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**“SIMPLE” IO MODEL: G7 or EXCEL  
ALTERNATIVE (RUSSIAN EXPERIENSE)**

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# Statement of a problem

Any expert in the fields of macroeconomic modeling and forecasting sometimes is to make not very difficult interindustrial calculations. These models are simple but must be made with a high degree of precision. We call this type of models as *calculator*.

For example, such problem can be an estimation of the importance of separate sector for economy of the country. If the government wishes to study, what will be with economy of Russia if in intermediate term prospect to stop production domestic cars and to begin to import on 100%. In our opinion there is no need in difficult calculations on the big interindustrial model on the basis of package INTERDYME. The problem can be solved by means of simple model in Excel or G.

# **Main Question**

**What package is better for development of the interindustrial calculator?**

# Main approaches and problems

1. We need to use the official data published by the russian statistic offices.
2. For the present moment, numbers of IO tables are accessible to researchers only up to 2001.
3. We should construct the missing data for the period 2002-2004.
4. Model must work in current and constant prices and in US dollars.

# IMPORT MATRIX

Unlike traditional static models of interindustrial balance we have expanded opportunities of the analysis and forecasting by inclusion in calculations of on import table.

Sector import in model calculated as the sum of intermediate consumption of import production and dynamics of a final demand for import, and then is built in the scheme of calculation interindustrial balance.

# Basic approaches and assumptions for model CONTO

- Demographic forecast, raw material extraction forecast, primary sectors development forecast were used.
- Energy, metal and agriculture sector growth rates were put exogenous adjusting to supply restrictions. All other sector outputs were defined as the result of IO equations.
- Households' consumption depended on scenario of their income. Sector shares of PCE were adjusted to the aggregate level of economic growth.

- Government expenditures were put exogenous adjusting to the current policy of transition from free services to paid services
- Fixed capital investment was put exogenous. Housing construction was distinguished separately.
- Exports for sectors with exogenously put output were defined as the difference between output and domestic demand adjusting to import.

- Primary sector export was related to the export of oil. Similarly manufacturing sector export was related to the export of machines and equipment. In its turn export of machines and equipment depended on aggregate level of economic growth and on competitiveness of domestic goods.
- Imports were calculated using the changing import matrix.
- Imports of goods for households' consumption were adjusted to the ratio of inflation to foreign currency exchange rate. This last was put exogenous.



# CONCLUSIONS

First of all, it is necessary to note that as the decision of such problems as package G and Excel have the advantage and disadvantage.

However, our experience shows that for development of model such in Excel some days of work of the expert of a degree Ph.D are required, during too time for development of model in G-7 few hours are necessary.

*The russian choice by development of “simple” interindustrial model is G*