228-6336  
E-mail: [institute@ier.kiev.ua](mailto:institute@ier.kiev.ua)  
<http://www.ier.kiev.ua>

It is expected that 2003 state sector expenditures will not change in comparison with the current year.

### Investment: Growth will slightly accelerate in 2003

Present accumulation of fixed capital has significantly decelerated compared to years 2000-01. In the first quarter of 2002, it increased only by 1.4% yoy, adding almost nothing to total GDP growth. There are several factors that determine a low investment activity in the country during the current year. Firstly, the parliamentary election campaign diverted some of enterprises' funds from productive to political activity. Since Ukraine's enterprises are heavily dependent on profits for their investments, a drop in financial results that occurred at the beginning of the year has undermined their investment capacity. Secondly, it was an absence of substantial reforms in the economy, including further postponement of full-scale tax reform. Thirdly, it was a moratorium on privatisation of regional electricity distributing companies and overall deceleration of privatisation process. Moreover, uncertainty with regard to the outcome of the elections and uncertain expectations regarding changes in economic privileges has caused enterprises to delay their investments.

No substantial changes in the growth rate of fixed capital accumulation in Ukraine are expected till the end of 2002. Issues that shaped growth rates of capital at the beginning of the year will affect the entire period. Thus, its total growth will amount to approximately 2%.

Growth of fixed capital accumulation is expected to somewhat accelerate in 2003 due to absence of the factor of parliamentary elections. Additionally, development of financial intermediation, including steady growth of commercial banks' crediting and establishment of bonds market, will support investments.

In August 2002 the NBU introduced a new program of commercial banks long-term crediting (refinancing). The NBU can provide up to three years credits to commercial banks for financing of long-term innovative investment projects under conditions of this program. However, its impact on investments in 2003 remains unclear due to ambiguity whether these credits will be disbursed and, if so, of what amount.

Domestic savings will remain a major source of funding. Foreign direct investments are not expected to play a significant role in 2003 due to ambiguity with privatisation of both Ukrtelecom and regional electricity distribution companies, as well as an increasingly tense political situation in the country.

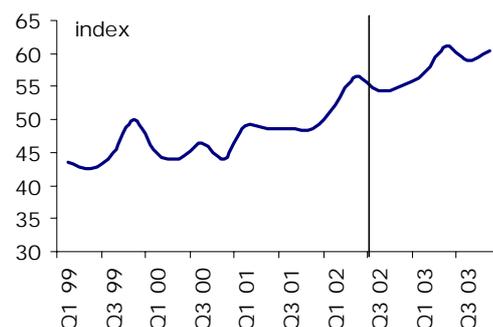
### External Sector: Surplus in goods and services trade is expected to decrease in 2003

Exports growth rates in the first quarter of 2002 dominated imports, while in the second quarter the tendency reversed, causing a gradual reduction in surplus of balance of goods and services. For 2002, it is expected to constitute approximately USD 600 m, slightly down from USD 613 m in 2001.

In 2003 the currently observed trend will continue, i.e. the growth rate of imports will exceed the growth rates of exports. It is expected that the balance of goods and services in 2003 will show a surplus of nearly USD 150 m.

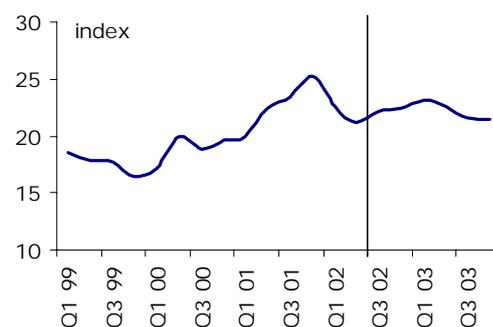
Growth of exports will be stimulated by improvement of trade relations with the Russian Federation and higher openness of European markets for Ukrainian agricultural products. Import growth will be driven by higher demand for investment goods as well as intermediary products.

#### Dynamics of Private Consumption\*



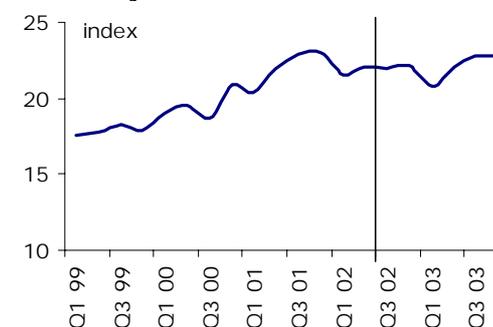
Source: Derzhkomstat, own calculations  
\* seasonally adjusted

#### Dynamics of State Consumption\*



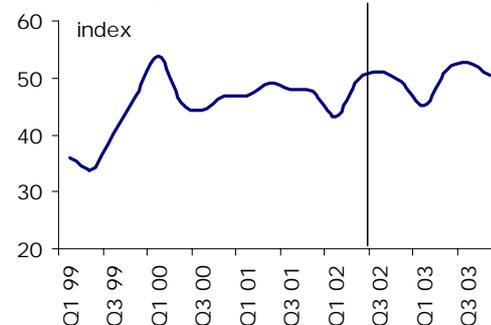
Source: Derzhkomstat, own calculations  
\* seasonally adjusted

#### Dynamics of Investments \*



Source: Derzhkomstat, own calculations  
\* seasonally adjusted

#### Dynamics of Imports\*



Source: Derzhkomstat, own calculations  
\* goods and services, seasonally adjusted

**Production Side: Positive growth of value-added will be observed in all sectors of the economy**

During the first half of 2002 industry continued to lose its importance as a major source of value added growth in the country. The rate of its value-added growth dropped almost to zero at the beginning of the year. One of the major drops occurred in the metallurgy sector, although all other industries also decelerated their growth paths. However, industry has started to quickly recover and it is expected that by the end of 2002 its value added will increase by approximately 6%, i.e. only half of that in the previous year. Lower investment activity at present will have lagged negative effects on production in the year 2003. Thus, no substantial changes in industrial growth are expected next year. Both in 2002 and 2003 final-consumer oriented industries will grow faster than intermediate production.

Wholesale and retail trade (WRT) took over in 2002 while industry was losing its positions. Growth of WRT value added contributed almost one third of total real GDP increase, observed in the first half of 2002. It is projected that WRT value added will rise by approximately 12% by the end of 2002 alongside with growth in private consumption. The growth rates in 2003 are expected to slightly reduce due to slowdown in households' expenditures.

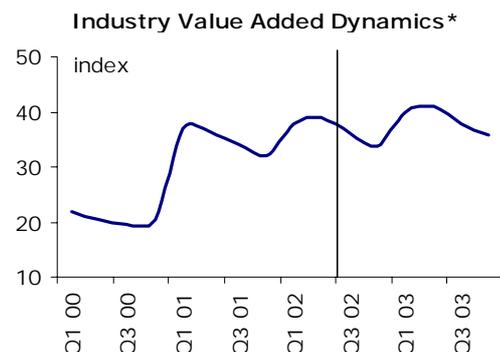
High rates of value-added growth in agriculture at the beginning of 2002, particularly the development of animal husbandry, significantly contributed to the total yearly performance of this sector. However, in the second half of the year, value-added is expected to grow slower due to the very high base of comparison, established by good harvest in 2001. Still, agriculture is projected to grow by more than 5% in 2002. Agriculture is expected to continue its growth path in 2003 due to technological improvements and higher labour productivity.

The growth rate of the construction sector was negative in the first half of 2002. The overall annual growth rate for this sector will remain negative at approximately -2% although it is expected to slightly accelerate in the second half. This also indicates a very low investment rate in the country, since investments in construction constitute nearly half of total investments. Construction is expected to increase in 2003 in line with projected higher investment activity.

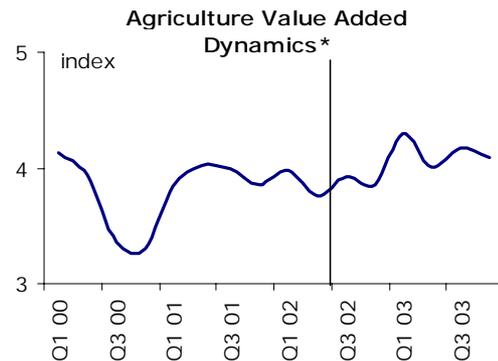
**Inflation: Acceleration in 2003**

Year 2002 was quite unusual in terms of consumer price dynamics observed in the first six months. In particular, downward movement of consumer prices was driven by increased competition in food market as well as administrative intervention in price formation. The CPI will nevertheless increase by approximately 1.4 % yoy by the end of 2002 due to higher administratively set tariffs on utilities and other services, as well as seasonal increases in agricultural products.

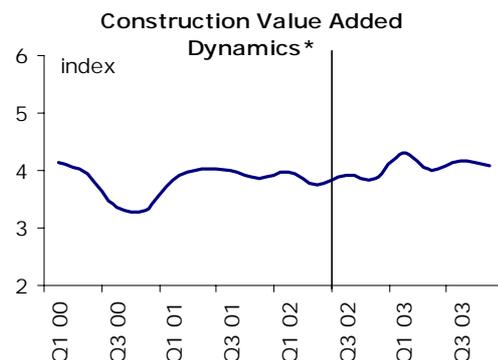
Next year CPI growth is expected to be higher and reach 7.6% yoy. There are several reasons behind this forecast. First, it is expected that reduction of food prices caused by competitive pressure will decelerate due to slower growth rates of foods industry and further quality differentiation of products. Second, the increase in real money demand will slow down, making the relationship between money creation and inflation stronger. Currently a significant part of extra liquidity is held by commercial banks, but the situation is expected to change next year. Third, inflationary expectations may increase if the NBU applies its new refinancing program. The NBU credits will mean money emission, producing pessimistic expectations on inflation and exchange rate.



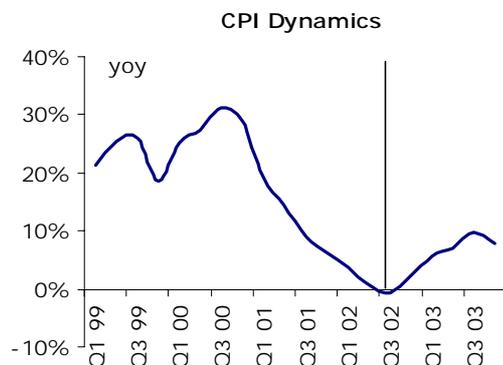
Source: Derzhkomstat, own calculations  
\* seasonally adjusted



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\* seasonally adjusted



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**Table 1.**

Growth of Real GDP by Expenditures: Forecast (% year-on-year)

	2000	2001	2002 E	2003 F
Private consumption	2.5	9.1	11.8	8.8
State consumption	1.0	9.6	-4.7	0.2
Gross fixed capital formation	12.4	8.3	1.8	4.6
Exports of goods and services	21.5	2.9	2.5	1.3
Imports of goods and services	23.8	2.2	2.7	3.5
<b>Gross Domestic Product</b>	<b>5.9</b>	<b>9.1</b>	<b>4.3</b>	<b>4.6</b>

Note: E – estimate; F - forecast

**Table 2.**

Growth of Real GDP by Sector: Forecast (% year-on-year)

	2000*	2001	2002 E	2003 F
Agriculture, hunting and forestry	5.9	10.9	5.2	6.0
Manufacturing industry	12.8	16.5	8.0	7.7
Construction	1.6	9.0	-2.1	6.6
Wholesale and retail trade, repair services	5.4	25.0	11.7	8.4
Transport	1.4	0.8	1.6	1.5
<b>Gross Domestic Product</b>	<b>5.9</b>	<b>9.1</b>	<b>4.3</b>	<b>4.6</b>

\* In 2000 there was another classification of the GDP components, thus the provided data are approximate

Note: E – estimate; F - forecast

### Technical note

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

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

Calculations are conducted on a quarterly basis, and annual data are received by aggregation of quarterly dynamics.

Forecasting procedure includes the following steps:

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

Within a forecasting table, there is a system of build-in indicators (proportions) expected to stay fairly constant. These indicators partially connect components of the GDP by production and by expenditures. As additional methods in components' forecasting, econometric equations and input-output tables are applied. Iterations continue until two methods of the GDP determination produce identical results.

### Box 1. Calculations

For identification of a contribution of each GDP component to the 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  $\Theta^{X_i}$  of component  $X_i$  to real growth can be calculated as (2):

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

for each period  $t$ .

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

Note: yoy year-on-year