Centre for Economic Policy Research

Euro Area Business Cycle Dating Committee:
Determination of the 2009 Q2 Trough in Economic Activity

The Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research (CEPR) met by conference call in June 2010 and by e-mail exchange throughout September 2010. The Committee's mission is to establish the chronology of recessions and expansions of the 11 original euro area member countries plus Greece for 1970-1998, and of the euro area as a whole from 1999 onwards. The Committee issued its first findings on 22 September 2003.

This document concerns the euro area in 2010, consisting of 16 member countries, with Slovakia having joined on January 1st 2009 during the recession. The Committee determined that a trough in economic activity occurred in the second quarter of 2009. This follows the peak in economic activity in the euro area in the first quarter of 2008, as had been determined earlier for the then 15 member countries: the same judgment applies, once extended to the 16 member countries. The month of the trough is April 2009, indicated by a clear trough in industrial production, following the peak in January 2008.

The trough marks the end of the recession that began in the first quarter of 2008. The recession lasted 5 quarters or 15 months. The total decline in output from peak to trough is 5.5 percent.

This document provides an account of the underlying reasoning. A complementary Excel Document, available from the CEPR website at http://www.cepr.org/press/Dating-Committee-Data-21-Sept-2010.xls provides the detailed data as well as a number of additional graphs.

A recession is a significant decline in the level of economic activity, spread across the economy of the euro area, usually visible in two or more consecutive quarters of negative growth in GDP, employment and other measures of aggregate economic activity for the euro area as a whole; and reflecting similar developments in most countries. A recession ends when growth resumes in GDP and other key measures of economic activity for the euro area as a whole; and when this reflects similar developments in most countries.

Because a recession is a broad contraction of the economy, not confined to one sector, the Committee emphasizes economy-wide measures of economic activity. The Committee believes that domestic production and employment are the primary conceptual measures of economic activity, also taking into account industrial production as a monthly measure of private production, sales as a measure of retail activity, investment, and consumption, as well as data on unemployment. Employment and unemployment tend to lag economic activity at the end of recessions: their recovery therefore often follows with some delay. The committee does not forecast, however, whether unemployment rates will eventually return to their pre-recession level, or to some other level.

All data are taken from the European Central Bank (ECB) website or from the Eurostat website. In most cases, we have plotted the data in terms of their percentage change compared to the 2009 Q2 level, for quarterly data, or the level in April 2009, for monthly data. For unemployment, the level has been plotted.

The Quarter of the Trough

According to the definition of a recession provided above, the key variables for determining the trough are euro area GDP and GDP in the member countries.

Euro area GDP bottomed out in the second quarter of 2009, and has grown every quarter since then, in currently available data. Given the initial uncertainty concerning the recovery as well as concerns regarding the impact of the Greek debt crisis, the Committee felt it prudent to wait for the data release on GDP in September 2010 to ascertain that the recession did indeed end in 2009 Q2.

Employment has stabilized but has not turned yet, while unemployment has continued to rise, albeit at a slower pace. This is not unusual at the end of recessions, and therefore is not in contradiction to our assessment.

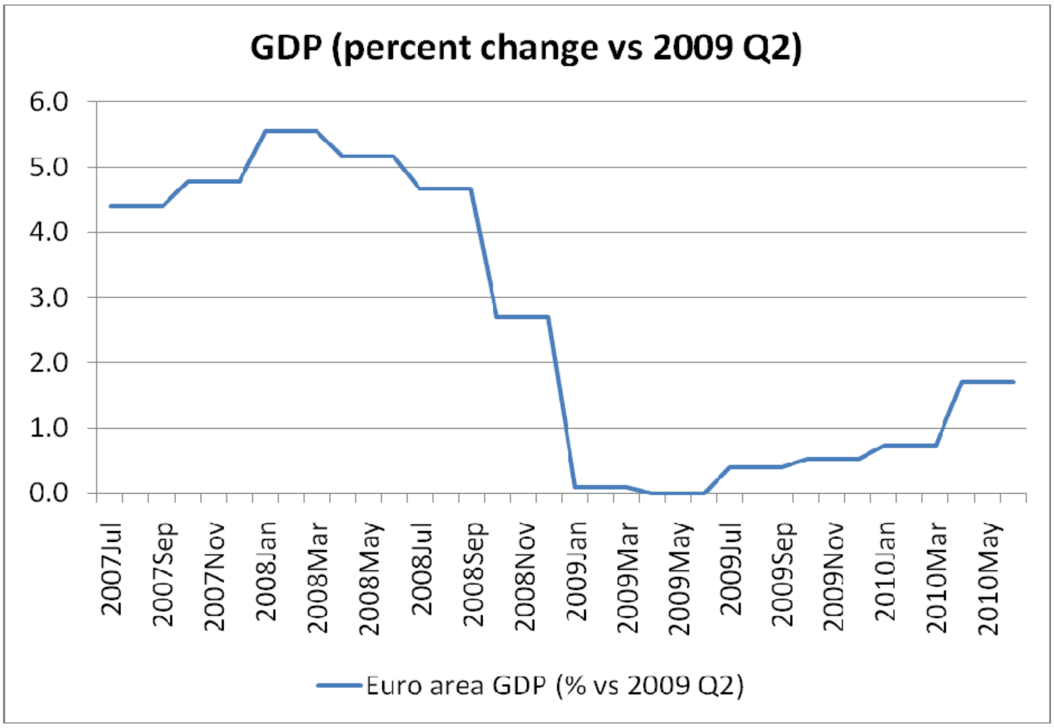

Figure 1: euro area GDP

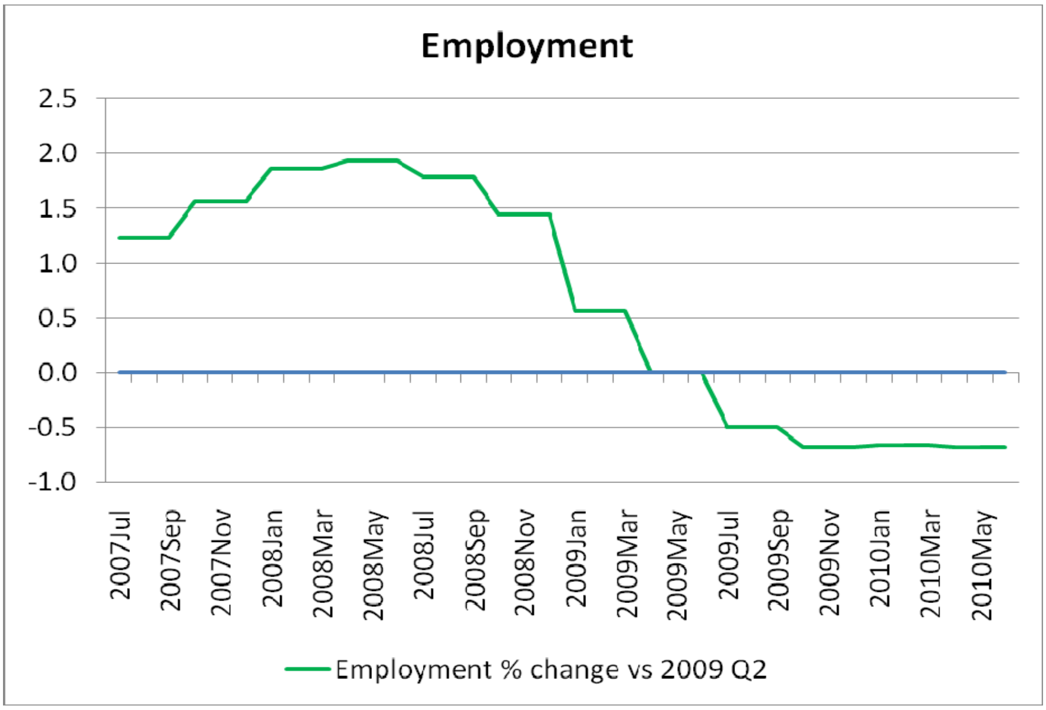

Figure 2: euro area employment

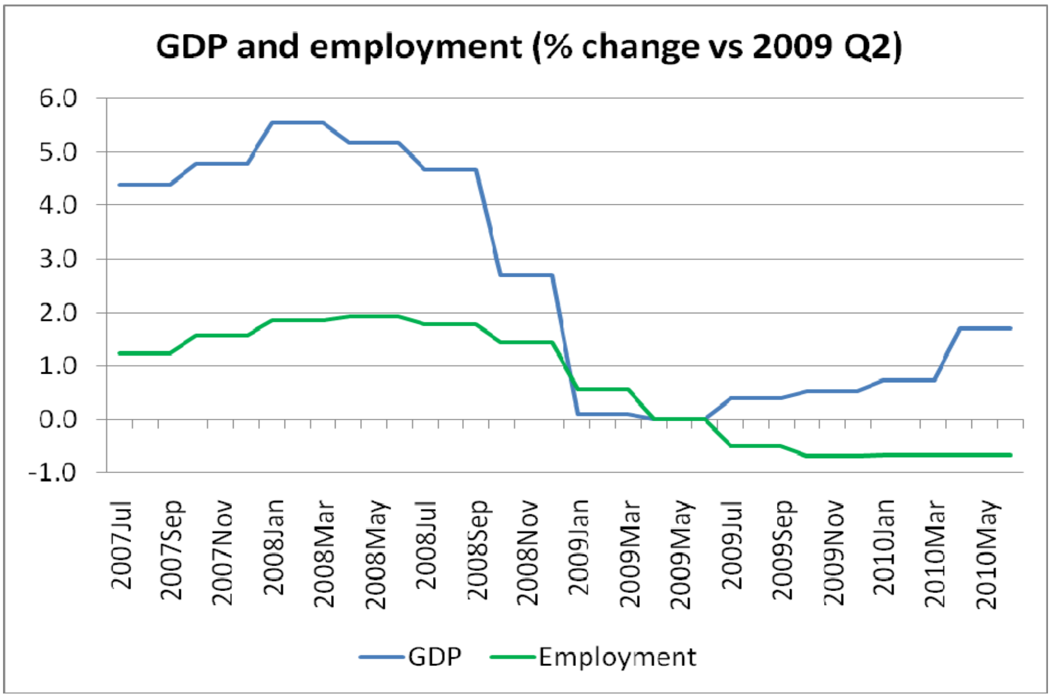

Figure 3: euro area GDP and employment

The movement in euro area GDP is essentially tracked in the large member countries. Germany and France bottomed in the first rather than the second quarter of 2009, but the GDP difference is mild. Italy bottomed in the second quarter of 2009. The GDP of Spain kept falling until the fourth quarter of 2009, but the further decline was fairly mild. The same picture emerges for most of the smaller countries, with the majority reaching the trough in 2009 Q2 and a few more with a bottom in 2009 Q1. There are a few exceptions and caveats. GDP in Greece has continued to decline. Ireland and Cyprus reached the bottom in 2009 Q4.

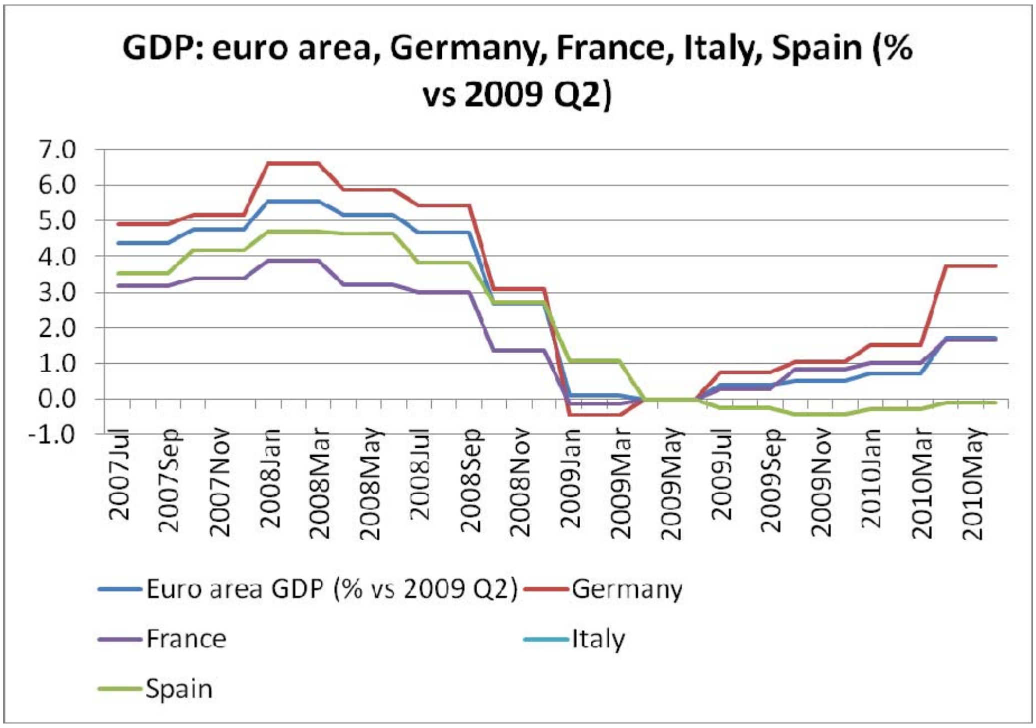

Figure 4: GDP – euro area, Germany, France, Italy, Spain

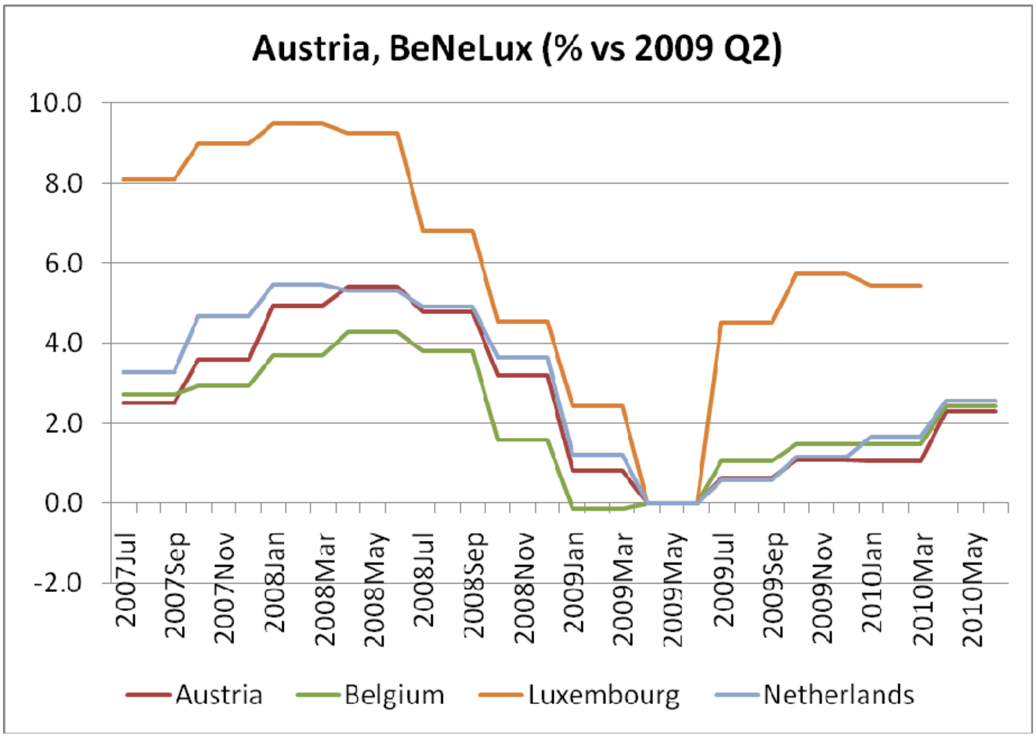

Figure 5: GDP – Austria and BeNeLux

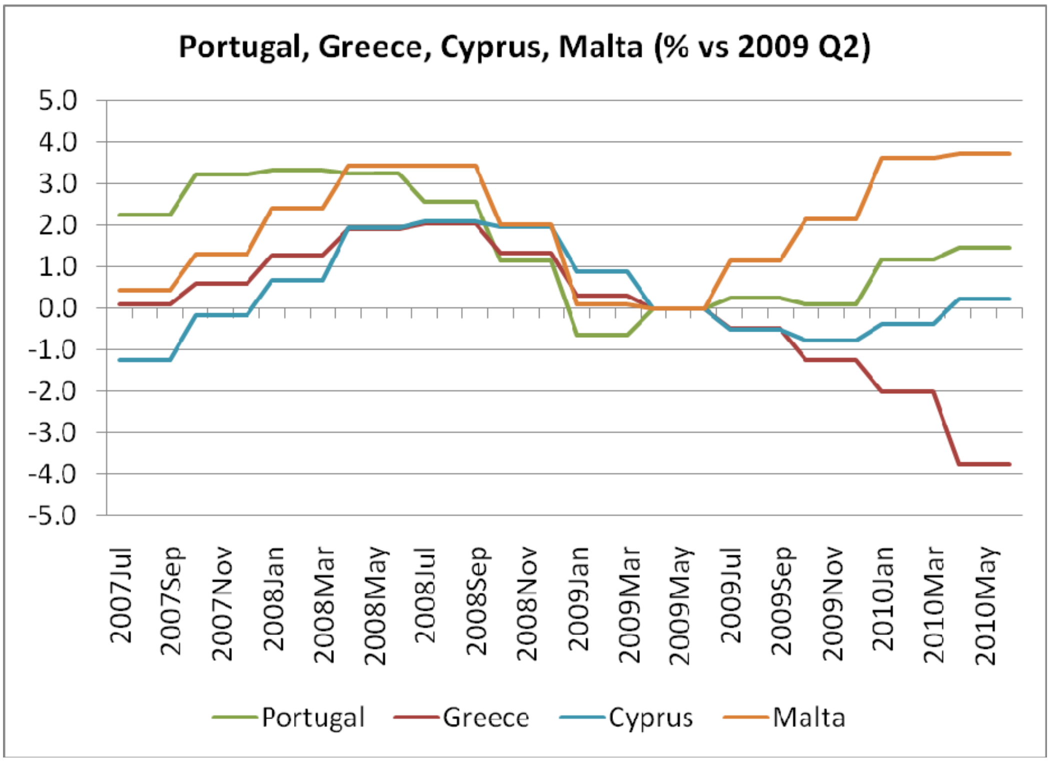

Figure 6: GDP - Greece, Portugal, Cyprus, Malta

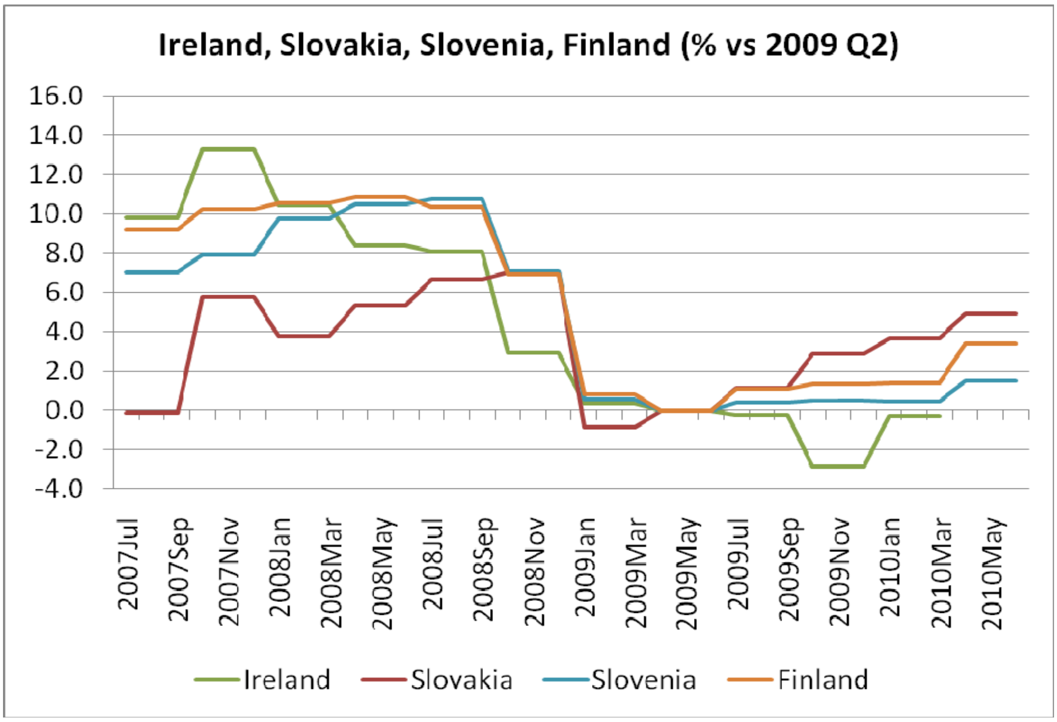

Figure 7: GDP – Ireland, Slovakia, Slovenia, Finland

The Committee has also examined investment and consumption for the euro zone. Investment in the form of gross fixed capital formation has kept dropping, until the most recent quarter, while private consumption has grown somewhat less then GDP since 2009 Q2. Decomposing the nominal growth in output from 2009 Q2 until 2010 Q2 shows that private consumption accounted for about half, inventory investment for about a third and government consumption for about a quarter, while the contribution of investment in the form of gross fixed capital formation was negligible and the contribution of trade slightly negative. In short, the recovery of GDP seems to be largely accounted for by private consumption, inventory investment and government consumption.

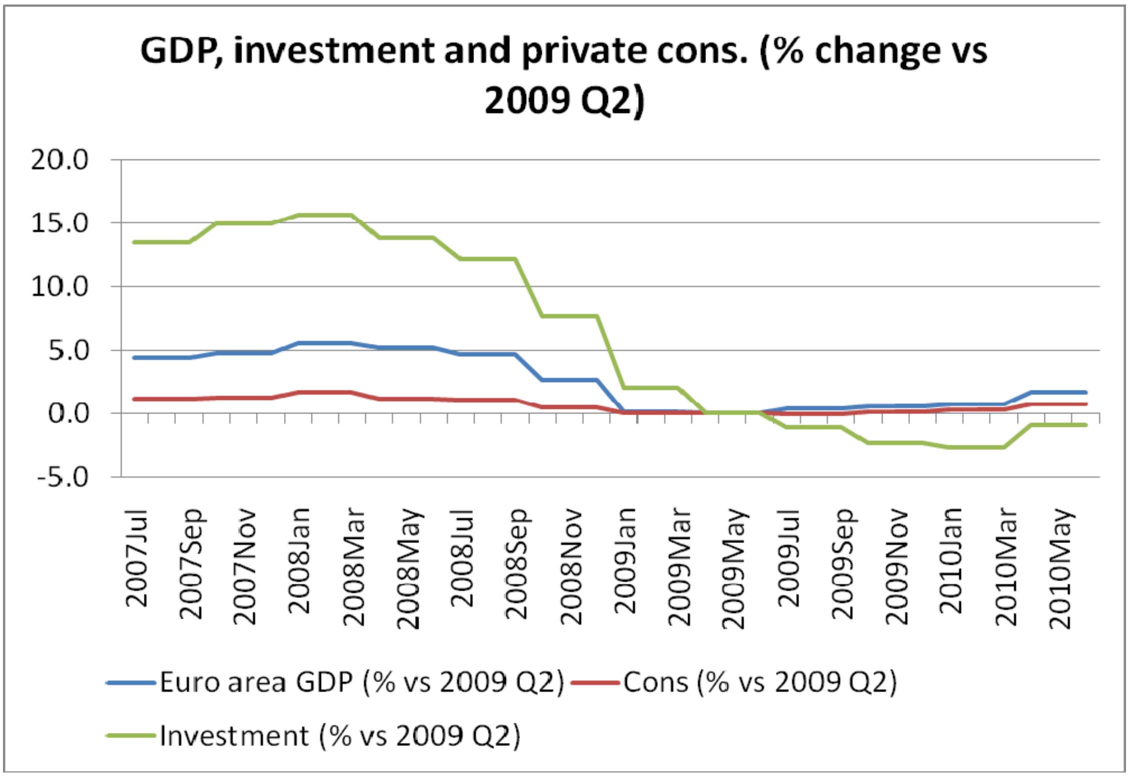

Figure 7: euro area GDP, investment and consumption

The Month of the Trough

A similar picture is painted by monthly data. In particular, industrial production, as a monthly indicator of economic activity, had a marked trough in April 2009. Sales shows nearly equally deep troughs in March 2009, May 2009 and September 2009, and therefore provides a somewhat erratic picture. As raw sales data contain a large seasonal component, one cannot read too much into these somewhat jagged movements of the de-seasonalized data, however.

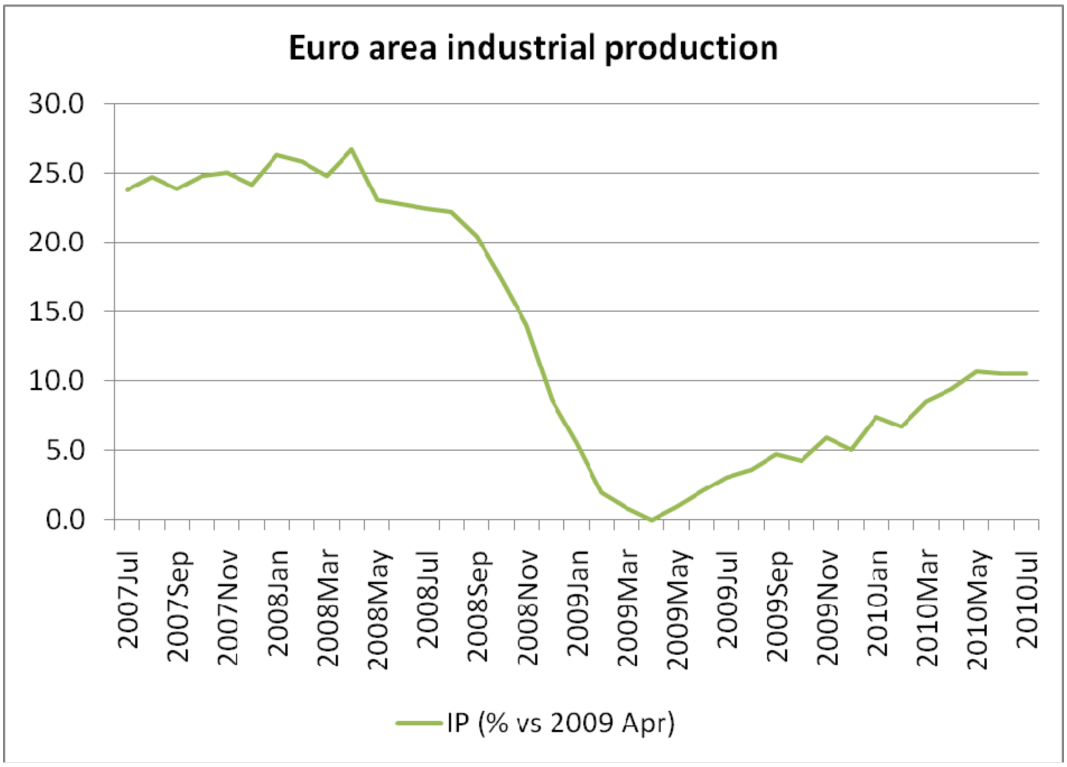

Figure 8: euro area industrial production

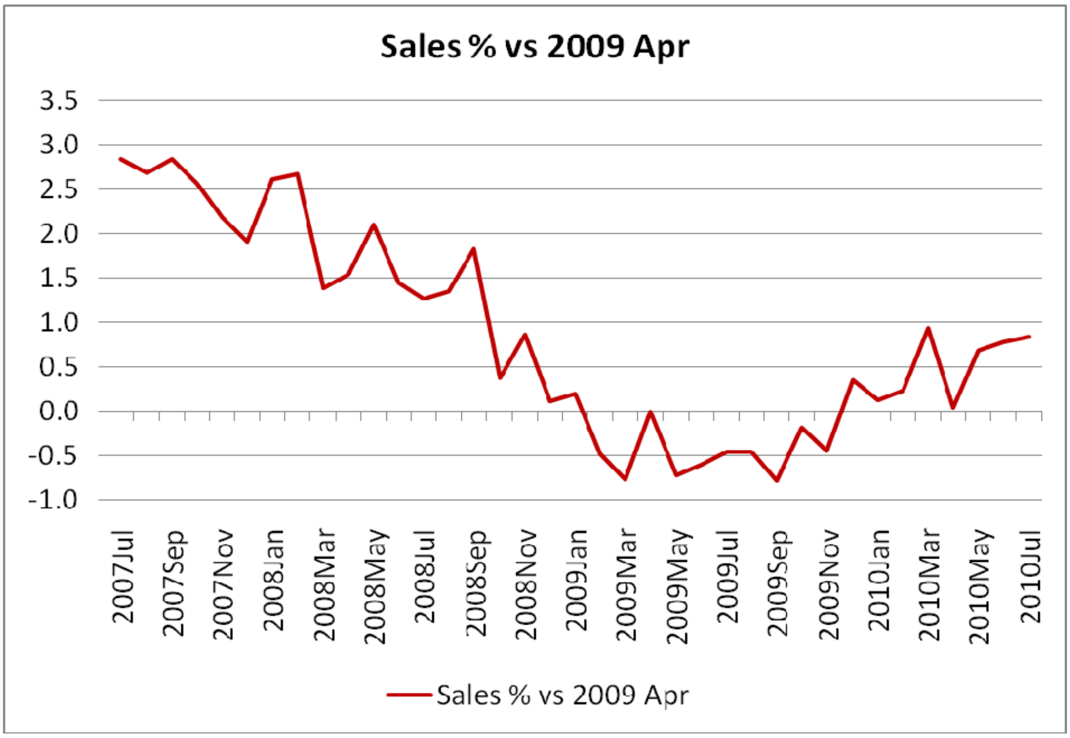

Figure 9: euro area sales

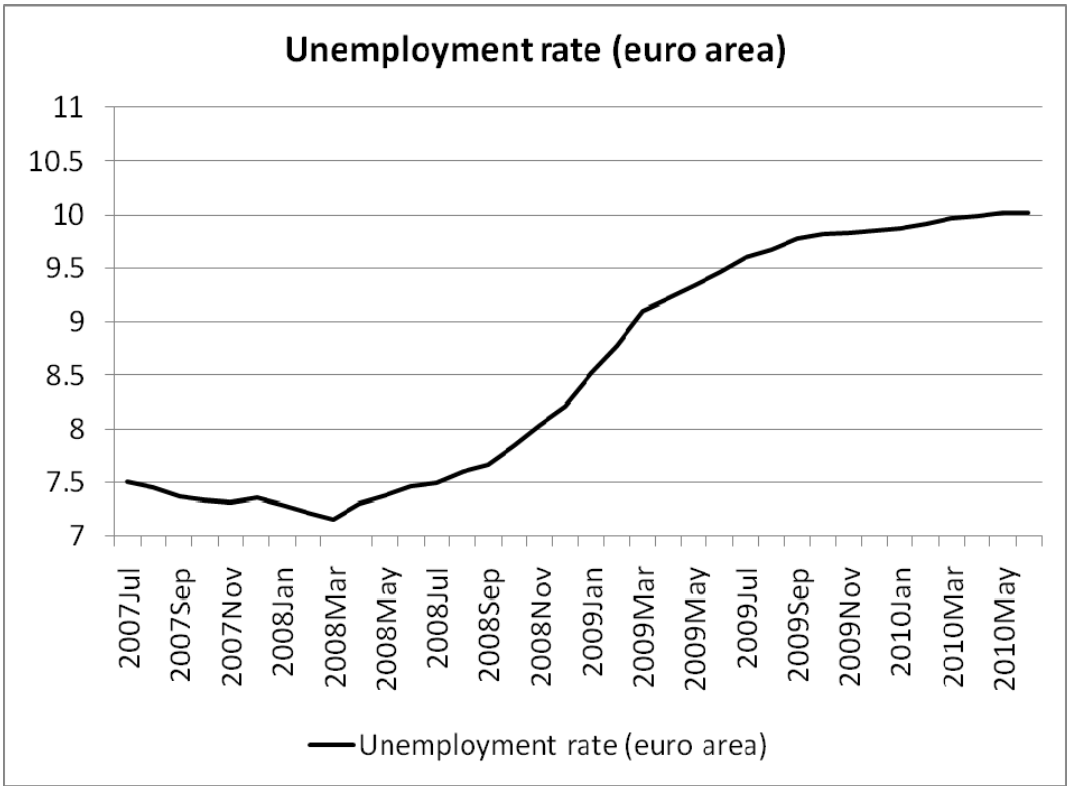

Figure 10: euro area unemployment rate

Unemployment keeps rising: however, this is not unusual at the end of recessions. Therefore, given the clear trough of industrial production in April 2009, the Committee has decided to declare this month to be the end of the recession.

Euro 15 or Euro 16: re-determining the peak in 2008 Q1

The Committee has originally declared the peak of the cycle to be in 2008 Q1, for a euro area consisting of 15 countries. It has re-examined that conclusion in light of the fact that Slovakia has joined the euro zone on January 1st 2009. A plot of GDP-changes vis-à-vis 2009 Q2 shows virtually no difference, whether Slovakia is included or not. In particular, the peak remains to be unchanged in 2008 Q1, as can be seen in figure 1 (which is for the euro-16 zone). Therefore, there is no need to consider two separate peak-to-trough dates.

Committee members:

Fabio Canova (ICREA-Universitat Pompeu Fabra and CEPR)

Jordi Galí (CREI, Universitat Pompeu Fabra and CEPR)

Francesco Giavazzi (Università L Bocconi and CEPR)

Richard Portes (CEPR and London Business School)

Lucrezia Reichlin (London Business School and CEPR)

Harald Uhlig (University of Chicago and CEPR) - Committee Chair

Philippe Weil (ECARES-ULB, Sciences Po and CEPR)

Volker Wieland (Johann Wolfgang Goethe-Universität Frankfurt and CEPR)

For more information, see the FAQs below and also see http://www.cepr.org/data/dating/.

FAQs

The following “FAQs” have been adapted from the NBER document.

Q: The financial press often states the definition of a recession as two consecutive quarters of decline in real GDP. How does that relate to your recession dating procedure?

A: Most of the recessions identified by our procedures do consist of two or more quarters of declining real GDP, but declining real GDP is not the only indicator used. As an example, the Committee has identified the period from the first quarter in 1980 to the third quarter in 1982 as a recession, despite the fact that real GDP was growing in some quarters during that episode and that real GDP was higher at the end of the recession than at the beginning. As another example, the Committee did not declare a recession for 2001 or 2003, even though the data at the time appeared to show a decline in economic activity (though not for two quarters). Subsequent data revisions have erased these declines.

Q: Why doesn’t the Committee accept the two-quarter definition?

A: The Committee’s procedure for identifying turning points differs from the two-quarter rule in a number of ways. First, we do not identify economic activity solely with real GDP, but use a range of indicators. Second, we place considerable emphasis on monthly indicators in arriving at a monthly chronology. Third, we consider the depth of the decline in economic activity. Recall that our definition includes the phrase, “a significant decline in activity.”

Q: Isn’t a recession a period of diminished economic activity?

A: It’s more accurate to say that a recession—the way we use the word—is a period of diminishing activity rather than diminished activity. We identify a month when the economy reached a peak of activity and a later month when the economy reached a trough. The time in between is a recession, a period when economic activity is contracting. The following period is an expansion.

Q: How long does the Committee expect the expansion to last?

A: The Committee does not forecast.

Q: Does the Committee follow the NBER Business Cycle Dating Committee in its deliberations?

A: While the CEPR Euro Area Business Cycle Dating Committee has been conceived to operate similar to the NBER Business Cycle Dating Committee, its deliberations and timing of announcements are independent.

Q: How is the Committee's membership determined?

A: The President of the CEPR appoints the members after consultation with the current members of the Business Cycle Dating Committee.

For more frequently asked questions and their answers, see http://www.cepr.org/data/dating/faq.asp

Data:

ECB: http://sdw.ecb.europa.eu/

Eurostat: http://epp.eurostat.ec.europa.eu