

Box 5

ESTIMATES OF SLACK IN THE LABOUR MARKET

Since the outbreak of the financial crisis in 2008, several euro area countries have experienced a significant rise in their unemployment rates. According to the standard Phillips curve, an increase in the unemployment rate should exert downward pressure on wages and inflation. However, if there was a steep rise in structural unemployment for a given increase in overall unemployment, this would reduce the downward impact on wages. On the other hand, high structural unemployment points to the need for structural reforms to reduce rigidities in both labour and product markets. This box therefore studies the recent developments in the euro area unemployment rate, with a view to assessing the extent to which these developments may be attributed to cyclical and structural factors.

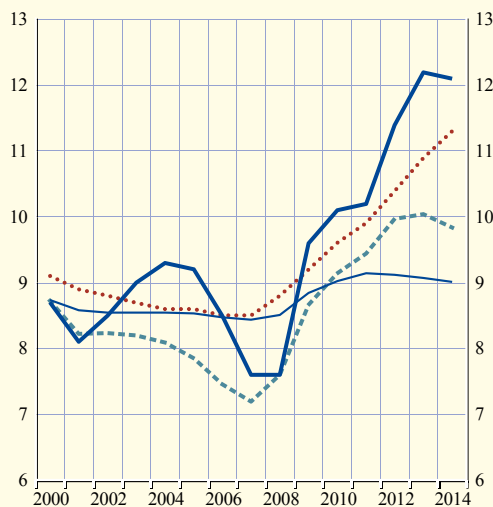
Recent developments in unemployment rates in the euro area

Several euro area countries have experienced a significant increase in their unemployment rates. The aggregate euro area unemployment rate increased from an annual average of 7.6% in 2007 to 11.4% in 2012. According to the European Commission's estimates, about half of this

Chart A The actual unemployment rate and estimates of the NAIRU in the euro area

(percentages of the labour force)

— unemployment rate
 European Commission
 - - - IMF
 — OECD

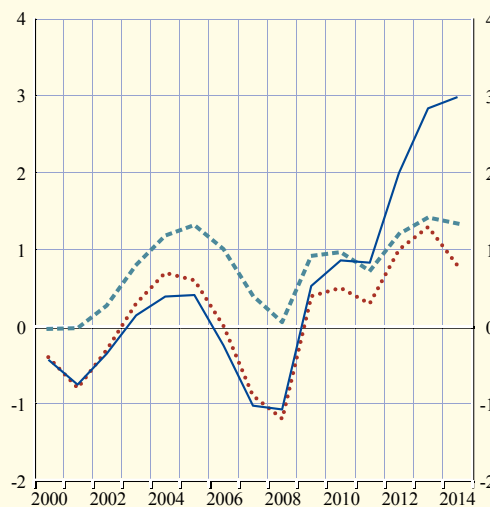


Sources: October 2012 IMF World Economic Outlook, February 2013 European Commission Economic Forecast and November 2012 OECD Economic Outlook.
 Note: Projections for the unemployment rate are those of the European Commission.

Chart B Estimates of the unemployment gap in the euro area

(percentage points)

..... European Commission
 - - - IMF
 — OECD



Sources: October 2012 IMF World Economic Outlook, February 2013 European Commission Economic Forecast and November 2012 OECD Economic Outlook.

3.8 percentage point rise is due to an increase in structural unemployment¹. A similar picture emerges from the estimates of the NAIRU by other international institutions (see Chart A).

The difference between the actual unemployment rate and the structural component reflects the so-called unemployment gap, which denotes the slack in the labour market (see Chart B).

However, the extent to which the recent rise in unemployment is assessed to be structural varies considerably across countries. In some countries, both the actual unemployment rate and the estimated structural unemployment rate have changed little (Belgium, Austria and the Netherlands) or have decreased (Germany). In other countries, especially those most affected by the crisis (namely Ireland, Greece, Spain, Cyprus and Portugal), the rise in both actual unemployment and estimated structural unemployment has been particularly large (see Chart C).²

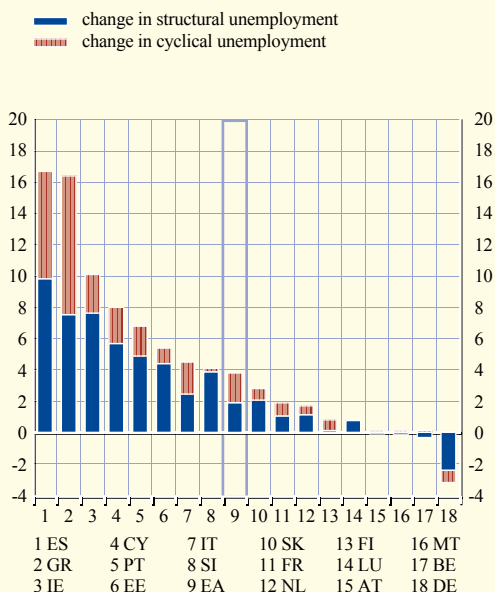
The rate of structural unemployment is expected to remain at elevated levels or even increase further in the short term. For 2014 the estimates of the European Commission, the IMF and the OECD range between 9% and 11%, with particularly high levels for countries such as Spain, Greece, Portugal and Ireland.

1 Throughout this box, the term “structural unemployment” is used to refer to the Non-Accelerating Inflation Rate of Unemployment (NAIRU).

2 For further information on structural unemployment, see also the 2012 Structural Issues Report entitled “Euro area labour markets and the crisis”, *Occasional Paper Series*, No 138, ECB, October 2012.

Chart C Decomposition of the change in the unemployment rate between 2007 and 2012

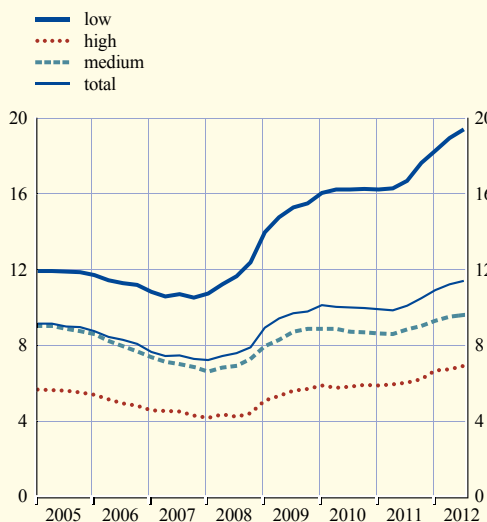
(percentage points)



Source: European Commission AMECO database.
Note: The sum of changes in structural unemployment and cyclical unemployment equals the change in total unemployment.

Chart D Unemployment rates among workers with different levels of education in the euro area

(percentages of the labour force)



Source: Eurostat.
Notes: Classification based on International Standard Classification of Education. Low: Pre-primary, primary and lower secondary education; Medium: Upper secondary and post-secondary non-tertiary education; High: First and second stage of tertiary education.

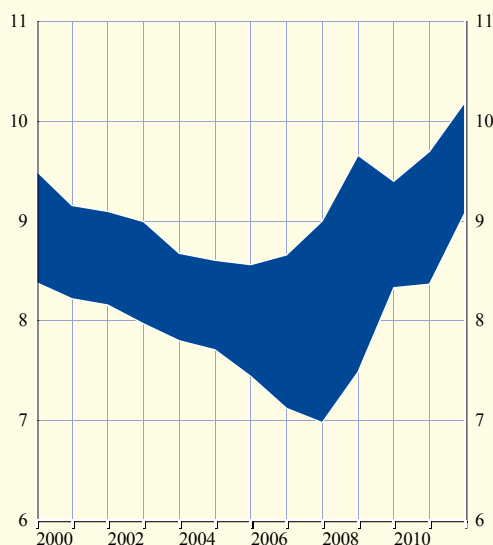
Indications of a rise in structural unemployment

Several factors may be behind the estimated recent rise in structural unemployment. First, the share of long-term unemployment has increased in many countries, as well as in the euro area as a whole. The longer the unemployed are out of work, the more likely it is that skills will diminish and their human capital will depreciate. Individuals experiencing longer periods of unemployment may be viewed less favourably by potential employers, making it harder for them to find jobs. Moreover, the longer they remain unemployed, the more discouraged they may become in their job searches and they may become increasingly detached from the labour market. The long-term unemployed may therefore become less effective in competing for jobs, resulting in a risk of a further rise in structural unemployment in the future. Second, the possible increase in mismatches between labour supply and labour demand may be another factor behind the rise in structural unemployment. In particular, the unemployment rate among the low-skilled workers has increased by far more than among the higher-skilled workers, indicating a strong fall in demand for the less-skilled, consistent with a rise in skills mismatch (see Chart D).

The increase in long-term unemployment and mismatches may be partly explained by the fact that, following the sharp decline in employment in the construction sector in many euro area countries, it may be difficult for unemployed construction workers to find jobs in other sectors of the economy.

Chart E Range of NAIRU estimates for the euro area

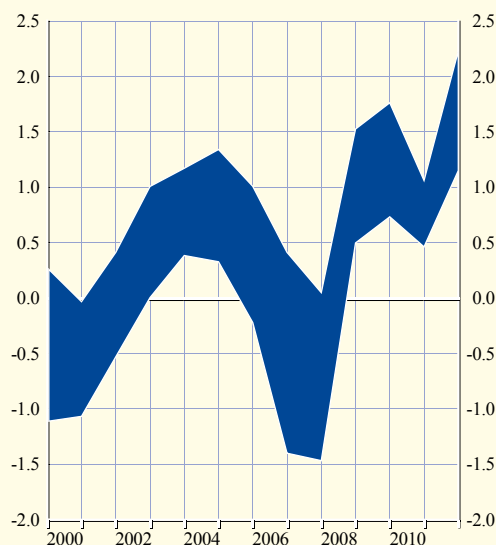
(percentages of the labour force)



Sources: European Commission, IMF and OECD.
Note: The range is derived from estimates made in the period 2004-12.

Chart F Range of unemployment gap estimates for the euro area

(percentage points)



Sources: European Commission, IMF and OECD.
Note: The range is derived from estimates made in the period 2004-12.

Uncertainty related to the estimates

It is important to emphasise that the estimates of the NAIRU and the unemployment gap should be viewed with caution, as they are surrounded by a high degree of uncertainty. First, data on actual unemployment rates are subject to considerable revisions and, in general, the more time that elapses, the larger such revisions are. Second, various methods and models used to estimate the NAIRU may produce rather different results. Moreover, in later estimates using new or revised data, both the model parameters and the results may change. Estimates by different international institutions at various points in time also underline the uncertainty surrounding the estimates of the NAIRU and the unemployment gap (see Charts E and F), with sizeable ranges between these estimates.

Overall, several euro area countries have experienced a significant rise in their unemployment rates. It is widely perceived that this increase is not only cyclical, but also partly structural. High structural unemployment points to the need for further ambitious structural reforms in many euro area countries to remove rigidities in both labour and product markets. Such measures should aim to help lower the NAIRU and reduce the persistence of unemployment.