

Fiscal consolidation in EU

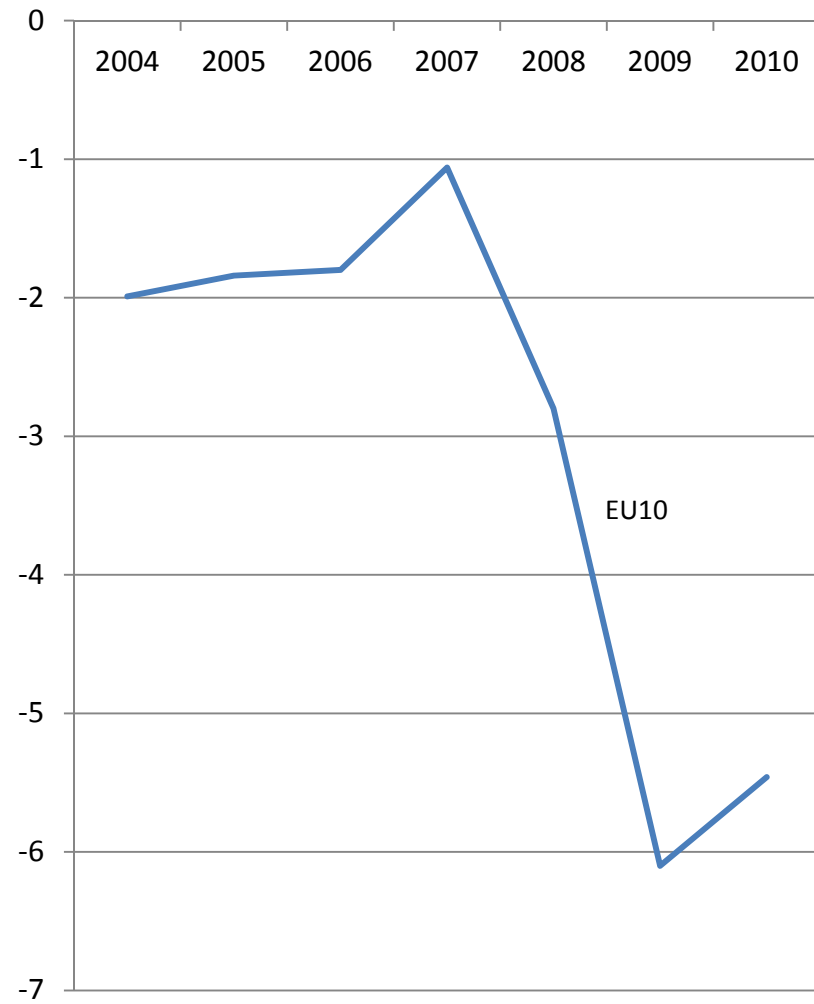
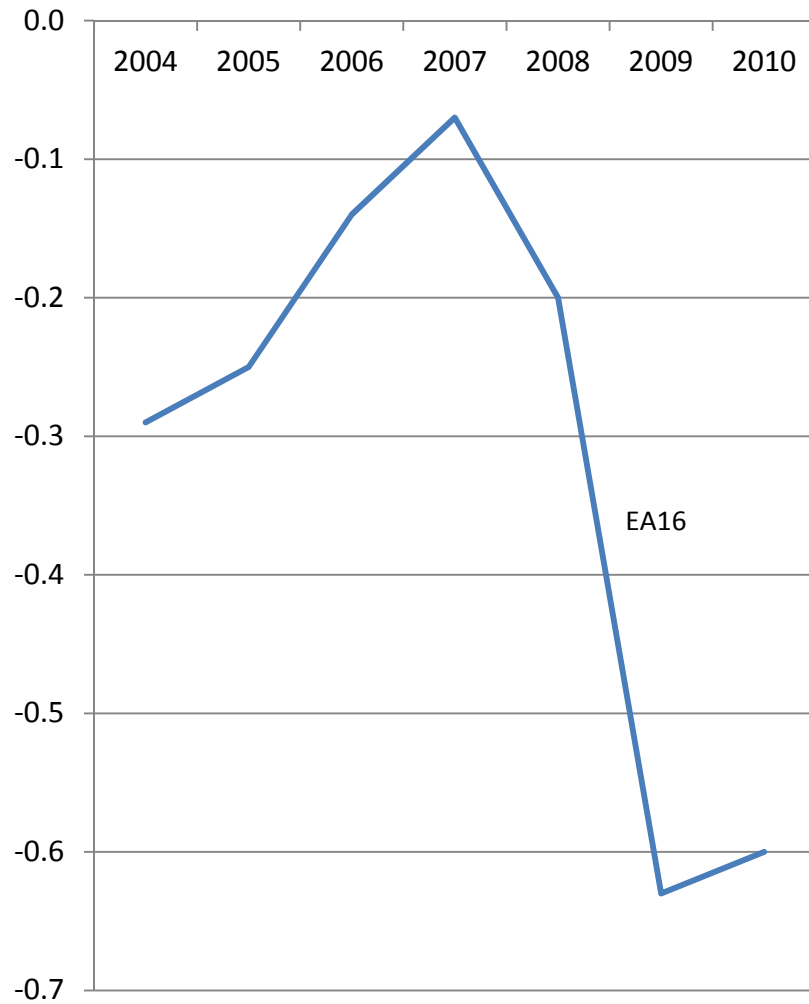
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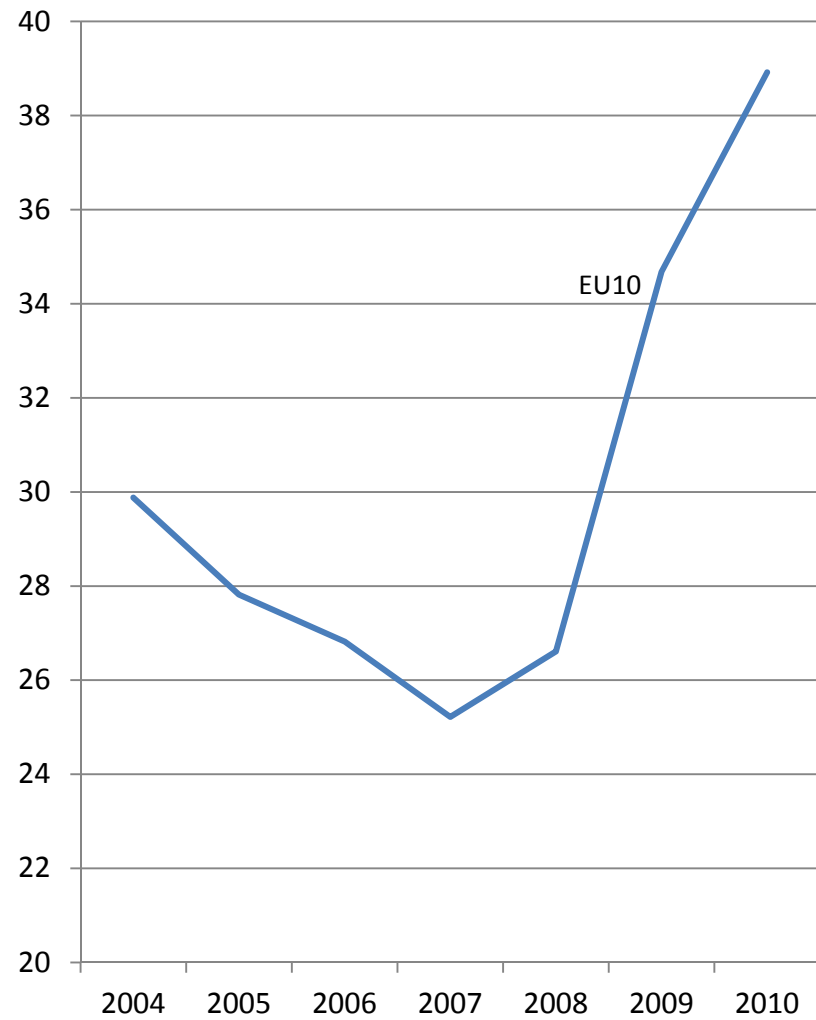
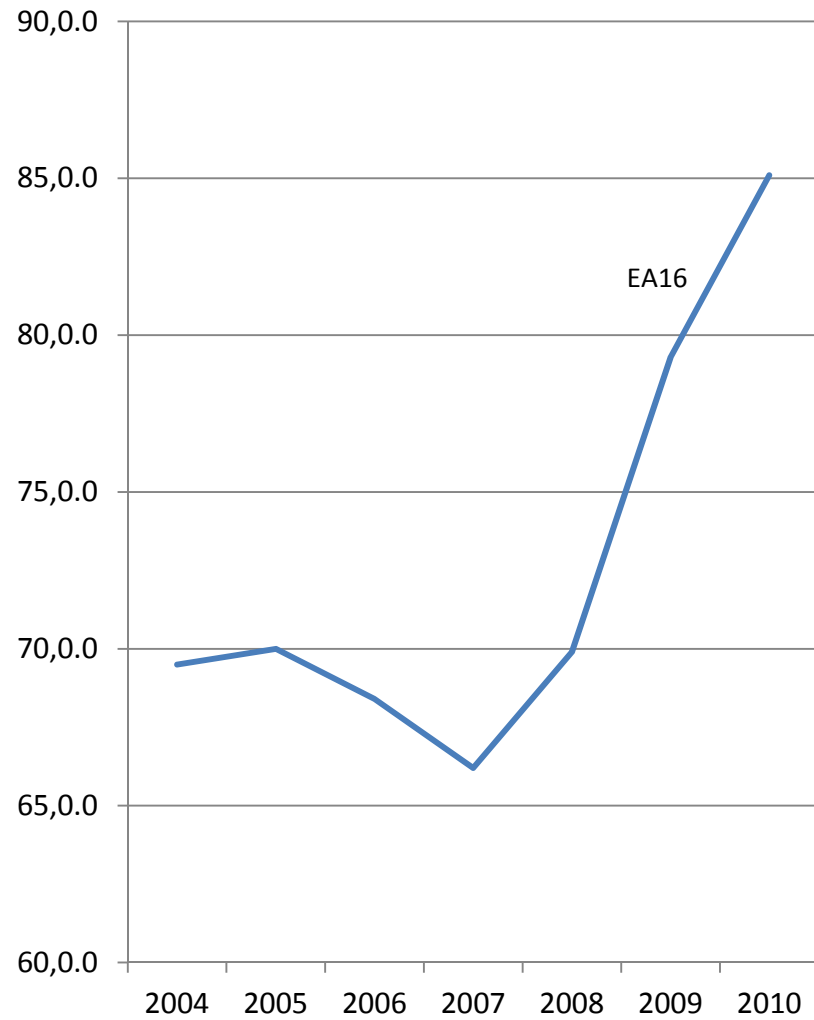
Fiscal situation in EU: an overview

- Before the crisis 2008-2009, fiscal position differed in different EU countries: in the Euro Area countries (EA16) public debt levels were already very high by historical standards, while they were still moderate in the new member states (EU10);
- Between end-2007 and mid-2011, fiscal position of EU countries deteriorated significantly, with public debt rising by ca. 20 % of GDP for EU27 and EA16, and by ca. 14% of GDP for EU10 over 3,5 years;
- The reasons were large budgetary deficits and – in some cases – falling output levels;
- Deficits increased sharply due to a combination of cyclical factors (falling tax revenues in recession 2008-2009) and discretionary fiscal policies (fiscal stimulation plus support to banks);
- The key difference between „this crisis” and other past episodes of financial distress is not in the relative deterioration but in that the starting level of indebtedness in EA16/EU27 in 2008 was much higher;

Fiscal deficit in EA16 and EU10, 2004-2010, % of GDP



Public debt in EA16 and EU10, 2004-2010, % of GDP



The standard debt dynamics framework

Let $D/Y = d$ be the debt-to-GDP ratio, $B/Y = b$ is the primary budgetary deficit-to-GDP ratio, i is the interest rate, y is the nominal GDP growth rate, sf is the stock-flow adjustment, and t is the time index. The debt ratio year-to-year dynamics is then depicted by the following familiar equation:

$$d(t) - d(t-1) = b(t) + d(t-1) * [(i - y)/(1 + y)] + sf(t) \quad (1)$$

The stability of the debt/GDP ratio (d) implies $d(t)=d(t-1)$; assuming $sf(t)=0$, the stability condition can be derived from (1) as:

$$b(t) = d(t-1) * (y - i)/(1 + y) \quad (2)$$

or: $B(t) = D(t-1) * [y - i] \quad (2a)$

[Primary deficit = debt level * (growth rate – interest rate)]

At high debt levels, the debt dynamics becomes non-linear

- The standard debt dynamics framework assumes linearity. However, it can be argued that at some point the relationship becomes non-linear: for high debt levels y tends to fall and i tends to rise so that the differential $(y-i)$ not only becomes negative, but also becomes larger in absolute terms.
- This implies, that the differential $(y-i)$ is not constant but a declining function of d ;
- This requires the primary balance to be positive and growing to stabilize the debt/GDP ratio.

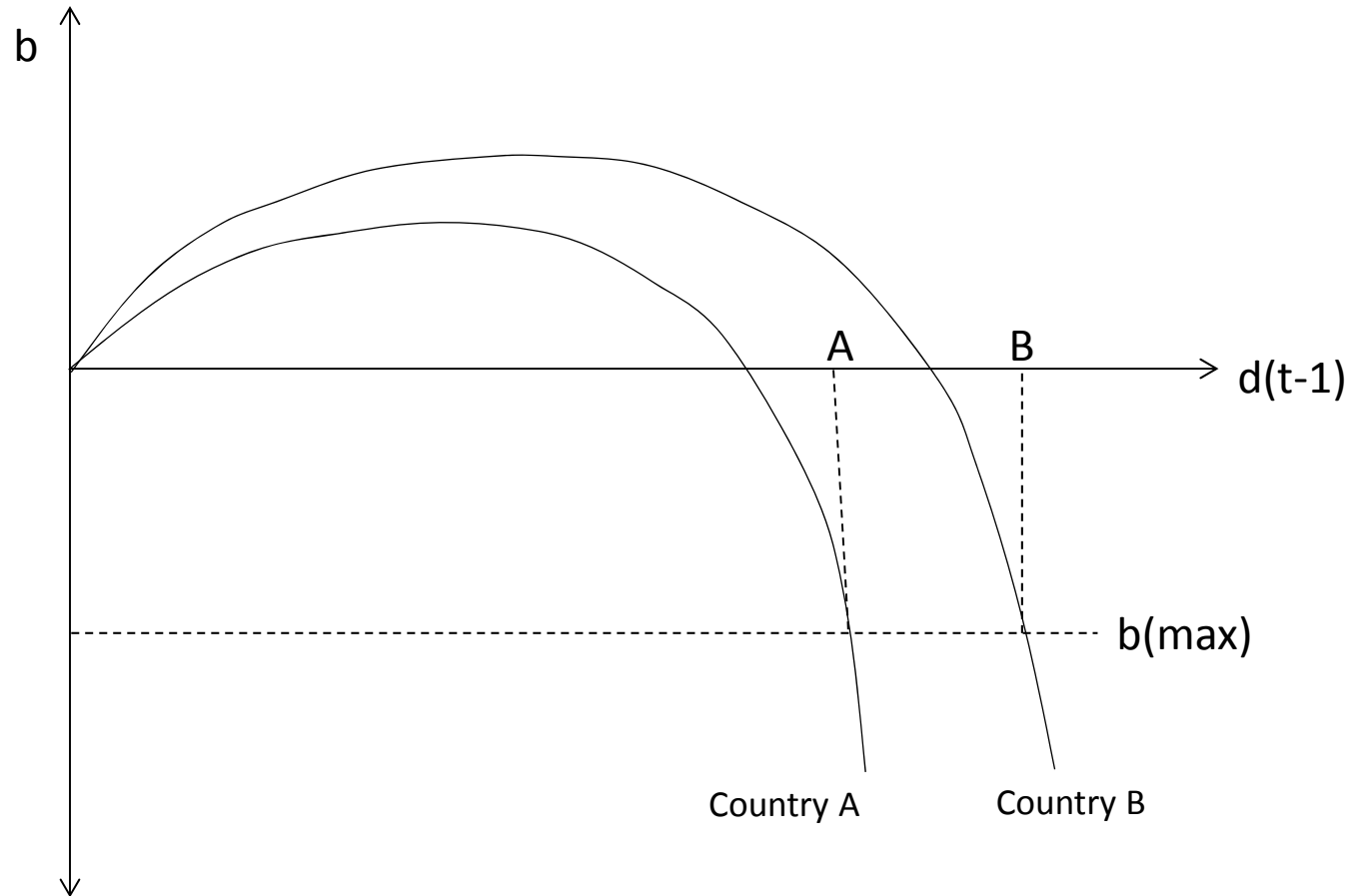
Why at high debt levels y is falling and i is rising?

- The higher is the debt level, the higher is the total cost of debt service in relation to GDP, i.e. taxes are higher and less resources are available for investment which in turn implies slower growth;
- For higher debt levels, risk premiums in market interest rates increase as the risk of default increases;
- High debt levels are therefore associated with lower GDP growth rates (because of higher taxes and lower investment), and with higher interest rates (because of higher risk premiums);
- The threshold above which a high debt level significantly reduces GDP growth rate is estimated at around 90% of GDP by Reinhard and Rogoff (2010) and at 80-100% of GDP by Cecchetti et al. (2011);

Above a certain threshold level the surplus ratio is unsustainable and the debt/GDP ratio simply cannot be stabilized

- Large negative differential ($y-i$) requires large primary surplus ratio (b) to stabilize the debt/GDP ratio;
- But there is an upper limit to b , determined by political constraints („maximum politically feasible primary surplus” - Blanchard, 1984);
- Above that limit the debtor country has strong incentive to default (Greece?);
- Depending on the value of $(y-i)$, countries can have higher (B) or lower (A) „default level of debt” (see next slide);

The relationship between the primary deficit ratio b necessary to stabilize the debt-to-GDP ratio, and the debt ratio d (equation 2, non-linear).



The sovereign risk channel

- The standard debt dynamics ignores two important relationships between the sovereign risk and macroeconomic instability;
- The first relationship is the spill-over from increased sovereign default risk, reflected in rising bond spreads and CDS, to the rest of the economy, adversely affecting borrowing conditions in the private sector, because strained public finances imply a greater threat of increased taxes in future; a rising debt and/or deficit causes investors to ask for higher risk premiums on public debt and, via the sovereign risk channel, also on private debt as well, and thus higher credit cost slow down economic activity;
- The second relationship is the spill-over into the banking sector itself: as no financial institution can have a higher rating than its sovereign, a downgrade of a sovereign entails a downgrade of its banks, which raises cost of capital and reduces credit emission (the credit crunch);
- Under these conditions, the aggregate demand falls with the increase in sovereign risk;

Fiscal consolidation in EA and EU10

- Public debt levels in EA countries are high and in some cases well above the „threshold” level, with strong negative impact on growth via rising interest rates and credit crunch;
- Stabilization of high debt requires large primary surpluses, which may be politically unfeasible;
- In addition, the sovereign risk channel may further slow down economic activity, making the task of debt stabilization even more difficult;
- In principle, for lower public debt levels in EU10 the differential ($y-i$) should be positive, so no primary surplus would be required;
- However, this may not be the case, because the risk premiums in EU10 are higher than in EA, e.g. 10Y bond yields are broadly equal for Italy and Poland ($\approx 5,8\%$) even though Italy's debt ratio is more than twice as high than Poland's (119% vs. 55%); the same holds true for Austria and the Czech Republic (yields $\approx 2,6-3,0\%$, while debt ratios are 73% vs. 40%, respectively);

Conclusion

- Non-linearity of debt dynamics and the sovereign risk channel make debt ratio stabilization more difficult;
- Fiscal consolidation necessary in almost all EU countries,
- Some EU10 have still some room for fiscal manoeuvre (CZ, SI, SR, EE);
- Restoring confidence in the markets is the key.