Euro Area Business Cycle Dating Committee: A Slow but Steady Euro Area Recovery

7 August 2017

The CEPR Euro Area Business Cycle Dating Committee met in London on 2 March 2017 and continued its deliberations by e-mail exchange until the end of July 2017. The Committee's main conclusion is that since the last trough in 2013Q1, the euro area recovery is proceeding at a slow but steady pace. Notably, the post-recession recovery of the euro area is commensurate with that of the US recovery, considering it began later, after the double-dip European recession that followed the global financial crisis.

The CEPR Euro Area Business Cycle Dating Committee's task is to establish the chronology of recessions and expansions of the eleven-original euro area member countries plus Greece for 1970-1998 and of the entire Euro area from 1999 onwards. The goal of this document is to provide a description of the Committee's main findings concerning the state of the business cycle in the Euro area.

Four years of Euro Area recovery

The economic expansion that started after the 2013Q1 trough (see our October 2015 findings) is carrying on.

The Euro area has experienced a weak but persistent recovery in terms of GDP growth rate, as shown in Figures 1 and 2. In 17 quarters of economic recovery, GDP in the Euro area has grown by a cumulative 7.03%. This is low by historical standards – that is, below the rate at which Euro area GDP had recovered 17 quarters after the onset of previous expansions (*Figure 3*). It is, however, consistent with historical evidence about recoveries from deep recessions (see, for instance, the IMF World Economic Outlook 2009, chapter 3 which shows that it

takes longer for economic activity to recover after a financial crisis than after a traditional recession). The ongoing recovery, which follows a double-dip recession with an anemic interceding recovery, has been slow but steady. Although it has taken a long time, Euro area GDP has surpassed the peak it had reached on 2008Q1 before the onset of the financial crisis, after seven and half years, on 2015Q3.

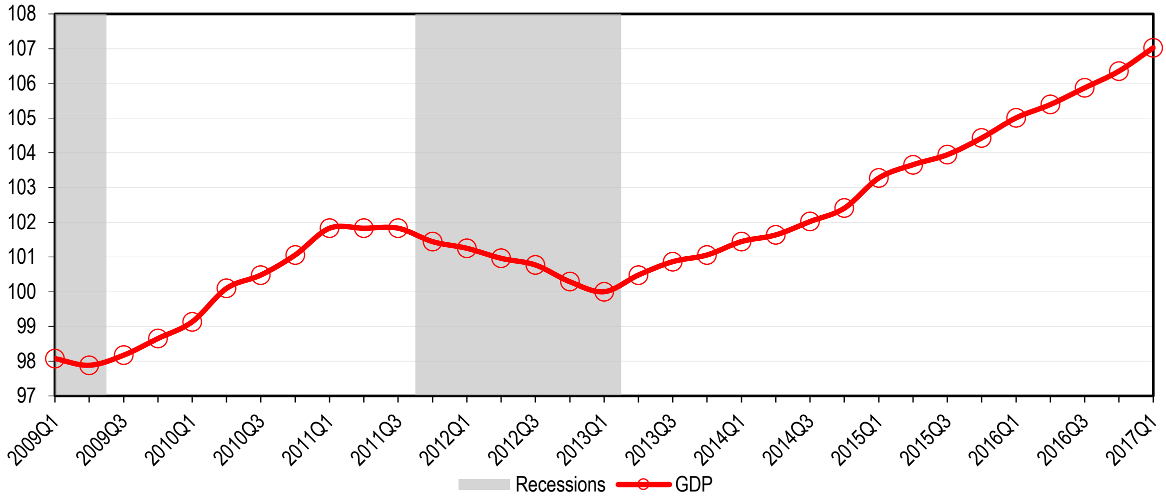

Figure 1 – Euro area[1] GDP from 2009Q1 to 2017Q1

Note: The red line is the GDP Index 2013Q1 = 100 and the shaded areas represent the recession periods as dated by the Committee. Data source: Eurostat and Committee computation.

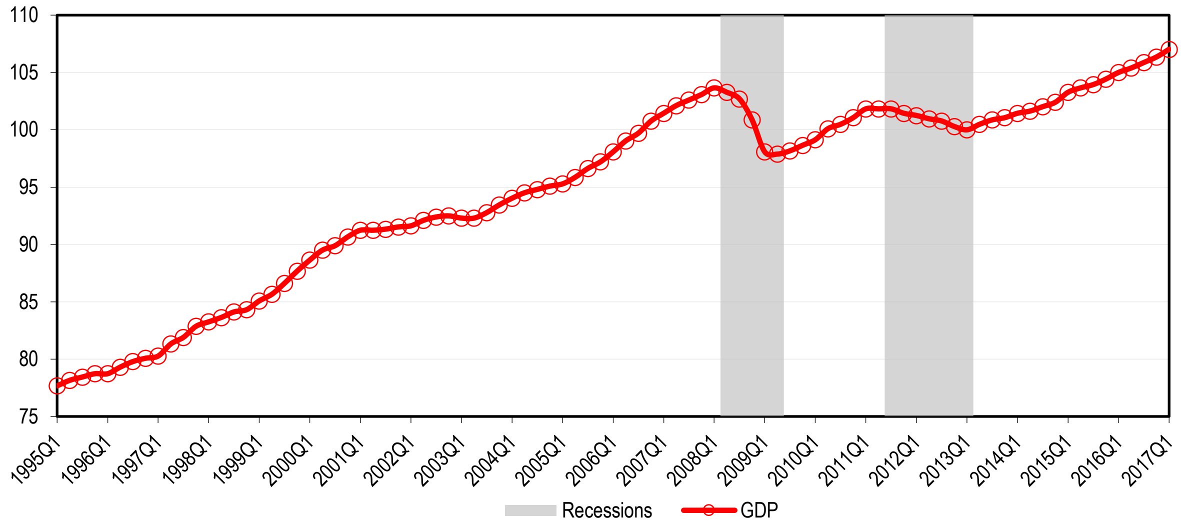

Figure 2 - Euro area[1] GDP from 1995Q1 to 2017Q1

Note: The red line is the GDP Index 2013Q1 = 100 and the shaded areas represent the recession periods as dated by the Committee. Data source: Eurostat and Committee computation.

[1] Euro area changing composition, that is EA11 from 1995, EA12 from 2006, EA13 from 2007, EA15 from 2008, EA16 from 2010, EA17 from 2010, EA18 from 2014, and EA19 since 2015.

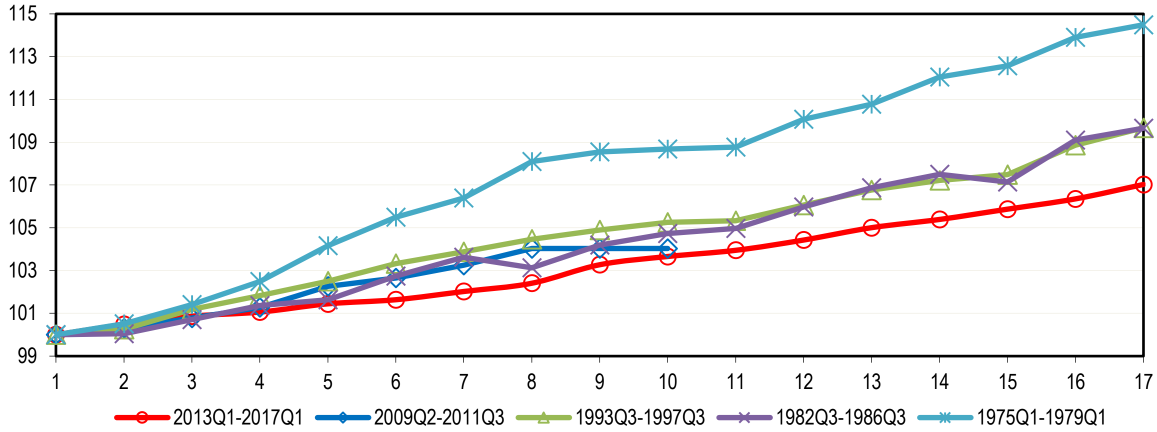

Figure 3- Euro area GDP: recoveries comparison

Note: The figure shows a comparison among the GDP in all the expansion periods dated by the Committee in the Euro area. The solid lines are the real GDP computed as index, with reference period the quarter of the different troughs. On the x-axis, the number of quarters after the troughs are shown. The first two series (red and dark blue lines) refer to Euro Area changing composition, while the other ones refer to Euro Area 19 fixed composition.
Data sources: Eurostat, AWM Database and Committee computation.

The Euro area quarter on quarter GDP growth rate has been uniformly positive after the 2013Q1 trough. As shown in Figure 4, the main source of the recovery are private consumption and private investment. These two expenditure components are the principal drivers of Euro area GDP growth rate from 2013Q2 to 2017Q1.

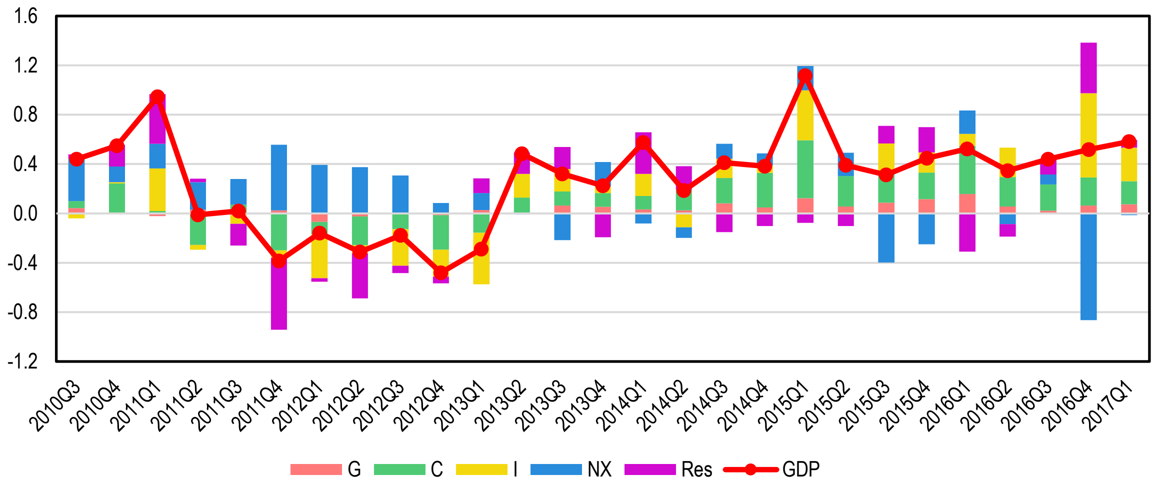

Figure 4 - Contribution of expenditures components to QoQ GDP growth rate

Note: The red solid line is the quarter on quarter GDP growth rate from 2010Q3 to 2017Q1. The bars represent the contribution of the GDP expenditure components to its growth. *G* is Government Expenditure, *C* is Private Consumption, *I* is investment, *NX* is Net Export and *Res* is the residual component, which is the changes in inventories and acquisition less disposals of valuables.
Data source: Eurostat and Committee computation.

The Committee has also analyzed several other macroeconomic indicators. Investment and consumption are both increasing at a steady pace, although the latter has been showing a more sluggish growth than the former (*Figure* 5).

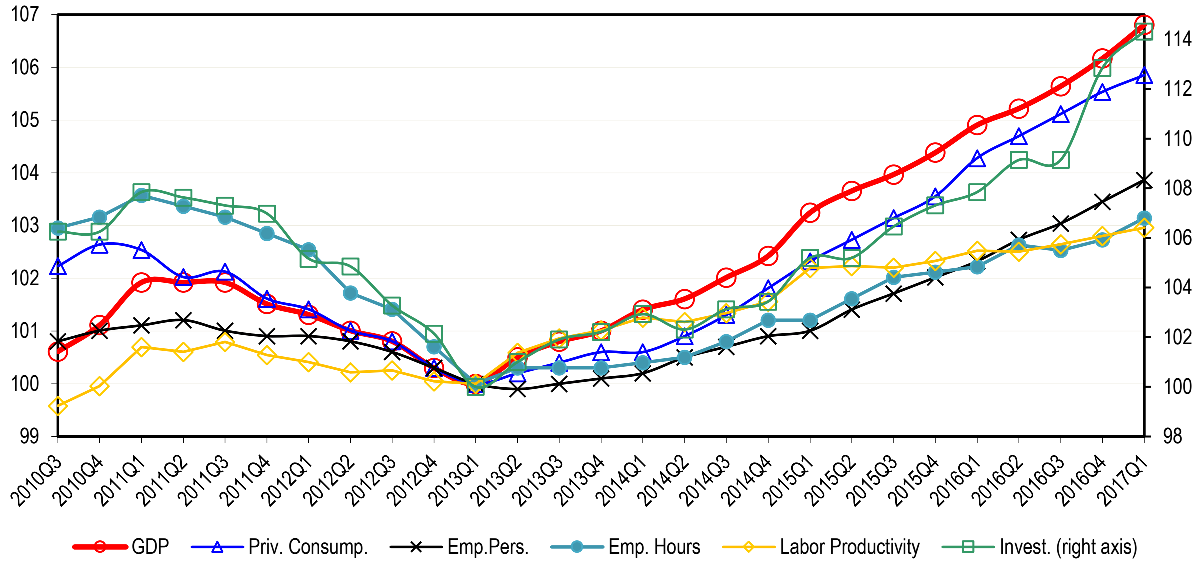

Figure 5 - Euro area GDP, consumption, investment (right axis), employment (in pers.)[2] and labor productivity[3]

Note: The figure shows the key economic indicators computed as indices 2013Q1 = 100, for the period 2010Q3-2017Q1.

Data source: Eurostat and Committee computation.

This is unusual when compared to all previous Euro area expansion periods. The recovery in economic activity manifests itself most clearly in investment which has grown, 17 quarters into the recovery, faster than in all previous euro area expansions (see Figure *6*), while private consumption growth has been slightly weaker (Figure 7).

[2] Employment A*10 industry breakdown

[3] Computed as ratio between real GDP in millions of euro and Employment in thousands of persons.

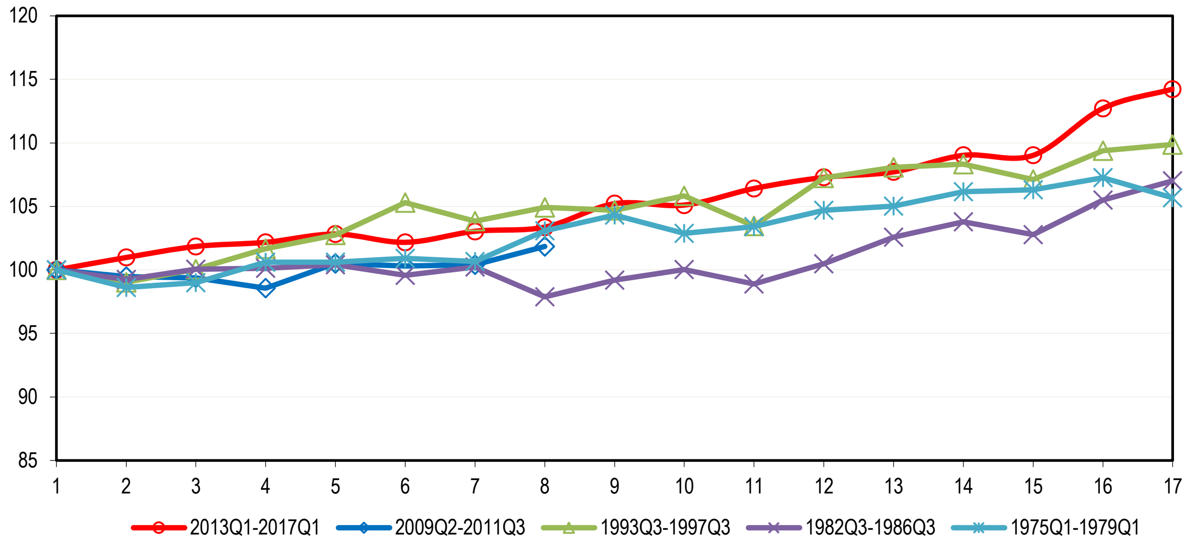

Figure 6 - Euro area investment: recoveries comparison

Note: The figure shows a comparison among the Investment in all the expansion periods dated by the Committee in the euro area. The solid lines are the Gross Fixed Capital Formation computed as index, with reference period the quarter of the different troughs. On the x-axis, the number of quarters after the troughs are shown. The first two series (red and dark blue lines) refer to Euro Area changing composition, while the other ones refer to Euro Area 19 fixed composition.

Data sources: Eurostat, AWM Database and Committee computation.

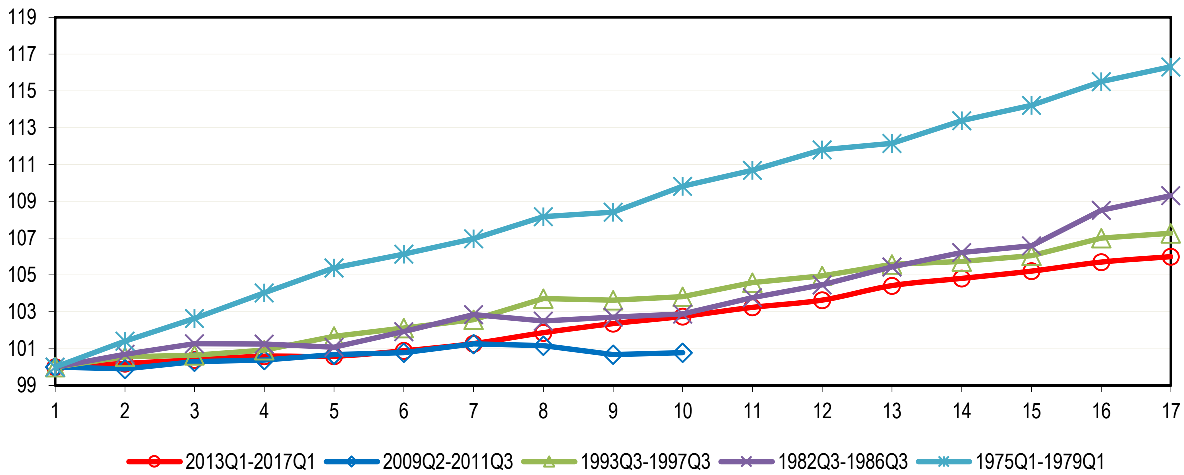

Figure 7 – Euro area consumption: recoveries comparison

Note: The figure shows a comparison among the Consumption in all the expansion periods dated by the Committee in the euro area. The solid lines are the Private Consumption series computed as index, with reference period the quarter of the different troughs. On the x-axis, the number of quarters after the troughs are shown. The first two series (red and dark blue lines) refer to Euro Area changing composition, while the other ones refer to Euro Area 19 fixed composition.

Data sources: Eurostat, AWM Database and Committee computation.

Contrary to the recent development of the US business cycle there have been no signs of the recovery in the Euro are being jobless. Euro area employment has expanded in 17 quarters at the fastest clip of all previous euro area recoveries (Figure 8). The increase in the number of persons working is commensurate with the growth in the total number of hours worked (Figure 5). Thus, an adjustment on the extensive margin of employment has been recorded.

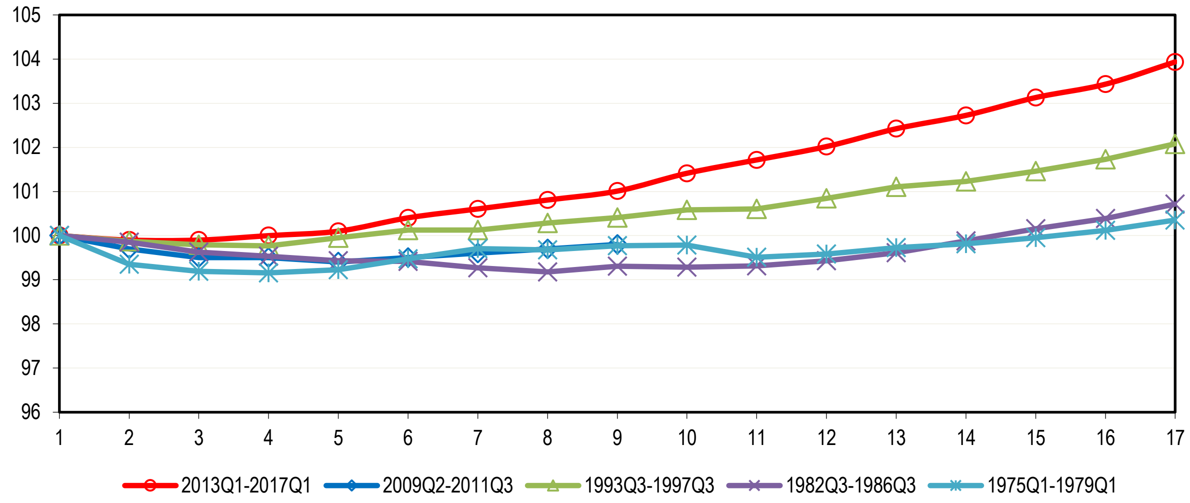

Figure 8 - Euro Area Employment (pers.): recoveries comparison

Note: The figure shows a comparison among the Employment in all the expansion periods dated by the Committee in the euro area. The solid lines are the Employment (in pers.) computed as index, with reference period the quarter of the different troughs. On the x-axis, the number of quarters after the troughs are shown. The first two series (red and dark blue lines) refer to Euro Area changing composition, while the other ones refer to Euro Area 19 fixed composition.
Data sources: Eurostat, AWM Database and Committee computation.

The exceptional pace of employment and investment recovery may reflect their much steeper than usual fall during the latest double-dip recession. Investment reached its pre-crisis level in 2016Q2 while employment caught-up with its pre-recession level in 2015Q2.

The modest GDP growth, despite the improvement in employment, entails a weak increase in labor productivity of only 3% above its value at the time of the trough.

Hence, the euro area is experiencing a low productivity recovery. The recovery has been long lasting albeit slow, and by its longevity has increased employment while raising GDP above its pre-recession peak.

Euro Area and US comparison

A comparison between the recent US and euro area experiences shows some striking similarities and provide a better understanding of the euro area current economic recovery. The performance of the euro area is indeed comparable with the rate at which the economy of the US had recovered 17 quarters into its latest recovery, started in 2009Q2 (Figure 9). Therefore, the euro area is currently at the same stage of the cycle as the US were two years ago, because of the second dip in the euro area recession. However, as shown in Figure 10, labor market in the US continued contracting after the trough and subsequently picked up faster than the euro area labor market.

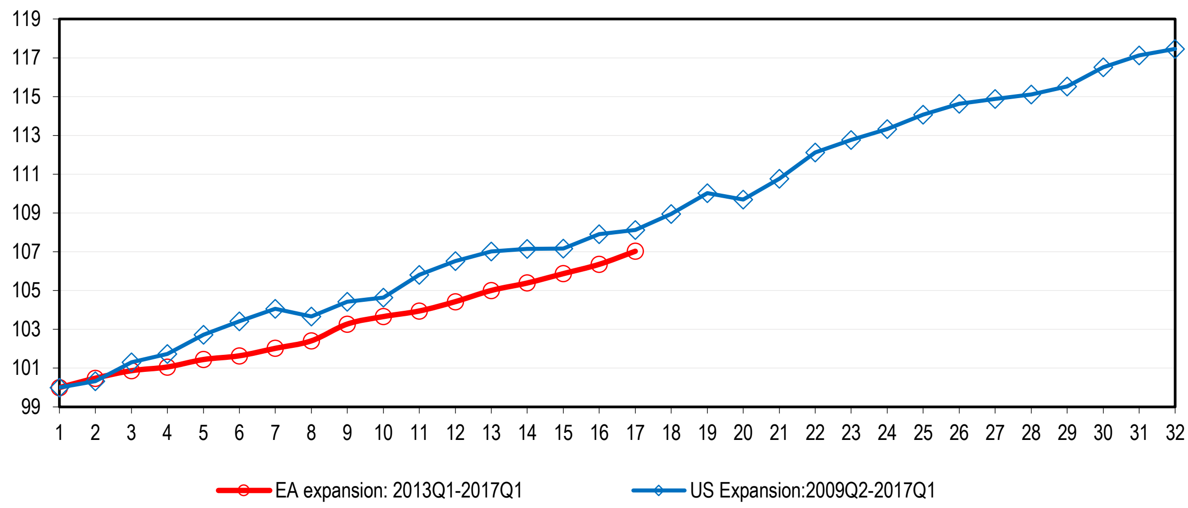

Figure 9 – US vs EA GDP

Note: The figure shows a comparison between the two latest expansion periods for the US and the euro area. The red line is the EA real GDP computed as index 2013Q1=100 for the period 2013Q1-2017Q1 and the blue line is the US real GDP computed as index 2009Q2=100 for the period 2009Q2-2017Q1. On the x-axis, the number of quarters after the troughs are shown.
Data sources: Eurostat, Fred Database and Committee computation.

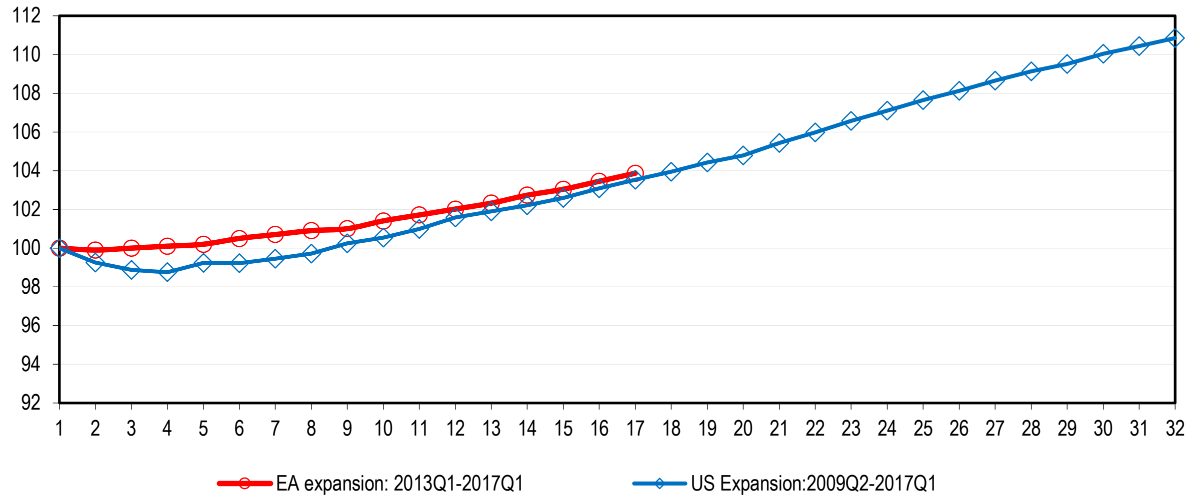

Figure 10 - US vs EA Employment

Note: The figure shows a comparison between the two latest expansion periods for the US and the euro area. The red line is the EA Employment in thousand persons computed as index 2013Q1=100 for the period 2013Q1-2017Q1 and the blue line is the US Employment in thousand persons computed as index 2009Q2=100 for the period 2009Q2-2017Q1. On the x-axis, the number of quarters after the troughs are shown.
Data sources: Eurostat, Fred Database and Committee computation.

The general message is that, despite being very slow by its own historical standards, the post-recession recovery of the euro area is commensurate with that of the US recovery, considering the later trough in the euro area. Thus, the US and the euro area are experiencing similar recoveries so far, but with a phase shift, as the euro area recovery began later – after the European crisis that followed the Global Financial Crisis.

Appendix: Heterogeneity in business cycles of euro area countries

The task of the Committee is to date the business cycle of the euro area as an aggregate, hence it does not date the turning points of individual countries. However, analysis of the euro area countries' key economic indicators is helpful for a deeper understanding.

As it has been since the financial crisis, the performances of euro area countries have continued to be diverse. The slow recovery in terms of weak GDP growth rate is tracked in the five largest euro area economies (Germany, France, Italy, Spain and Netherlands). France and Italy are experiencing a weaker recovery in comparison to the other countries (11). The employment (*2* has been growing in Germany: as of 2017Q1 it is roughly 4% higher than its value in 2013Q1 euro area trough. In Italy and Netherlands, employment has plummeted even after the recession was over, but recently picked up. Spain has experienced a very large drop in employment during the latest recession and, despite the recovery, employment has not reached the pre-recession level.

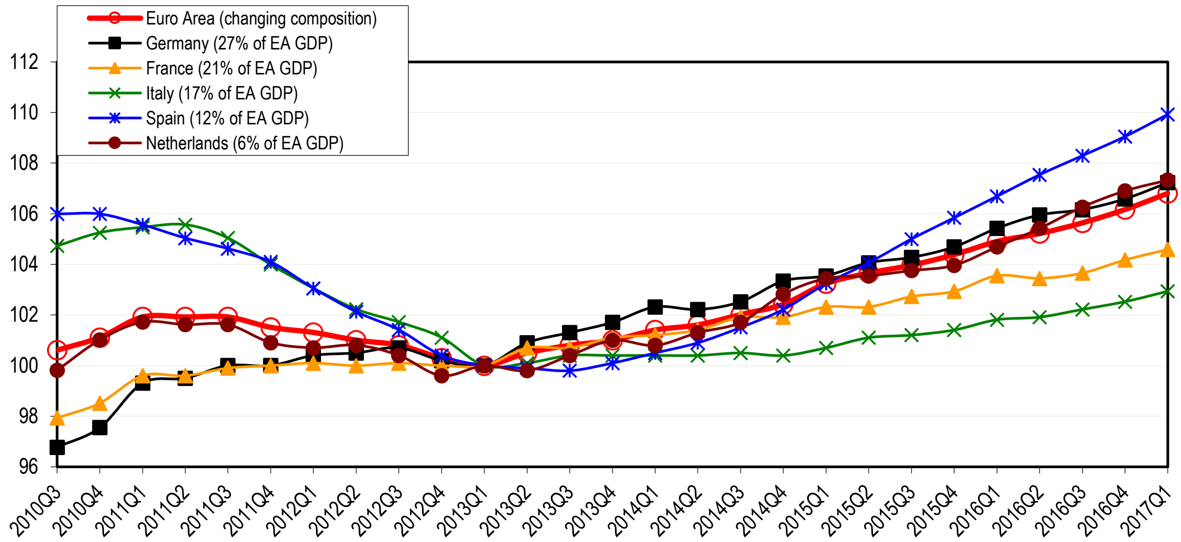

Figure 11 – Euro area countries GDP

Note: The figure shows the real GDP series for the euro area (red line) and the bigger five countries (Germany, France, Italy, Spain, Netherlands) computed as indices 2013Q1 = 100, for the period 2010Q3-2017Q1. Countries' weights are based on 2011 GDP.
Data source: Eurostat and Committee computation.

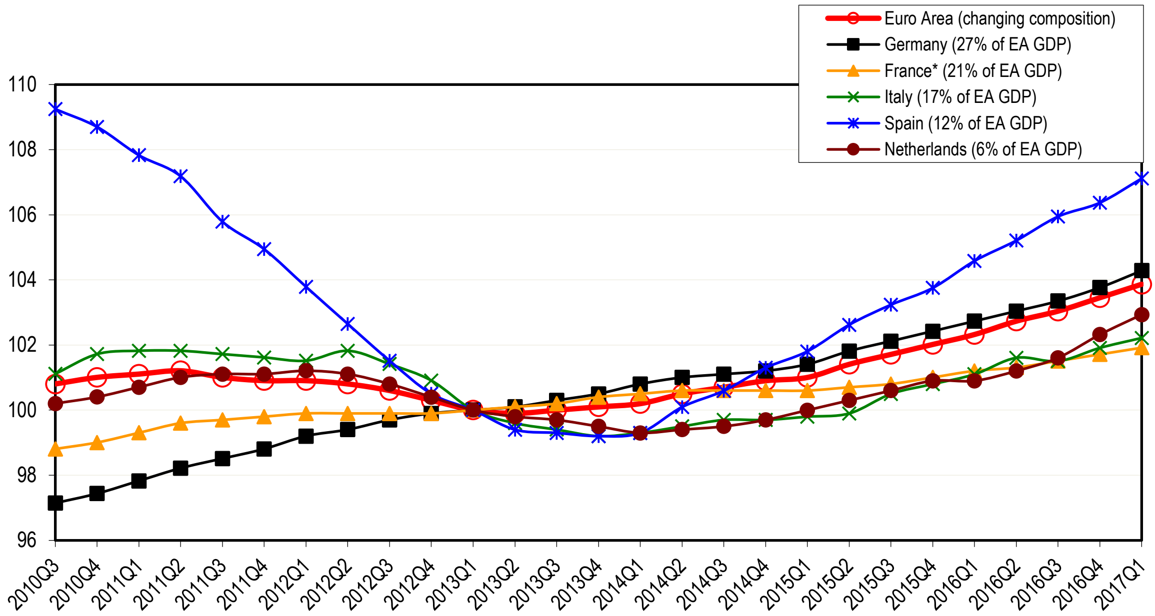

Figure 12 – Country employment (in pers.) Error! Bookmark not defined.

Note: The figure shows employment (in pers.) for the euro area (red line) and the bigger five countries (Germany, France, Italy, Spain, Netherlands) computed as indices 2013Q1 = 100, for the period 2010Q3-2017Q1. The time series are seasonal and calendar adjusted, except the employment for France is seasonal but not calendar adjusted. Countries' weights are based on 2011 GDP.

Data source: Eurostat and Committee computation.

However, a heat map representation of the main economic indicators expressed in quarter-on-quarter growth rates, for both the euro area aggregate and the largest five countries, shows a synchronization of the turning points (Figure 13). Hence, there is a strong co-movement across the five biggest economies in the euro area.

	2011Q4	2012Q1	2012Q2	2012Q3	2012Q4	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1
GDP EA	-0.4	-0.2	-0.3	-0.2	-0.5	-0.3	0.5	0.3	0.2	0.4	0.2	0.4	0.4	0.8	0.4	0.3	0.4	0.5	0.3	0.4	0.5	0.6
Private Consumption EA	-0.5	-0.2	-0.4	-0.2	-0.5	-0.3	0.2	0.2	0.2	0.0	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.7	0.4	0.4	0.4	0.3
Investment EA	-0.3	-1.7	-0.3	-1.5	-1.1	-2.1	1.0	0.9	0.3	0.7	-0.6	0.8	0.3	1.7	0.0	1.2	0.8	0.5	1.2	0.0	3.4	1.3
Employment (persons) EA	-0.1	0.0	-0.1	-0.2	-0.3	-0.3	-0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4
Employment (hours) EA	-0.3	-0.3	-0.8	-0.3	-0.7	-0.7	0.3	0.0	0.0	0.1	0.1	0.3	0.4	0.0	0.4	0.4	0.1	0.1	0.4	-0.1	0.2	0.4
GDP EA	-0.4	-0.2	-0.3	-0.2	-0.5	-0.3	0.5	0.3	0.2	0.4	0.2	0.4	0.4	0.8	0.4	0.3	0.4	0.5	0.3	0.4	0.5	0.6
Germany (27% of EA GDP)	0.0	0.4	0.1	0.2	-0.5	-0.2	0.9	0.4	0.4	0.6	-0.1	0.3	0.8	0.2	0.5	0.2	0.4	0.7	0.5	0.2	0.4	0.6
France (21% of EA GDP)	0.1	0.1	-0.1	0.1	-0.1	0.0	0.7	0.0	0.4	0.1	0.2	0.5	0.0	0.4	0.0	0.4	0.2	0.6	-0.1	0.2	0.5	0.4
Italy (17% of EA GDP)	-1.0	-0.9	-0.8	-0.5	-0.6	-1.1	0.1	0.3	0.0	0.0	0.0	0.1	-0.1	0.3	0.4	0.1	0.2	0.4	0.1	0.3	0.3	0.4
Spain (12% of EA GDP)	-0.5	-1.0	-0.9	-0.7	-1.0	-0.4	-0.1	-0.1	0.3	0.4	0.4	0.6	0.7	1.0	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.8
Netherlands (6% of EA GDP)	-0.7	-0.2	0.1	-0.4	-0.8	0.4	-0.2	0.6	0.6	-0.2	0.5	0.4	1.1	0.6	0.1	0.2	0.2	0.7	0.7	0.8	0.6	0.4
Employment (persons) EA	-0.1	0.0	-0.1	-0.2	-0.3	-0.3	-0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4
Germany (27% of EA GDP)	0.3	0.4	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5
France (21% of EA GDP)	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2
Italy (17% of EA GDP)	-0.1	-0.1	0.3	-0.4	-0.5	-0.9	-0.4	-0.2	-0.2	0.1	0.2	0.2	0.0	0.1	0.1	0.6	0.3	0.3	0.5	-0.1	0.4	0.3
Spain (12% of EA GDP)	-0.8	-1.1	-1.1	-1.1	-1.0	-0.5	-0.6	-0.1	-0.1	0.1	0.8	0.5	0.7	0.5	0.8	0.6	0.5	0.8	0.6	0.7	0.4	0.7
Netherlands (6% of EA GDP)	0.0	0.1	-0.1	-0.3	-0.4	-0.4	-0.2	-0.1	-0.2	-0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.0	0.3	0.4	0.7	0.6
Employment (hours) EA	-0.3	-0.3	-0.8	-0.3	-0.7	-0.7	0.3	0.0	0.0	0.1	0.1	0.3	0.4	0.0	0.4	0.4	0.1	0.1	0.4	-0.1	0.2	0.4
Germany (27% of EA GDP)	0.3	0.3	-0.8	0.3	-0.2	-0.9	0.8	0.5	-0.2	0.8	-0.2	0.3	0.2	0.2	0.2	0.0	0.4	-0.2	1.1	-0.1	0.3	0.3
France (21% of EA GDP)	0.0	0.1	-0.1	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.2	0.2
Italy (17% of EA GDP)	-0.5	-1.5	0.0	-0.6	-1.1	-1.3	-0.3	0.2	-0.4	0.0	0.1	0.4	0.3	-0.4	0.5	0.5	0.3	1.0	0.1	0.0	0.4	0.3
Spain (12% of EA GDP)	-1.1	-1.3	-1.5	-0.8	-1.7	-0.7	-0.2	-0.4	0.4	0.0	0.7	0.5	1.0	0.1	1.4	0.9	0.3	0.7	0.6	0.5	-0.3	0.9
Netherlands (6% of EA GDP)	0.4	-0.8	0.0	-1.0	-0.7	-0.1	0.9	-0.9	0.3	0.5	0.1	-0.3	0.3	-0.5	0.4	1.2	0.0	0.1	1.1	0.4	1.0	0.3

-3.5 0 3.5

Figure 13 - Euro Area Heat Map

Note: The figure presents a Heat Map for Euro Area and the largest five countries' GDP, Consumption, Investment and Employment (in number of persons and hours worked). The data are in percentage change over previous period. The legend below the table explains the rule for the graded color scale used to realize the Heat Map (from dark red, -3.5, to dark green, +3.5). The time period is 2011Q4-2017Q1.

Data Source: Eurostat.

Finally, Figure displays a scatterplot reporting GDP and employment in persons for 17 economies[4] of the euro area in 2017Q1, normalized such that the level of 2013Q1 equals to 100. The dotted lines represent the reference value (100) for GDP and Employment in the quarter of the trough. Hence, the countries on these lines experienced no change in the relevant variable since the trough of 2013Q1, such as Greece and Finland. The figure shows the heterogeneity in the recoveries of individual euro area countries.

[4] Data series for Ireland and Luxembourg are not available yet in 2017Q1.

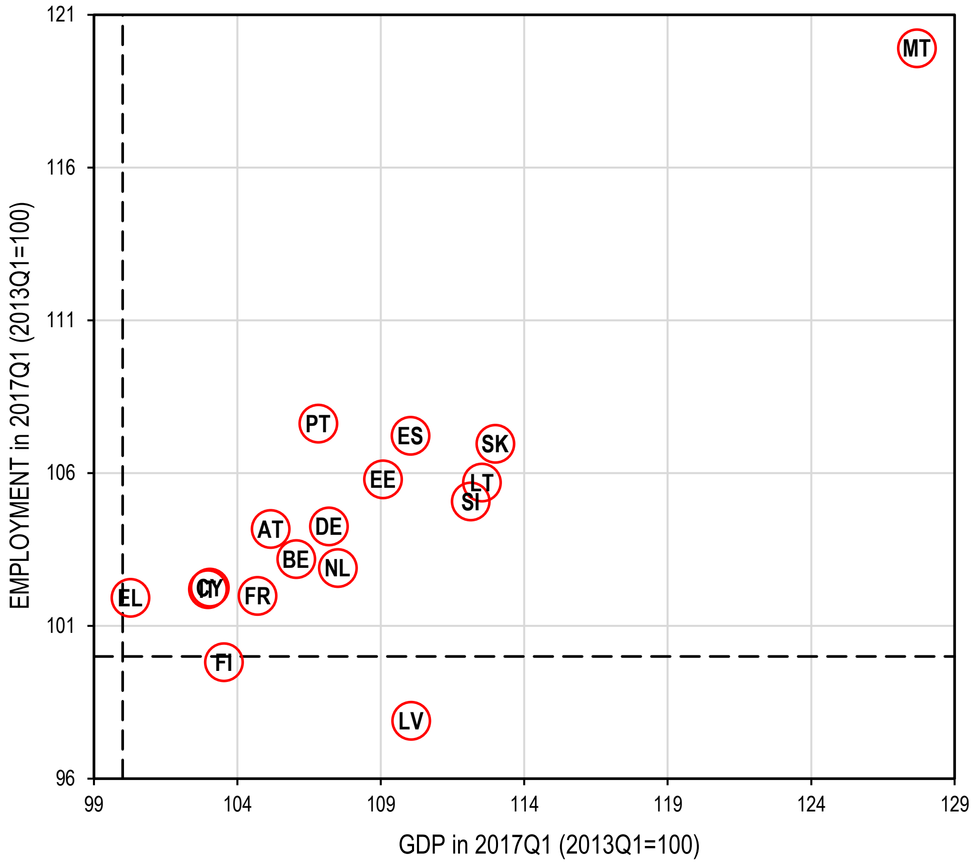

Figure 14 - Countries' GDP and Employment in 2017Q1 compared to 2013Q1

Note: The figure is a scatterplot for all 19 euro area countries. On the x-axis, the real GDP in 2017Q1 computed as index 2013Q1 = 100 is shown. On the y-axis, the Employment (in pers.) in 2017Q1 computed as index 2013Q1 = 100 is shown.

Data sources: Eurostat and Committee computation.