13. THE "DOBRESCU MACROMODEL" OF THE ROMANIAN MARKET ECONOMY - 2005 VERSION[1] YEARLY FORECAST SUMMER FORECAST 2009[2]

A Macromodel of the Romanian Market Economy[3]

Abstract

The macromodel estimates the short and medium-term economic implications for domestic policies and changes in the international context. This version of the Romanian macromodel incorporates the experience accumulated through the utilisation 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 is the structural decomposition of the economy, associated with input-output techniques. Due to the relatively advanced stage of the transition 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 with 1980, the present one is based exclusively on information concerning the period 1989-2004. Therefore, we consider it is appropriate to name this variant the macromodel of the Romanian market (not transition, as before) economy. In this article we present three scenarios for 2009.

Keywords: model, input-output analysis, econometric relationships, simulations
JEL Classification: C5, E2-E6, H6

[1] *PHARE Programme RO2003/005-551.02.03 "Strengthening the capacity for analysis, macroeconomic forecasting and elaboration of economic policies within the National Commission for Prognosis, the Ministry of Economy and Trade and the Prime Minister's Cabinet" – Romanian Centre for Economic Policies.*

[2] *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 Păuna, Corina Sâman, etc.*

[3] *Source: Emilian Dobrescu,* Macromodels of the Romanian Market Economy*, Editura Economică, Bucharest, 2006.*

2009 Scenarios

For a short description of the model, see RJEF, Vol 8, No. 1/2007.[45]

April estimates

The methodological changes introduced in the last forecasting estimations were maintained. The statistical series for 2007-2008 have been updated, thus modifying the size of several indices (including the expected disposable income). The assumptions adopted by the Stand-by Agreement with the International Monetary Fund, the European Commission and the World Bank have been also taken into consideration. The previous three scenarios for 2009 were accommodated to the macroeconomic framework established by this document and by the corresponding new public budget structure.

1. The ***common hypotheses*** of these scenarios were slightly changed.

- Thus, a slower growth of nominal revenues is taken into account.
- The predictions are conceived under a severe austerity of public expenditures, including the governmental transfers.
- The equation for imports is multiplied by a lower corrective coefficient (0.85), due to the increasing difficulties in getting access to external financial resources.
- According to the international projections, the main indicators for the global economic environment deteriorate: IWTc = 0.95 and WTDsdr = 0.955.
- The capital inflows (FDPIE and NOCAE) diminish; the EU structural funds are considered to be 2 billion Euros.
- The broad money (M2) – as annual level - increases by 7.5% as compared to the previous year.
- All scenarios involve the same general consolidated budget coefficients. Generally, they are close to the public budget structure adopted by the Government after the Stand-by Agreement.
- The demographic indicators and the depreciation rate of tangible fixed assets (0.075) are also common.

2. The ***first scenario*** (A1) is based on an IY_D^{exp} (index of expected disposable income) of 1.05. The equation of total factor productivity (ITFP) is multiplied by a corrective coefficient of 0.9175, taking into account especially the diminishing capital utilization rate in constructions, manufacturing industry, tourism and other services, due to the compression of the domestic and external demand.

The results of estimations are presented in Table 1.

Practically, this scenario simulates the premises on which the Stand-by Agreement was built.

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[4] *Păuna, Bianca, Ion Ghizdeanu, Cornelia Scutaru, Petre Fomin, Corina Sâman, (2007), "The «Dobrescu Macromodel» of the Romanian Market Economy – 2005 version – Yearly forecast, basic scenario",* Romanian Journal of Economic Forecasting*,* 8(1): 115-125.

[5] *Dobrescu Emilian, (2008), "A desirable Scenario for the Romanian Economy during 2008-2013. Some Considerations Concerning the Global Economic Context",* Romanian Journal of Economic Forecasting*, 9(4): 15-58.*

Table 1

A1 Scenario for 2009

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	531.837
GDP index, current prices	IGDP	1.055
GDP index, constant prices	IGDPc	0.952
Household consumption index, constant prices	ICHc	0.993
Gross fixed capital formation index, constant prices	IGFCFc	0.995
Export of goods and services, bill. EUR	XGSE	40.874
Import of goods and services, bill. EUR	MGSE	52.311
The deficit of the trade balance (% of GDP)	rNX	-0.094
Labour force, mill. pers.	LF	9.945
Employment, mill. pers.	E	9.150
Unemployment rate	ru	0.0799
GDP deflator	PGDP	1.108
Consumption price index	CPI	1.059
Exchange rate, RON/EUR	ERE	4.395
The general consolidated budget deficit (% of GDP).	cbb	-0.0447

The estimations are presented in Table 1bis.

Table 1bis

A1bis Scenario for 2009

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	531.895
GDP index, current prices	IGDP	1.055
GDP index, constant prices	IGDPc	0.946
Household consumption index, constant prices	ICHc	0.977
Gross fixed capital formation index, constant prices	IGFCFc	0.989
Export of goods and services, bill. EUR	XGSE	40.680
Import of goods and services, bill. EUR	MGSE	51.764
The deficit of the trade balance (% of GDP)	rNX	-0.092
Labour force, mill. pers.	LF	9.945
Employment, mill. pers.	E	9.126
Unemployment rate	ru	0.0824
GDP deflator	PGDP	1.115
Consumption price index	CPI	1.066
Exchange rate, RON/EUR	ERE	4.428
The general consolidated budget deficit (% of GDP).	cbb	-0.0446

The variant A1bis admits a possible more accentuated deterioration of the business environment, amending the equation of total factor productivity (ITFP) by a corrective coeficient of 0.915.

3. In the ***second scenario*** (A2), the IY_D^{exp} is equal to 1.065, and the corrective coefficient of ITFP slightly ameliorates (0.935).

The computational results are presented in Table 2.

Table 2

A2 Scenario for 2009

Indicators	Symbol	Dobrescu Macromodel
GDP, current prices, bill. RON	GDP	539,399
GDP index, current prices	IGDP	1,070
GDP index, constant prices	IGDPc	0.973
Household consumption index, constant prices	ICHc	1.005
Gross fixed capital formation index, constant prices	IGFCFc	1.013
Export of goods and services, bill. EUR	XGSE	41,482
Import of goods and services, bill. EUR	MGSE	54,225
The deficit of the trade balance (% of GDP)	rNX	-0,102
Labour force, mill. pers.	LF	9,945
Employment, mill. pers.	E	9,156
Unemployment rate	ru	0.0793
GDP deflator	PGDP	1.0998
Consumption price index	CPI	1.051
Exchange rate, RON/EUR	ERE	4.333
The general consolidated budget deficit (% of GDP).	cbb	-0.0445

4. Comparatively with the previous estimations, the current ones are more pessimistic. All the scenarios involve a recession of the real GDP. The last of them corresponds to a stagnant evolution (associated with the highest trade deficit). The differences concerning inflation are explainable through the variation in global output under a relatively close dynamics of the expected disposable income (IY_D^{exp}).

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