



Economic Alignment of the euro area countries

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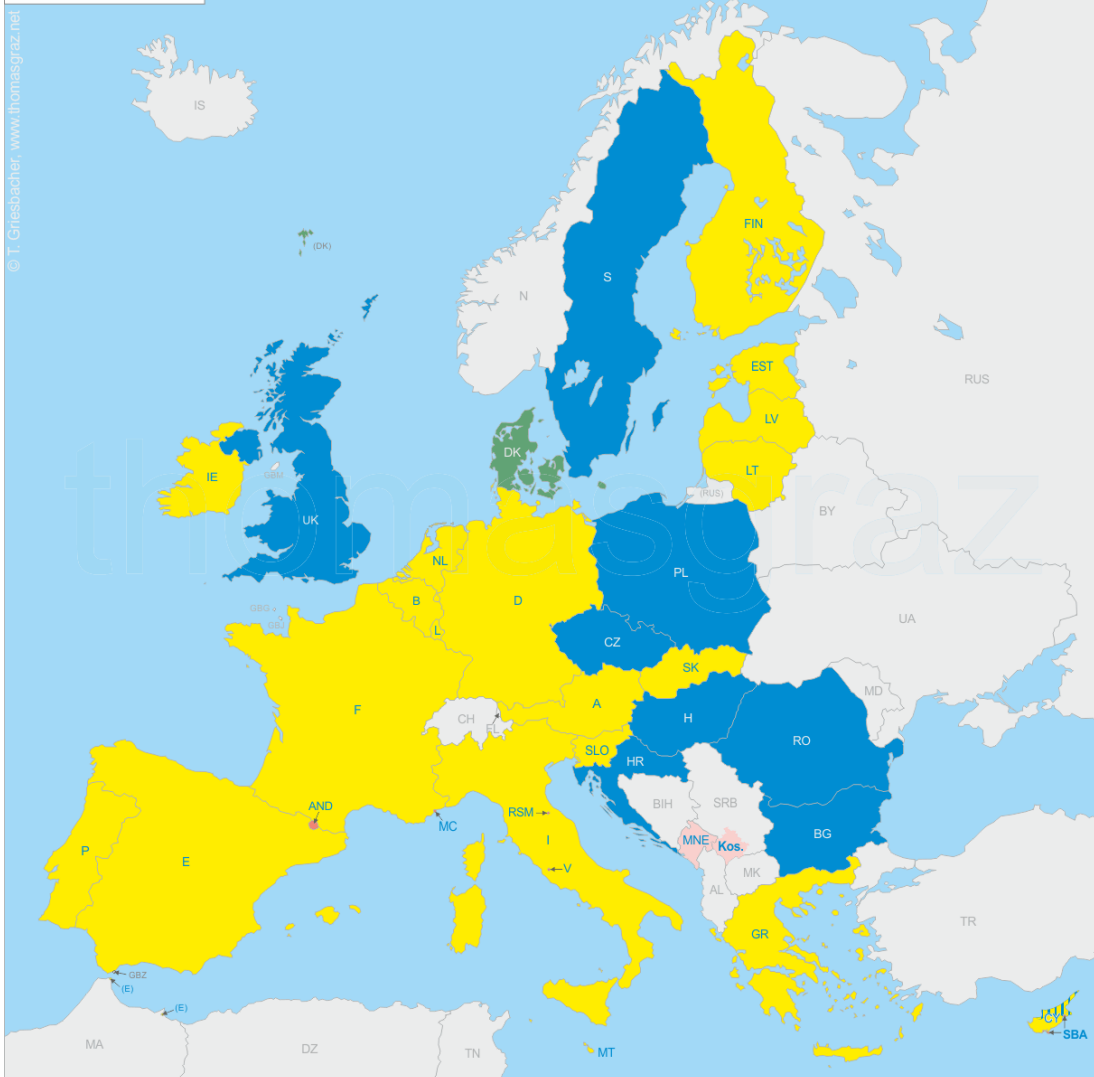
ANALYSIS OF EURO AREA ECONOMIC COHESION

- **I. Convergence of real and nominal variables**
- **II. Fiscal positions of the euro area countries**
- **III. Summary**

Introduction



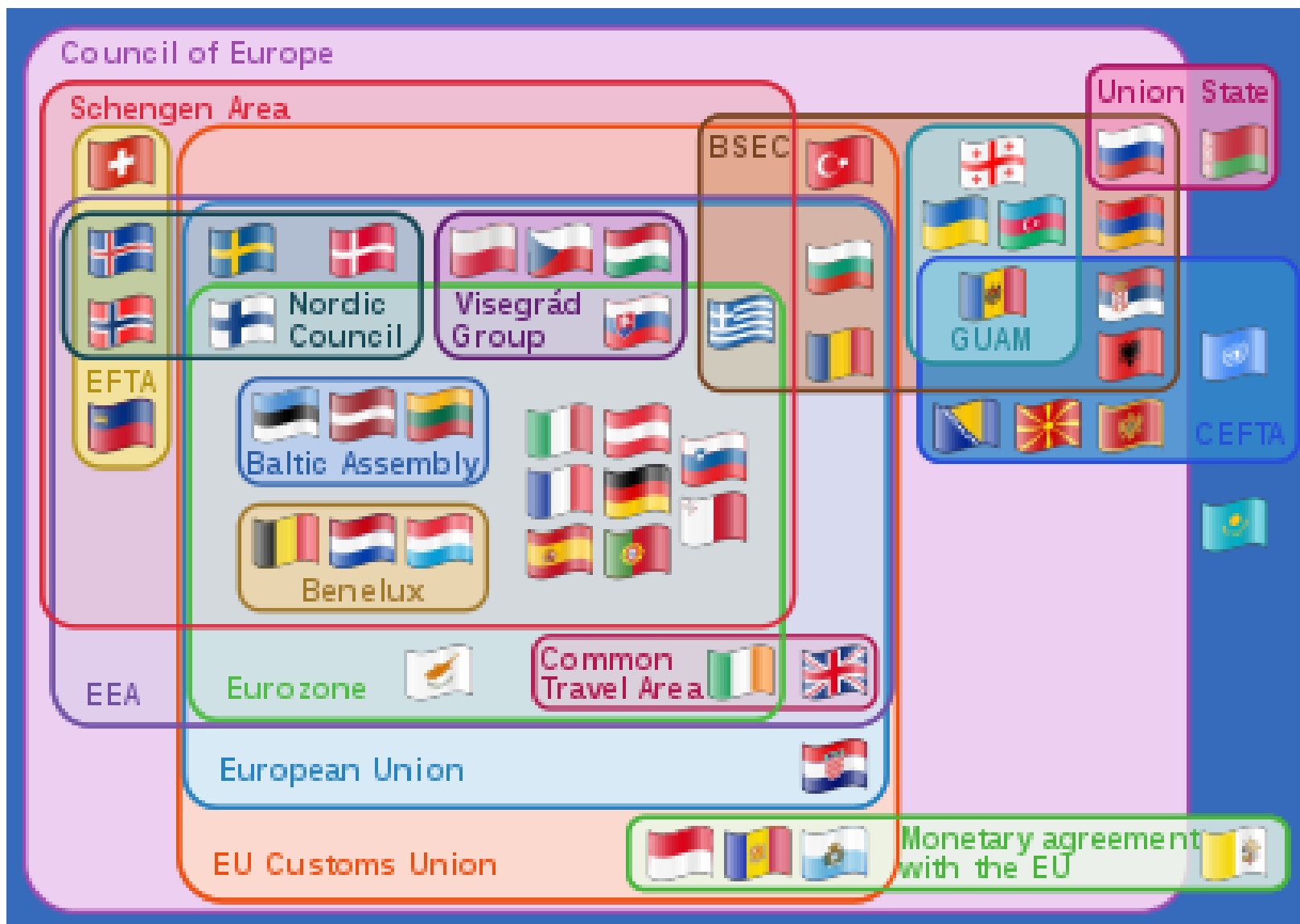
Countries using the Euro
2014



EU countries using the Euro (Eurozone)	EU countries not using the Euro (ERM II countries)	EU countries not using the Euro (non-ERM II countries)
A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z	DK	BG, CZ, H, HR, PL, RO, S, UK
(de facto parallel use with Turkish Lira in Northern Cyprus; *plus overseas areas)		
non-EU countries and areas using the Euro (special adoption agreement or treaty)	non-EU countries and areas using the Euro (unilateral adoption)	other countries
AND, MC, RSM, V; SBA (Akrotiri & Dhekelia)	MNE, Kosovo	

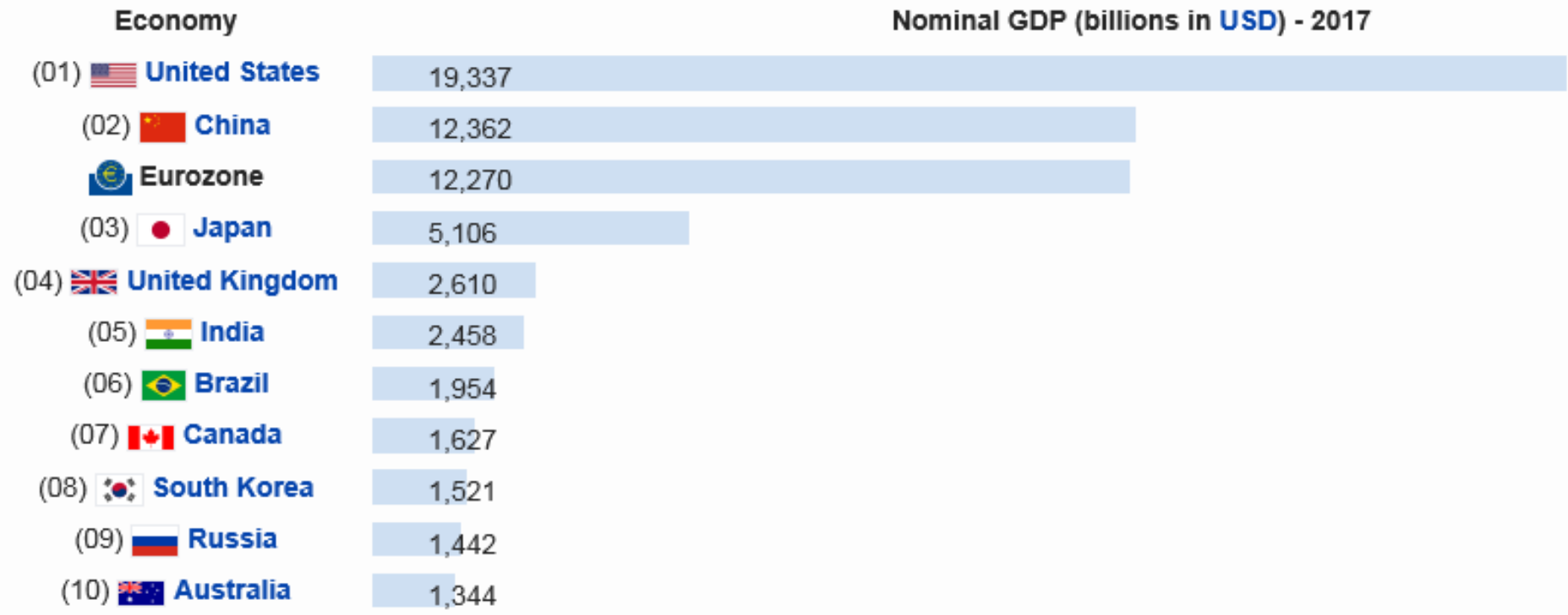
<http://www.thomasgraz.net/glass/map-euro-2015.htm>

Introduction





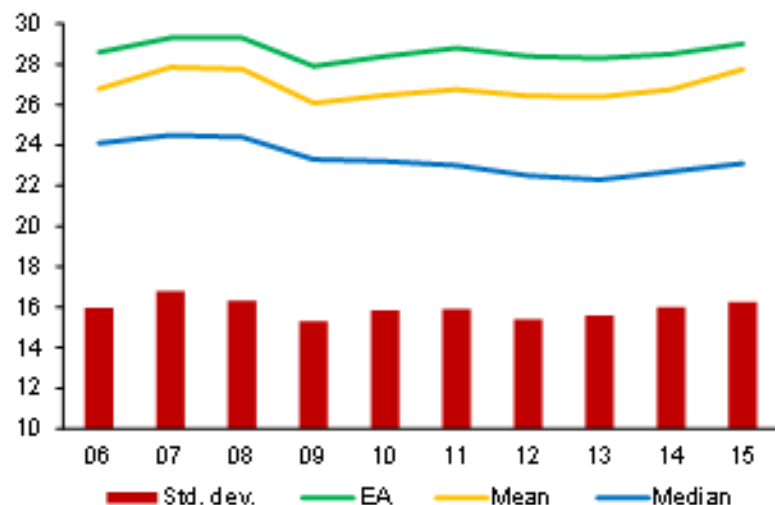
Comparison of Economies





Ia. Real Convergence

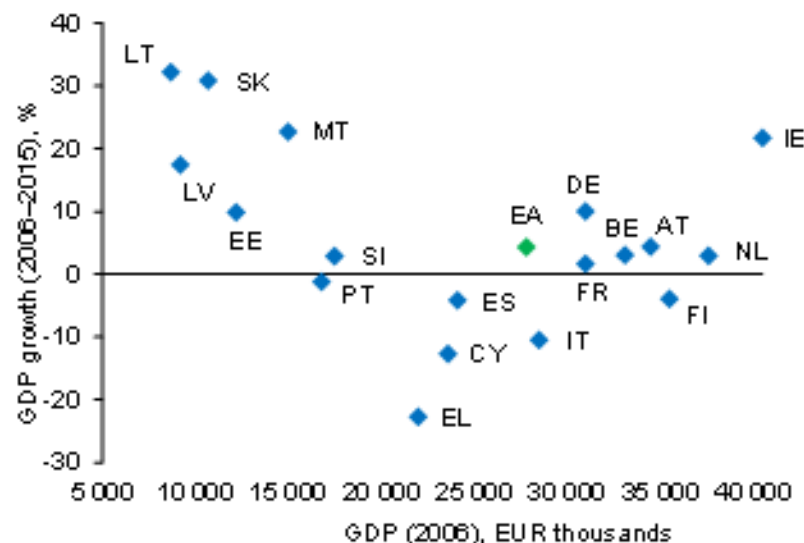
Chart 1: Real GDP per capita in euro area countries (EUR thousands)



Note: GDP at 2010 prices. The mean series depicts the unweighted arithmetic mean of real GDP per capita in the given year across euro area countries.

Source: Eurostat, CNB calculations.

Chart 2: Beta-convergence of real GDP in euro area countries



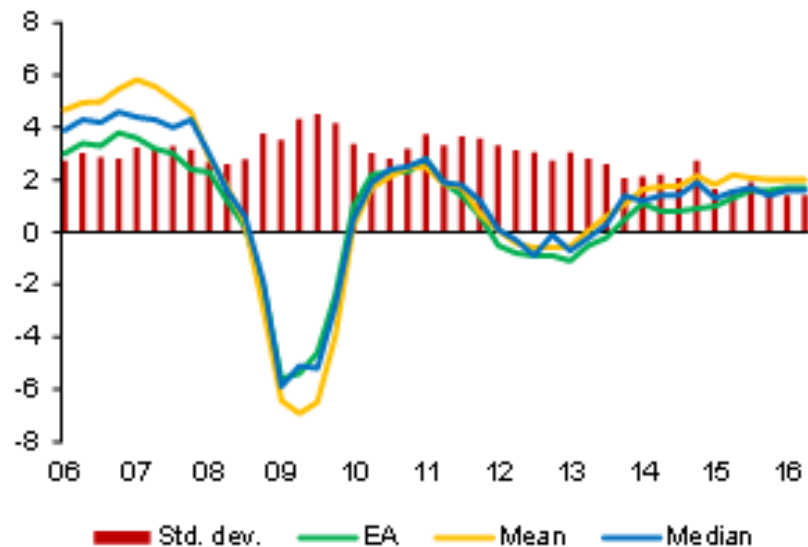
Note: The chart depicts the relation between GDP growth per capita in each country and its initial level (beta-convergence). X-axis – the GDP per capita of each country in 2006 at 2010 prices. Luxembourg is not given in the chart due to the high number of foreign workers in that country who are not Luxembourg citizens, which results in exceptionally high GDP per capita in the country.

Source: Eurostat.



- Convergence Reports

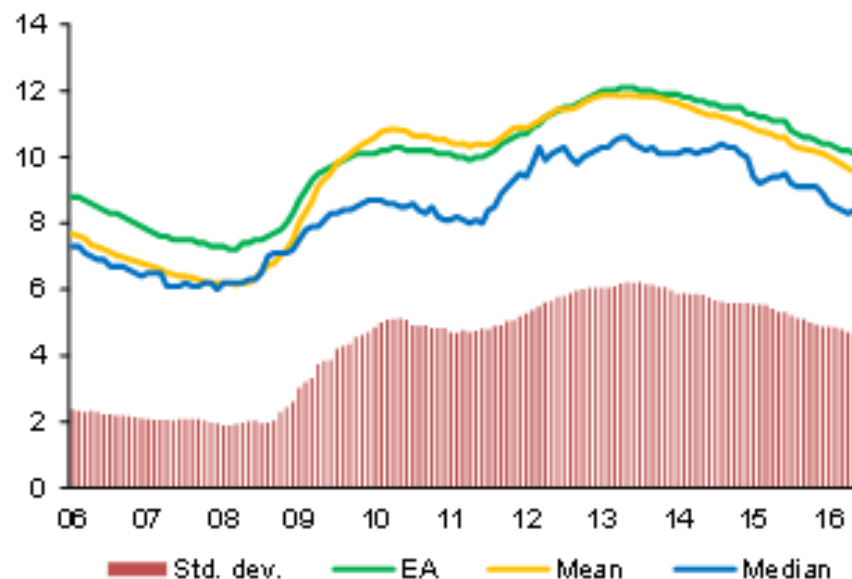
Chart 3: Real GDP growth in euro area countries (y-o-y, %)



Note: The mean series depicts the unweighted arithmetic mean of GDP growth in the given quarter across euro area countries. Data for Ireland were not included in the 2015 calculation due to inconsistency. The source series are seasonally adjusted.

Source: Eurostat, EIU, CNB calculations.

Chart 4: Unemployment in euro area countries (%)



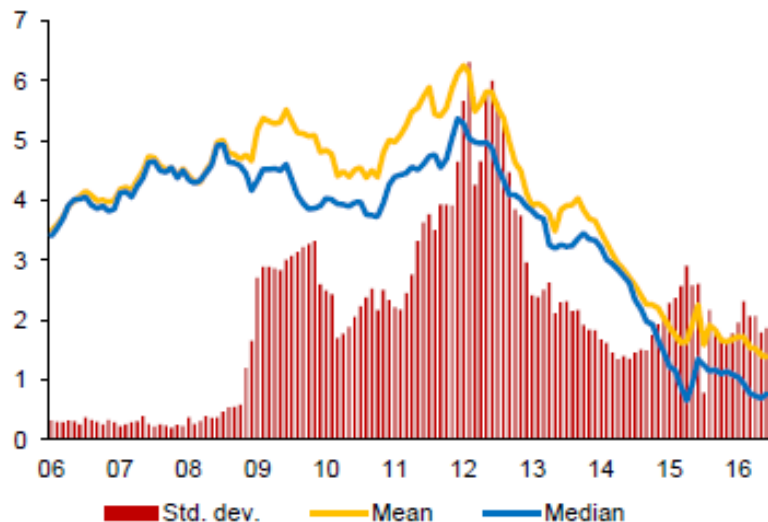
Note: The mean series depicts the arithmetic mean of unemployment in the given month across euro area countries. The source series are seasonally adjusted.

Source: Eurostat, CNB calculations.

Ib. Nominal Convergence



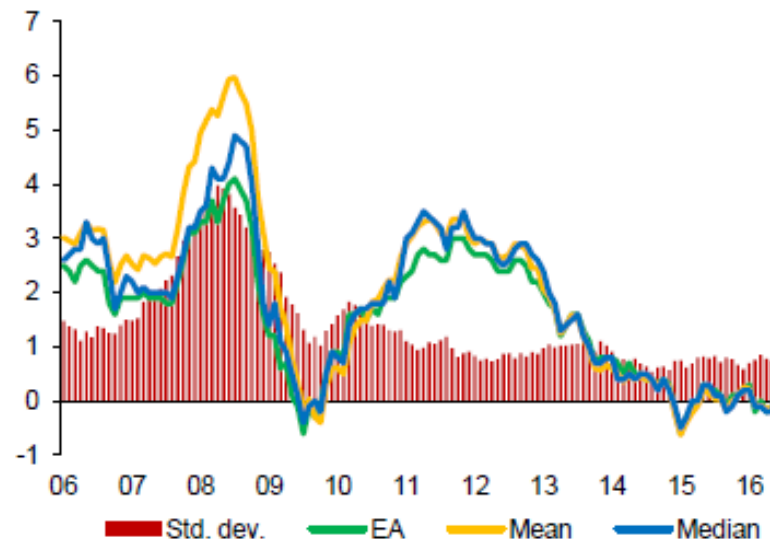
Chart 5: Long-term interest rates in euro area countries (%)



Note: Bond yields for the convergence criteria. The bond maturity is about ten years. Estonia is not included in the chart because the time series is not available.

Source: ECB, CNB calculations.

Chart 6: Inflation in euro area countries (y-o-y, %)



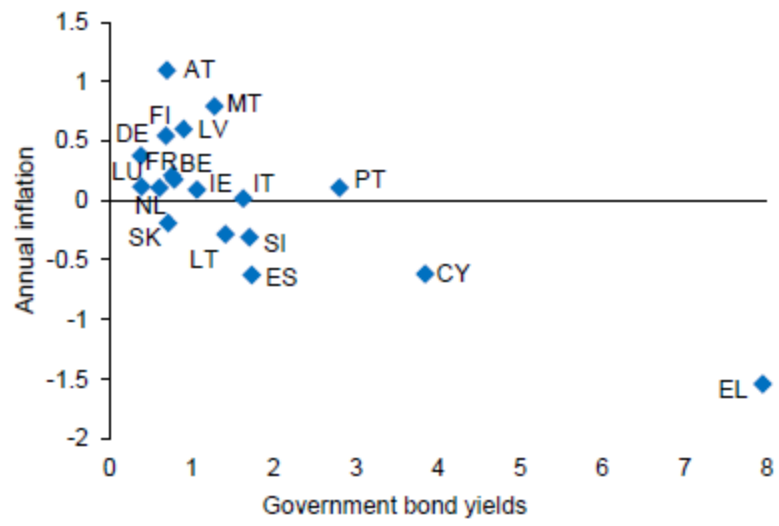
Note: The EA series is a weighted average of the inflation rates of the euro area countries, where the weights are the shares of household expenditure of the given countries in household expenditure in the euro area. The mean series depicts the unweighted arithmetic mean of inflation in the given year across euro area countries.

Source: Eurostat, CNB calculations.

Ib. Nominal Convergence



Chart 7: Long-term nominal interest rates and inflation in euro area countries (%)



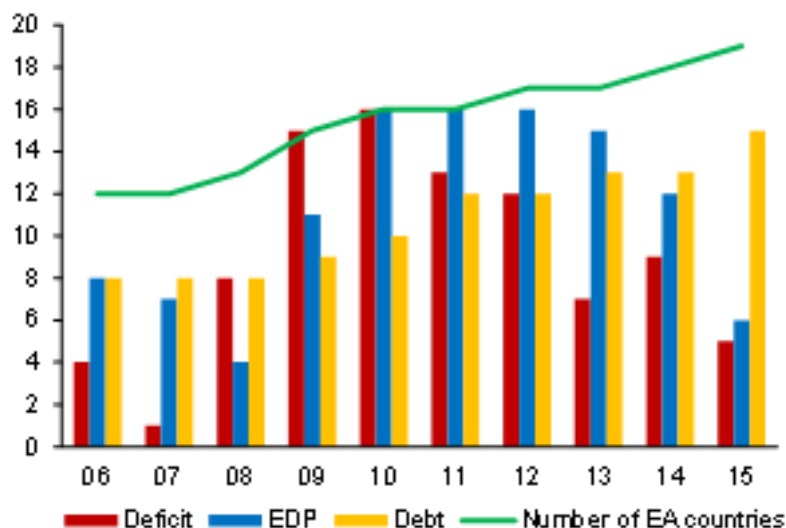
Note: Average bond yields for convergence purposes and average annual inflation from July 2015 to June 2016. Ex post real yields are defined as the difference between nominal yields and inflation. Estonia is not included in the chart because the time series is not available.

Source: ECB, CNB calculations.

II. Fiscal positions of euro area countries



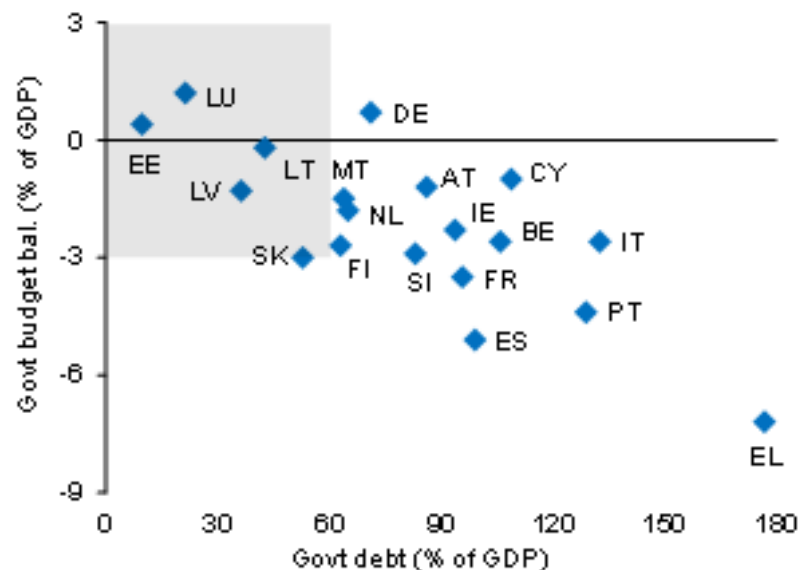
Chart 8: Non-compliance with the fiscal criteria



Note: The number of countries not compliant with the Stability and Growth Pact, which sets limits on government deficits (3% of GDP) and debt (60% of GDP). The EDP series shows the number of countries in an excessive deficit procedure. The number of countries in an EDP can be higher than the number of countries with an excessive deficit, as EDPs usually last several years.

Source: Eurostat, European Commission, CNB calculations.

Chart 9: Fiscal positions of euro area countries (%)



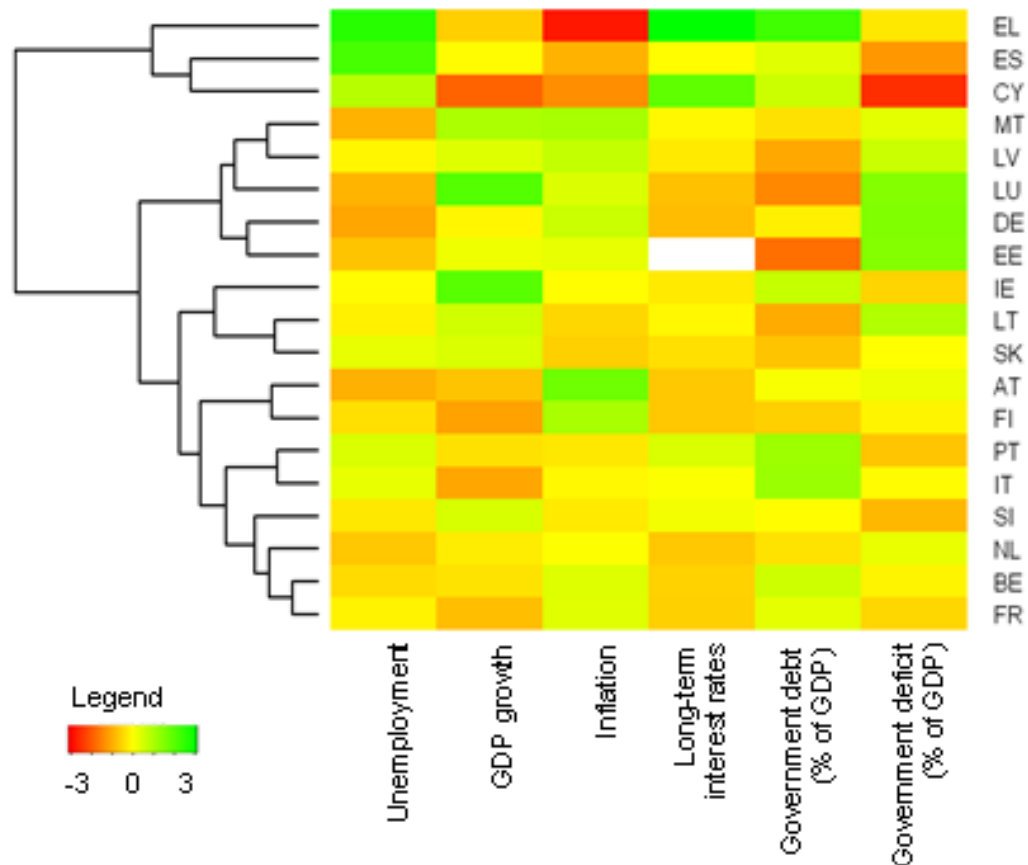
Note: 2015 data. Countries compliant with the Stability and Growth Pact lie in the grey area.

Source: Eurostat.]

III. Summary



Chart 10: Summary of key macroeconomic indicators in euro area countries
(percentage points)



Note: The tile colour indicates the country's deviation from the average indicator value for January 2015–June 2016. Red expresses a negative deviation (i.e. the indicator for the given country is lower than the average for the sample of countries) and green a positive deviation; indicators close to the average are shown in yellow. Countries are arranged into clusters according to indicators in the hierarchy shown on the left-hand side. No time series of long-term interest rates is available for Estonia.

Source: ECB, Eurostat, CNB calculations.



- **Assessment of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area**
http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/en/monetary_policy/strategic_documents/download/maastricht_assessment_2016.pdf
- **Analyses of the Czech Republic's Current Economic Alignment with the Euro Area**
http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/en/monetary_policy/strategic_documents/download/analyses_of_alignment_2016.pdf



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