Centre for Economic Policy Research

Euro Area Business Cycle Dating Committee:
Euro Area Business Cycle Peaked in Third Quarter of 2011, Has Been in Recession Since

The Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research (CEPR) met in Paris on 10 September 2012 and continued its deliberations by e-mail exchange throughout September and early October 2012. The Committee's task 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 2012, which consists of 17 member countries since Estonia joined on 1 January 2011. The Committee has determined that **a peak in economic activity occurred in the third quarter of 2011**. This follows the trough in economic activity in the euro area in the second quarter of 2009, as had been determined earlier for the then 16 member euro area.

The third quarter of 2011 thus marks the end of the expansion that began in the second quarter of 2009 and the beginning of a euro-area recession. [1] This recovery lasted 10 quarters. The total increase in output from trough to peak was 4.03 percent.

This document provides an account of the reasoning underlying the decision of the Committee.

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[1] Beginning with this release, the Committee is dating turning points using only euro-area aggregate data. In the past, it also monitored individual country statistics to make sure that expansion or recessions were widespread over the countries of the area. However, the increased heterogeneity among euro-area member countries necessitated paying attention only to the euro area as a whole, so that the committee's pronouncements of cyclical turning points reflect only the aggregate data used by policy makers and researchers at the euro-area level. Two companion notes describe the motivation behind this methodological change http://www.cepr.org/data/dating/Dating-Methodology-Nov-2012.pdf and establish that previously announced turning points would remain the same under the new method http://www.cepr.org/data/dating/Dating-Heterogeneity-Nov-2012.pdf The data used for this Committee decision will be archived on the CEPR web site.

The Quarter of the Trough

Euro area GDP peaked in the third quarter of 2011 and, except for a minor rebound in the first quarter of 2012, it has declined since then according to currently available data. Although some other indicators of economic activity, most notably employment, had peaked earlier (see below), the Committee has determined that, in this episode, the peak of economic activity coincides with that of GDP. In other words, the euro area has been in recession since 2011Q3.

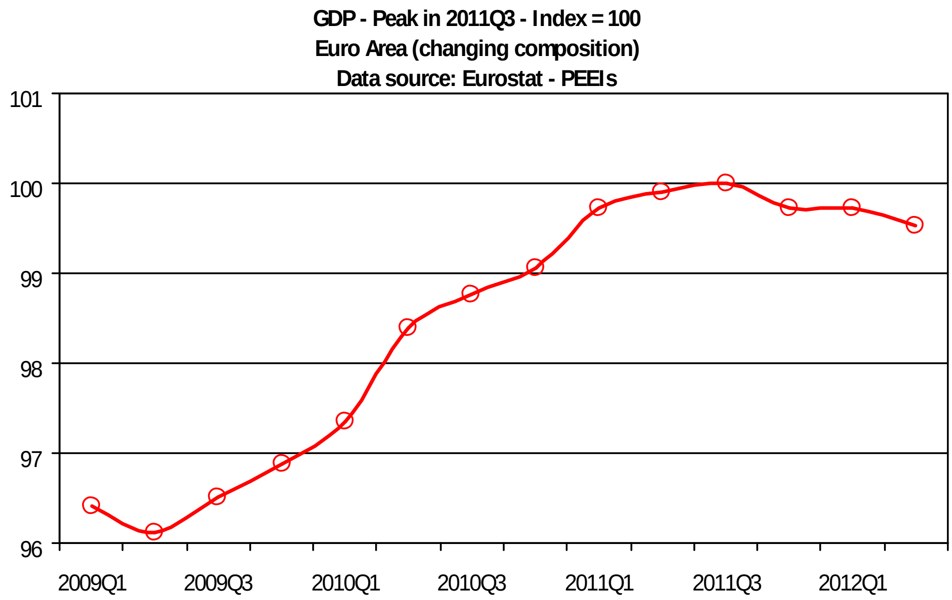

Figure 1. The 2009Q2 to 2011Q3 expansion

Note: Euro area (changing composition) stands for EA11 from 1995, EA12 from 2006, EA13 from 2007, EA15 from 2008, EA16 from 2010, and EA17 since 2010.

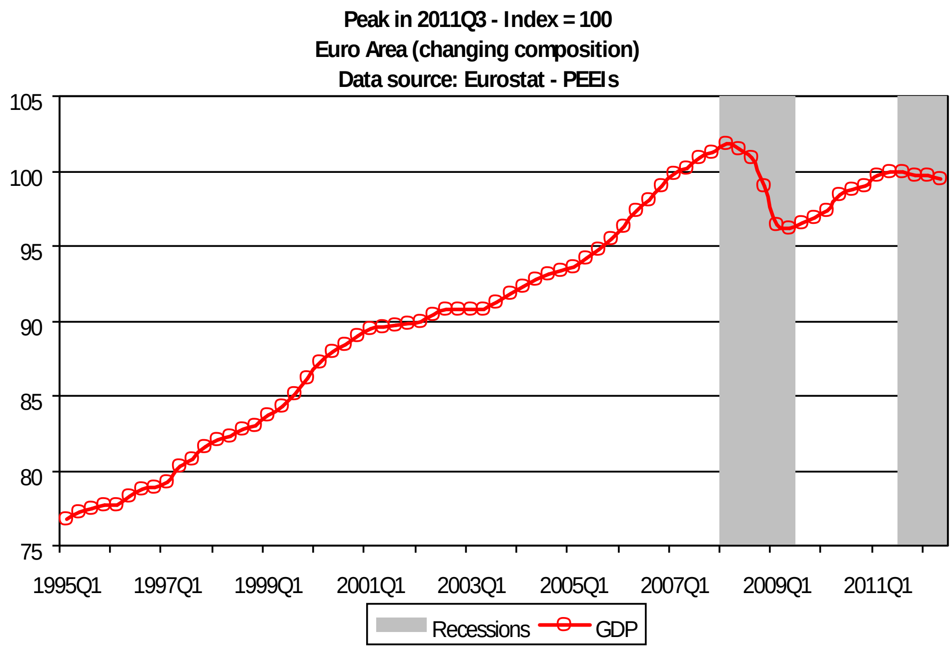

Figure 2. From 1995Q1 to 2012Q2

It is important to note that the expansion that ended in the third quarter of 2011 was not strong enough to bring euro-area GDP back to its pre-financial crisis level. At its 2011Q3 peak, GDP in the euro area was still roughly 2% below its previous 2008Q1 peak.

Several other key macroeconomic aggregates have also been decreasing markedly since the third quarter of 2011, such as euro-area consumption, investment and employment. Investment and employment had started to decline slightly even before 2011Q3. This is quite unusual, since employment generally lags behind output and was a lagging variable in the previous recession (2008Q1-2009Q2) in the euro area, both at the peak and at the trough. The fact that employment led output in this recession should be seen as a particular feature of this episode, likely due to the labor market never quite recovering from the previous recession. Whatever the reasons for the lead of employment, the euro-area recession that started in the third quarter of 2011 has manifested itself very clearly in labor markets.

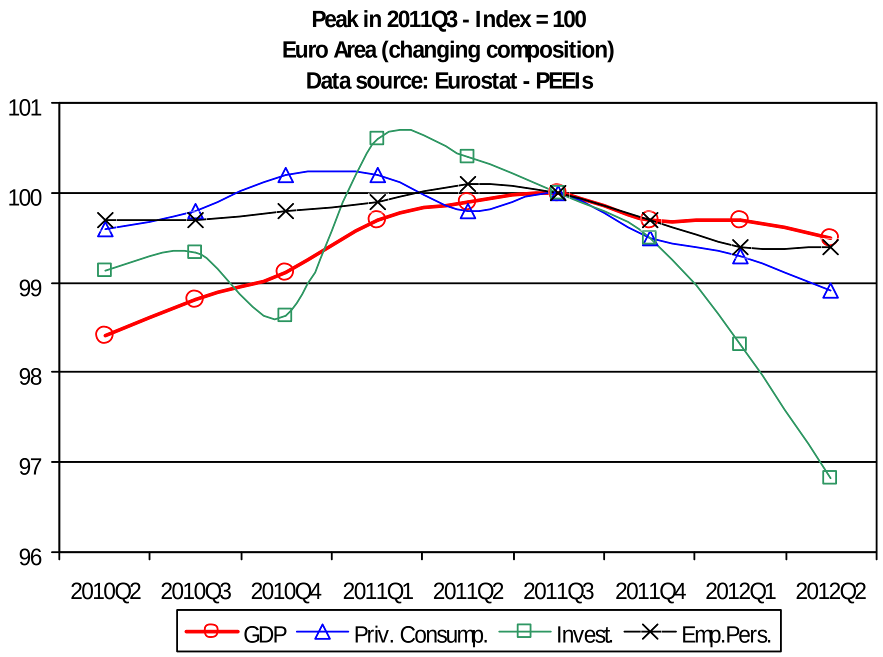

Figure 3. GDP, consumption, investment and employment

Likely impact of subsequent data revisions

Dating business cycles is a difficult and non-mechanical exercise because of measurement errors in official statistics and of data revisions months and years after their original publication. The challenge is thus to date peaks and troughs of economic activity based on the imperfect information available today while minimizing the chance that data revisions might lead the Committee to reconsider its choice in the future.

To achieve this goal, the Committee examines a wide array of economic data in addition to GDP, such as the individual components of output and labor market data. This makes the dating exercise less vulnerable to subsequent data revisions of a small number of variables and provides a broader picture of economic activity. The practice of examining the joint evolution of several key macroeconomic aggregates has been followed by the committee in its previous decisions. For instance, the committee did not declare a recession in 2001 in spite of reported negative GDP growth in then-available data because it did not observe a decline in employment. Subsequent data revisions vindicated the judgment of the Committee by providing "a more positive assessment of business conditions in the euro area then prevailing, with the most recent figures (…) indicating an increase instead of a decline in the real GDP growth rate".[2] The often dramatic effect of these data revisions on the estimate of growth since April 2002 is illustrated in the following graph which depicts the estimated GDP growth rate in 2001Q4 in several vintages of data (available in real-time), reported in the x-axis. For example, in April 2002, GDP growth rate was stated as -0.16, but it was revised to be 0.10 in April 2009.

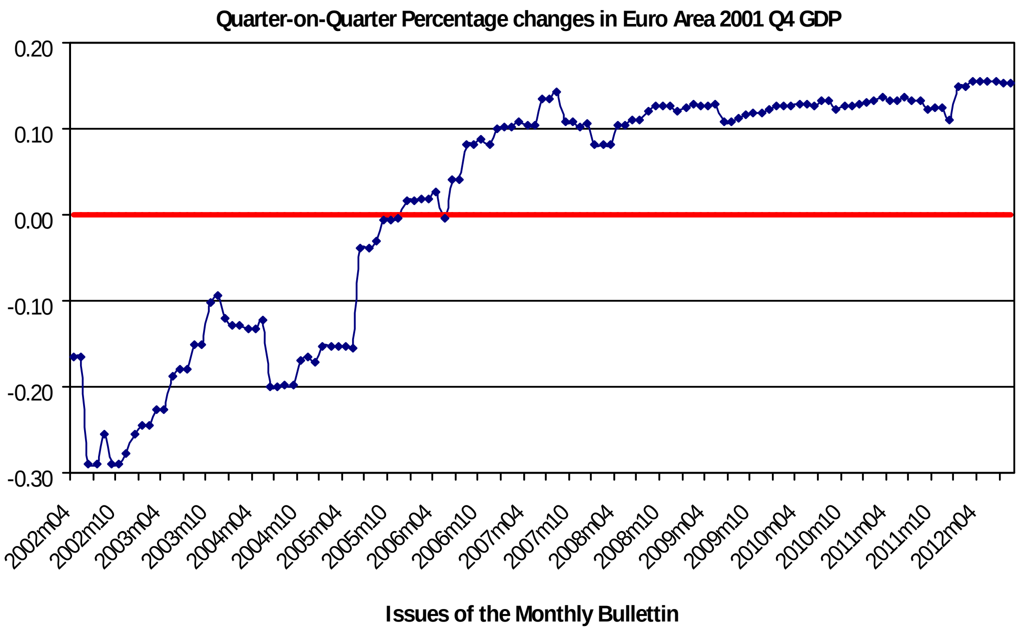

Figure 4. Revisions of 2001Q4 GDP growth since April 2002

To ensure further that its decisions are robust to data revisions, the Committee investigated the probability that future data revisions might lead it to revise its choice of 2011Q3 as a euro-area peak in economic activity. Using the past

[2] Domenico Giannone, Jerome Henry, Magdalena Lalik, and Michele Modugno, 2010. "An area-wide real-time database for the euro area," CEPR Discussion Paper 7673 (*Review of Economics and Statistics*, forthcoming).

statistical properties of euro-area GDP revisions, Domenico Giannone estimated for the Committee that [3]

i) there is a 75% probability that, based on the data that will be available **three years from now** (that is, in September 2015), we will still determine that 2011Q3 as a peak of euro-area GDP

ii) the probability that, after revision, GDP in 2012Q2 will be found to exceed GDP in 2011Q3 is about 5%. The Committee thus feels strengthened in its determination that the euro-area expansion did end in the third quarter of 2011.

Heterogeneity in business cycles of euro-area countries

While this committee has determined that the euro area as a whole is in recession since the third quarter of 2011, not all its member countries are. The Committee does not date the turning points of individual countries but it seems that Germany, and to some extent France, has been in a more favorable situation than the euro area as a whole. Indeed, individual GDP data from the euro area's five largest economies show, in Figure 5, the slide into negative territory during the third quarter of 2011. Only one economy, Germany, returned to positive growth in 2012, while France appears to have been stagnating since late 2011. This, however, is not true of the euro area as a whole.

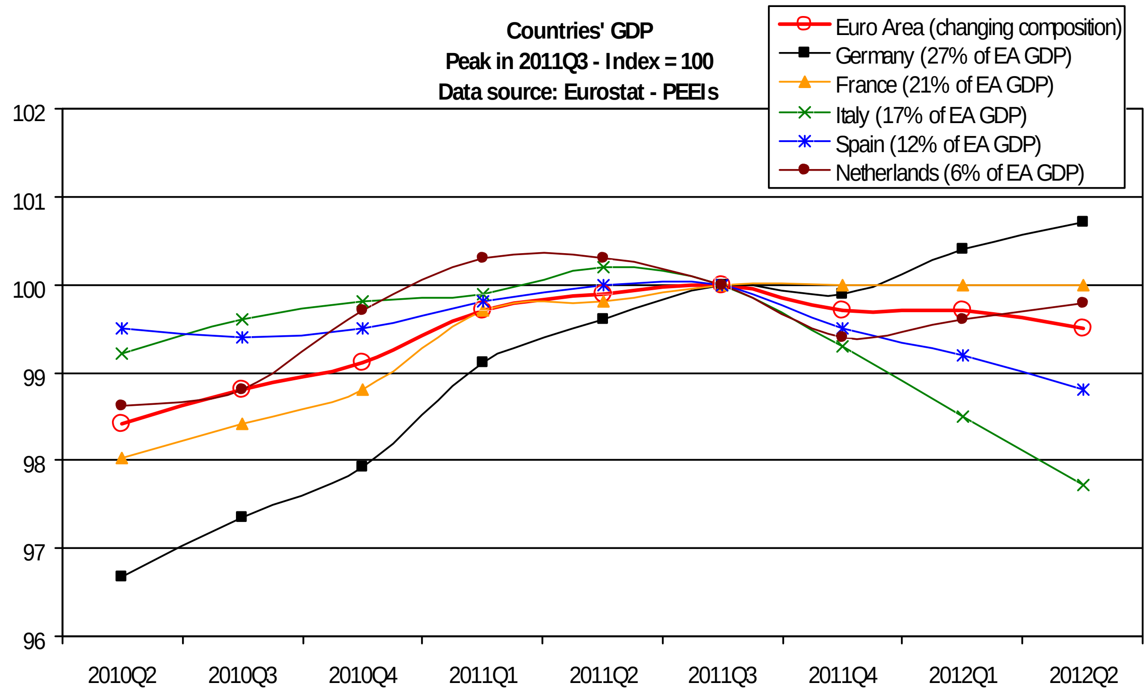

Figure 5. Countries' GDP

Note: Countries' weights are based on 2011 GDP.

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[3] http://www.cepr.org/data/dating/Dating-Probabilities-Nov-2012.pdf

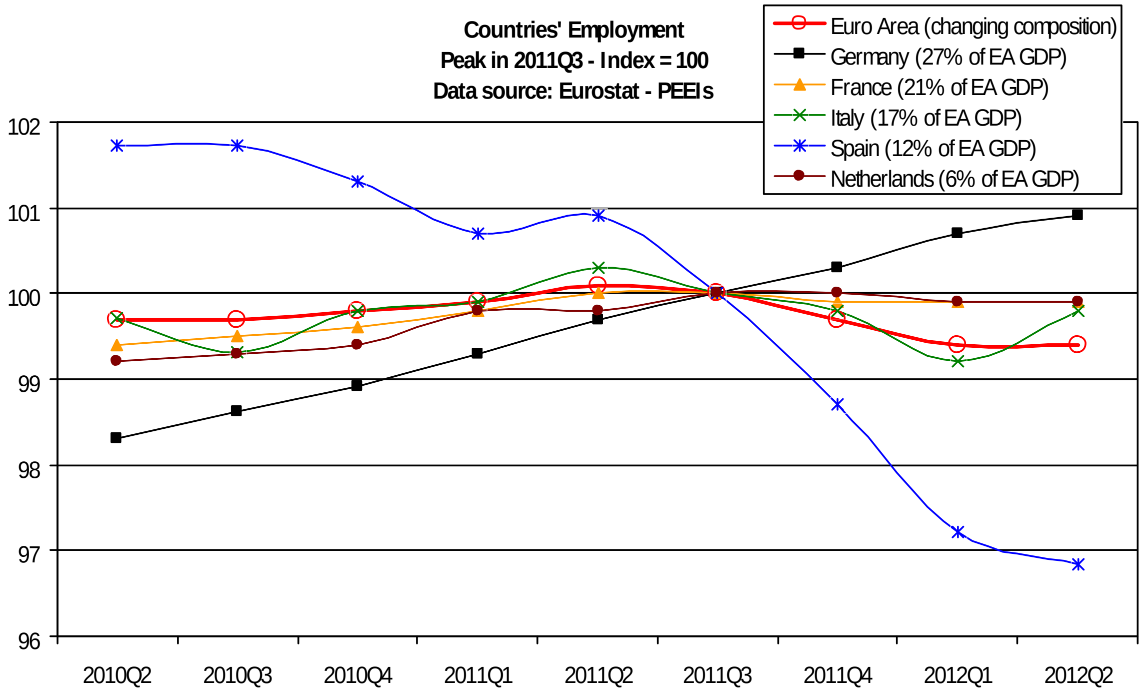

Figure 6. Countries' Employment

Note: Countries' weights are based on 2011 GDP.

In order to provide more information on heterogeneity in euro-area countries' business cycles, the following scatterplot reports GDP and employment in 2012Q2 for those euro-area countries where recent data are available (normalized such that the level of 2011Q3 equals 100). Countries labeled in red are countries whose GDP and employment levels are both below their 2011Q3 levels. Countries whose GDP and employment level equal 100 experienced no change in either variable since 2011Q3 (such as France). The figure shows that there is substantial heterogeneity in the Euro-area. Countries such as Spain and Portugal display low levels of both employment and GDP; the opposite is true for countries such as Germany, Austria and Estonia. Finally, other countries display low levels of GDP but not employment, such as Finland.

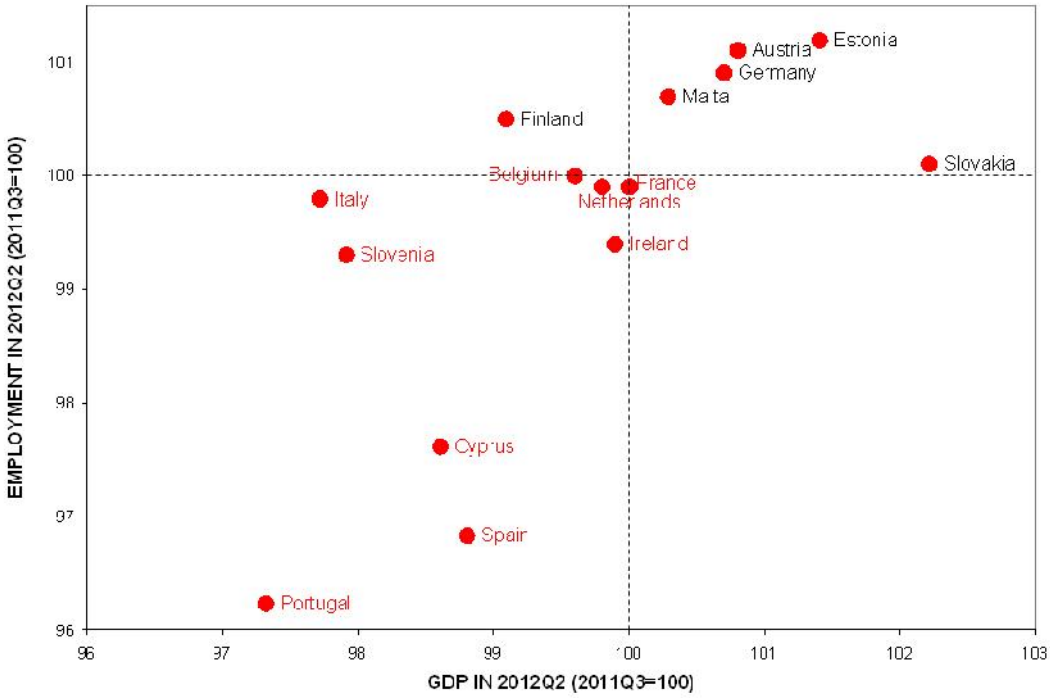

Figure 7. Countries' GDP and Employment in 2012Q2 compared to 2011Q3

Chronology of euro-area business cycles

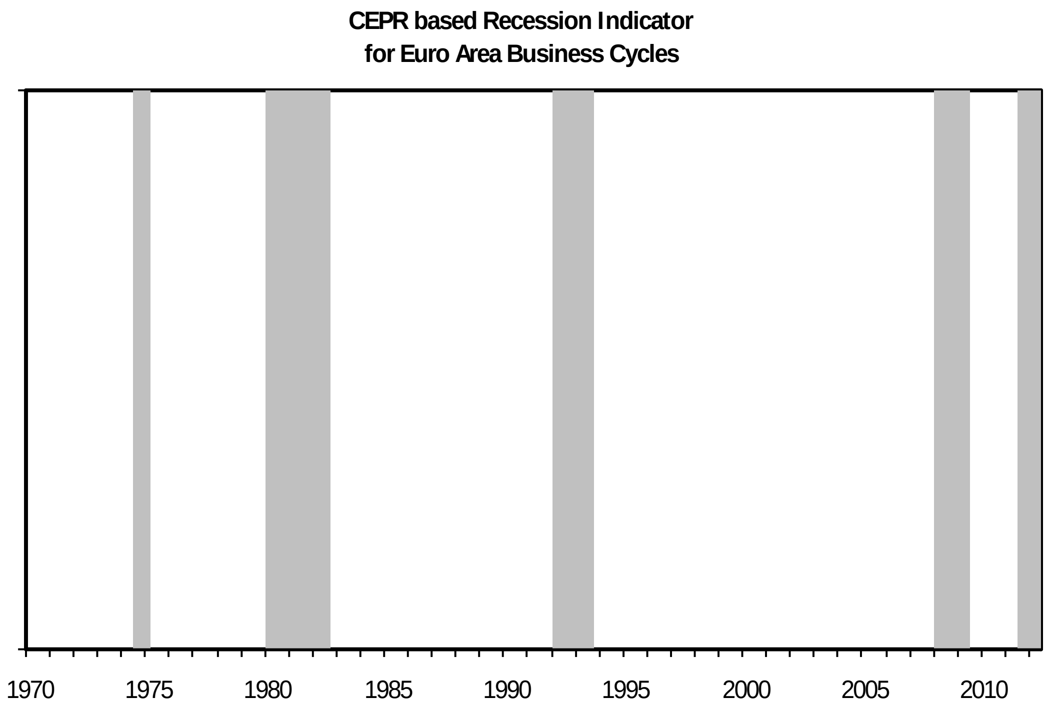

Figure 8. Recessions

Committee members

Philippe Weil,(Chair, 2012-), 2003- , OFCE, Sciences Po, ULB and CEPR
Domenico Giannone, 2012- , ULB and CEPR
Refet Gürkaynak, 2012- , Bilkent University and CEPR
Monika Merz, 2012- , University of Vienna and CEPR
Richard Portes, 2003- , LBS and CEPR (*ex officio*)
Lucrezia Reichlin (Chair, 2003-2005), 2003- , LBS and CEPR (*ex officio*)
Albrecht Ritschl, 2012- , LSE and CEPR
Barbara Rossi, 2012- , ICREA-UPF, BGSE, CREI and CEPR
Karl Whelan, 2012- , UCD and CEPR

Michael Artis, 2003-2009
Fabio Canova, 2003-2012
Jordi Gali, 2003-2012
Francesco Giavazzi, 2003-2012
Harald Uhlig (Chair, 2005-2012), 2003-2012
Volker Wieland, 2008-2012

Rapporteur: Paul Hubert, 2012- , OFCE, Sciences Po

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

FAQs[4]

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 the Committee's procedures 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.

[4] The following "FAQs" have been adapted from the NBER document.

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, notably employment. Second, 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 quarter when the economy reached a peak of activity and a later quarter 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 recession 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 in a manner 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 CEPR appoints new members after consultation with the Chair of the Business Cycle Dating Committee and the Research Director of CEPR. The President and the Research Director are *ex officio* members of the Committee.

Q: Does the Committee date recessions for individual countries in the euro area?

A: No, the sole objective of the Committee is to date recessions for the euro area as a whole.

Q: Why does the Committee not date recessions for individual countries? Is it possible that the EU area is in a recession while some of the individual countries are not?

A: The Committee wants to make sure that its characterization of Euro-area economic activity (which is its sole objective) is not affected by rising heterogeneity in the Euro-area. Adopting a dating criterion that refers solely to aggregate Euro-area economic activity achieves this objective most transparently. Note that since October 2012 the Committee has dropped its requirement that peaks or troughs mark turning points in economic activity in most countries of the euro area. The rationale for this definitional change is explained in details in the methodological note [http://www.cepr.org/data/dating/Dating-Probabilities-Nov-2012.pdf]. It is thus possible that the EU-area is in a recession while some of the individual countries are not, and that the business cycle dates differ for the Euro-area and for individual countries. For instance, 2011Q3 is a peak in the Euro-area as a whole, but not for Germany. A detailed analysis of heterogeneity in individual countries' business cycles is included in the Committee's releases since its creation.

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

Data:

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