

# 21. THE "DOBRESCU MACROMODEL" OF THE ROMANIAN MARKET ECONOMY - 2005 VERSION<sup>1</sup> - YEARLY FORECAST - SUMMER FORECAST FOR 2010<sup>2</sup>

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## Macromodel of the Romanian Market Economy<sup>3</sup>

### Abstract

*The macromodel estimates the short and medium-term economic implications for internal policies and changes in the international context. This version of the Romanian macromodel incorporates the experience accumulated through the utilization of its previous forms - either experimental (tested during 1991-1995) or operational (developed during 1996-2003). At the same time, it introduces some methodological and informational improvements. The most significant of them is the structural decomposition of the economy, associated with input-output techniques. Due to the relatively advanced stage of the transitional processes in Romania, the behavioural functions were accommodated - as much as possible - to the standard relationships. Unlike the versions that used the statistical series beginning in 1980, the present one is based exclusively on information concerning the period 1989-2004. Therefore, we have considered more adequately naming this variant the macromodel of the Romanian market (not transition, as before) economy. In this article we present the Summer forecast for 2010 (May estimations).*

**Keywords:** model, input-output analysis, econometric relationships, simulations

**JEL Classification:** C5, E2-E6, H6

<sup>1</sup> PHARE Programme RO2003/005-551.02.03 "Strengthening the capacity for analysis, macroeconomic forecast and elaboration of economic policies within the National Commission for Prognosis, the Ministry of Economy and Trade and the Prime Minister's Cabinet" – Romanian Center for Economic Policies.

<sup>2</sup> This is a continuation of the forecasts published so far in Romanian Journal of Economic Forecasting. The team working on these forecasts consists of specialists from the Institute for Economic Forecasting, the National Commission for Forecasting and the Centre for Macroeconomic Modelling: Cornelia Scutaru, Ion Ghizdeanu, Lucian-Liviu Albu, Bianca Pauna, Corina Sâman, etc.

<sup>3</sup> Source: Emilian Dobrescu: "Macromodels of the Romanian Market Economy", Editura Economică, Bucharest, 2006.

## Summer Forecast for 2010, May estimations<sup>4</sup>

The present predictive estimations are based on the 2005 version of the Romanian macroeconomic model, amended with some methodological corrections in the statistical indicators. The indicators for 2009 have been updated and, as a result, some of them differ somewhat from the estimates published in *RJEF* (2010, No.1). The demographic parameters are concordant with the official forecasts. The simulations are based on some common qualitative premises:

- The world economy, including international trade, recovers from recession.
- The Romanian economy is also involved in this process. However, the consequences of the crisis are reabsorbed step by step, continuing to have an important negative influence (the gross fixed capital formation, total factor productivity, the unemployment are concerned).
- The budget policy is dominated by the imperative to compress the public deficit to sustainable levels.
- The re-monetization of the economy continues, along with a gradual decrease in the interest rate. The National Bank is able to manage the evolution of the exchange rate of RON in order to maintain its fluctuations between reasonable limits.
- Romania benefits to a greater extent from the structural funds delivered by the European Union.

Three simulations have been selected.

1. The first is named the Base Scenario (BSc). Generally, it takes into account the macroeconomic policies envisaged in the Stand-by Agreement with the International Monetary Fund. This scenario is conceived under stability of taxation. Instead, the ratio (to general consolidated budget expenditures) of the government transfers is decreasing. Its main indicators are presented in Table 1.

Table 1

### Base Scenario for 2010, May estimations

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	523.2146
GDP index, current prices	IGDP	1.065016
GDP index, constant prices	IGDPc	1.003708
Household consumption index, constant prices	ICHc	0.979200
Gross fixed capital formation index, constant prices	IGFCFc	1.000001
Export of goods and services, bill. EUR	XGSE	35.62971
Import of goods and services, bill. EUR	MGSE	44.43369
Trade balance deficit (% of GDP)	rNX	-0.07066

<sup>4</sup> For a brief description of the model, see Romanian Journal of Economic Forecasting, 8(1): 115-125.

Indicators	Symbol	Dobrescu Macromodel
Labour force, mill. pers.	LF	9.966179
Employment, mill. pers.	E	9.090746
Unemployment rate	ru	0.087840
GDP deflator	PGDP	1.061081
Consumption price index	CPI	1.053791
Exchange rate, RON/EUR	ERE	4.199081
The general consolidated budget deficit (% of GDP).	cbb	-0.06702

The following two simulations assume less favorable conditions for the Romanian economy.

2. One of them is named the Worsened Scenario W1Sc. It admits that the domestic situation (institutional reforms, fiscal system, etc.) does not allow for a significant improvement in the business environment. Consequently, the capital inflows are more limited; this concerns the foreign direct and portfolio investments, current account net transfers, structural European funds. It is, nevertheless, assumed that the NBR policy still is able to maintain the exchange rate of RON in a narrow band of fluctuation. The main indicators of this scenario are presented in Table 2.

**Table 2**

**Worsened Scenario W1Sc for 2010, May estimations**

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	520.4291
GDP index, current prices	IGDP	1.059346
GDP index, constant prices	IGDPc	0.976802
Household consumption index, constant prices	ICHc	0.955672
Gross fixed capital formation index, constant prices	IGFCFc	0.977197
Export of goods and services, bill. EUR	XGSE	35.14238
Import of goods and services, bill. EUR	MGSE	42.32294
Trade balance deficit (% of GDP)	rNX	-0.06018
Labour force, mill. pers.	LF	9.966179
Employment, mill. pers.	E	9.080921
Unemployment rate	ru	0.088826
GDP deflator	PGDP	1.084505
Consumption price index	CPI	1.077243
Exchange rate, RON/EUR	ERE	4.361861
The general consolidated budget deficit (% of GDP).	cbb	-0.07033

3. The last scenario, derived from the previous one, is named the Worsened Scenario W2Sc. Practically, it tries to compress the inflation by more restrictive income, monetary, and budget expenditure policies. Table 3 presents its main indicators.

Table 3

**Worsened Scenario W2Sc for 2010, May estimations**

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	518.6887
GDP index, current prices	IGDP	1.055803
GDP index, constant prices	IGDPC	0.973956
Household consumption index, constant prices	ICHc	0.948137
Gross fixed capital formation index, constant prices	IGFCFc	0.967199
Export of goods and services, bill. EUR	XGSE	34.96170
Import of goods and services, bill. EUR	MGSE	41.75597
Trade balance deficit (% of GDP)	rNX	-0.05726
Labour force, mill. pers.	LF	9.966179
Employment, mill. pers.	E	9.080517
Unemployment rate	ru	0.088867
GDP deflator	PGDP	1.084035
Consumption price index	CPI	1.075473
Exchange rate, RON/EUR	ERE	4.371567
The general consolidated budget deficit (% of GDP).	cbb	-0.06692

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