

Oil revenues and macroeconomic management

(Azerbaijan case study)

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Outline

1. Economic impacts of oil revenues

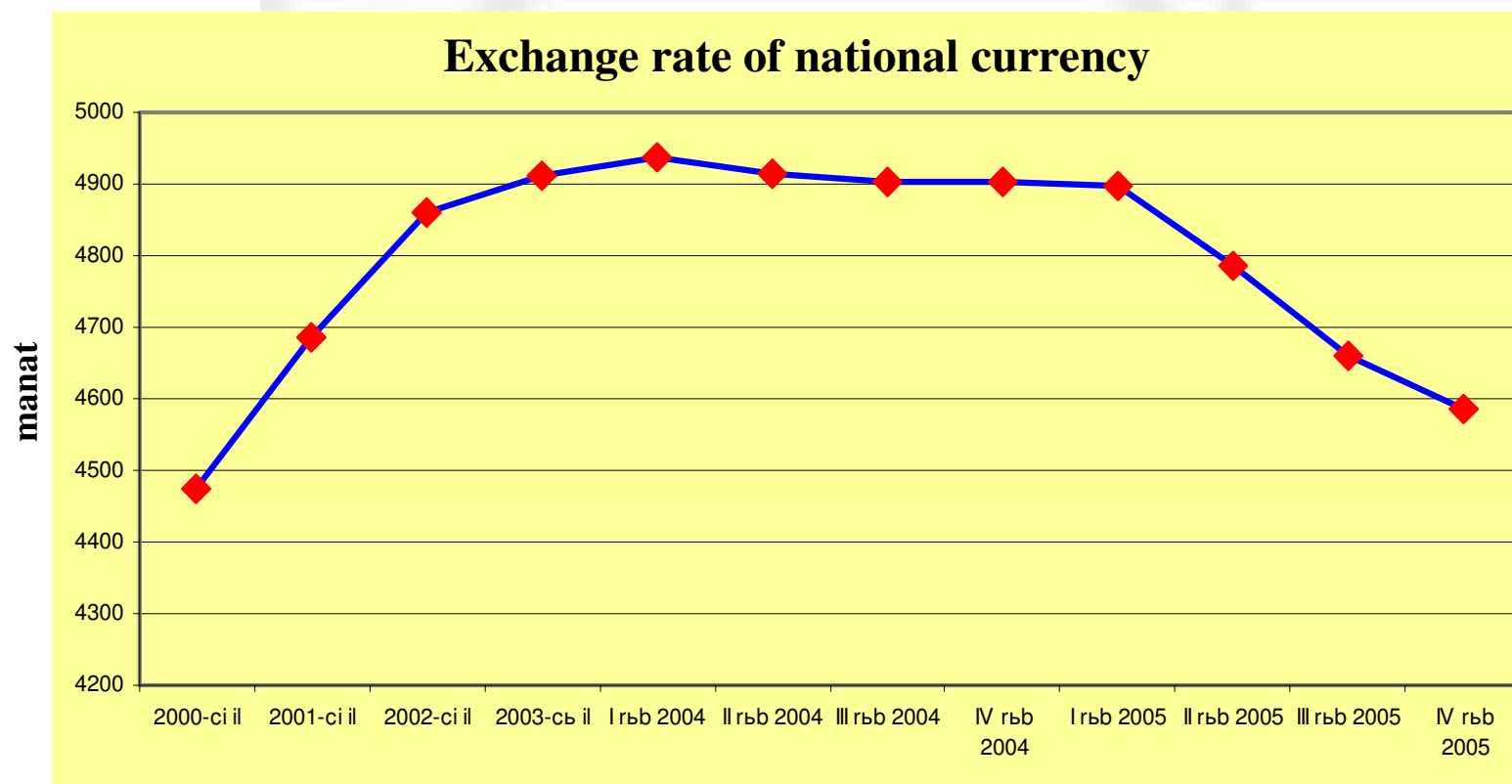
- ✓ *The problem of real exchange rate*
- ✓ *Low competitive potential of the non-oil sector*
- ✓ *Non-oil budget deficit*

2. Models of budgetary management of oil revenues

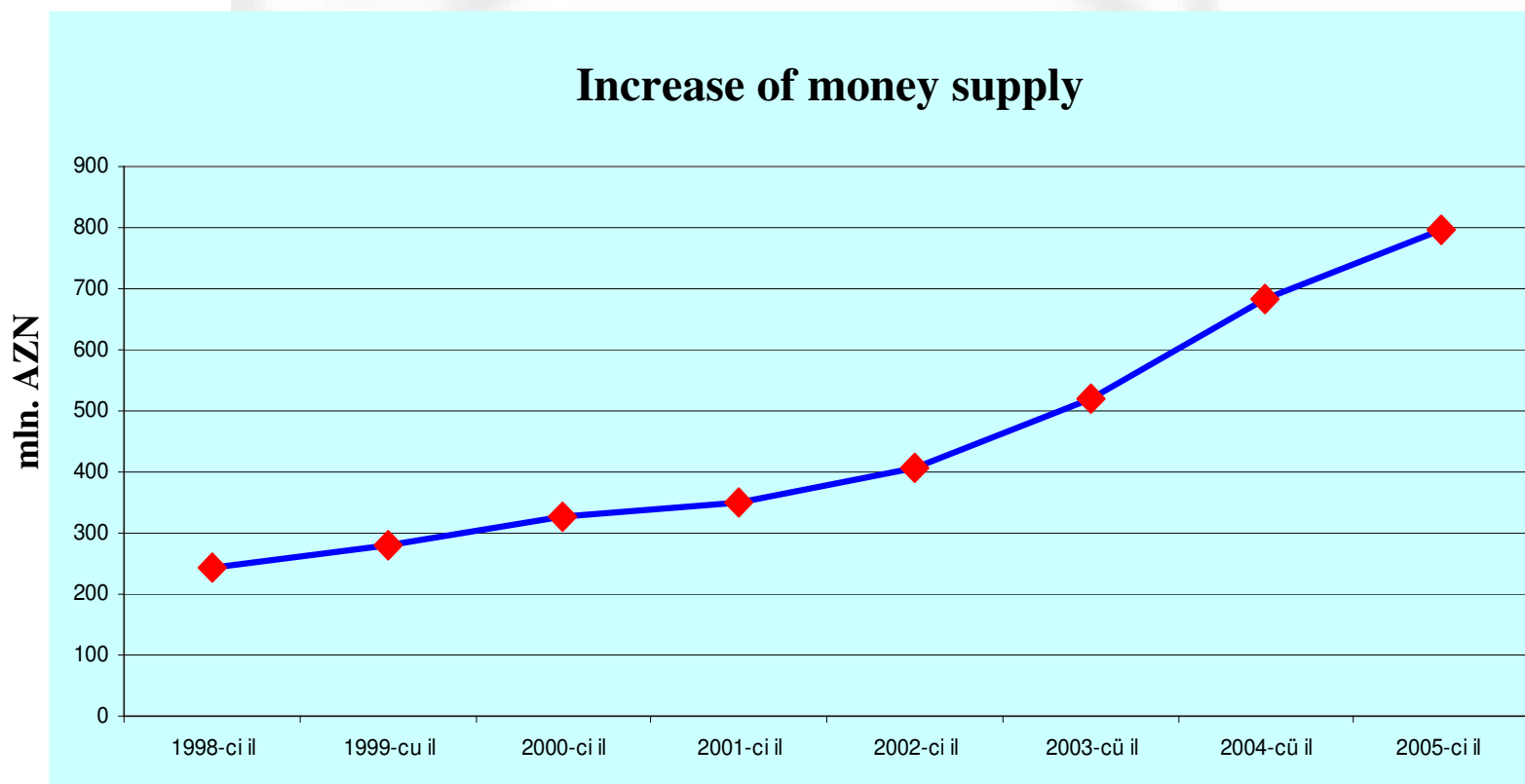
3. The practices of Azerbaijan

4. “The budget trap”

The problem of real exchange rate

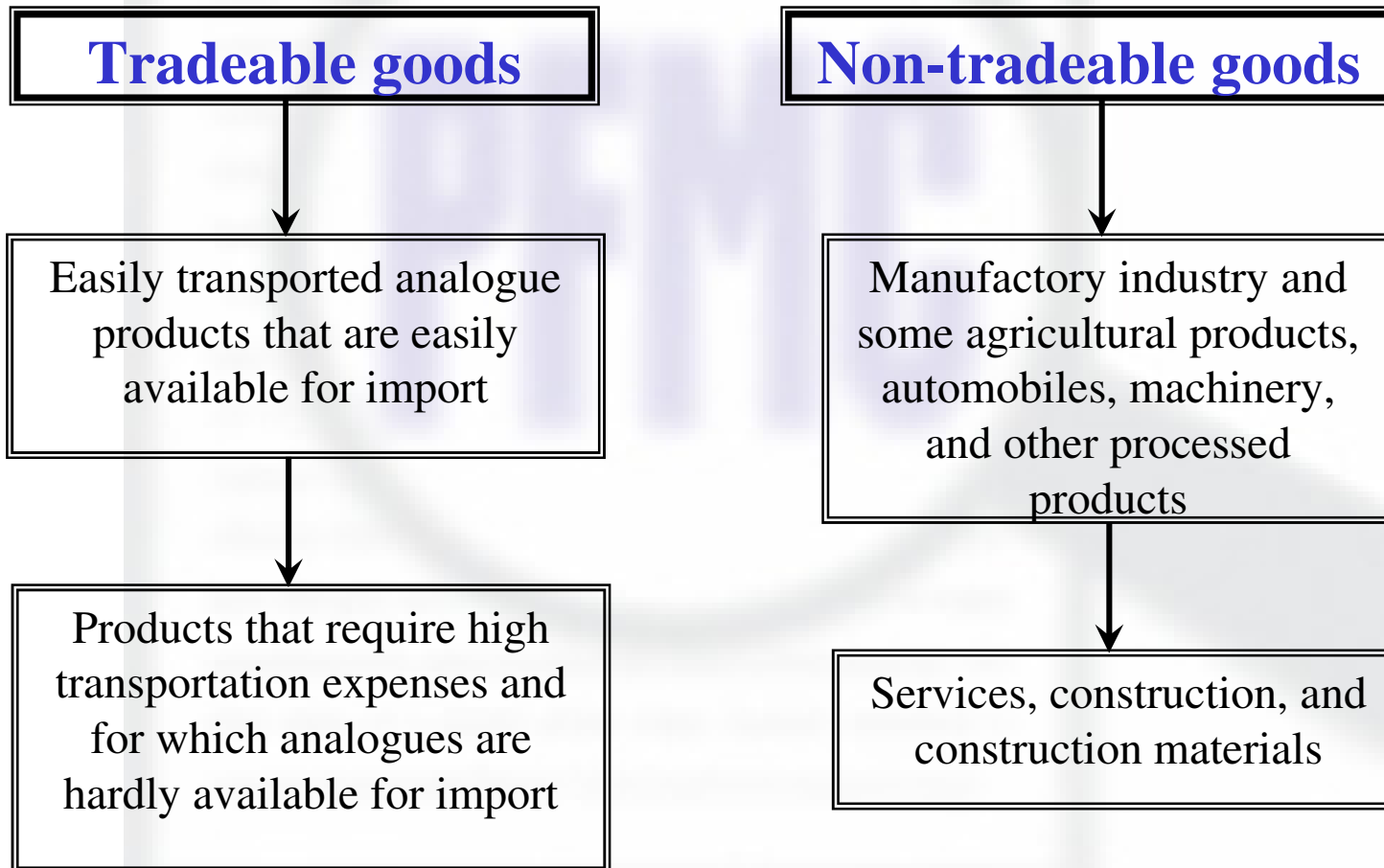


The problem of real exchange rate



Low competitive potential of the non-oil sector

Tradeable and non-tradeable sectors



Non-oil budget deficit

What is this?

TOTAL STATE BUDGET EXPENDITURES

—

NON-OIL BUDGET INCOMES

How is it calculated?

$$NOD_{ef_t} = A + bF_{t-1}$$

The models for the use of oil incomes

The concepts

- ✓ *Bird- in-hand consumption (IMF)*
- ✓ *The Permanent Income Hypothesis (WB)*

Practical models

- ✓ *Norwegian model (non-oil deficit)*
- ✓ *The base payers model (existing practice in Kazakhstan)*
- ✓ *Balanced budget model (the model suggested for Kazakhstan)*
- ✓ *The model of steady expenditures*
- ✓ *The practice of Azerbaijan*

Bird-in-Hand (BIH) - IMF

$$Y(t) = r F(t-1)$$

where,

***Y** – transfers to the budget in year **t**;*

***F(t-1)** – the State Oil Fund accumulations in the previous year;*

***r** – the Oil Fund's profitability rate.*

Note: more typical for Norway's practice

Permanent Income Hypothesis (PIH) - WB

$$Y(t) = A = r * NPV(\text{oil income})$$

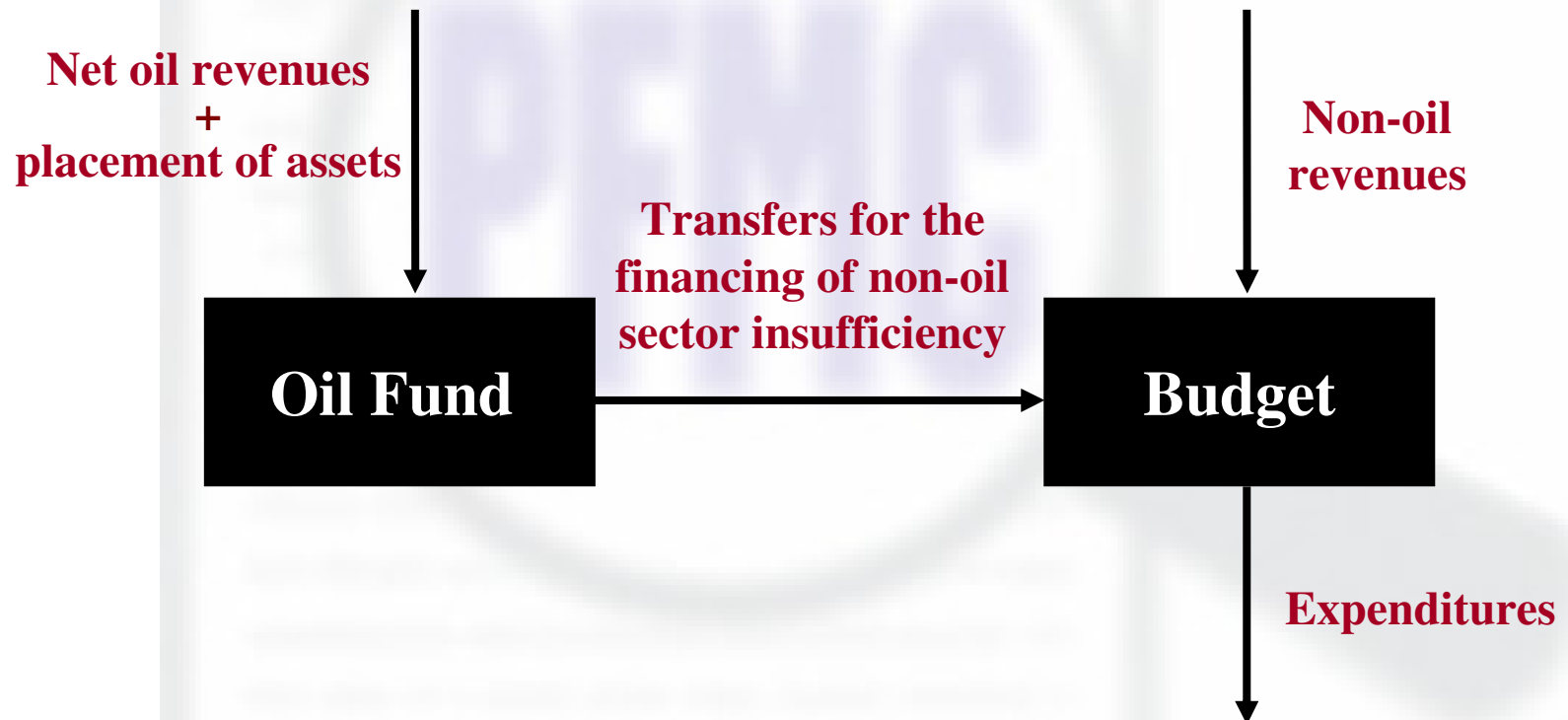
where,

r – the Oil Fund's profitability rate.

NPV (Net Present Value) - the state's net profit from oil production.

✓ *A* - taxes levied by the state from the oil sector during the current year

The model of Norwegian oil revenues management

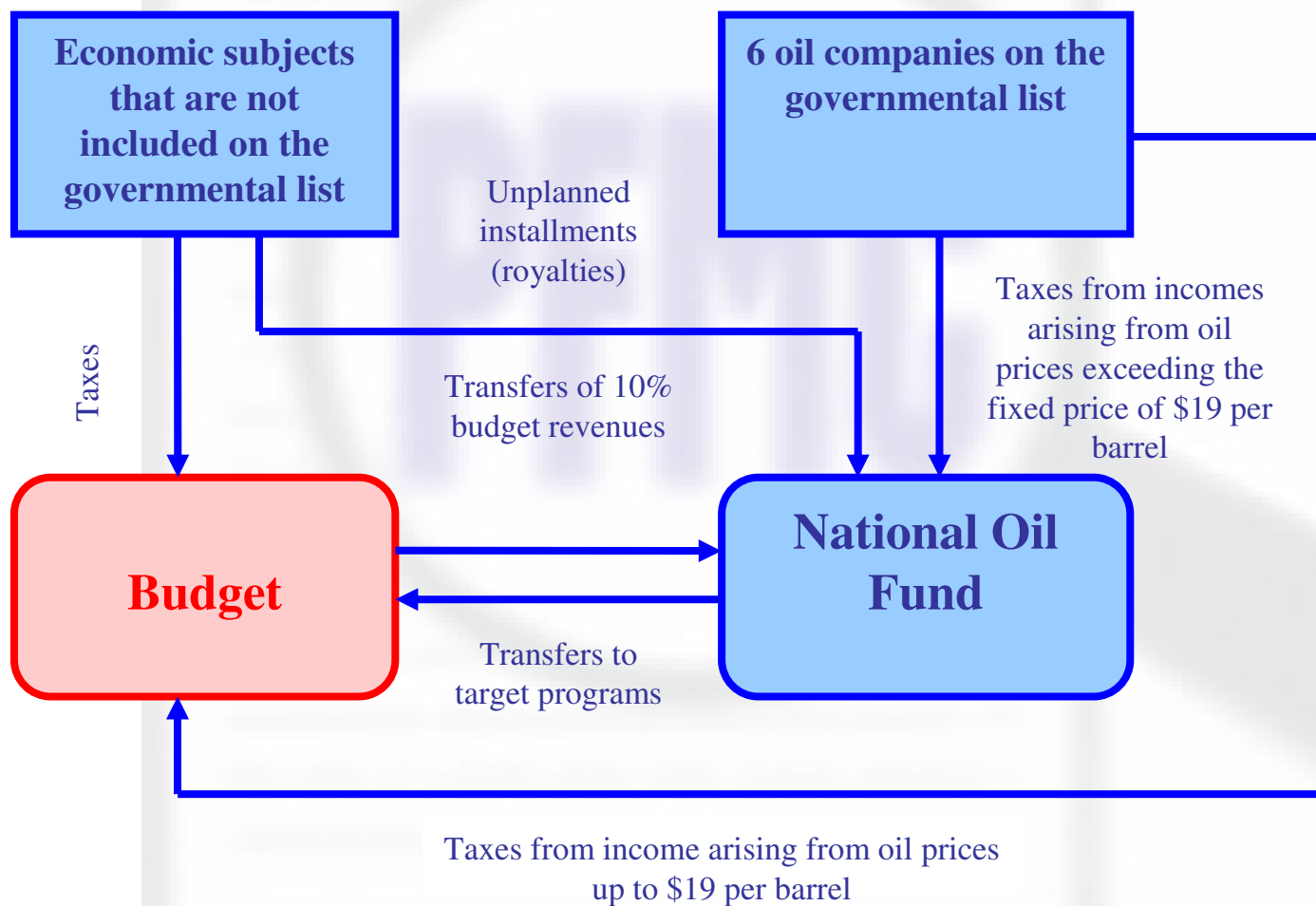


The model of Norwegian oil revenues management

Non-oil sector deficit is equal to 4% GDP

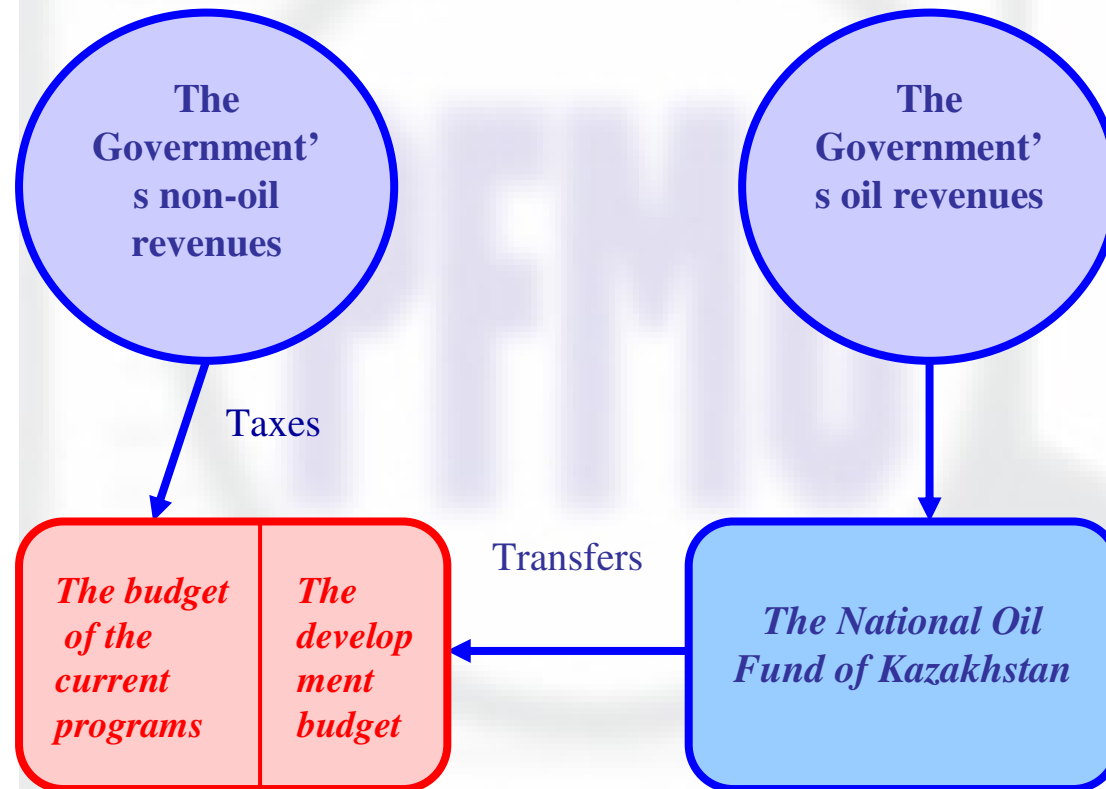
2003	_____	~ \$ 10 bln
2004	_____	~ \$ 11 bln
2005	_____	~ \$ 12 bln

The current mechanism for the use of oil revenues in Kazakhstan



The new model for the use of oil revenues in Kazakhstan

(Balanced budget model)



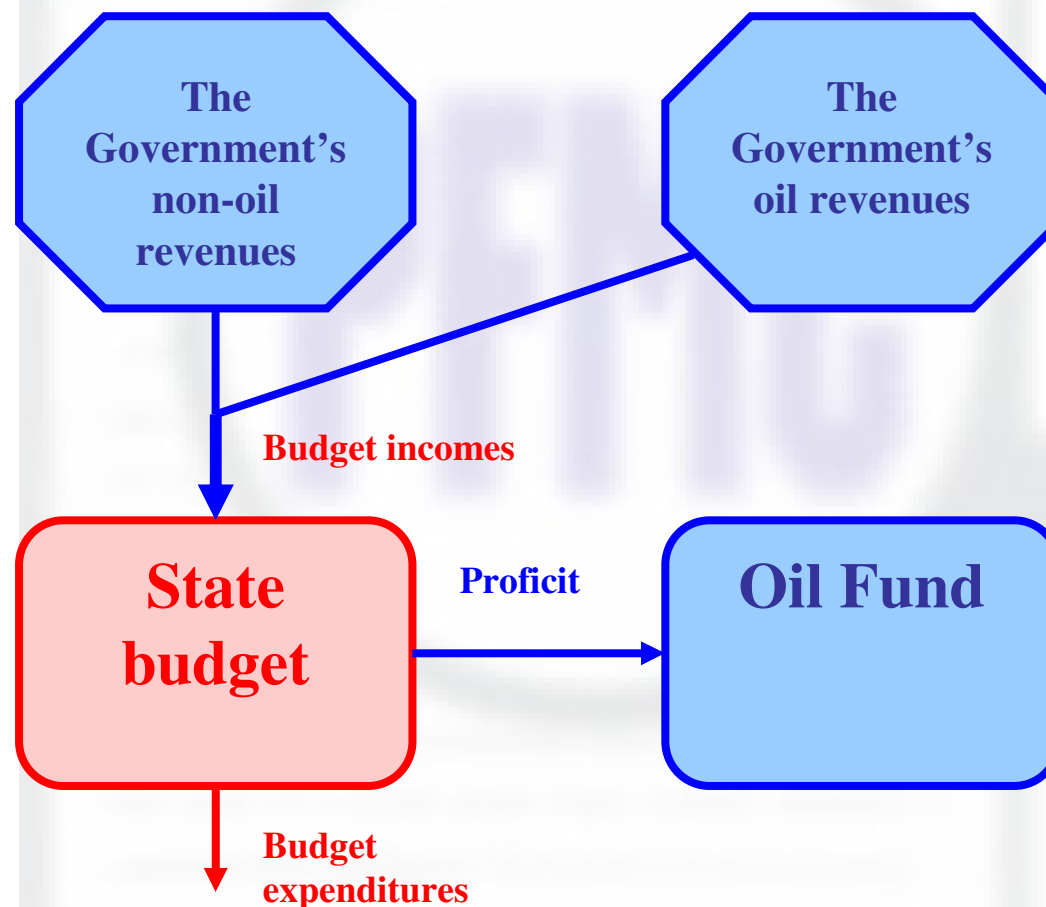
Balanced budget model

$$Y(t) = A + b F(t-1)$$

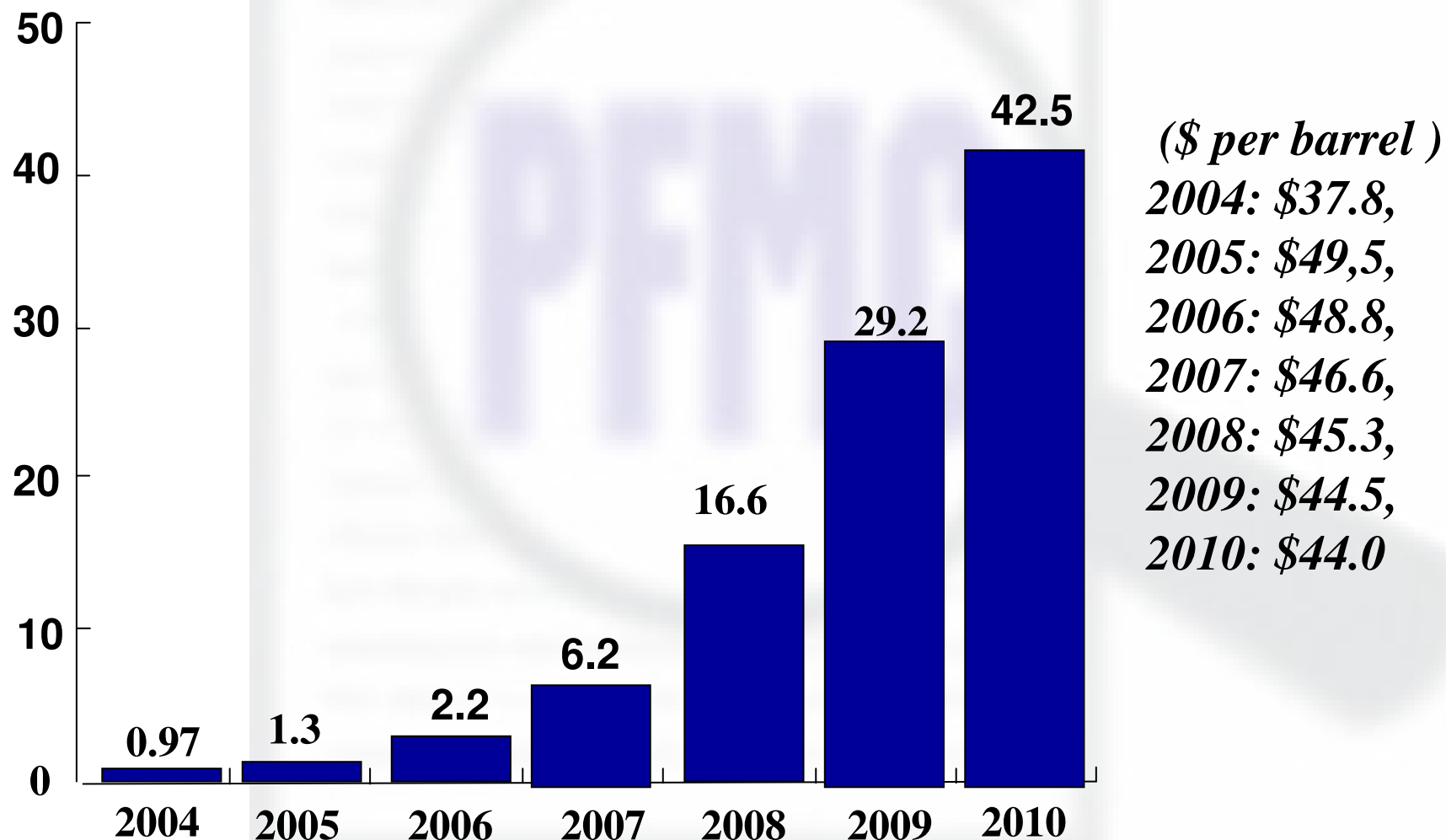
***b** – special parameter.*

Determined by the Government at a rate that is insignificantly higher or lower than the Oil Fund's profitability rate.

The model of steady expenditures



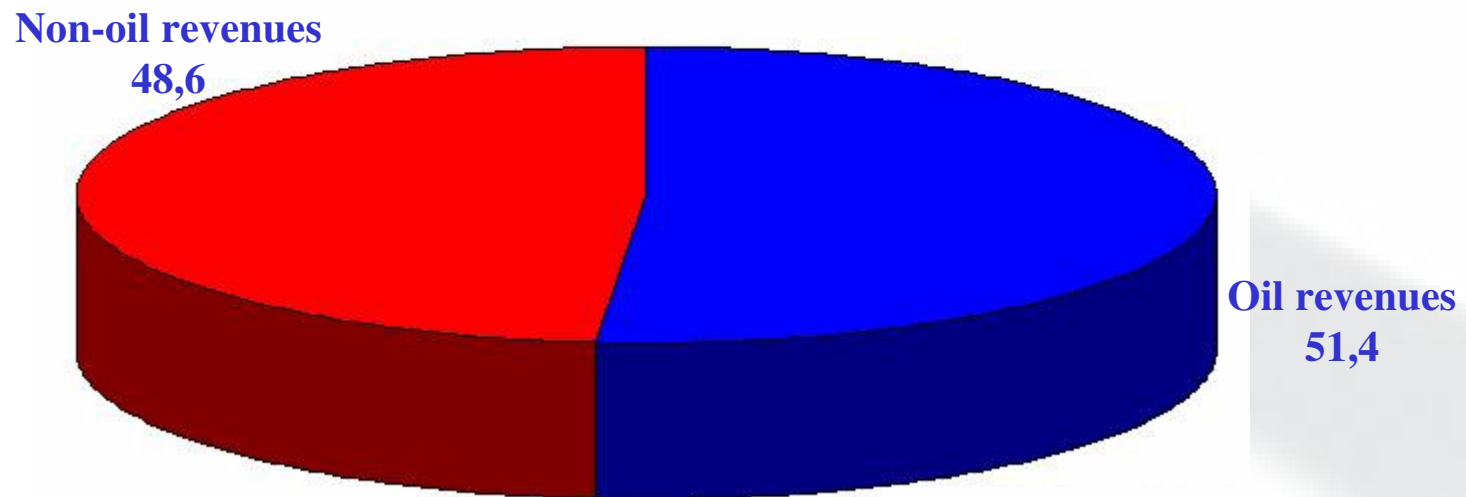
The dynamics of revenues of the State Oil Fund of Azerbaijan (*bln. \$*)



Source: IMF estimations

Oil factor in the budget (%)

Share of oil revenues in the budget

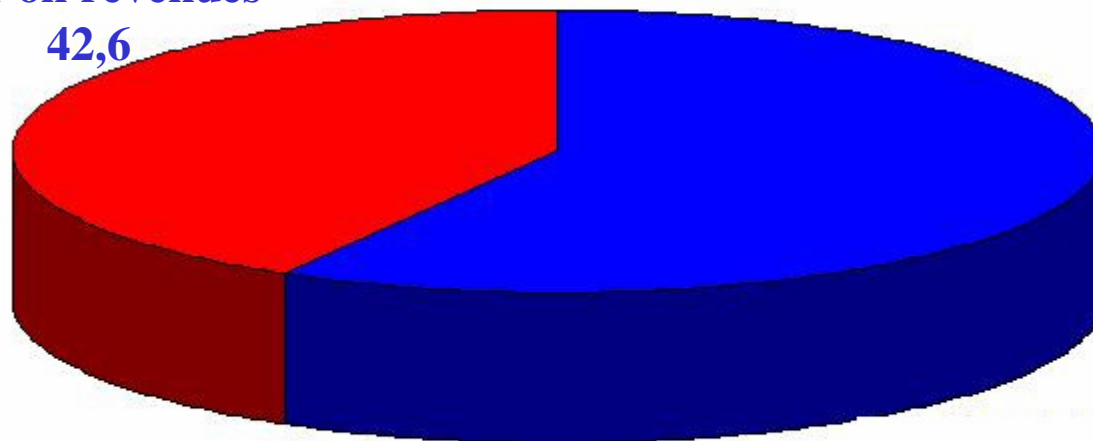


Oil factor in the budget (%)

Share of oil revenues in the budget (forecast)

Non-oil revenues

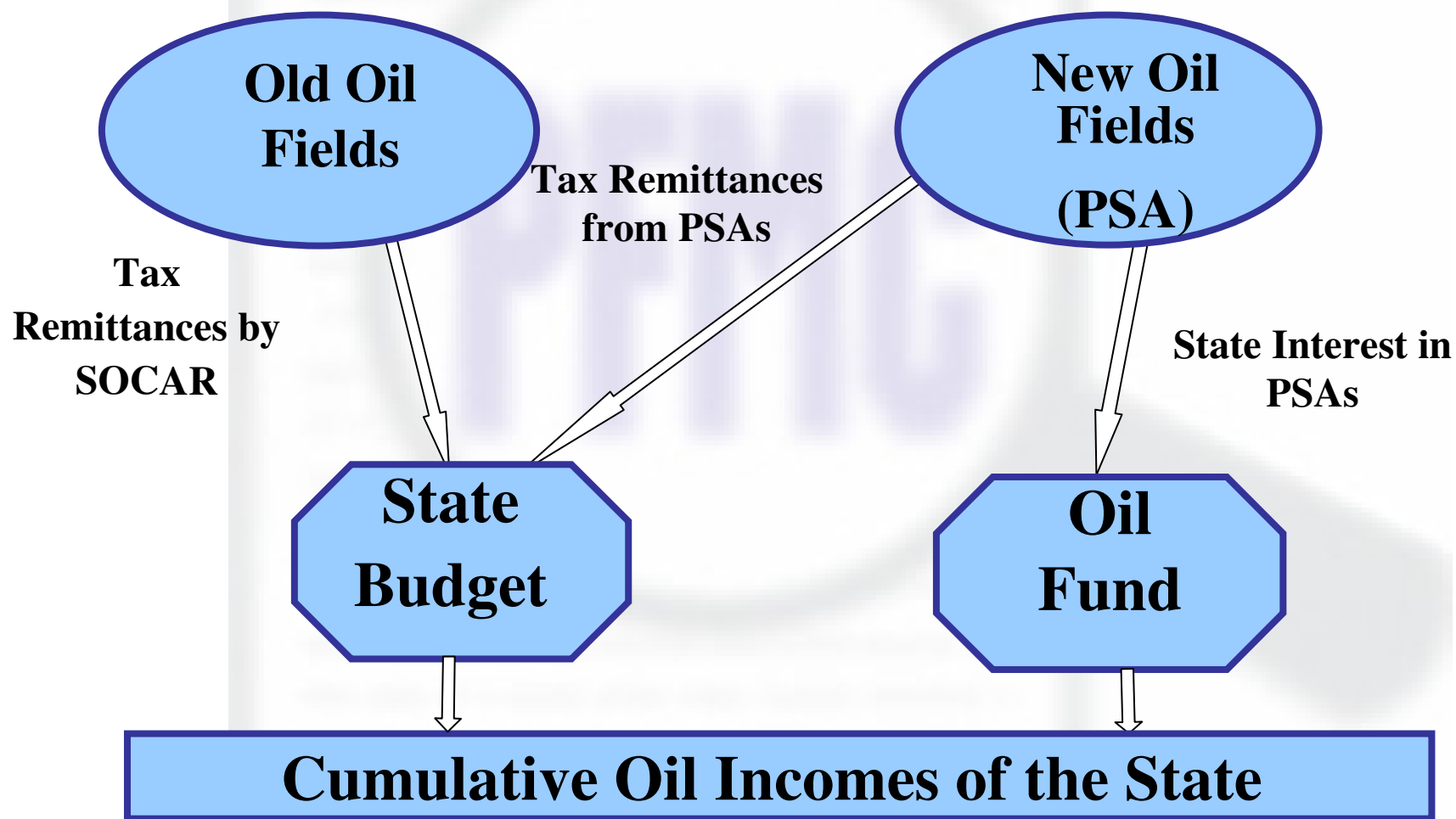
42,6



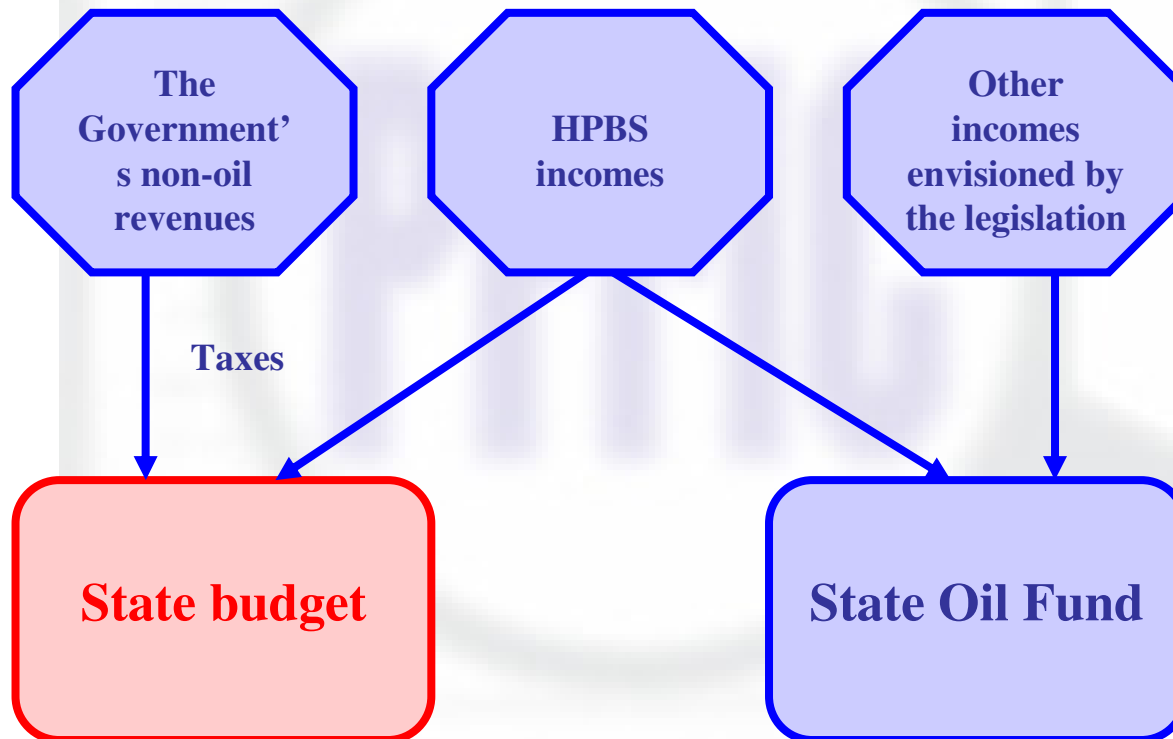
Oil revenues

58,4

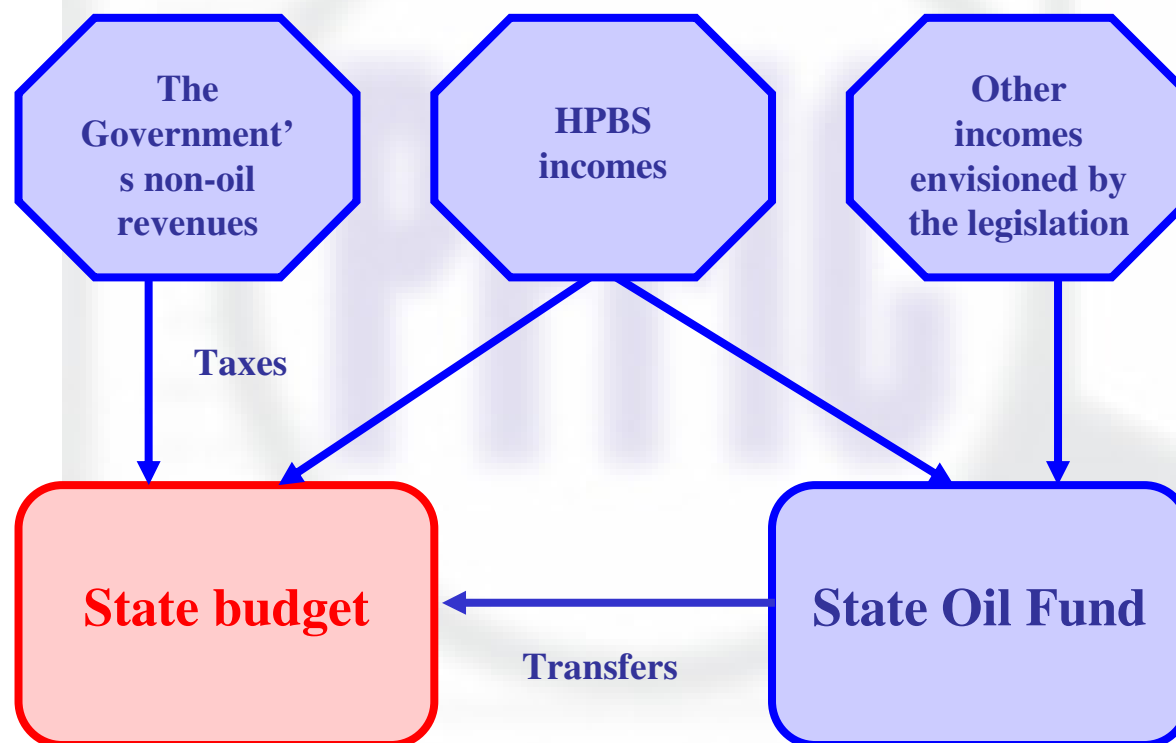
The sources of oil and gas incomes in Azerbaijan



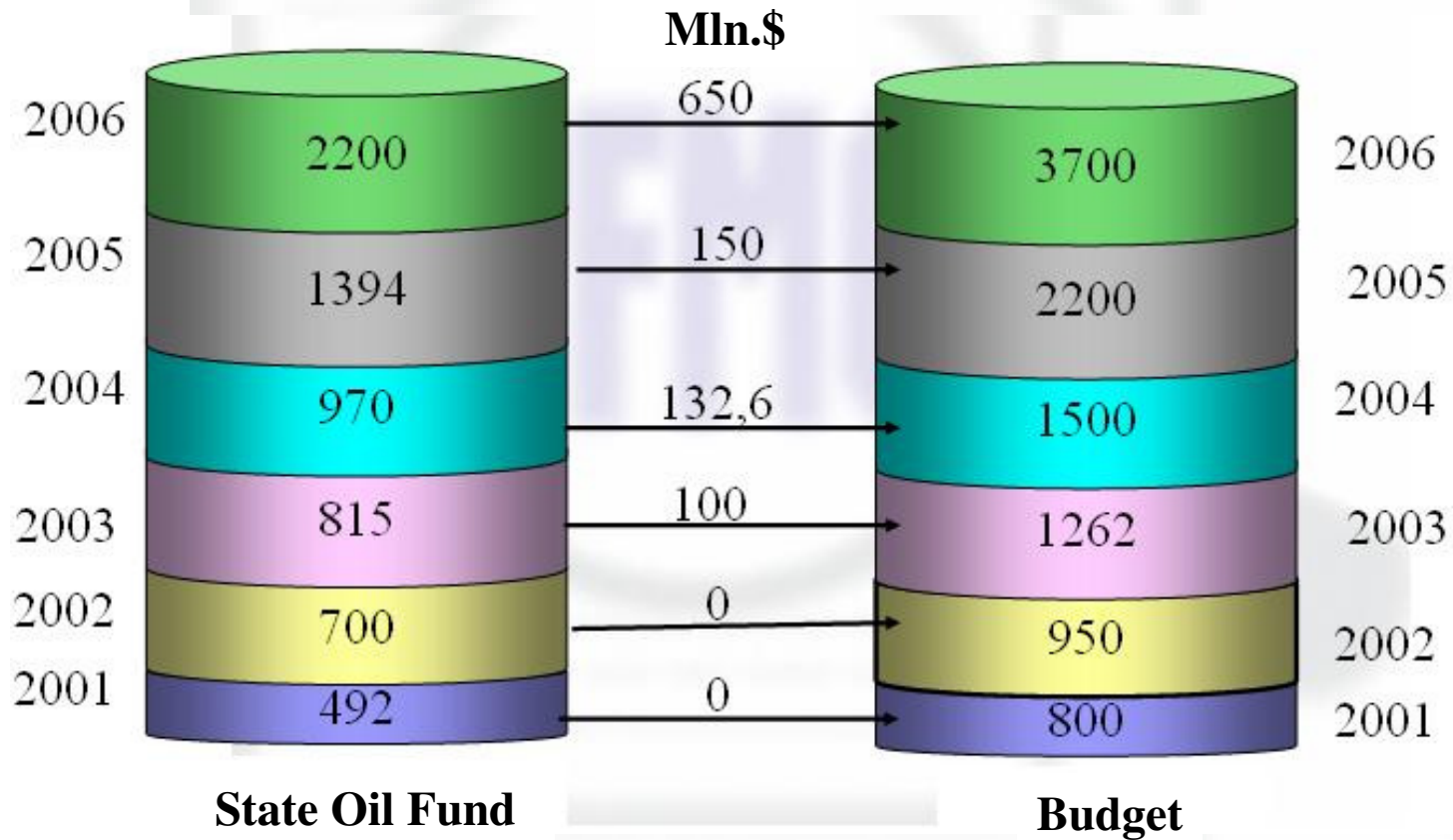
The sources of oil incomes in Azerbaijan (until 2003)



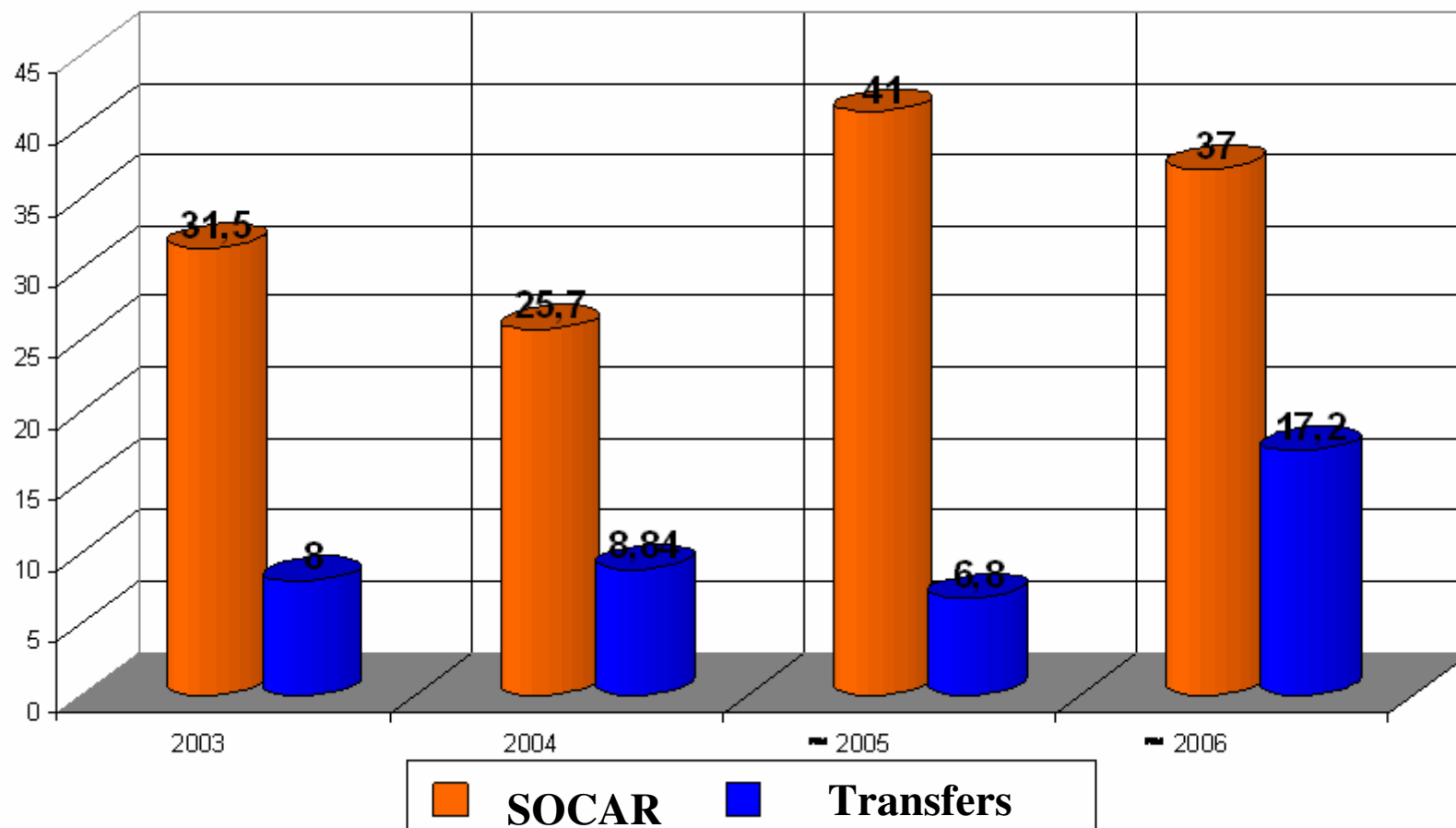
The models for the use of oil revenues in Azerbaijan (after 2003)



Transfers from the State Oil Fund to the Budget



Oil installments to the budget (%)



Problems with the use of oil revenues in Azerbaijan

- ✓ *Problems with ensuring macroeconomic stability and the formation of a balanced budget;*
- ✓ *Inconsistency in the determination of the oil revenues' level by the Government;*
- ✓ *Uncertainty regarding accumulated and expended amounts of oil revenues by the state;*
- ✓ *The necessity of fixing an expected price for oil in the budget;*
- ✓ *Growth of corruption and aggravation of problems with public management at a time when fundamental structural problems are hidden by the large-volume income flows;*
- ✓ *Medium-term (~3 years) budgetary expenditures are unidentified, which results in non-effective and the excessive utilization of oil revenues;*
- ✓ *Possible purposeful overestimation of budgetary expenditures;*
- ✓ *Negative influence of growing budgetary expenditures upon the macroeconomic situation in the country;*

“The budget trap”

- ✓ *The non-oil sector deficit is seriously aggravated against the background of big oil incomes*
- ✓ *Increased transfers from the State Oil Fund to the state budget are aimed to cover the deficit*
- ✓ *A large volume of unsecured resources encourages inflation*
- ✓ *The Government seriously combats the inflation and gains numerous partners in this business*
- ✓ *In its fight against inflation in the conditions of the poor development of the non-oil sector, the Government’s most active tool is the policy of strengthening the national currency of AZN*
- ✓ *The strengthening of AZN is the greatest barrier for the development of the non-oil sector*
- ✓ *The non-oil sector deficit will grow even further in the next budget, because non-oil revenues will be reduced against expectations*
- ✓ *As a result, the budget is increasingly becoming dependent on the oil factor and this problem is rather difficult to be resolved within the existing policy*

Conclusion

(2 ways of decreasing the non-oil deficit)

1. Strengthening of non-oil factors in the budget

- ✓ *reduction of dubious economic turnover*
- ✓ *system changes in price policy of natural monopolies and the identification of their commercial status*
- ✓ *combating dollarization*
- ✓ *combating corruption*
- ✓ *improvement of the accounting system*
- ✓ *development and provision of state assistance to target projects in various fields*

2. Reducing the growing dynamics of general budgetary expenditures

THANK YOU!

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