

REPORT FROM THE FIRST WORKSHOPS

Monday 20th August 2007

Participants: Aleksandar Stojkov, Marjan Nikolov, Todor Milcevski,
Katerina Suleva and Filip Blazeski.

Orientation meeting Monday morning

Orientation meeting of Macedonian delegation with Marein van Schaaijk and Stephen Chong (both MMC):

discussing program, action plan development (who will report which workshop, resulting in Proceedings Paper), training objectives etc.



Workshop with Marein van Schaaijk about the update of the startmodel. Participants (from left to right): Filip Blazeski (Economic advisor for US Aid Contractor BAH), Marjan Nikolov MSc (President of CEA), Aleksandar Stojkov MSc (Assistant Lecturer at Ss. Cyril and Methodius University), dr. Marein van Schaaijk (MMC), drs. Stephen Chong (MMC), Todor Milcevski (Economic Associate DEPRR Macedonia) and Katerina Suleva (National Bank of Macedonia).

During this visit the short term MMC specialists Michiel Vergeer, Ate Nieuwenhuis and Frits Bos each will give one workshop and several Workshops will be given by Marein van Schaaijk:

1. Monday morning
2. Monday afternoon
3. Tuesday afternoon
4. Wednesday afternoon
5. Thursday morning
6. Thursday afternoon

During these workshops we will go through the model step by step. During each workshop another member of the Macedonian delegation will be the “driver” and the

consultant will not even touch the keyboard and mouse, and give guidance with his pointer. By that the delegation will be trained in:

1. Learn how equations are linked throughout the model, by going through the sheets of the model and see how they are linked, by analysing the consistency framework (data and definitions)
2. Furthermore we will go into each behavioural equation, equation by equation and see which variables are in the equations.
3. And in each equation we can discuss the coefficients.

After that the team will have a better idea what is needed to change the startmodel into an operational version. See also the chapter "Towards an outline of an operational Macroabc-MK", that can be used in the construction of an action plan what to do in the year(s) after this visit to MMC.

Subjects in these workshops with Marein:

1. Introduction; a brief walk through all sheets (including brief manual); scheme with structure of the model; Proceedings Paper 2003 and CDROM with all documentation
2. Discuss block by block the data in sheet Source07 (the new data sheet)
3. The consistency framework (the datapart in sheet Startmodel including definition equations (see also report of workshop 15/9/2003 in Proceedings Paper 2003)
4. The forecasting part of sheet Startmodel row by row: discussion of plausibility of coefficients, for each main behavioural equation the link to sheet Bev. Eq.
5. The overview of 12 main behavioural equations (see the overview table in the chapter Macroabc Methodology, and also workshop theory pages 32-38 in Proceedings Paper 2003)
6. How to run variants
7. The baseline: plausibility of the result, inserting of add factors
8. Run 20 variants and discussion of plausibility of the results (see pages 69-71 in Proceedings Paper 2003)
9. A long term version of the Macroabc model
10. The Budget Forecasting Tool from Macroabc-MK
11. For action plan: towards an outline of an operational version of Macroabc (see text in this paper)
12. A test growth scenario

Now follows the report of the morning and the afternoon workshop with Marein, and during the lunch we have discussed how the model might be used by DPM

Review of the blocks of the Model

The building blocks of the model were reviewed. The model contains the following blocks:

- Government sector (central government plus extra-budgetary funds);
- Market sector;
- Household sector;
- Rest-of-the-world sector;
- Monetary sector;
- Prices;
- Labor, and
- Foreign exogenous variables.

The data on local financing is not taken into account properly. There is a need for another sub-block in Government Sector called “Local Government”. The general government block should comprise of the central government, the extra-budgetary funds and the local government sub-blocks.

Identification of missing data and statistical discrepancies

The Model was found to lack the following data:

- Population from 2002-2006 (Line 15)
- Compensation of employees and number of employees (Lines 44 and 45)
- Breakdown of employees by economic and non-economic activity (Lines 55 and 56)
- Domestic and external debt for 2002-2006 in Source’ 07 (Lines 303 and 304)
- “Other domestic financing” (Line 85)
- Actual data on Real GDP growth for 1997-2005 has to be checked
- The projection on 2006 GDP growth has to be checked.

During the data consistency check, several statistical discrepancies have been identified:

- statistical discrepancy between the domestic debt decrease and the change in domestic financing of the consolidated central government budget accounts (central government plus extra-budgetary funds)
- statistical discrepancy between the current account data in the system of national accounts and the balance-of-payments statistics;
- Statistical discrepancy between the change in total foreign exchange reserves and the overall balance of payments (current account plus capital and financial account plus net errors and omissions).

The newly identified statistical discrepancies have been incorporated in the forecasting formulae, and will remain so, until additional empirical verification is conducted.

Needed amendments of the behavioural equations

In order for the model to be used efficiently we must check the behavioral equations – BE and their coefficients:

1. The set of equations (this will come after consideration of the theory behind the model in combination with Macedonian specifics)
2. Specification of the equations
3. The calibration and lags of coefficients

The discussion about the BE 2 (the private investment volume growth) for example brought the following points:

1. Basically the private investments are a function of the accelerator and the profit rate;
2. The impact of the Government (public investments) is two fold;
 - a. Crowding out impact – the Government’s activities in this sector crowds out the private initiative
 - b. Crowding in impact – the Government’s activities in this sector crowds in private initiative because of the enabling environment

What would be the net impact and the elasticity of this public investment on the private investment is a task yet to be researched.

Discussion of the possible uses of the model

The group, together with Dr. Marein van Schaaik discussed the possible uses of the model. Examples from other countries were analyzed, as well. The group conducted some preliminary simulations:

- Scenario building for identifying requirements for achieving the projected economic growth by the Government of Macedonia;
- Analyzing the impact of FDI inflows on the Macedonian economy
- Effects of exogenous increase in gross private investments and exports;
- Analyzing the impact of lower direct taxes on the economy in general
- Analyzing the possibility of reducing the mandatory social security contributions
- Analyzing the effects of favourable terms-of-trade changes on the Macedonian economy (change in prices of main export articles, for example).

One of the most valuable features of the model is the platform it provides for discussion among various agencies in the government.

Possible extensions

The model does not take into account the specifics of the Macedonian economy – most notably it large informal sector. The possibility of amending the model with ‘guesstimates’ relating to the informal sector would be very useful. This feature will add much to the quality of the projections, which will be done by the model in the future.

The group has formulated the following recommendations and future steps:

1. Review of the theory behind the model;
2. Analysis of each behavioural equation (specification, lags, coefficients, historical analysis, regressions, etc.)
3. Consideration of the specifics of transition economies in general, and of the Macedonian economy, in particular.