



Tax Revenue Outlook for Ukraine

- The VAT revenues in 2005 will amount to UAH 27.9 bn, which is below the government's plan.
- In 2005 and 2006 the VAT revenues will continue to rise in relation to the GDP (to 6.5% and 7.0% respectively).
- The IER forecasts PIT revenues at the level of UAH 16.9 bn, which is above the Ministry of Finance's plan.
- In 2006 the PIT revenues will be lower by UAH 1.9 bn than in 2005, totaling UAH 15.0 bn.

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Forecast Period:
2005 and 2006

Forecast Variables:
VAT and PIT revenues

Launching the Tax Revenue Outlook for Ukraine (TRO)

In Ukraine, the major part of the consolidated fiscal revenues is collected in the form of taxes, which account for 70% of total revenues. Key taxes are the value added tax (VAT), the tax on profits of enterprises (EPT), and the tax on the incomes of physical persons (PIT). In 2004 the shares of these taxes in consolidated tax revenues reached 26.5% for VAT, 25.6% for EPT and 20.9% for PIT. These three taxes together accounted for more than 70% of consolidated tax revenues and, therefore, forecasting them well is of crucial importance for the budget process.

Fiscal policy and tax revenue collection are essential for a state's ability to perform its functions. To improve the predictability of the fiscal policy as well as being able to estimate tax revenues with a fair degree of certainty over the medium term forecasting is needed. The lack of independent estimates of tax revenues and the importance of tax forecasting for the Ukrainian fiscal policy motivated the Institute for Economic Research and Policy Consulting (IER) to launch a biannual product: *Tax Revenue Outlook for Ukraine (TRO)*.

The TRO will be published in May before the Cabinet of Ministers submits the Major Guidelines for the next budget year to the Verkhovna Rada. Another issue is intended to be published in September, when parliament will consider the first draft of the State Budget Law.

The IER's TRO is a parallel forecast to that issued by the Ministry of Finance for budget planning. The availability of an independent tax forecast is beneficial for the country allowing comparisons with the official estimates, while openly stressing the revenue risks. Besides, independent modeling creates room for improvements in the methodology of tax forecasting in Ukraine.

The first issue of the TRO includes the IER's forecasts for 2005 and 2006 of two major components of the consolidated fiscal revenues, namely the revenues the government is likely to collect from the value added tax, and the tax on the incomes of physical persons. In the future, the forecasts will be expanded to include the tax on profits of enterprises.

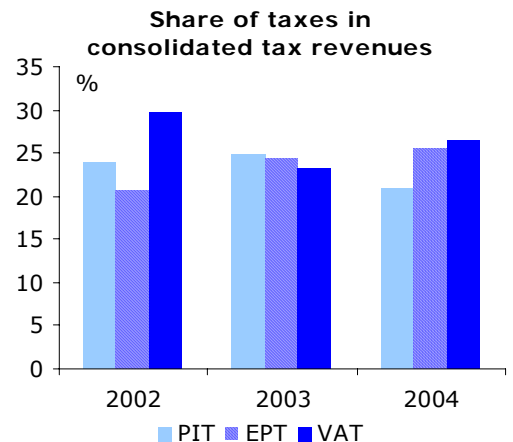
For forecasting VAT we adopted an iterative-analytical technique and used the Ukrainian legislation. The VAT forecast model is based on the Macroeconomic Forecast Ukraine, produced by the IER. Therefore, the TRO is not a replica of the official forecast, but presents an alternative view of developments in the Ukrainian economy.

In the TRO the PIT forecast is based on the wage distribution provided by the Household Survey (Derzhkomstat) using a methodology developed by the IER.

Following hereafter the TRO discusses the major VAT and PIT forecast assumptions and provides forecast results. The final part presents the reader with summary data. A detailed technical note of the forecast methodology is provided at the end of the TRO.

Fiscal indicators 2004:

Consolidated fiscal revenues/GDP: 26.5%
VAT/Consolidated fiscal revenues: 18.3%
PIT/Consolidated fiscal revenues: 14.4%
Consolidated fiscal expenditures/GDP: 29.4%
Central fiscal deficit/GDP: 2.9%
Public debt/GDP: 24.8%
GDP: UAH 344.8 bn
Population: 47.3 m



Source: State Treasury reports, own estimates

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VAT forecast: The VAT revenues in 2005 will amount to UAH 27.9 bn, which is below the government's plan

The value added tax (VAT) is traditionally the largest taxation source of the consolidated fiscal revenues. In 2004, VAT revenues relative to consolidated tax revenues and consolidated total revenues were 26.5% and 18.3%, respectively. Currently the VAT rate is set at 20%.

In Ukraine, VAT remains a very essential tax on domestic consumption. The destination principle of VAT collection applied in Ukraine implies that VAT is collected on imports but zero VAT rate is applied to exports. As VAT works on a tax credit method, exporters are eligible for refunds from the government. However, delays with VAT refunds to exporters used to be a common practice, which was a significant impediment to business activity. Thus the methods of administering VAT are of special importance to exporters.

The IER's forecast VAT revenue for 2005 is UAH 27.9 bn (6.5% of GDP), which is higher than the 2004 actual (up by UAH 11.1 bn). The VAT revenue forecast is driven by a favorable consumption outlook. Additional revenues will be received due to the elimination of VAT privileges, effective April 1, 2005. Besides, we expect that steps taken in the direction of improving the VAT administration will contribute to higher VAT revenues. As a result, we anticipate that the share of VAT in the consolidated revenues will increase. This trend is favorable for the economy, since VAT as an indirect tax is less harmful for investment than income taxes.

According to the IER forecast, the government overestimated the net VAT revenues by UAH 2.2 bn. One of the reasons is that the Ministry of Finance foresees a lower requirement for VAT refunds (Ministry of Finance: UAH 13.2 bn vs. Institute: UAH 14.1 bn). Another reason is a very optimistic nominal GDP growth forecast in the State Budget Law for 2005.

Comparing our forecast for the first quarter of 2005 with the amount of VAT actually collected during this period indicates that the VAT revenues forecast by IER was 10% lower than the actual. The difference can predominantly be attributed to increasing VAT refund arrears during this period.

The IER's forecast VAT revenue for 2006 is UAH 35.3 bn, which amounts to 7.0% of GDP, thus continuing the upward trend of 2005. As in 2005 the driving force for the revenue increase is higher domestic consumption. Also, some additional VAT revenues are attributable to the introduction of a 10% VAT rate in the agricultural sector, instead of the present zero VAT rate. Finally, we anticipate further policies aimed at improving the VAT administration.

The risks inherent in the VAT revenue forecasts for 2005 and 2006 are associated with a worse than expected economic development. Besides, the revenues, which are foreseen to be received from eliminating certain VAT privileges, may well be lower than anticipated.

VAT forecast assumptions:

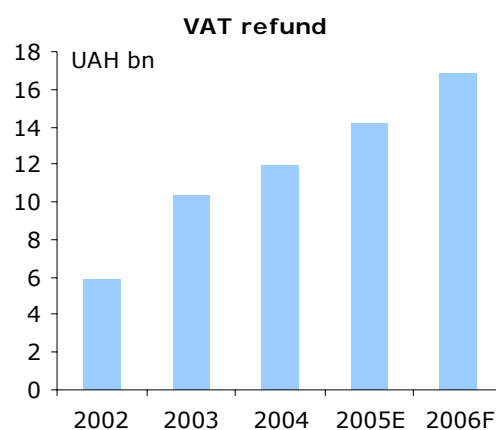
- The VAT forecast is based on macroeconomic indicators for 2005 and 2006 according to MEFU №1 (7), May 2005.
- Reductions in VAT privileges adopted in March 2005 come into effect as planned.
- The administration for collecting VAT will be improved.
- The government will not further increase VAT refund arrears.
- A VAT rate at the level of 10% will be introduced in 2006 for the agricultural sector.

Parameters of VAT forecast:

	2004	2005E	2006F
GDP, UAH bn	344.8	428.8	505.7
Industrial output growth, % yoy	12.5	10.2	9.5
Household consumption, UAH bn	185.5	239.0	289.3
Exports of goods and services, USD bn	39.3	47.2	55.2
Imports of goods and services, USD bn	34.1	41.9	49.7
CPI inflation, % yoy aop	9.0	14.0	10.0
PPI inflation, % yoy aop	20.4	17.8	12.0

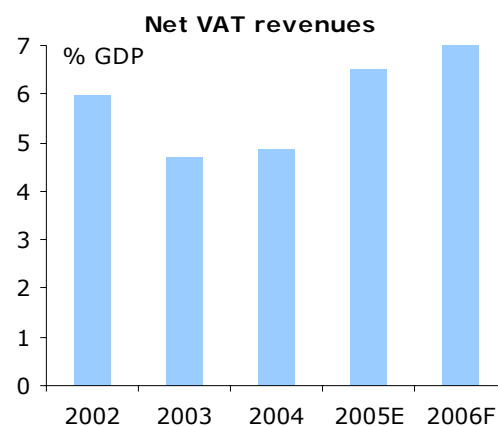
E - estimate, F - forecast

Source: Macroeconomic Forecast Ukraine №1 (7), May 2005, IER



Source: State Treasury Reports, IER forecast

E - estimate, F - forecast



Source: State Treasury Reports, IER forecast

E - estimate, F - forecast

PIT forecast: The government underestimated the PIT revenues for 2005

Since 2004 the personal income tax (PIT) rate is flat at the level of 13%. People, whose wages are lower than 1.4 subsistence minimums (for persons able to work), are eligible for an income deduction, the so-called social privilege. In 2004 the limit for this deduction was equal to 30% of the minimum wage (UAH 61). For 2005 the level was set at 50% of the minimum wage (UAH 131) and for 2006 it is planned to reach 80% of the minimum wage.

Currently the revenues from the PIT are the third largest source of the consolidated fiscal revenues of Ukraine, and the main revenue sources for local governments. In 2004 the PIT's share amounted to 14.4% of the consolidated fiscal revenues and reached 55.2% of the local revenues (without accounting for intergovernmental transfers). The government collected UAH 13.2 bn of PIT (3.8% of GDP) in 2004.

The IER's forecast PIT revenues for 2005 are UAH 16.9 bn, increasing its share in the GDP to 3.9%. Wage increases are anticipated to be the major determinant for the increased PIT revenues. In 2005 the driving force for wage growth in the economy will be the minimum wage, which is being gradually increased from UAH 262 in January to UAH 332 by September 2005.

The IER has forecast PIT revenues for 2005 to be UAH 0.2 bn higher than the Ministry of Finance in the Budget 2005, i.e. we expect that the government will collect more PIT revenues in 2005.

The IER's forecast PIT revenues for the first quarter of the year were equal to the amount collected by the government during this period. We expect that distribution of PIT revenues by quarters will be similar to the previous year. Therefore, we anticipate nearly 30% of all PIT revenues to be collected in the fourth quarter of 2005.

We expect a reduction of PIT revenues in 2006 mainly due to a sharp increase in the amount of the social privilege. The overall factors that will influence PIT revenues in the year 2006 are expected to remain the same: increases in the minimum wage and the subsistence minimum. It is expected that the minimum wage will be raised to UAH 370 on January 1, 2006. At the same time, we assume that the subsistence minimum will be indexed according to the level of inflation in 2005 and amount to UAH 500. Also, the social privilege will rise to 80% of the minimum wage, according to the present legislation. This will increase the amounts of the income deductions, and, thus, decrease the PIT revenues expected to be collected in 2006. This reduction in PIT revenues will be partially offset by continued wage increases in the economy. The IER forecast of PIT revenues for 2006 is UAH 15.0 bn. As a result the PIT revenues will fall to 3.0% of GDP.

The risks inherent in the PIT revenue forecasts for 2005 and 2006 are associated with lower wage growths than assumed. In addition, the forecast for 2006 could be challenged if the government set a higher minimum wage growth, which would increase the level of the social privilege yet further.

PIT forecast assumptions:

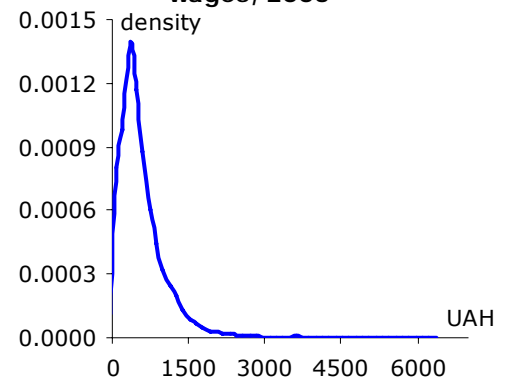
- The gross wages in the economy in 2005 are equal to UAH 130 bn (a 40% increase as compared to 2004).
- The minimum wage is expected to be raised to UAH 370 on January 1, 2006.
- In 2006 the subsistence minimum for persons able to work will be indexed by the inflation rate and equal UAH 500.
- Gross wages will increase by 22% in 2006.
- The distribution of wages remains constant over time.
- Employment levels will remain the same in 2005 and 2006.

Parameters of PIT forecast:

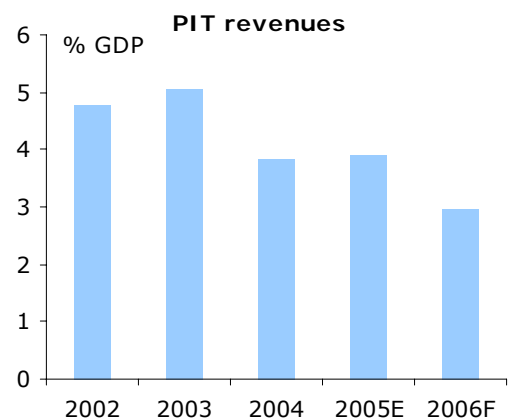
	2004	2005	2006F
PIT rate, %	13	13	13
Gross wages, UAH bn	94	130	159
Minimum wage, beginning of year, UAH	205	262	370
Subsistence minimum for persons able to work, UAH	386	409	500
Social privilege, UAH	61	131	296

Source: legislation of Ukraine, IER estimates
F - forecast

Distribution of monthly wages, 2005*



Source: Household Survey (Derzhkomstat), own calculations
* Kernel density function of monthly wage



Source: State Treasury Reports, IER forecast
E - estimate, F - forecast

Table 1. Tax revenues (UAH bn) *

	2002	2003	2004	2005E	2006F
VAT	13.5	12.6	16.7	27.9	35.3
PIT	10.8	13.5	13.2	16.9	15.0

Note: E – estimate; F – forecast

Table 2. Tax revenues (% GDP) *

	2002	2003	2004	2005E	2006F
VAT	6.0	4.7	4.9	6.5	7.0
PIT	4.8	5.1	3.8	3.9	3.0

Note: E – estimate; F – forecast

Table 3. Distribution of tax revenues by quarters in 2005 (UAH bn) *

	QI	QII	QIII	QIV
VAT				
IER estimate	6.1	6.9	7.4	7.5
Actually collected	6.8	-	-	-
PIT				
IER estimate	3.4	4.0	4.4	5.1
Actually collected	3.4	-	-	-

* Source: State Treasury Reports, IER estimations

Technical notes

1) VAT forecast

For forecasting VAT we adopted an iterative-analytical technique and used the Ukrainian legislation. The forecast is built on a system of build-in indicators (proportions), which are adjusted to reflect past dynamics and the changes in legislation.

The methodology of VAT revenue forecasting is close to the official VAT forecasting methodology of the Ukrainian government. The official methodology has been adjusted to use IER macroeconomic forecasts as input. Besides, our VAT model uses different sets of empirical data. The official methodology is approved by the joint Order of the Ministry of Finance, Ministry of Economy, State Tax Administration and State Customs Service #543/315/502/637 from August 31, 2004.

VAT revenue is forecast on the basis of macroeconomic indicators and effective tax rates. The total VAT revenue is decomposed into VAT from imported goods, VAT from domestically produced goods, and VAT refunds. The evolution of each component is forecast on the basis of historical data as well as macroeconomic forecasts by the Institute. The forecast for VAT from domestically produced goods is done through a simplified demand method, using household consumption as the leading indicator. VAT from imports is forecast via the dynamics of imports of goods and services and the exchange rate. VAT refunds are forecast using the dynamics of exports of goods and services, the exchange rate, PPI and the growth of industrial output. Additionally, the contribution of the reduction in VAT privileges is taken into account. The value of canceled VAT privileges was taken from the Explanatory Note to the Draft State Budget 2005.

When making the VAT forecast for 2005, we disregarded UAH 3.6 bn of VAT revenues, which are due to the state according to a non-transparent non-cash operation scheme.

2) PIT forecast

The PIT forecast is based on a detailed household survey (HS), produced by Derzhkomstat. This survey includes information describing the distribution of the after-tax income of individual households for the year 2003. Therefore, for forecast purposes we extrapolated given data for the following years (2004-2006), assuming that the income distribution would remain constant throughout.

The actual PIT revenues collected by the government were taken from the yearly State Treasury reports. This allowed us to check our estimates of PIT revenues in 2004 with the actual amounts collected. Our estimate for 2004 differs from the actual by 2%. Thus, for the forecasts of 2005 and 2006 we made an adjustment of the same magnitude.

The forecasts includes estimates of PIT paid by employees based on wages, since this is the major source of the total PIT revenues, which also include the fixed and unified taxes paid by small entrepreneurs, taxes from lotteries, on dividends, etc. In 2004 wage-based PIT amounted to 96% of the total PIT collected. We finally corrected the wage-based PIT revenues to account for all the other PIT revenues.

3) Quarterly distribution of tax revenues

The quarterly dynamics of tax revenues depend to a great extent on the GDP behavior, inflation, and legislative provisions. Each of these components of deviations has its seasonality. Therefore, in the forecast of quarterly tax inflows we forecast the patterns of inflation, GDP, and the 'Tax calendar' separately. To forecast the PIT revenues tax calendar, last year's pattern was used as the basis for the 2005 distribution of revenues. Taking into account the unusually high volumes of VAT refunds made in 2003, the forecast 2005 VAT pattern is based on an average for the years 2002 and 2004.

Note: **yoy** year-on-year
aop average of period
VAT value added tax
PIT personal income tax
EPT enterprise profit tax