Macroeconomic Forecast Ukraine

- The real GDP is forecast to grow by 7.9% in 2003, and by 6.2% in 2004.
- While the year 2003 is marked by high investment and state consumption, the year 2004 is expected to be a year of private consumption.
- Implementation of tax reform is expected to stimulate private consumption, while hurting state consumption due to lower real fiscal revenues in 2004.
- Although imports grow faster than exports, the forecast balance of goods and services remains positive.
- The value added in agriculture reduced in 2003 due to a poor grain harvest, but is expected to pick up in 2004.
- A high growth rate was observed in construction in 2003, but is expected to slow next year.
- Inflation will reach 8% in 2003, and will not significantly decelerate in 2004.

No.3 (4)
December 2003

Forecast Period:
Q4-2003 to Q4-2004

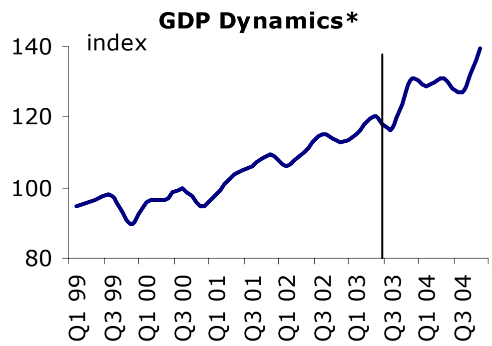
Forecast Variables:
GDP and components, inflation

Population: 48 m
Industry/GDP: 30.5%
Agriculture/GDP: 13.4%
Investment/GDP: 20.3%
Export destinations: Russia 17%, EU 20%
Import origins: Russia 35%, EU 23%

GDP: Growth forecast for 2004 is 6.2%

The growth rate of the real GDP in 2003 was revised upwards to 7.9% due both to a substantial increase in investment and state consumption. The high external demand for metals and re-exported mineral products also contributed to growth, although counterweighted by growth in imports. The summer slowdown of value added in agriculture due to the poor wheat harvest was offset by strong performances in other sectors.

The forecast growth of the real GDP for 2004 is 6.2% mainly due to growing private consumption. The significant reductions of the personal income tax rates, as well as the launch of the pension reform are expected to raise household incomes and stimulate private consumption. The gross fixed capital accumulation will return to moderate growth path in 2004 after exceptionally high growth this year.



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

Private Consumption: Tax reform will stimulate private consumption next year

Although the first half of 2003 was marked by a high growth rate of household consumption, this rate is expected to slow for the rest of the year 2003. The food market panic associated with the poor wheat harvest caused increases in food prices, consequently depressing the purchasing power of households.

Private consumption is forecast to be the leading cause of real GDP growth in 2004. The growth rate of 14% yoy is expected to be caused by the reduction of the progressive personal income tax rate of 10-40% to a flat rate of 13%, and by the pension reform, which promotes increases of pension levels. The increase in the minimum wage and the re-introduction of a unified wage scaling system in the budget sector will also have positive impacts on incomes.

Assumptions for the forecast

- The minimum wage will remain at UAH 205/month until November 2004, but inter-qualification salary ratios will be re-introduced in the budget sector.
- Tax reforms in 2004: An enterprise profits tax rate of 25% and a flat personal income tax rate of 13%.
- Presidential elections will take place in 2004 causing higher political uncertainty.
- Demand for metals remains high in the world.
- Completion of the WTO accession requirements by the end of 2004 will have no influence on trade flows next year.

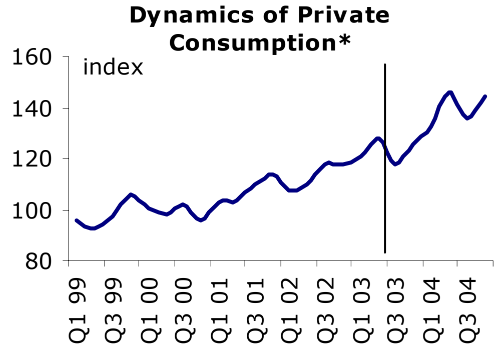
Authors:
Veronika Movchan
Olena Bilan
Ricardo Giucci

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
http://www.ier.kiev.ua

State Consumption: Decline in real state consumption is forecast in 2004

Economic growth, better tax collection and successful external borrowing resulted in a good fiscal performance in 2003, making final state consumption one of the driving forces of economic growth in the country. As expected, state consumption increases by 18.2% in 2003.

The personal income and the enterprise profits tax rates will be reduced next year. The resulting reduction in fiscal income is expected to be partially offset by a broadening of the tax base, economic growth, de-shadowing of the economy, and better tax collection. Even though the nominal state consumption is expected to increase, its growth will to a large extent be offset by inflation. As a result, the real state consumption will slip to a negative 1% yoy in 2004.



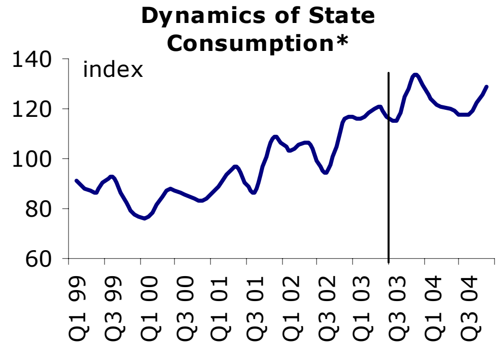
Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1= 100

Investment: After a year of mediocre growth, investment boomed

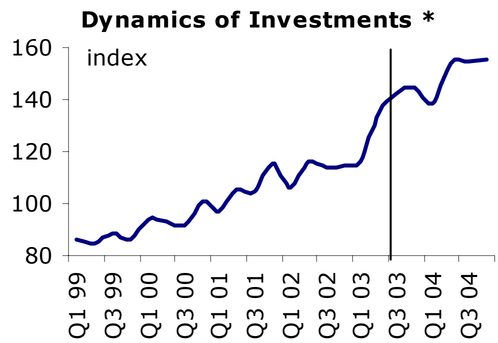
The year 2003 is marked by exceptionally high growth of fixed capital accumulation, especially investments in machinery. In the first half of the year it grew by 18% yoy, and the estimated growth of this GDP component for the whole year is 23.4% as compared to 4.9% last year. Significant investment demand, postponed in 2002, together with adoption of tax laws and the development of infrastructure created a favourable environment for this growth. Also, access to all sources of finance for investments – enterprise profits, bank credits and the stock market – eased, and foreign direct investment (FDI) accelerated.

On the production side, the growth of investments reveals an increase in construction activity mainly due to expansion of industrial constructions and renovations (for the first nine months of the year construction grew by 25% yoy) and growth in machine building (33% yoy growth from January to September).

Next year investments are forecast to grow by 12.8% yoy, returning to moderate growth path against the background of high current year development. Two opposing forces will also add to the pace of investment. On the one hand, launch of tax reform is expected to have a positive impact on investment, freeing-up enterprise and household funds. On the other hand, involvement of producers into election campaign is likely to hamper investments, since own funds of enterprises remain the main source of investments in the country. It is expected that no strategic enterprises will be privatised at the eve of elections.



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

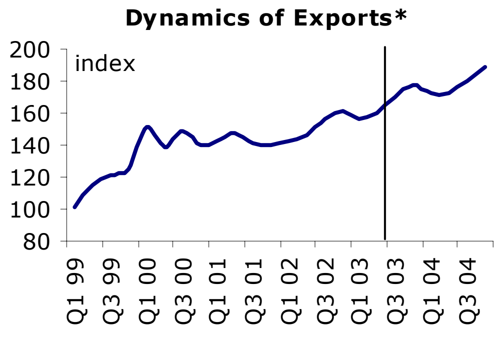


Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1= 100

External Sector: Import growth exceeds export

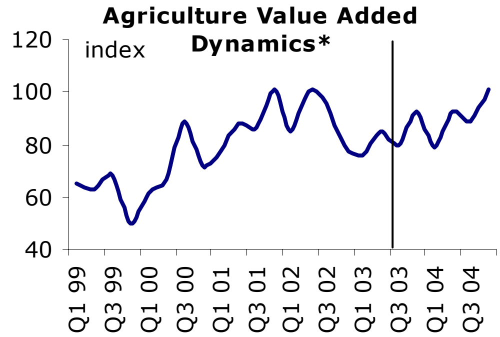
The growth rate of exports of goods and services was 9.3% yoy in real hryvnia terms during the first half of the year, while imports grew by 15.9% yoy. The major driving forces for goods exports were metallurgy and re-exports of gas (previously banned), while the major import goods were oil, machinery and transport equipment. This trend is expected to be maintained till the end of the year, i.e. imports are expected to exceed exports, but the trade balance will remain positive, and amount to USD 1.9 bn for the whole year (near 4% of the GDP).

For 2004 the growth of imports is forecast to continue to exceed exports due to increased consumption and investment demand. Still, both trade flows are expected to grow at lower rates than in 2003: exports are expected to increase by 7.4% in real hryvnia terms and imports by 14.4%. The net effect of the EU enlargement on Ukraine's trade remains uncertain, although no significant losses are expected. The loss of the free trade agreements with the Baltic countries and the uncertainty regarding the volume of the steel export quota to the EU-25 are expected to be offset by a reduction of the tariff protection of the candidate countries after accession.



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

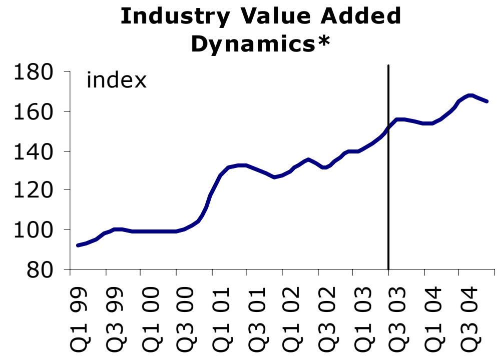
Taking into account the acceleration of the WTO accession activity, Ukraine is likely to complete negotiations by the end of 2004, provided the planned establishment of a Common Economic Area between Ukraine, Russia, Belarus, and Kazakhstan does not impede the process. Thus, Ukraine may become a member of the WTO early in 2005. The accession process is not expected to influence trade flows in 2004.



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

Production: The GDP growth recovered after the slowdown during the summer

The growth rate of value added in *agriculture* became one of the key factors of overall economic performance of the country. Despite the stable positive development of animal breeding, the weak performance of plant growing (namely, the poor wheat harvest) caused the negative (-7.2 yoy) growth rate in agriculture in the first half of the year. In September-October agriculture performed better than during the previous months due to a delayed harvesting period and a rather good late grain-crops harvest. Still, in 2003 the value added in agriculture is expected to decline by 10%. The sector is expected to perform better next year. Taking in account the low statistical base of this year, the growth in 2004 is forecast at 7.0%.

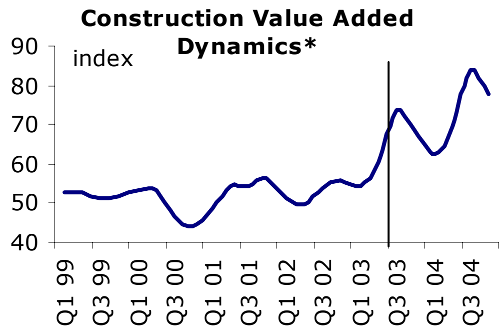


Source: Derzhkomstat, own calculations
* seasonally adjusted , 1996 Q1 = 100

The first half of the year was marked by high growth rates in the *manufacturing industry*, especially in machine building, metallurgy, chemistry, and the food industry. The value added in this sector is expected to increase by 18.6% this year, i.e. to exceed the growth rate of 2001, hitherto the most successful year for manufacturing. In 2004 the growth is forecast to reach 10.1% yoy.

After a slight decline (-0.7%) in 2002, *construction* boomed this year. In the first half of the year the growth of value added in this sector reached almost 22% yoy. The annual growth figure for construction in 2003 should reach 22.6%, mirroring the investment growth. Next year, due to an expected deceleration of investment activity, the forecast growth rate for construction is at 12.5% yoy.

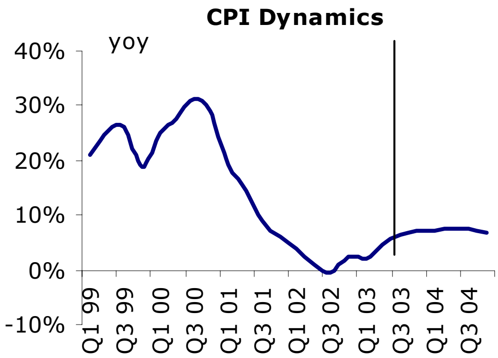
The growth of value added in the *wholesale and retail trade* is expected to reach 11.5%, exceeding last year's growth. Slightly lower growth is expected in 2004 (10.2%). The sector that has recently started growing is *transport*. While in 2001-2002 it grew at about 5% yoy, the growth of its value added during the first half of 2003 accelerated to 9.2%. This pace is expected to be maintained till the end of the year, with an annual growth near 11.5%, while the forecast figure for 2004 is 5.8%.



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

Inflation: Prices will continue to grow at lower pace

The more rapid than expected growth of consumer prices at the beginning of this year was to a large extent determined by demand-side factors, in particular, by consumer expectations of a poor agricultural harvest, which caused panic buying. For the remaining months of the year the CPI is expected to grow at approximately the same pace as to date, reaching about 8.2% yoy growth by the end of 2003, against a background of accommodating growth of money supply.



Source: Derzhkomstat, own calculations

It is forecast that the inflation development in 2004 will be both demand and supply driven. Reduction of the personal income tax rate, further increases in the minimum wage and pension benefits scheduled for 2004 as well as voter attracting campaigns on the eve of the presidential elections are expected to increase the purchasing power of the population. On the supply side, the consequences of poor grain crop on the domestic and international markets will continue to affect the price dynamics for grain related products, despite government control over producers and distributors of food products. Thus, due to rise in fodder prices increases in the prices of meat, meat products, and eggs are expected to add to inflation in 2004, which is forecast to reach 6.6% yoy. Also we expect that monetary policy will be loose enough to accommodate price growth.

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

	2000	2001	2002 P	2003 E	2004 F
Private consumption	2.5	9.6	5.6	8.1	13.7
State consumption	1.0	10.4	-0.7	18.2	-1.0
Gross fixed capital formation	12.4	6.2	4.9	23.4	12.8
Exports of goods and services	21.5	3.5	9.1	9.4	7.4
Imports of goods and services	23.8	6.0	3.7	19.8	14.4
Gross Domestic Product	**5.9**	**9.2**	**4.8**	**7.9**	**6.2**

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

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

	2000*	2001	2002 P	2003 E	2004 F
Agriculture, hunting and forestry	12.2	10.2	3.6	-10.0	7.0
Extractive industry		10.8	2.3	4.6	1.8
Manufacturing industry	5.0	14.0	8.9	18.6	10.1
Production/distribution of electricity, gas, water		3.8	1.1	6.5	0.9
Construction	-6.1	7.8	-1.4	22.6	12.5
Wholesale and retail trade, repair services	10.5	43.0	8.1	11.5	10.2
Transport	2.8	5.1	5.8	11.5	5.8
Education	1.2	5.1	1.0	3.0	1.8
Health	-3.4	8.4	0.5	2.8	2.0
Gross Domestic Product	**5.9**	**9.2**	**4.8**	**7.9**	**6.2**

* *In 2000 the GDP components were re-classified, thus the data shown are approximate*

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

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

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