Ministero dell'Economia e delle Finanze

Dipartimento del Tesoro

The New Medium-Term Budgetary Objectives and the Problem of Fiscal Sustainability: After the Crisis

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Aims of the paper (Threefold)

- First, analyzing the new MTO methodology and discuss critical aspects of the modalities to take on board government liabilities.
- Second, assessing the impact of the crisis on the current and future MTOs, showing the incidence of debt, growth, and cost of ageing on the budgetary targets that EU Member States are committed to achieve.
- Third, providing a simple alternative approach to introduce domestic/external imbalances into the MTO determination such as the composition of public debt by maturity, the structure of the private sector indebtedness, and financial market conditions.

The institutional framework of new MTO methodology

- The legal basis of the new MTOs.
- From an one-rule-fits-all approach ("medium-term budgetary position close to balance or in surplus" clause) to a country-specific approach taking into account differences across countries in their economic fundamentals and risks to public-finance sustainability.
- MTO differentiation must consider the countries' government debt and implicit liabilities (especially those associated with rising age-related expenditure), potential growth, and a safety margin.
- Euro Area MS should declare MTOs in a range between a structural deficit of 1 per cent of GDP and a balanced or in-surplus structural balance depending on their public debt level and potential growth.
- Towards a methodology for implementing MTO determination criteria: the transition period between 2006-09

Analytical underpinnings of new MTOs: Nature, purpose, and the determination of MTO

- The MTO is a quantitative budgetary target defined in structural terms, i.e. adjusted by cyclical fluctuations, net of one-offs and temporary measures, and expressed as percentage of GDP, that an EU MS commits to achieve over a certain time horizon, usually the planning horizon of the SCP.
- MTO aims at achieve a triple objective:

(a) providing the adequate safety margin;

(b) ensuring rapid progress towards public-finance sustainability;

(c) allowing an appropriate budgetary margin of maneouvre to support public investment;

- MTO determination criteria, included in the CoC, are implemented in a formal rule or algorithm

A calibrated model for the MTO determination

- The new MTO minimum target algorithm (MTOMT) is undisclosed.
- From the Code of Conduct we know that

  1. MTODi ≤MTOMTi.

  2. MTOMTi = Max (MTOMBi, MTOEAi, MTOSMi)

- MTODi is the target declared by country i,
- MTOMB is the minimum benchmark, i.e. the safety margin that prevents breaching the 3% GDP ceiling under normal cyclical circumstances ;
- MTOEAi is the commitment Euro Area and ERM II Countries to achieve at least a structural deficit of 1 percent of GDP
- MTOSMi is the country-specific MTO that links sustainability of public finances and budgetary manoeuvre granted to low-debt countries. <u>This parameter has been determined through an algorithm.</u>

A calibrated model for the MTO determination: the MTOSM

- The Code of Conduct gives some indications on how to calculate the MTOSM according to 3 components.

1. the budget balance that stabilises the debt-to-GDP ratio at 60 percent given a country's long-term growth rate of potential GDP;
2. a supplementary debt-reduction effort for countries whose debt exceeds 60 percent of GDP;
3. a proportion of the adjustment needed to cover the present value of the future increase in age-related expenditure (i.e. the cost of ageing).

Hence,

$$\mathbf{MTOSMi = -(60\ gi)/(1+gi) + k\ (di - 60) + 0.33\ S2Ei}$$

- The parameter k (= 0.033) is unknown and it is calibrated according to countries' MTOs declared in the 2009 updates of SCP.
- Then,

$$\mathbf{MTODj = Max\ (MTOMBj, MTOEAj, -(60\ gj)/(1+gj) + k\ (dj - 60) + 0.33\ S2Ej)}$$

A calibrated model for the MTO determination

Table 1: MTOMT* vs MTOs declared in SCP 2009 (% of GDP unless otherwise specified).

Country		Growth rate of potential GDP at current prices - average 2010-2060 (%)	Budget balance stabilising debt-to-GDP ratio at 60% (1)	Debt at end of 2008	Estimated supplementary debt-reduction effort (2)	S2E	MTOSM* (3)	MTOMB	MTOEA	MTOMT* = Maximum (MTOMB, MTOEA, MTOSM*)	MTO declared by country in SCP 2009 (4)
Belgium	**BE**	3.8	-2.2	89.8	1.0	4.8	0.3	-1.3	-1.0	0.3	no comm.
Bulgaria	**BG**	3.7	-2.1	14.1	0.0	1.5	-1.6	-1.8		-1.6	0.5
Czech Republic	**CZ**	3.6	-2.1	30.0	0.0	3.7	-0.9	-1.6		-0.9	no comm.
Denmark	**DK**	3.8	-2.2	33.4	0.0	1.4	-1.7	-0.5	-1.0	-0.5	no comm.
Germany	**DE**	3.2	-1.9	65.9	0.2	3.3	-0.6	-1.6	-1.0	-0.6	-0.5
Estonia	**EE**	3.8	-2.2	4.6	0.0	-0.1	-2.2	-1.9	-1.0	-1.0	0.0 or higher
Ireland	**IE**	4.4	-2.5	43.2	0.0	6.7	-0.3	-1.5	-1.0	-0.3	-0.5 to 0.0
Greece	**EL**	3.7	-2.1	99.2	1.3	11.5	3.0	-1.4	-1.0	3.0	no comm.
Spain	**ES**	3.9	-2.2	39.7	0.0	5.7	-0.4	-1.2	-1.0	-0.4	no comm.
France	**FR**	3.9	-2.2	67.4	0.2	1.8	-1.4	-1.6	-1.0	-1.0	0.0
Italy	**IT**	3.5	-2.0	105.8	1.5	1.5	0.0	-1.4	-1.0	0.0	0.0
Cyprus	**CY**	4.8	-2.7	48.4	0.0	8.3	0.0	-1.8	-1.0	0.0	n.a.
Latvia	**LV**	3.4	-2.0	19.5	0.0	1.0	-1.7	-2.0	-1.0	-1.0	-1.0
Lithuania	**LT**	3.5	-2.0	15.6	0.0	3.2	-1.0	-1.9	-1.0	-1.0	no comm.
Luxembourg	**LU**	4.6	-2.6	13.5	0.0	12.9	1.6	-1.0	-1.0	1.6	0.5
Hungary	**HU**	3.7	-2.1	72.9	0.4	1.5	-1.2	-1.6		-1.2	-1.5
Malta	**MT**	3.7	-2.1	63.6	0.1	5.7	-0.1	-1.7	-1.0	-0.1	0.0
Netherlands	**NL**	3.5	-2.0	58.2	0.0	5.0	-0.4	-1.1	-1.0	-0.4	-0.5 to 0.5
Austria	**AT**	3.7	-2.1	62.6	0.1	3.1	-1.0	-1.6	-1.0	-1.0	0.0
Poland	**PL**	3.5	-2.0	47.2	0.0	-1.2	-2.4	-1.5		-1.5	-1.0
Portugal	**PT**	3.9	-2.2	66.3	0.2	1.9	-1.4	-1.5	-1.0	-1.0	n.a.
Romania	**RO**	3.8	-2.2	13.6	0.0	4.9	-0.6	-1.8		-0.6	n.a.
Slovenia	**SI**	3.4	-2.0	22.5	0.0	8.3	0.7	-1.6	-1.0	0.7	no comm.
Slovakia	**SK**	3.7	-2.2	27.7	0.0	2.9	-1.2	-2.0	-1.0	-1.0	no comm.
Finland	**FI**	3.7	-2.1	34.2	0.0	4.5	-0.6	-1.2	-1.0	-0.6	0.5
Sweden	**SE**	3.9	-2.3	38.0	0.0	1.6	-1.7	-1.0		-1.0	1.0
United Kingdom	**UK**	4.1	-2.4	55.5	0.0	3.6	-1.2	-1.4		-1.2	no comm.

(1) Computed as -(60*g)/(1+g) where g is average nominal potential GDP growth rate over 2010-2060.

(2) Computed as 0.033*(d - 60) where d is 2008 debt as percentage of GDP.

(3) Computed as -(60*g)/(1+g)+0.033*(d - 60)+0.33*S2E

(4) Declared MTO: 'no comm.' indicates that no commitment is explicitly made by the country in the SCP 2009; 'n.a.' indicates SCP 2009 is not available.

Note: Luxembourg declared MTO is below MTOMT* because the country opted to cover cost of ageing cumulated up to 2040.

Sources: Debt levels are from 2009 Updates of Stability and Convergence Program, submitted by countries in January 2010.

Debt for Cyprus, Portugal, and Romania in 2012 is from European Comission 2009 Autumn forecast and refers to 2011.

Average nominal potential GDP growth rates over 2010-2060 and S2E indicators are from European Commission's Ageing Report 2009 and Sustainability Report 2009.

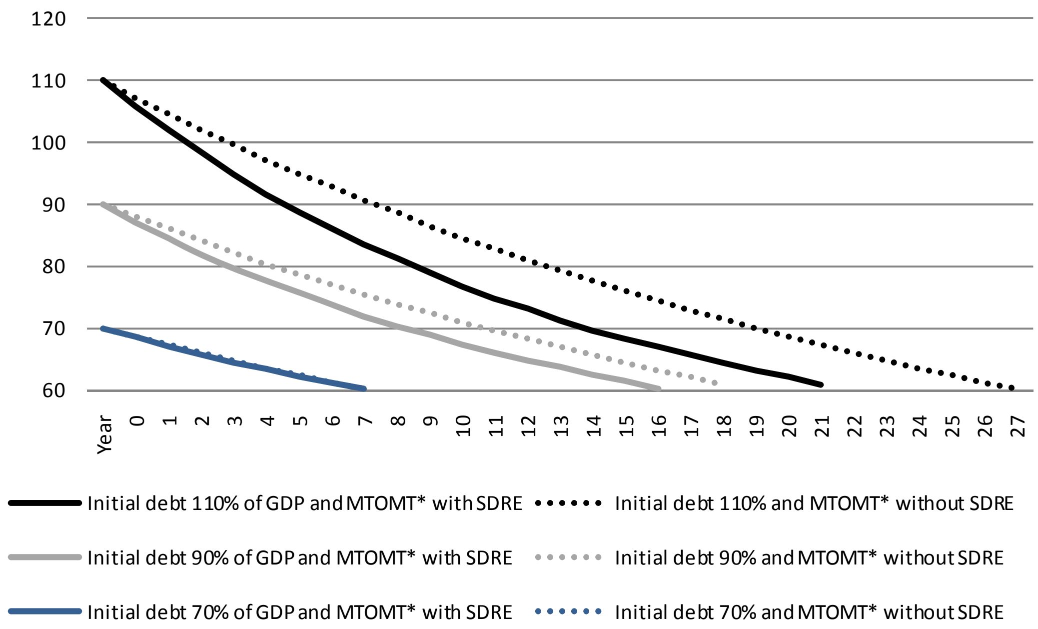
Strengths and weaknesses of the new MTO approach

- **Main advantages of the new methodology:**
  - The algorithm is not revealed but it provides more transparency, simplicity and ownership.
  - Quantification of both explicit (public debt levels) and implicit (cost of ageing) government s' liabilities.
    - On explicit liabilities as determinants of MTOs: the additional debt requirement parameter distinguishes between low-debt and high-debt countries providing larger margin of manoeuvre to the former.
    - On implicit liabilities in the MTOs: total or partial frontloading of the cost of ageing ensures both a budgetary safety margin against the projected increase in age-related expenditure and improve ownership.
    - Minimum degree of frontloading is required from all EU countries, so as not to weaken the incentives to implement pension reforms.
    - MTOs could be revised regularly(every 3 years) and in any case after major structural reforms having an impact on age-related expenditures.

Strengths and weaknesses of the new MTO approach

- **Main weaknesses of the new methodology**

Debt paths under MTOMT with and without supplementary debt-reduction effort (% of GDP)



- the supplementary debt-reduction effort does not accelerate significantly the convergence of debt-to-GDP ratios towards the Maastricht 60 percent reference value but imposes an additional medium term burden on high debt countries.

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Strengths and weaknesses of the new MTO approach

- **Main weaknesses of the new methodology**

- The MTO algorithm does not provide the symmetry condition between explicit and implicit liabilities in the long-term solvency equation of the government.
  - Example: let consider a country with a Debt-to-GDP ratio equal to 100% which undertakes a pension reform that increases primary balance permanently by 0.5 p.p..
  - The S2E indicator improves by the same amount but, given a 0.33 pp degree of frontloading, the MTOMT improves by only 0.17pp whereas the NPV of the permanent improvement in primary balance is 33.3% of GDP.
  - by reducing the debt by 33.3% of GDP implies a decline in MTOMT by 1.09 pp.

→ the MTO does not offer a balanced incentive but a clear preference for consolidation and limited gains for structural reforms for Member States deciding to adopt either short-term budgetary consolidation that reduces the debt ratio or long-term structural reforms

The impact of the financial and economic crisis on MTO

Table 2: Declared MTOs, dates of achievement, and gaps between structural budget balances and MTOs in SCP 2007, 2008, and 2009 (% of GDP).

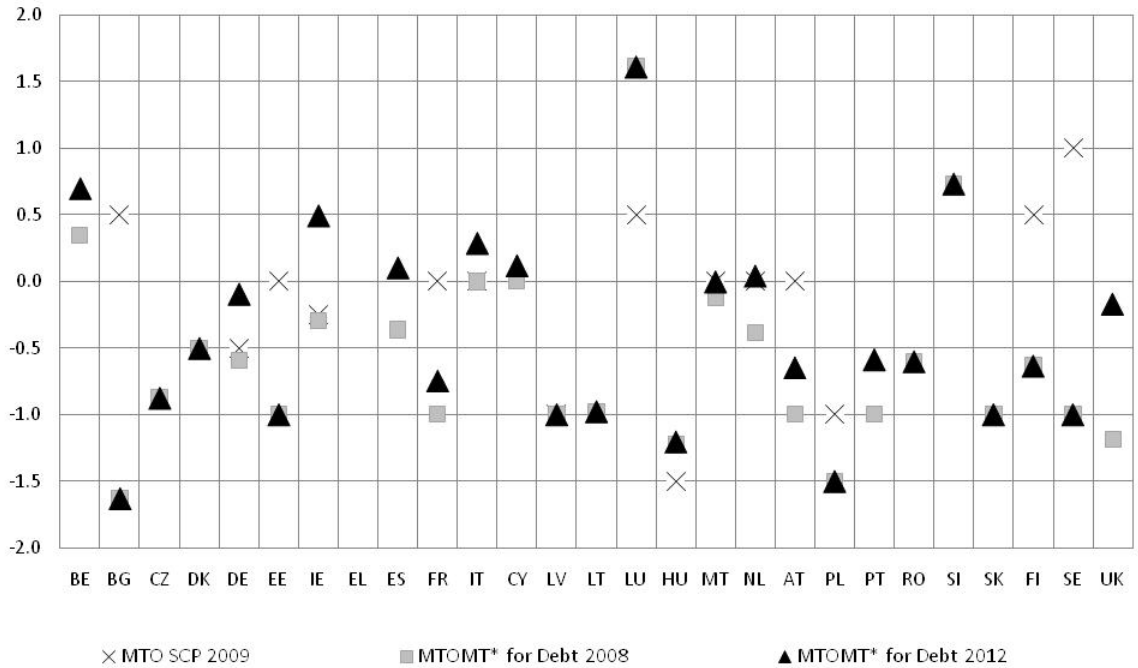
Country		SCP 2007							SCP 2008		SCP 2009						
		MTO declared by country (1)	Date to achieve MTO (2)	Structural balance 2007	Distance to MTO (3)	Structural balance 2010	Distance to MTO (3)	Achievement of MTO by 2010?	MTO declared by country (1)	Date to achieve MTO (2)	MTO declared by country (1)	Date to achieve MTO (2)	Structural balance 2009	Distance to MTO (4)	Structural balance 2012	Distance to MTO (4)	Achievement of MTO by 2012?
Belgium	**BE**	0.5	2009	-0.3	-0.8	1.0	0.5	yes	0.5	n.d.	no comm.	n.d.	-3.7		-2.0		
Bulgaria	**BG**	1.5	2010	2.9	1.4	3.1	1.6	yes	1.5	t.p.p.	0.5	n.d.	-1.0	-1.5	1.0	0.5	yes
Czech Republic	**CZ**	-1.0	2012	-4.1	-3.1	-2.5	-1.5	no	-1.0	2012	no comm.	n.d.	-5.5		-2.6		
Denmark	**DK**	0.75 to 1.75	t.p.p.	3.5	2.3	2.5	1.3	yes	0.75 to 1.75	t.p.p.	no comm.	n.d.	-0.6		-0.8		
Germany	**DE**	0.0	2007	-0.3	-0.3	0.0	0.0	yes	0.0 to 0.5	n.d.	-0.5	n.d.	-1.5	-1.0	-3.0	-2.5	no
Estonia	**EE**	0.0	t.p.p.	1.2	1.2	1.3	1.3	yes	0.0	2011	0.0 or higher	n.d.	-0.8	-0.8	0.5	0.5	yes
Ireland	**IE**	0.0	2007	0.5	0.5	-0.7	-0.7	no	0.0 to 0.5	n.d.	-0.5 to 0.0	n.d.	-9.3	-9.0	-6.8	-6.6	no
Greece	**EL**	0.0	2012	-2.8	-2.8	-0.5	-0.5	no	0.0	n.d.	no comm.	n.d.	-7.8		-2.1		
Spain	**ES**	0.0	2007	2.2	2.2	1.9	1.9	yes	0.0	n.d.	no comm.	n.d.	-10.0		-4.6		
France	**FR**	0.0	2012	-2.0	-2.0	-1.0	-1.0	no	0.0	2012	0.0	n.d.	-5.8	-5.8	-2.8	-2.8	no
Italy	**IT**	0.0	2011	-2.2	-2.2	-0.5	-0.5	no	0.0	n.d.	0.0	n.d.	-3.6	-3.6	-2.0	-2.0	no
Cyprus	**CY**	0.0	2007	0.3	0.3	0.8	0.8	yes	0.0	n.d.	n.a.	n.d.	-3.4		na		
Latvia	**LV**	-1.0	t.p.p.	-0.5	0.5	1.7	2.7	yes	-1.0	n.d.	-1.0	n.d.	-8.1	-7.1	-0.5	0.5	yes
Lithuania	**LT**	-1.0	2009	-1.2	-0.2	1.1	2.1	yes	-1.0	2010	no comm.	n.d.	-7.5		-1.7		
Luxembourg	**LU**	-0.8	2007	0.7	1.5	1.6	2.4	yes	-0.8	n.d.	0.5	n.d.	0.4	-0.1	-4.0	-4.5	no
Hungary	**HU**	-0.5	n.d.	-4.8	-4.3	-2.5	-2.0	no	0.5	n.d.	-1.5	n.d.	-2.5	-1.0	-1.5	0.0	yes
Malta	**MT**	0.0	2010	-2.1	-2.1	0.1	0.1	yes	0.0	2011	0.0	n.d.	-3.3	-3.3	-3.3	-3.3	no
Netherlands	**NL**	-1.0 to -0.5	t.p.p.	-0.3	0.5	0.8	1.6	yes	-0.5 to -1.0	t.p.p.	-0.5 to 0.5	n.d.	-3.5	-3.5	-3.6	-3.6	no
Austria	**AT**	0.0	2010	-0.7	-0.7	0.1	0.1	yes	0.0	n.d.	0.0	n.d.	-2.6	-2.6	-2.4	-2.4	no
Poland	**PL**	-1.0	2011	-2.4	-1.4	-1.1	-0.1	no	-1.0	2012	-1.0	n.d.	-7.1	-6.1	-2.9	-1.9	no
Portugal	**PT**	-0.5	2010	-2.1	-1.6	-0.3	0.2	yes	-0.5	n.d.	n.a.	n.d.	-6.6		na		
Romania	**RO**	-0.9	n.d.	-3.4	-2.5	-2.7	-1.8	no	-0.9	2012	n.a.	n.d.	-7.1		na		
Slovenia	**SI**	-1.0	t.p.p.	-0.8	0.2	-0.1	0.9	yes	-1.0	n.d.	no comm.	n.d.	-4.8		-2.1		
Slovakia	**SK**	-1.0 or higher	2010	-3.0	-2.0	-1.2	-0.2	no	-1.0	2010	no comm.	n.d.	-5.2		-2.6		
Finland	**FI**	2.0	t.p.p.	4.2	2.2	2.8	0.8	yes	2.0	t.p.p.	0.5	n.d.	0.3	-0.2	-1.0	-1.5	no
Sweden	**SE**	1.0	t.p.p.	2.4	1.4	3.4	2.4	yes	1.0	t.p.p.	1.0	n.d.	1.4	0.4	0.6	-0.4	no
United Kingdom	**UK**	no comm.	n.d.	-3.0		-1.9			no comm.	n.d.	no comm.	n.d.	-9.0		-4.7		

(1) Declared MTO: 'no comm.' indicates that no commitment is explicitly made by the country in the SCP; 'n.a.' indicates SCP is not available.
(2) Date to achieve MTO: 'n.d.' indicates that the date of achievement is not declared in the SCP; 't.p.p.' indicates the MTO is achieved throughout the programme period; 'n.a.' indicates the SCP is not available
(3) For Denmark and Netherlands, distance to the central point of MTO range; for Slovakia, distance to the minimum value of MTO range.
(4) For Ireland and Netherlands, distance to the central point of MTO range; for Estonia, distance to the minimum value of MTO range.
Sources: SCP 2007's declared MTO and structural balances are from European Commission's Public Finances in EMU 2008, p.37 and country annexes respectively.
SCP 2008's declared MTO are from 2008 Updates of Stability and Convergence Program.
SCP 2009's declared MTO and structural balances are from 2009 Updates of Stability and Convergence Program, submitted by countries in January 2010.

- In 2007 SPC many MS at MTO. In 2008 lenghtening the period for achieving targets.
- In the 2009 SCP many countries failed to declare MTOs or posted ambitious targets

Crisis, public debt and MTOs

MTOs declared in 2009 SCP vs MTOMT* for debt stocks at the end of 2008 and 2012 (% of GDP)



- The current MTOs declared in the 2009 SCP are based on pre-crisis debt stocks of 2008.
- The future MTOs in 2012,will be based on the much larger post-crisis debt levels.
- Debt accumulation will imply more demanding MTOs due to supplementary debt-reduction effort

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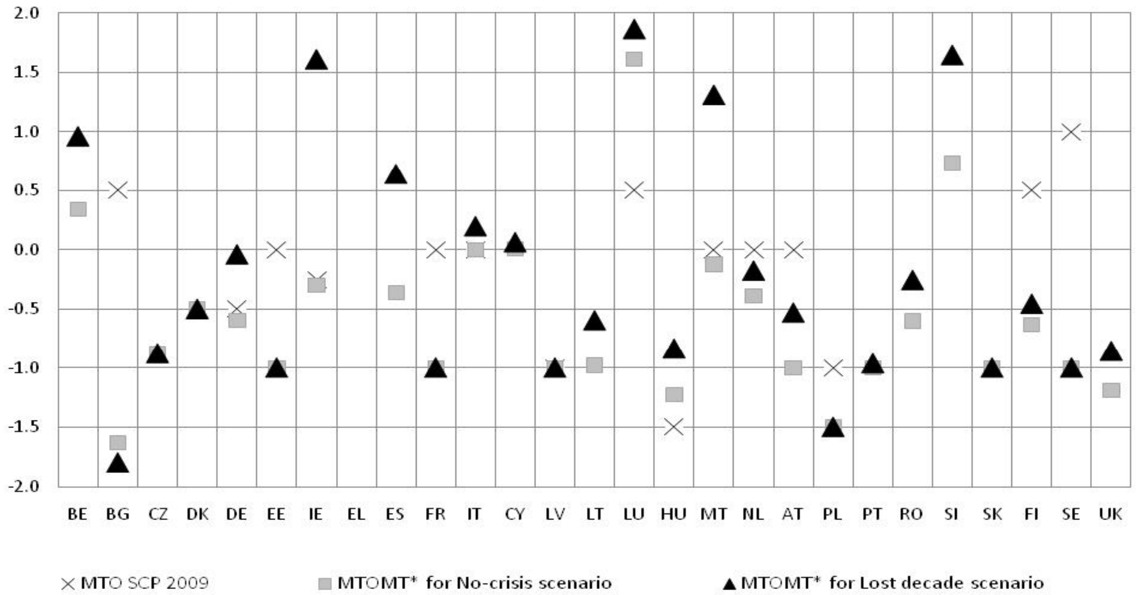
Crisis, potential growth and MTOs

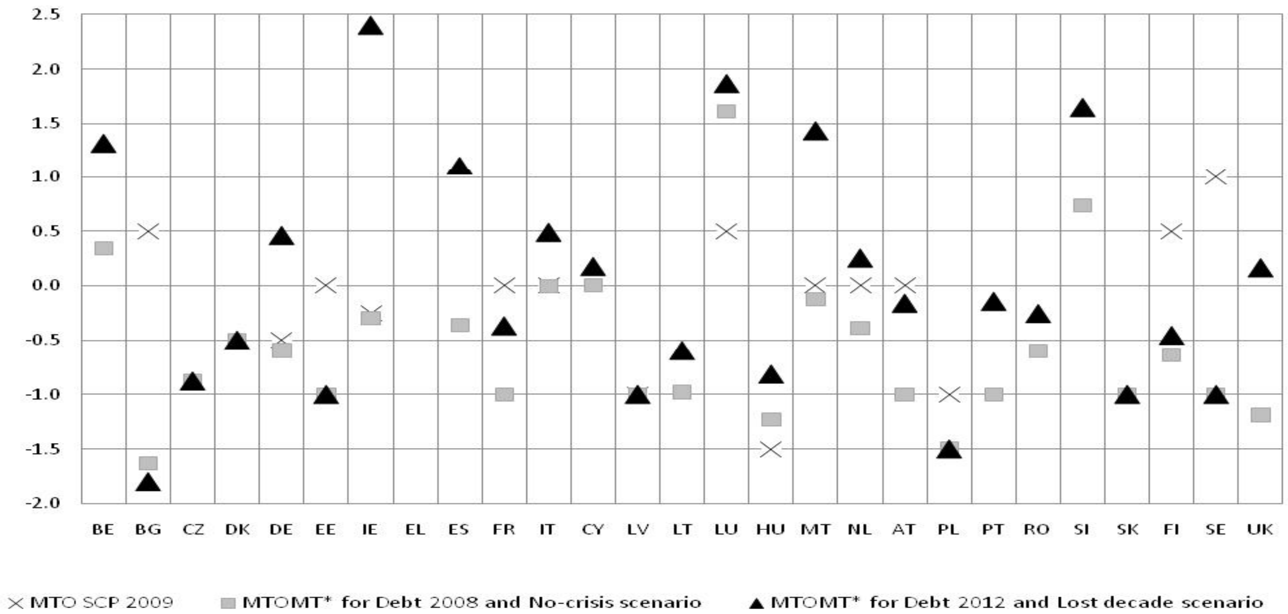
MTOs declared in 2009 SCP vs MTOMT* for no-crisis and lost decade scenarios (% of GDP)



- Current MTOs have been set using the latest AWG projections of potential growth and age-related expenditure elaborated early in 2008 which do not take into account the effects of the crisis.
- To address the lack of realism we use potential output and cost of ageing of the lost decade scenario, which envisages lower growth rates of potential GDP for all EU countries until 2020.
- Tighter MTOs for 15 MS due to higher cost of ageing. Limited impact of potential

An integrated medium term crisis scenario

MTOs in 2009 SCP vs MTOMT* for debt 2008/no-crisis and debt 2012/lost decade (% of GDP)



- Conditional on the materialisation of current projections on debt and potential growth, tighter MTOs is a likely outcome for the next round of revision in 2012.
- The current debate on exit strategies for EU Member States should consider that future MTOs will become more demanding due to the actual deterioration of public finance and growth conditions

The exposure index: an alternative to the supplementary debt effort.

Underlying rationales

- Severe effect of the current crisis on the credibility of the MTO methodology.
- Huge increase in debt ratios and explicit liabilities in many EU countries during 2008-2009 has not been a consequence of profligate governments but the response to a very severe shock and an attempt to correct large underlying imbalances.
- Focusing only on the level of public debt may not be sufficient to address the stance of fiscal policy in order to set MTOs. Additional features of the public debt, the performance of financial and banking system, and sectoral and external imbalances may all be important
- Alternative formulation for MTOs in which the supplementary debt-reduction effort is replaced by a synthetic exposure index that measures funding pressures and risks facing all sectors in a given country at a certain point in time.

The exposure index: an alternative to the supplementary debt effort.

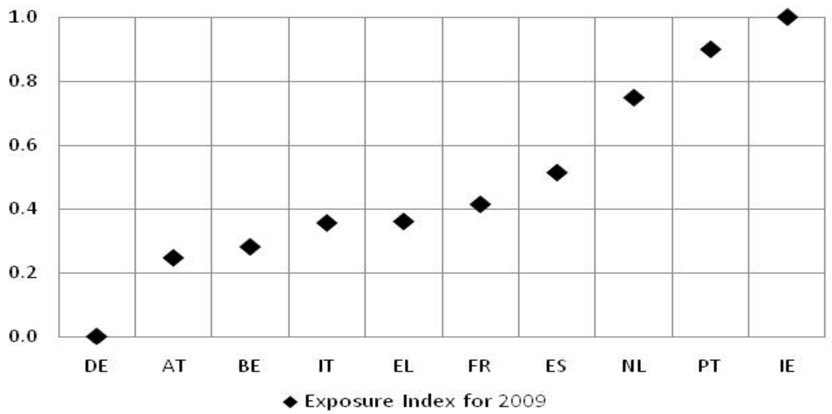
- Public sector: level, composition of debt in terms of residual maturity and the share held by non-resident investors

- Banking sector's risk exposure on assets: debtors' characteristics (counterparty risk) separating credit to domestic agents and to foreigners (developed vs developing countries) .

- Funding pressures facing the banking sector: banks' total debt, the share of debt maturing in the next three years, and the ratio between total domestic loans and domestic deposits.

- Sectoral imbalances: net borrowing position of four sectors -households, non-financial corporate, financial corporate, and the general government

- External imbalances: net borrowing position of the economy and the debt composition by maturity aggregated across the four sectors.



- For each subsector we ranked the performance of all countries from the best grading 1 to the worst performer grading 10. We averaged the single sub-component scores along all the dimensions and ranked the countries accordingly over a [0, 1] interval.

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The exposure index

Sector	Indicator	Year	BE	DE	IE	EL	ES	FR	IT	NL	AT	PT
Public sector	Public debt	2009	8	5	3	9	1	6	10	2	4	7
		2005	8	7	1	9	2	6	10	3	5	4
	Share of debt maturing in the following 3 yrs	2009	9	4	2	8	3	7	10	5	1	6
		2005	9	4	3	2	5	10	7	6	1	8
	Foreign holdings of public debt	2009	5	4	8	7	3	6	2	9	1	10
		2005	4	2	9	7	3	5	1	6	8	10
	Relative position average	2009	7.3	4.3	4.3	8.0	2.3	6.3	7.3	5.3	2.0	7.7
		2005	7.0	4.3	4.3	6.0	3.3	7.0	6.0	5.0	4.7	7.3
Banking sector - loan exposure to foreign debtors	Developed countries	2009	8	6	10	1	5	7	2	9	4	3
		2005	9	8	1	2	5	7	3	10	6	4
	Emerging markets	2009	9	2	5	6	8	4	1	7	10	3
		2005	7	4	1	3	8	5	2	9	10	6
	Relative position average	2009	8.5	4	7.5	3.5	6.5	5.5	1.5	8	7	3
		2005	8	6	1	2.5	6.5	6	2.5	9.5	8	5
Banking sector - loan exposure to domestic debtors	Households	2009	2	6	10	3	9	5	1	7	4	8
		2005	3	7	9	2	6	4	1	10	5	8
	Corporates	2009	1	2	10	3	9	4	5	7	6	8
		2005	1	4	10	3	8	2	5	6	7	9
	Relative position average	2009	1.5	4.0	10.0	3.0	9.0	4.5	3.0	7.0	5.0	8.0
		2005	2.0	5.5	9.5	2.5	7.0	3.0	3.0	8.0	6.0	8.5
Banking sector funding	Loan/deposit ratio	2009	1	3	10	2	5	7	9	6	4	8
		2005	1	3	9	2	6	5	10	8	4	7
	Debt securities outstanding	2009	2	5	9	1	6	3	4	10	7	8
		2005	3	5	9	1	7	2	4	10	6	8
	Debt securities maturing in the following 3 yrs	2009	1	3	9	4	6	2	5	10	7	8
		2005	3	6	9	1	8	2	4	10	5	7
	Relative position average	2009	1.3	3.7	9.3	2.3	5.7	4.0	6.0	8.7	6.0	8.0
		2005	2.3	4.7	9.0	1.3	7.0	3.0	6.0	9.3	5.0	7.3
Sectoral net borrowing	Non-financial corporations	2009	5	4	2	3	7	6	9	1	8	10
		2005	3	5	4	2	10	8	7	1	6	9
	Households and NPISH	2009	7	3	6	10	1	4	5	9	2	8
		2005	6	1	9	10	8	4	3	7	2	5
	General goverment	2009	5	1	9	10	8	7	4	3	2	6
		2005	5	7	1	9	2	6	8	3	4	10
	ROW - current account	2009	4	1	7	10	8	6	5	2	3	9
		2005	3	2	7	10	8	6	5	1	4	9
	Relative position average	2009	5.3	2.3	6.0	8.3	6.0	5.8	5.8	3.8	3.8	8.3
		2005	4.3	3.8	5.3	7.8	7.0	6.0	5.8	3.0	4.0	8.3
Sectoral short-term refinancing needs	Financial corporates - bonds	2009	1	3	9	4	6	2	5	10	7	8
		2005	3	6	9	1	8	2	4	10	5	7
	Non-financial corporates - bonds	2009	4	9	6	3	2	10	5	7	1	8
		2005	3	9	2	7	4	10	6	8	1	5
	Non-financial corporates - loans	2009	8	1	10	2	5	6	9	3	4	7
		2005	9	1	10	3	5	4	8	6	2	7
	Households	2009	1	3	10	9	5	2	4	6	7	8
		2005	1	5	10	9	3	2	4	6	8	7
	General government	2009	9	4	2	8	3	7	10	5	1	6
		2005	9	4	3	2	5	10	7	6	1	8
	Relative position average	2009	4.6	4	7.4	5.2	4.2	5.4	6.6	6.2	4	7.4
		2005	5	5	6.8	4.4	5	5.6	5.8	7.2	3.4	6.8

		BE	DE	IE	EL	ES	FR	IT	NL	AT	PT
Exposure index	2009	4.8	3.7	7.4	5.0	5.6	5.2	5.0	6.5	4.6	7.1
	2005	4.8	4.9	6.0	4.1	6.0	5.1	4.8	7.0	5.2	7.2
Relative position	2009	3	1	10	5	7	6	4	8	2	9
	2005	2	4	8	1	7	5	3	9	6	10

An application of the exposure index to the new MTO calculation.

Table 5: MTOMT* using Exposure Index (% of GDP unless otherwise specified).

Country		Growth rate of potential GDP at current prices - average 2010-60 (%)		Budget balance stabilising debt-to-GDP ratio at 60%		Exposure Index	S2E		MTOSM* using Exposure Index		MTOMB	MTOEA	MTOMT* = Maximum (MTOMB, MTOEA, MTOSM*) using Exposure Index		MTOMT* = Maximum (MTOMB, MTOEA, MTOSM*) using supplementary debt-reduction effort		MTO declared by country in SCP 2009 (1)
		No-crisis scen.	Lost decade scen.	No-crisis scen.	Lost decade scen.		No-crisis scen.	Lost decade scen.	No-crisis scen.	Lost decade scen.			No-crisis scen.	Lost decade scen.	No-crisis scen.	Lost decade scen.	
Belgium	BE	3.8	3.7	-2.2	-2.1	0.3	4.8	6.4	-0.3	0.3	-1.3	-1.0	-0.3	0.3	0.3	1.0	no comm.
Germany	DE	3.2	3.1	-1.9	-1.8	0.0	3.3	4.8	-0.8	-0.2	-1.6	-1.0	-0.8	-0.2	-0.6	0.0	-0.5
Ireland	IE	4.4	4.1	-2.5	-2.4	1.0	6.7	12.1	0.7	2.6	-1.5	-1.0	0.7	2.6	-0.3	1.6	-0.5 to 0.0
Greece	EL	3.7	3.6	-2.1	-2.1	0.4	11.5	10.7	2.1	1.8	-1.4	-1.0	2.1	1.8	3.0	2.7	no comm.
Spain	ES	3.9	3.8	-2.2	-2.2	0.5	5.7	8.6	0.1	1.1	-1.2	-1.0	0.1	1.1	-0.4	0.6	no comm.
France	FR	3.9	3.7	-2.2	-2.2	0.4	1.8	2.7	-1.2	-0.9	-1.6	-1.0	-1.0	-0.9	-1.0	-1.0	0.0
Italy	IT	3.5	3.3	-2.0	-1.9	0.4	1.5	1.9	-1.1	-0.9	-1.4	-1.0	-1.0	-0.9	0.0	0.2	0.0
Netherlands	NL	3.5	3.4	-2.0	-2.0	0.7	5.0	5.5	0.3	0.5	-1.1	-1.0	0.3	0.5	-0.4	-0.2	-0.5 to 0.5
Austria	AT	3.7	3.6	-2.1	-2.1	0.2	3.1	4.5	-0.9	-0.4	-1.6	-1.0	-0.9	-0.4	-1.0	-0.5	0.0
Portugal	PT	3.9	3.8	-2.2	-2.2	0.9	1.9	3.1	-0.7	-0.3	-1.5	-1.0	-0.7	-0.3	-1.0	-1.0	n.a.

(1) Declared MTO: 'no comm.' indicates that no commitment is explicitly made by the country in the SCP; 'n.a.' indicates SCP is not available.

Sources: For both no-crisis and lost decade scenarios, the average nominal potential GDP growth rates over 2010-2060 and S2E indicators are from European Commission's Ageing Report 2009 and Sustainability Report 2009.

- MTOMT*s with exposure index are more or less demanding depending on the assessment of imbalances in the banking, financial corporate, and household sectors (tighter target for IE).
- High-debt countries with low underlying sectoral imbalances converge to a minimum budgetary target less stringent than what estimated using the supplementary debt-reduction effort (see IT and to some extent EL)

Final remarks (1)

- We analyzed the new MTO methodology recently adopted by EU Member States on the basis of a calibrated algorithm that closely follows the still undisclosed formulation and discussed the most critical aspects regarding the modalities to take on board government liabilities.
- We presented an assessment of the impact of the current crisis on MTOs. Current and future lower bounds for MTOs have been calculated measuring the incidence on the budgetary targets of changes in public debt, potential growth, and the projected cost of ageing.
- The paper has outlined a simple alternative modality to introduce into the MTO determination, together with the level of current public debt, other elements connected with the building-up of external and domestic imbalances through an exposure indicator.

Final remarks (2)

Our results show that the new MTOs values:

- heavily depend on the current debt ratios. The credibility of the medium-term fiscal targets is influenced by the consolidation of current budget balances which may eventually be procyclical (like now). *NB: On the basis of 2009 SCPs, due to the impact of the crisis, EU Member States reacted either delaying the date of achievement of MTOs or even not declaring them.*
- Give less incentive to undertake structural reforms to contain the projected increase in age-related expenditure and reduce non-contractual future spending commitments without necessarily adjusting current budget balances.
- The new MTOs methodology is sensitive to the impact of current crisis with tighter targets which would require additional budgetary efforts. This could reduce governments' incentives in committing towards too ambitious objectives and reduce political ownership. *NB: New MTO methodology would result in more restrictive targets at the moment of their revision scheduled for 2012.*
- The fiscal and financial exposure indicator in the algorithm shows that, in times of crisis, countries with large domestic and/or external imbalances should set fiscal targets much more ambitious than those determined on the sole basis of the current debt-to-GDP ratio.
- but our findings to be interpreted with caution. Large uncertainty on the index construction.
- The exposure index is as a preliminary attempt to assess the impact of current explicit liabilities on the determinants of fiscal targets and the role of domestic and external imbalances for the conduct of efficient and credible fiscal policies.

THANK YOU!