

Macroeconomic Forecast Ukraine

- The real GDP is forecast to grow by 8.9% in 2004, and 7.5% in 2005.
- The major driving force for economic growth is expected to be private consumption, stimulated by tax reform.
- State consumption is expected to remain unchanged in real terms.
- Investments are forecast to slightly decelerate in 2004, but recover next year.
- Economic growth is expected to stimulate import demand, while a favourable world economic situation and economic growth in trade partners' countries are expected to fuel exports.
- The growth of value added in agriculture in 2004 is forecast at 8.0%, a welcome change from last-year's reduction.
- The continued growth of construction and machine building is forecast to satisfy a high investment demand both in 2004 and 2005.
- Inflation will reach 6.6% in 2004, but is expected to accelerate in 2005.

**No.1 (5)
April
2004**

Forecast Period:

Q1-2004 to Q4-2005

Forecast Variables:

GDP and components, inflation

Population: 48 m

Industry/GDP: 28.8%

Agriculture/GDP: 10.9%

Investment/GDP: 19.1%

Exports to: Russia 17%, EU-15 20%

Imports from: Russia 35%, EU-15 23%

GDP: Growth remains high

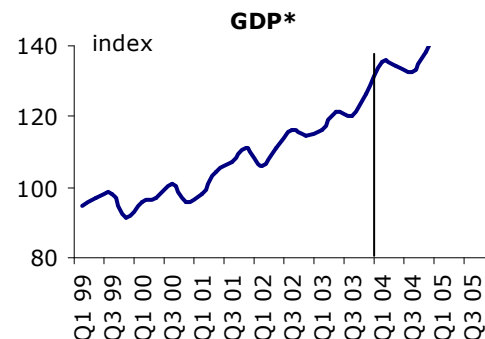
Real GDP is forecast to increase by 8.9% in 2004, thus maintaining the pace established in 2003. The major driving force behind the growth is expected to be final consumption by households stimulated by a reduction in the personal income tax rate from a progressive one of 10-40% to a flat 13%. External demand remains another important factor of GDP growth, but its contribution to the overall growth will be offset by continued increases in imports of investment products and raw materials.

Real GDP is forecast to grow by 7.5% in 2005, this against the background of a high growth rate previous year and decreasing real final households' consumption. The latter is anticipated due to accelerating consumer price inflation in 2005, which will not be fully offset by wage growth. Imports are expected to grow faster than exports. The major driving force for imports is investment demand.

Private Consumption: The reduction of the personal income tax rate stimulates consumption

Final household consumption is forecast to grow in 2004 by 15.0% in real terms, stimulated by the personal income tax rate reduction from a progressive 10-40% to a flat 13%. The higher minimum wage and the administrative increase in wages in the budget sector will contribute to an overall rise in household incomes.

As forecast, real private consumption will return to its previous growth pace of 9.5% in 2005. The main reason for this slowdown in purchasing power of households is an anticipated acceleration of consumer price inflation at the end of 2004 and the beginning of 2005, which will not be fully offset by an expected further increase in the minimum wage or by increased overall incomes.



Source: Derzhkomstat, own calculations
* seasonally adjusted, 1996 Q1 = 100

Authors:

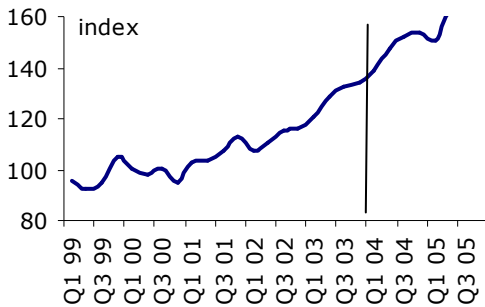
Veronika Movchan
Olena Bilan
Ricardo Giucci

Assumptions for the forecast

- A reduction of the VAT rate in 2005.
- Presidential elections will take place in 2004 causing higher political uncertainty.
- The world demand for metals remains high.
- The WTO accession negotiations will not affect Ukraine's foreign trade in 2004 and 2005, since Ukraine is unlikely to become a WTO member before the middle of 2005.

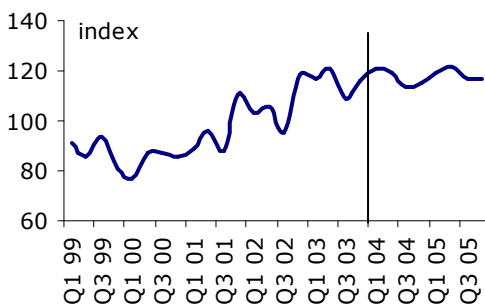
Institute for Economic Research
and Policy Consulting
Reytarska St. 8/5-A, 01034 Kyiv
Tel. (+38044) 228-6342
Fax (+38044) 228-6336
E-mail: institute@ier.kiev.ua
<http://www.ier.kiev.ua>

Private Consumption*



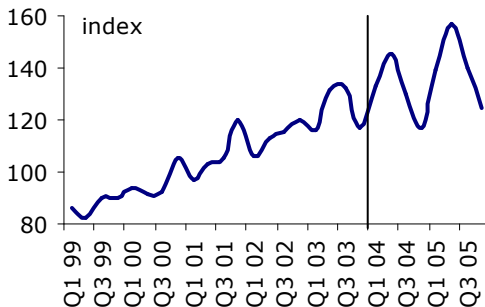
Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1= 100

State Consumption*



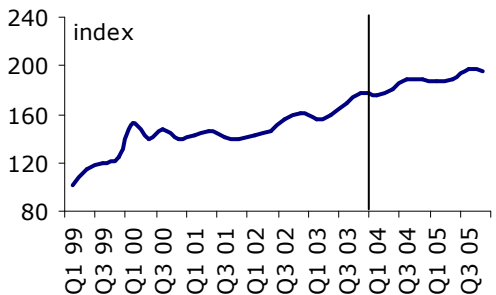
Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1= 100

Investments *



Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1= 100

Exports*



Source: NBU, Derzhkomstat, own calculations
* seasonally adjusted , goods and services, 1996 Q1= 100

State Consumption: The real state consumption is not expected to grow

The major factors determining state consumption in 2004 will be changes in the tax rates and in the tax administration procedures. The reduction of the enterprise profit tax rate from 30% to 25% and the decrease in the personal income tax rate have already caused a decline, at least temporary, of revenues from these taxes. This reduction is somewhat compensated by economic growth, and thus, higher value added tax (VAT) revenues. Additional compensation should come from some de-shadowing of the economy due to reduced tax burdens and changes in tax administration procedures. The latter refers to the introduction of the special VAT accounts that are to be launched in the second half of 2004. Once set up, these accounts could improve fiscal performance, but might hurt the financial situation of enterprises by reducing their cash flows. Taken together, these factors should allow the budget forecasts to be met. State consumption is forecast to increase moderately in nominal terms. However, this nominal growth is expected to be offset by price increases, so that real growth is forecast to be zero.

The introduction of the special VAT accounts and the planned VAT rate reduction will determine the fiscal revenues in 2005. It is expected that, if lowered, the VAT rate will be compensated by an increased VAT collection rate based on tough monitoring of all VAT-related transactions. As a result of all these forces, real state consumption is forecast to remain unchanged in 2005 as well.

Investment: The high investment demand continues

While in 2003 gross fixed capital accumulation grew by 15.8%, the growth in 2004 is forecast to be more moderate at 12.0%. The high growth of investments is expected to persist during the first half of 2004 due to the continuation of several large projects launched last year. However, investments are forecast to decelerate during the second half of the year, mainly because producers will be involved in the election campaign, which usually causes enterprise funds to be redirected from investment to other activities. This deceleration should not be very significant, since many enterprises will need to invest in renovating fixed assets, more than a half of which are obsolete or require upgrading.

Next year investments are forecast to resume their high growth rates at 15.0%, caused by a continuing high investment demand, stabilisation of the political situation, and a gradual development of financial instruments, which will facilitate long-term borrowing.

External Sector: Economic growth fosters a demand for imports

Both exports and imports of goods and services are forecast to continue their high growth paces established in 2003. The forecast growth of exports is 11.1% in inflation adjusted hryvnia terms, while the growth of imports is forecast at 14.7%. The main factors determining the dynamics of goods exports will be a favourable world situation for ferrous metals, the demand for which is expected to remain high throughout the year, and an acceleration of external demand (mainly by CIS countries) for Ukraine's machines and transport equipment. As in 2003, Ukraine will continue to import raw materials, intermediate inputs, and investments goods, the demand for which is fuelled by the economic growth in the country.

Yet another factor that plays an important role in merchandise trade is EU enlargement that will cause changes in trade regimes with ten important trade partners of Ukraine. The effect of EU enlargement on Ukraine's trade is twofold. On the one hand, tariffs now applied by several accession countries (e.g. Poland, Hungary, Czech Republic) will be reduced, thus making Ukraine's exports more competitive. Also, Ukraine's exports will face a larger market with unified trade rules, which should lower the transaction costs of exporters. On the other hand, Ukraine is likely to lose some metals

export share to the larger EU, since the metals quota for the EU-25 is the same as that for the EU-15 (the volumes of Ukraine's exports to the accessing countries were not included). The new unified custom rules will also require some getting used to, especially for those enterprises that didn't trade with the EU before: this will cause some short-term cost increases. Moreover, the introduction of the new members of the Union into the non-tariff environment of the EU could also harm their trade with Ukraine. As a result, the net effect of the EU enlargement on Ukraine is likely to be neutral or slightly negative in 2004, although positive in the long run.

Production: Growth in all sectors

The poor grain harvest of 2003 will continue to determine the pace of *agricultural* value added during the first half of 2004, while the situation is expected to improve during the second half. According to a forecast by the Ministry of Agrarian Policy, the 2004 grain harvest will be 60-70% higher or approximately 32-35 m tons. Thus, it is expected that value added will resume its growth later in 2004, with the overall increase forecast at 8.2%. In 2005 agriculture should continue to grow at a moderate rate of 4.5%.

The key driving force for overall value added growth remains the *manufacturing* industry. High growth in the machine building, metallurgy, and food industries will cause a further increase of the value added in manufacturing, forecast at 18.5%. A 6.8% acceleration of growth is also expected in the *extractive* industry in 2004 due to a high internal demand for raw materials. Industrial growth is forecast to continue in 2005, but at a moderate pace: 13.8% in manufacturing and 3.5% in the extractive industries.

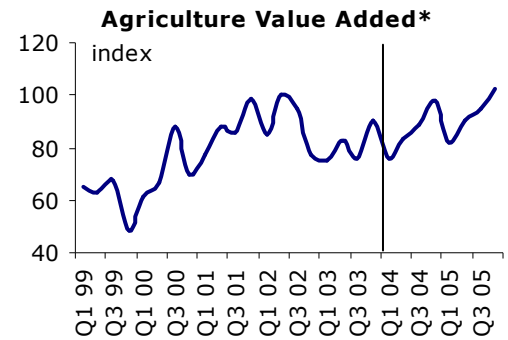
Although the growth rate of value added in *construction* is forecast to decelerate during the second half of 2004 as compared to the previous year, it remains one of the fastest-growing sectors: 17.6% for 2004 and 19.5% for 2005. The growth in this sector, as well as in machine building, reflects the high domestic investment demand.

The growth of value added in *wholesale and retail trade* is expected to reach 16.5% in 2004, backed by increases in private consumption. In 2005 it is forecast to grow by 11.4%. Value added in *transport* is forecast to grow by 11.1% in 2004 and 10.3% in 2005, maintaining last year's pace. This sector is also responsible for the increase in the demand for transport equipment, pushing transport production up, and with it overall manufacturing output.

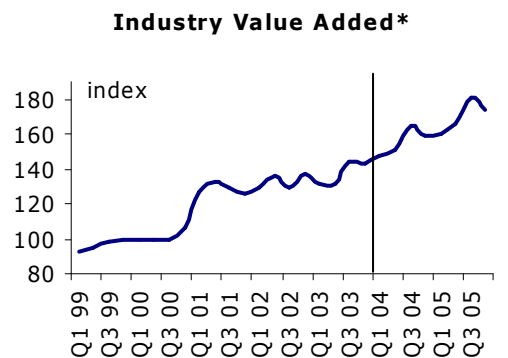
Inflation: CPI inflation is forecast to accelerate in 2005

By the end of 2004 CPI is expected to increase by 6.6%. There are several demand-side factors causing upward pressures on prices, such as increased wages and pensions, a reduced personal income tax and overall economic growth; however, before the presidential election consumer price inflation will be kept at a moderate level by administrative forces. For the same reason, the rapid growth of producer prices, observed early in 2004 and expected to continue later on, will not spill over into consumer prices this year.

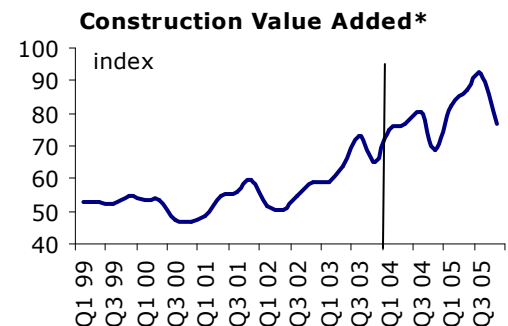
The growth of consumer prices is forecast to accelerate in 2005. In addition to the continued influence of demand-side forces, a distinctive feature of 2005 will be an increasing weight of cost-push factors. It is forecast that the growth of producer prices will raise the costs of final goods production, and thus, create an upward pressure on consumer prices. In addition, increases in utility and transport tariffs, which were postponed in the past, are expected to be implemented in 2005. The planned reduction of the VAT rate will generate an immediate reduction in the overall price level, but will contribute to more rapid price growth later on due to a greater demand for cheaper goods and services. Taking into account that no changes in the development of the money supply are assumed next year, inflation is forecast to reach 9.0%.



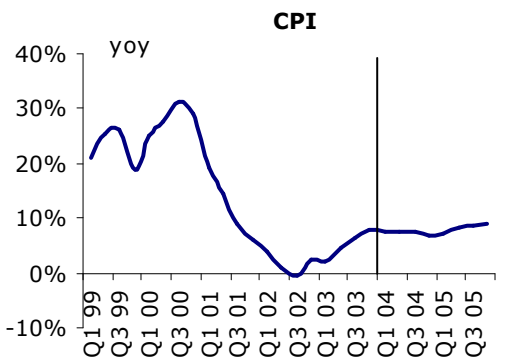
Source: Derzhkomstat, own calculations
* seasonally adjusted, 1996 Q1=100



Source: Derzhkomstat, own calculations
* seasonally adjusted, 1996 Q1=100



Source: Derzhkomstat, own calculations
* seasonally adjusted, 1996 Q1=100



Source: Derzhkomstat, own calculations



Table 1. Growth of the Real GDP by Expenditures: Forecast (% year-on-year)

	2001	2002	2003 P	2004 E	2005 F
Private consumption	9.6	9.5	12.4	15.0	9.5
State consumption	10.4	-6.7	14.8	0.0	0.0
Gross fixed capital formation	6.2	3.4	15.8	12.0	15.0
Exports of goods and services	3.5	9.1	10.3	11.1	4.5
Imports of goods and services	6.0	3.7	16.4	14.7	6.3
Gross Domestic Product	9.2	5.2	9.4	8.9	7.5

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

Table 2. Growth of the Real GDP by Sector: Forecast (% year-on-year)

	2001	2002	2003 P	2004 E	2005 F
Agriculture, hunting and forestry	10.2	2.0	-9.9	8.2	4.5
Extractive industry	10.8	2.4	5.5	6.8	3.5
Manufacturing industry	14.0	9.5	18.1	18.5	13.8
Production/distribution of electricity, gas, water	3.8	1.7	4.7	1.0	1.0
Construction	7.8	-2.6	23.1	17.6	19.5
Wholesale and retail trade, repair services	43.0	19.6	19.6	16.5	11.4
Transport	5.1	12.4	12.4	11.1	10.3
Education	5.1	1.9	1.9	1.8	1.9
Health	8.4	2.8	2.8	2.2	1.9
Gross Domestic Product	9.2	5.2	9.4	8.9	7.5

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):

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

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 Θ^{X_i} of component X_i to real growth can be calculated as (2):

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

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