EURO AREA SECTORAL ACTIVITY SINCE 2008

The recession that started in 2008 has had a strong but unequal impact on all three main sectors of the euro area economy. Sectoral rebounds, where these have occurred since 2009, have fallen far short of the recoveries seen in the aftermath of previous recessions over the past four decades. Among the main sectors, construction activity has suffered the strongest and longest-lasting impact, with value added still about one-quarter below its pre-recessionary peak. By contrast, services value added returned to pre-recessionary levels after three years. Despite a strong rebound from the sharp drop in early 2009, euro area industrial value added (excluding construction) is still about 5% below previous peak levels. These developments at the aggregated euro area level obscure marked differences across the largest euro area countries.

1 INTRODUCTION

This article takes stock of developments in euro area sectoral activity since 2008. Following a business cycle peak, this period began with a quarter-on-quarter decline in euro area real GDP in the second quarter of 2008, which marked the start of the global "Great Recession" and an exceptionally strong fall in activity worldwide. Following a mild recovery of GDP growth between the third quarter of 2009 and the third quarter of 2011, the sovereign debt concerns which had emerged in some euro area countries over the course of 2010-11 resulted in a second contraction of euro area GDP – henceforth referred to as the "double dip" – between the final quarter of 2011 and the first quarter of 2013. In the rest of the article, the period containing the two latest euro area recessions is referred to as the "recessionary period" and the peak in the cycle before this period as the "pre-recessionary peak".

The article is structured as follows. Section 2 compares developments in euro area activity at the sectoral level since 2008 with those during previous recessions. Box 1 compares sectoral developments in the euro area with those in the United States. Section 3 pays attention to the key sectoral drivers of these developments, including country-based divergences behind aggregate euro area developments. Box 2 examines developments in the automotive sector, which has a considerable share in total manufacturing production. Section 4 concludes.

2 HISTORICAL COMPARISION WITH PREVIOUS RECESSIONS

The fall in euro area activity since 2008 has been broad-based, as all main economic sectors have been strongly affected, and has been more pronounced than in previous recessions. Chart 1 compares real GDP developments since the pre-recessionary peak in the first quarter of 2008 with those after previous peaks in the euro area business cycle, as identified by the Centre for Economic Policy Research (CEPR) Business Cycle Dating Committee, in 1974, 1980 and 1992.[1] It shows that, 23 quarters after the pre-recessionary peak (in the fourth quarter of 2013), the profile of euro area real GDP continues to diverge from the recovery patterns seen in the aftermath of prior recessions. Euro area real GDP fell some 5% over the course of the 2008-09 recession, which is a considerably stronger decline – almost twice as great – than that following the first oil price shock in the early 1970s. The large contraction was mainly brought about by the very steep fall in output that occurred in the last quarter of 2008 and the first quarter of 2009, as a consequence of strong financial turmoil, heightened uncertainty and an unprecedented decline in world economic activity and demand. External demand slowed and domestic demand also contracted considerably. Confronted with

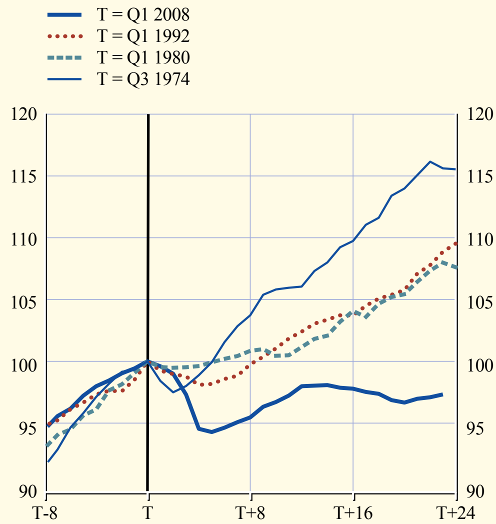
1 See also the box entitled "The current euro area recovery across economic sectors from a historical perspective", *Monthly Bulletin*, ECB, April 2010.

the sudden deterioration in business prospects, rapidly depleting order books and costlier and reduced access to financing, firms reacted by postponing investment and cutting inventories. Households, faced with greater uncertainty, increased their savings in the context of deteriorating short-term job prospects and portfolio losses, and delayed their consumption of non-essential goods and their investment in housing.

In the second half of 2009, real GDP returned to positive growth, albeit from a very low base. External trade picked up in the context of a recovery in global activity and domestic demand also recovered, partly reflecting a rise in confidence from previously low levels. The recovery in euro area economic activity was also supported by the accommodative monetary policy stance and other measures adopted to restore the functioning of the financial system. As financial market turbulence re-emerged on the back of sovereign debt concerns in some euro area countries in mid-2010, the recovery was interrupted as the euro area economy began to slow down before entering a new recessionary episode – the "double dip" – even before the prior peak of GDP had been reached again. This time, the weakness in euro area real GDP originated primarily in domestic markets (investment and consumption) rather than being a global phenomenon as in 2008-09. The weak pattern of GDP growth was adversely affected by low business and consumer confidence, high oil prices, tight bank credit standards, deleveraging by the corporate sector, fiscal consolidation, and tensions in sovereign debt markets mainly caused by concerns about the sustainability of public finances in a number of euro area countries.[2] All in all, in comparison with earlier recessions, the recovery since 2009 has thus been considerably more protracted, but nevertheless not untypical of what usually follows financial crises. It is not uncommon for GDP not to have reached pre-recessionary levels five to six years after the onset of such crises, as recoveries thereafter are often of a halting and protracted nature.[3]

Chart 1 Euro area real GDP across recessions

(index: T = 100 represents business cycle peak)



Sources: CEPR, Eurostat and ECB calculations.

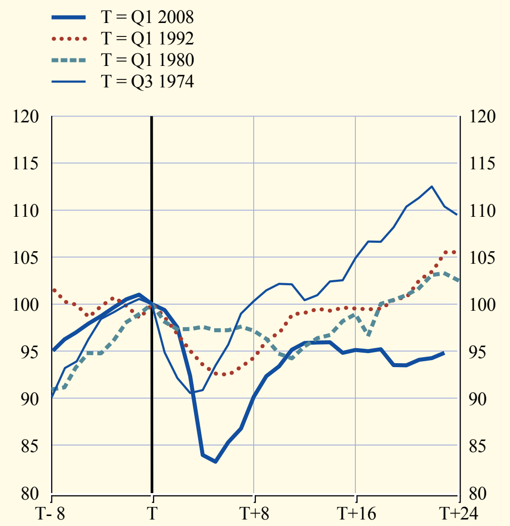
Turning to the three main economic sectors, sectoral growth rates rather than sectoral shifts have predominantly shaped the euro area output pattern since 2008. The value added patterns of the three main sectors have contrasted markedly with those experienced in the aftermath of previous euro area recessions. All three sectors have contributed to the comparatively muted real GDP

2 For more information on the impact of fiscal consolidation, see the box entitled "Growth effects of high government debt", *Monthly Bulletin*, ECB, March 2013, and the box entitled "The role of fiscal multipliers in the current consolidation debate", *Monthly Bulletin*, ECB, December 2012. Regarding costlier and reduced access to finance, see the article entitled "Extensions to the models for assessing money and credit", *Monthly Bulletin*, ECB, February 2014; the article entitled "Assessing the retail bank interest rate pass-through in the euro area at times of financial fragmentation", *Monthly Bulletin*, ECB, August 2013; and the article entitled "Assessing financing conditions for the euro area private sector during the sovereign debt crisis", *Monthly Bulletin*, ECB, August 2012. The February 2014 Monthly Bulletin article entitled "Deleveraging patterns in the euro area corporate sector" argues that deleveraging has been more pronounced in those sectors that had accumulated large amounts of debt in the run-up to the crisis and were most severely affected by it.

3 See Reinhart, C.M. and Rogoff, K.S., "Recovery from financial crises: evidence from 100 episodes", *NBER Working Papers,* No 19823, National Bureau of Economic Research, January 2014. They find that some 40% of episodes experienced double dips.

Chart 2 Euro area real value added in industry (excluding construction) across recessions

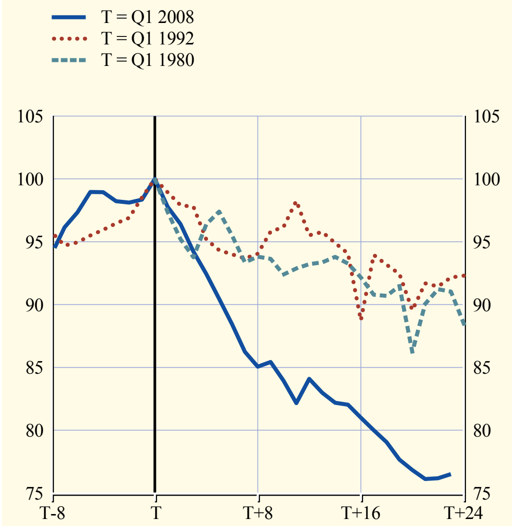
(index: T = 100 represents business cycle peak)



Sources: CEPR, Eurostat and ECB calculations.

Chart 3 Euro area real value added in construction across recessions

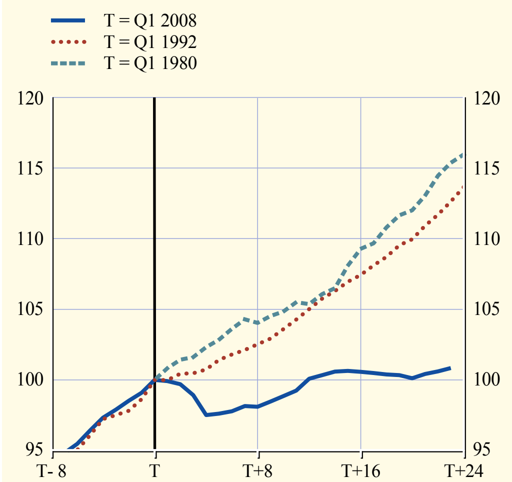
(index: T = 100 represents business cycle peak)



Sources: CEPR, Eurostat and ECB staff calculations.
Note: Data on construction value added are available from the first quarter of 1980.

Chart 4 Euro area real value added in services across recessions

(index: T = 100 represents business cycle peak)



Sources: CEPR, Eurostat and ECB calculations.
Note: Data on services value added are available from the first quarter of 1980.

developments since 2008, especially to the sharp drop in real GDP in 2008-09. In particular, industry excluding construction contributed to the rebound immediately after this period, and services have contributed to the muted recovery since 2009, whereas construction has remained a drag on the euro area economy throughout the period since 2008.

Industrial activity has been affected relatively strongly by some of the general drivers behind the recessionary period, such as heightened economic uncertainty, and costlier and reduced access to financing (see Chart 2).[4] Despite an initial strong rebound in the aftermath of the 2008-09 recession, almost six years on, industrial value added remains more than 5% below its pre-recessionary peak. While industrial value added has typically rebounded towards its pre-recession level within 12 quarters in all other recessions seen since the

4 See Ciccarelli, M., Maddaloni, A. and Peydró, J.-L., "Trusting the bankers – a new look at the credit channel of monetary policy", *Working Paper Series*, No 1228, ECB, July 2010; Gambetti, L. and Musso, A., "Loan supply shocks and the business cycle", *Working Paper Series*, No 1469, ECB, September 2012; and Hristov, N., Hülsewig, O. and Wollmershäuser, T., "Loan supply shocks during the financial crisis: evidence for the euro area", *Journal of International Money and Finance*, Vol. 31(3), 2012, pp. 569-592.

1970s, the recovery which followed the 2008-09 recession lasted for just six quarters before the second slowdown.

In construction, developments have been even bleaker, with a virtually unbroken contraction since 2008, which has resulted in real value added in that sector being about one-quarter below its pre-recessionary peak (see Chart 3). The protracted weakness in construction activity since 2008 can be attributed to a combination of weak consumer sentiment, significant credit constraints, a sharp fall in households' housing wealth and a significant supply overhang in certain euro area countries.

Even in services, where activity has rebounded to slightly exceed its pre-recessionary peak, the growth path is clearly slower than those observed after previous recessions (see Chart 4). In contrast to previous recessions, when services value added had continued to grow, it contracted distinctly against the background of weak private consumption and slackening business activity in the 2008-09 recession, thus contributing to the exceptionally sharp fall in real GDP. Moreover, the lacklustre recovery in the euro area stands in stark contrast to the sustained rebound in activity in the United States (see Box 1).

Box 1

A COMPARISON OF SECTORAL DEVELOPMENTS IN THE EURO AREA WITH THOSE IN THE UNITED STATES

This box compares economic growth in the euro area and the United States since 2001 (when harmonised sectoral data for the euro area commence). Specifically, it compares year-on-year developments, with a strong focus on the dynamics over the course of the crisis.

Prior to the global financial and economic crisis, for much of the 2000s, there had been a strong co-movement between US and euro area aggregate output, albeit with annual growth in the euro area lagging that in the United States by around two to six quarters.[1] With the outbreak of the US sub-prime crisis in 2007, US growth slowed markedly, followed some quarters later by similar developments in the euro area. This culminated in recessions in both economies as from 2008 (see Chart A).[2] Overall, the euro area appears to have suffered a stronger contraction in output than the United States, and its recovery path has been significantly more muted – particularly since the interruption of growth following the emergence of sovereign debt concerns in some euro area countries.[3] These trends have been particularly evident at the sectoral level.[4]

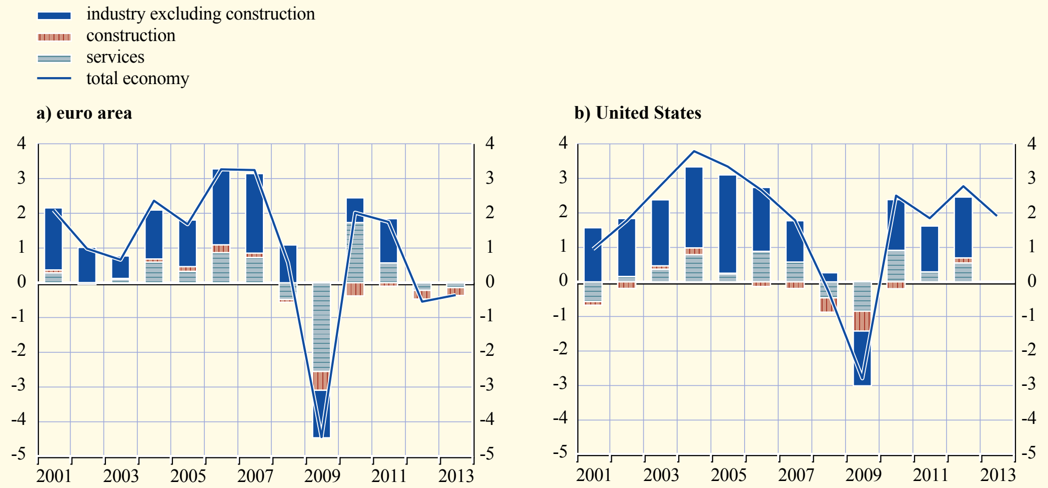
Developments in the industrial sector

The Great Recession of the late 2000s was triggered by the US sub-prime crisis, but in the presence of global vulnerabilities – such as an underpricing of risk that had resulted in a

1 See for example Giannone, D., Lenza, M. and Reichlin, L., "Business cycles in the euro area", *Working Paper Series*, No 1010, ECB, February 2009, and Dées, S. and Vansteenkiste, I., "The transmission of US cyclical developments to the rest of the world", *Working Paper Series*, No 798, ECB, August 2007.
2 According to the National Bureau of Economic Research, the US recession officially started in December 2007.
3 Partly, the overall stronger rates of US output growth can be explained by higher population growth, while differences in growth of GDP per capita are smaller.
4 When measured relative to estimates of potential output, the contractions are of a more similar magnitude in the euro area and the United States, at least during the initial downturns.

Chart A Value added growth and contributions of economic sectors

(annual percentage changes; percentage point contributions)

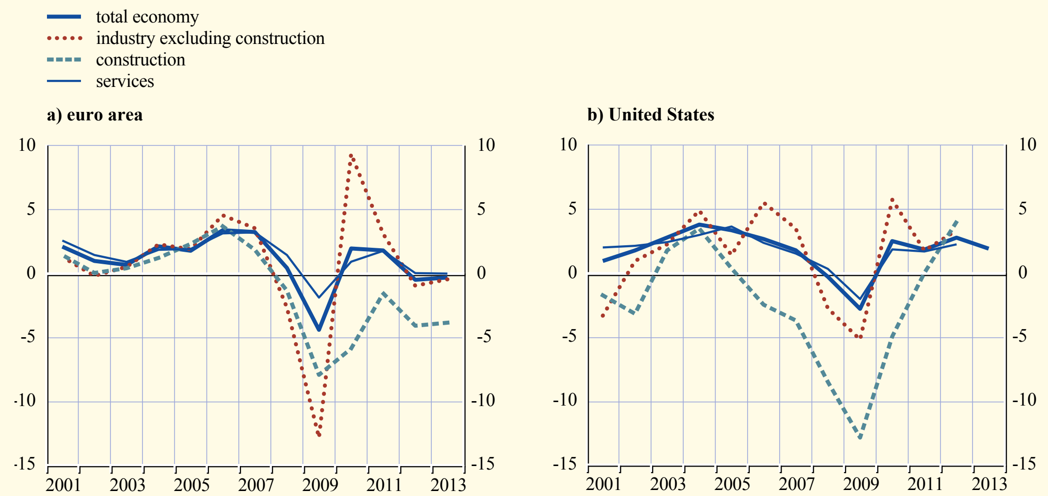


Sources: Eurostat and ECB staff calculations; United States Bureau of Economic Analysis.
Notes: Annual data. Contributions in the United States may not add up to the growth of total economy for reasons of comparability and statistical discrepancy. The latest observation for sectoral data in the US is 2012.

compression of credit spreads and high levels of leverage – it was quickly transmitted, via the global financial system, to the wider real economy on both sides of the Atlantic.[5] As can be seen in Chart A, over the course of the Great Recession, the euro area industrial sector was

Chart B Growth in value added by sector

(annual percentage changes)



Sources: Eurostat and ECB staff calculations; US Bureau of Economic Analysis.
Notes: Annual data. The latest observation for sectoral data in the United States is 2012.

5 See Brunnermeier, M.K., "Deciphering the Liquidity and Credit Crunch", *Journal of Economic Perspectives*, Vol. 23, No 1, Winter 2009, pp. 77-100 and "Patterns of euro area and US macroeconomic cycles – what has been different this time?", *Monthly Bulletin*, ECB, May 2011.

particularly hard hit by the sharp downturn in global demand, in part reflecting the higher share of industry (excluding construction) in total output in the euro area than in the United States (around 19.5% and 16.5% respectively).

Prior to the crisis, between 2001 and 2007, the industrial sector had been growing modestly (at roughly 2% per year, on average – see Chart B) in both economies. Following a more pronounced impact during the Great Recession (with euro area value added in the sector contracting by 12% in 2009 – more than double the 5.2% contraction recorded for the United States), the rebound in the euro area was also initially noticeably stronger than that in the United States, boosted in many euro area countries by strong public sector support for the industrial sector. This was particularly true for the economically important automotive sector, which was boosted by widely implemented "car scrapping" schemes in many euro area economies. These schemes were largely wound down and phased out by the end of 2010.

Since 2010, developments have diverged markedly across the two economies' industrial sectors. Euro area value added in industry (excluding construction) has slowed progressively from 9.3%, year on year, in 2010 to -1.0% in 2013, while US growth has remained robust, averaging around 3.6%, year on year, in 2012 (the latest year for which US data are available). Despite these different developments, the stronger contraction felt in the broader euro area economy has left the industrial shares of total value added in both economies broadly unchanged from their pre-crisis levels.

Developments in the construction sector

Given that the global financial crisis was triggered by developments in the US housing sector and that the ensuing credit squeeze had strong ramifications for residential investment globally (particularly in those economies which had previously shown distinct signs of overheating), the impact of the crisis appeared to be particularly immediate and long-lasting in the construction sector. Prior to the crisis, between 2001 and 2007, euro area value added in the sector had been growing at around 1.6%, year on year, on average, and represented a share of around 6.4% of the total economy. In the United States, growth in construction value added had already started to weaken in 2005 and turned negative in 2006 as growing distortions in the US housing market became evident, before plunging to -12.0%, year on year, in 2009 as the sub-prime crisis unfolded. As a consequence, the share of construction in total US value added fell from 5.6% in 2004 to 3.7% in 2010, after which it remained relatively stable. In part, this stabilisation reflects the introduction of a number of support measures for the housing sector by the US government and the Federal Reserve System in the wake of the wider consequences ("contagion") of the downturn in the sector seen during the Great Recession.[6] In the euro area, the crisis-led bursting of housing price bubbles in some euro area economies has resulted in a slow but continuous decline in the share of construction in total activity, from above 6% before the crisis to just under 5% by 2013.

Developments in the services sector

The services sector accounts for a slightly larger share of the total economy in the United States than in the euro area (roughly 78% and 74% of total value added respectively in 2013) and, as shown in Chart A, has been a major driver of US developments since the crisis. Even before

6 For more details, see "The impact of US housing support initiatives on recent housing market developments", *Monthly Bulletin*, ECB, September 2010.

the crisis, between 2001 and 2007, services sector growth in the United States had consistently outstripped that of the euro area, growing at an average of 2.5% and 2.0%, year on year, respectively. In the private sector-based market services segment, the differential was greater still, at 3.0% and 2.3% respectively over the same period, although both sectors contracted at similar rates at the depths of the recession. Since the initial rebound, the growth paths of the two economies' services sectors have diverged further, with US growth both markedly stronger and more sustained, which has helped boost aggregate growth to a far greater degree than in the euro area.

Concluding remarks

Despite some differences in the sectoral composition of the euro area and US economies, both economies were heavily affected by the global financial crisis of 2008-09. These compositional differences help to explain, in part, the stronger contraction in the euro area than in the United States at the depths of the Great Recession, as the euro area's larger industrial share suffered proportionately more from the ensuing downturn in global demand and trade. Unlike in the euro area, for the United States it has been the growth in the services sector – particularly the dynamic professional, business support and real estate services – which has led headline developments since the 2010 rebound. At the same time, protracted corrections to some formerly overheated euro area housing markets further limit the potential of the construction industry as an important contributor to euro area growth.

3 SECTORAL DRIVING FORCES

This section describes the main factors that may explain the muted developments in the main economic sectors of the euro area since 2008, as described in the previous section and Box 1, by taking a subsectoral perspective. Divergences among the four largest euro area countries behind aggregate euro area developments are also addressed. The analysis reveals that developments in industry excluding construction have been driven mainly by intermediate and capital goods, whereas construction has been predominantly affected by the evolution of building construction. The main driving force for the services sector has been trade, transport and business services activity.

3.1 INDUSTRY EXCLUDING CONSTRUCTION

Despite producing only around one-fifth of total output, industry (excluding construction) plays an important economic role, as the manufacturing sector has the highest multiplier effects via its interlinkages with the rest of the economy.[5] The industrial sector is dominated by the manufacturing industries (which together accounted for around 86% of the sector's output in 2010).

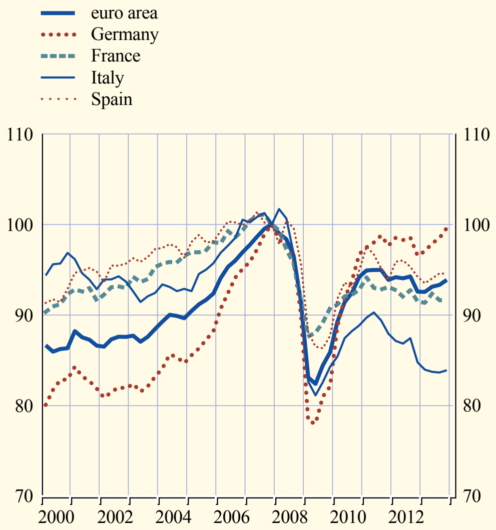
Value added in industry excluding construction expanded rather steadily between 2000 and 2007, at an average annual rate of 1.8% (see Chart 5). Among the four largest euro area countries, Germany grew at the fastest pace, driven by developments in intermediate and capital goods-producing industries, while the other three economies expanded more slowly. Growth in Italy was particularly sluggish over the period 2002-05, owing largely to lacklustre developments in the consumer goods

5 For Europe, see European Commission, *EU Industrial Structure Report 2013: Competing in Global Value Chains* (available at: http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/eu-industrial-structure/index_en.htm); for the United States, see The Manufacturing Institute, *The Facts About Modern Manufacturing*, 8th Edition, 2009 (available at: http://www.themanufacturinginstitute.org/~/media/D45D1F9EE65C45B7BD17A8DB15AC00EC.ashx).

sector. As has been shown, the recessionary period that started in 2008 was driven by various factors, some of which have hit industrial activity particularly hard. For instance, higher uncertainty led to a decline in demand for industrial goods, as household savings increased (at the expense of consumption of goods) and businesses delayed investment in machinery. Costlier and reduced access to financing may also have diminished expenditure on both consumer durables and capital goods. This is consistent with the finding that the effects of monetary policy in the euro area depend mainly on the durability of the goods produced in a sector.[6]

Chart 5 Real value added in industry (excluding construction): the euro area and its four largest economies

(index: Q4 2007 = 100)



Source: Eurostat.
Note: The euro area output peak for industry occurred in the fourth quarter of 2007.

Following the strong cyclical rebound in industrial value added between 2009 and 2010, which lost steam over the course of 2011, the slowdown in late 2011 was followed by a further fall in activity at the end of 2012. These output contractions, which were more modest than those seen back in 2008-09, were driven by developments in the highly cyclical intermediate and capital goods-producing sectors. Overall, even after the recovery that started in 2013, euro area industrial value added remains some 6% below its pre-recessionary level, though this gap obscures considerable cross-country variation. While industrial value added in Germany has just reached its pre-recessionary peak level, gaps still exist in Spain (-7%), France (-9%) and especially Italy (-17%).[7] Italy's large gap reflects broad-based developments across subsectors.[8] By contrast, Germany's gap disappeared owing to the strong rebound in the manufacturing industries that were hardest hit earlier (namely capital, intermediate and durable consumer goods).

Developments in euro area industrial production (excluding construction) can be decomposed into subcomponents in two ways, namely by the so-called main industrial groupings (MIGs) or by NACE (Rev. 2)[9] divisions. Compared with the standard NACE classification of activities from the production side, the classification by MIGs offers the advantage of grouping activities

6 See Peersman, G. and Smets, F., "The industry effects of monetary policy in the euro area", *The Economic Journal*, Vol. 115, Issue 503, Royal Economic Society, 2005, pp. 319-342.

7 There are statistical discrepancies between developments in quarterly value added data coming from national accounts statistics and industrial production data coming from short-term business statistics for the sector (available on a monthly basis). These differences can be large for some countries. For instance, using quarterly data, the gap between the release for the fourth quarter of 2013 and the pre-recessionary peak is more negative in the case of production than for value added, especially in France (-15% versus -9%), Italy (-24% versus -17%) and Spain (-30% versus -7%).

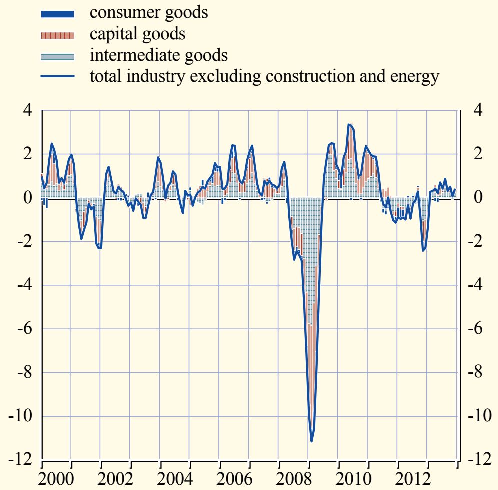
8 The Italian industries least affected since 2008 have been those belonging to the non-durable consumer goods subsector, such as those producing food and beverages.

9 The term "NACE" is the nomenclature of economic activities in the European Union and is derived from the French N*omenclature statistique des* activités *économiques dans la* Communauté européenne. The NACE classification provides the mandatory statistical framework for a wide range of European statistics, including national accounts, short-term statistics and labour market statistics, and is consistent with other international statistical classifications. With the introduction of NACE (Rev.2) in 2009, in particular the number of entries for services industries increased, reflecting the growing importance and the innovative contribution of services industries to modern economies. For further information, see the box entitled "Recent changes in short-term statistics", *Monthly Bulletin*, ECB, April 2009. Over time, classifications across sectors might have changed owing to reclassifications.

in terms of end users (namely, consumption, investment, intermediate use and, separately, energy use). Among these MIGs, the capital and intermediate goods-producing sectors have been more affected since 2008 than consumer goods activity (see Chart 6), and remain well below their pre-recessionary production levels, while consumer goods production is closer to its previous peak. However, within the consumer goods-producing sector, one segment – that of durable goods – has been particularly adversely affected since 2008 and remains far below its pre-recessionary level, partly reflecting developments in consumer spending on home-related products.[10] While energy production also fell markedly in 2008-09, its longer-term profile – although displaying considerable volatility – has been largely acyclical (possibly affected by factors such as energy supply disruptions and weather effects).

Chart 6 Euro area industrial production growth and contributions by main industrial groupings

(annual percentage changes; percentage point contributions; monthly data; seasonally adjusted)



Sources: Eurostat and ECB calculations.
Note: Data are calculated as three-month moving averages against the corresponding average.

The production breakdown by MIGs masks marked differences across the production for domestic or foreign purposes. The ECB indicator on euro area industrial new orders, which has shared the broad cyclical movements displayed by industrial production excluding construction, contains extra information for economic analysis since – unlike production data – it provides a decomposition by origins of demand.[11] Euro area non-domestic orders have fared better than domestic orders during the cyclical upswings (in particular, in the period prior to 2008 and in the recovery since the trough in 2009). Over the last two years a gap has emerged in non-domestic orders between the more dynamic component originating outside the euro area – which is currently at a record high – and the rather stagnant part originating inside the euro area.

Turning to a disaggregation by NACE groupings, over the whole period under consideration, manufacturing very closely mirrors the cyclical fluctuations previously described for industrial production (excluding construction). Chart 7 depicts the five largest disaggregated NACE divisions (four of them from the manufacturing grouping), which together account for almost half of industry excluding construction. As with manufacturing, mining and quarrying, as well as electricity, gas, steam and air-conditioning supply were adversely affected by the 2008-09 recession and rebounded after reaching a trough in 2009. However, these cyclical movements were much smaller than those seen in manufacturing. Furthermore, over the period since 2000 it is possible to infer largely acyclical fluctuations in electricity, gas, steam and air-conditioning supply (see Chart 7), and especially mining and quarrying – the latter also being a traditional activity that exhibits a secular declining trend.

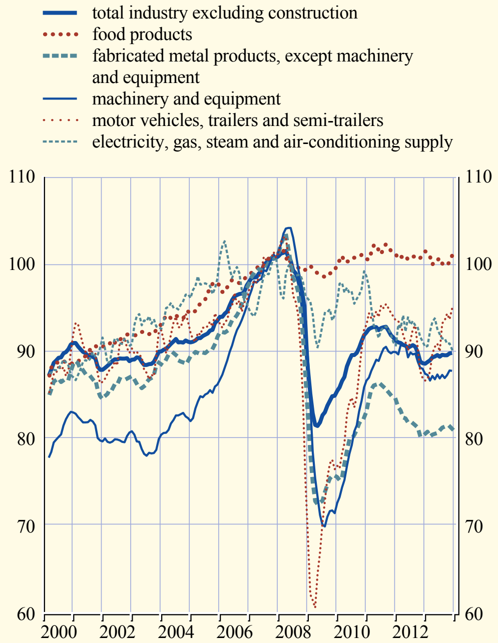
10 In cyclical terms, both consumer non-durables and consumer durables have made smaller contributions to overall developments than capital goods and intermediate goods. The reason is that consumer non-durables have tended to show relatively subdued fluctuations, while consumer durables have had a small weight in total production.

11 See the box entitled "Introducing the ECB indicator on euro area industrial new orders", *Monthly Bulletin*, ECB, July 2013, and de Bondt, G., Dieden, H.C., Muzikarova, S. and Vincze, I., "Introducing the ECB indicator on euro area industrial new orders", *Occasional Paper Series*, No 149, ECB, June 2013.

A further disaggregation within manufacturing shows that production in some of the largest manufacturing divisions – motor vehicle production, fabricated metal production and machinery not elsewhere classified – fell markedly during the 2008-09 recession. Among them, motor vehicle production recovered robustly in the two years following the trough, helped to a considerable extent by government support measures (see Box 2). For fabricated metal products and especially machinery not elsewhere classified, the recovery was less strong, with the gap vis-à-vis pre-recessionary peaks remaining considerably larger. Food processing has been quite stable since 2008, with production levels currently slightly above their pre-recessionary peak. Production in pharmaceuticals was also hardly affected by the 2008-09 recession and has since grown robustly. In these two divisions, consumer demand remained resilient as they produce goods that households tend to view as necessities.[12] At the same time, some more traditional and labour-intensive industries, such as tobacco, textiles, clothing, leather and furniture, have been in decline for some time in the euro area.

Chart 7 Euro area industrial production: selected subsectors

(index: Q4 2007 = 100; three-month moving averages)



Source: Eurostat.
Note: The selected subsectors correspond to NACE (Rev. 2) divisions.

12 See, for example, the analysis of the crisis' effects on retail trade in Eurostat, "Recession in the EU: its impact on retail trade", *Statistics in focus*, No 88/2009. In the case of pharmaceuticals, the relatively good performance may also be traced to some euro area countries' competitiveness in this capital-intensive sector (see European Commission, *EU Industrial Structure Report 2013: Competing in Global Value Chains*, op. cit.).

Box 2

DEVELOPMENTS IN THE EURO AREA CAR INDUSTRY SINCE 2008

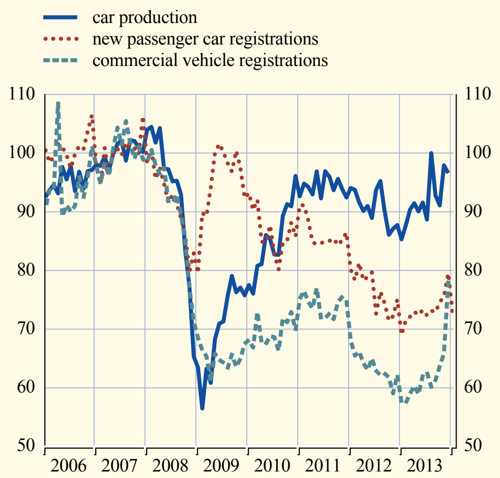
This box describes developments in the euro area car industry since 2008. Car production is more volatile than many other manufacturing industries, while following the broad sectoral cyclical patterns. The car industry also has a significant share in the gross value added of euro area manufacturing. It represents 6.8% of industry excluding construction, or 1.4% of the total economy, based on gross value added data over 2000-10. Among the four largest euro area countries, the share of the car sector in manufacturing is the largest in Germany (15.2%), followed by Spain, France and Italy (8.1%, 6.1% and 5.2% respectively). As with other manufacturing industries, these weights understate the actual importance of the industry in the economy, which has considerable spillovers to other sectors.

Developments in the period 2008-09

During the immediate pre-crisis period (2006-07), there was no clear trend in euro area sales of cars when looking, for example, at new passenger car registrations, despite a steady expansion in car production (see Chart A, which also shows new commercial vehicle registrations).[1] However, in 2008 both sales of passenger cars and production in the industry fell markedly in the euro area, reflecting the significant impact of the crisis at home and abroad. From peak (December 2007) to trough (January 2009), sales of passenger cars fell by some 25% and production decreased by around 37%. The large contractions in the industry reflected its sensitivity to developments in disposable income and households' net worth, as well as heightened uncertainty (which raised savings relative to consumption) and tighter credit constraints. In response to the downturn in the car industry, various fiscal incentive schemes were introduced to lift car purchases in a number of euro area countries.[2] As a result, sales of passenger cars recovered rapidly in the first half of 2009, while production fell somewhat further, before responding to the improvement in demand. By reacting with a lag to the incentive schemes, euro area production fell short of sales, resulting in some destocking.[3]

Chart A Euro area car industry

(index: 2007 = 100; monthly data)



Sources: European Automobile Manufacturers' Association (ACEA) and Eurostat.

Developments in the period 2010-13

The rebound in car production was followed by a second downturn, as with many other industries, but also displayed some specific features. In 2010, most governments phased out the car scrapping schemes introduced during the crisis. This is an important factor in explaining developments in euro area sales of passenger cars, which fluctuated in a relatively low range in 2010-11. Over the same period, this indicator of car sales was outpaced by production, whose dynamism in 2010 was followed by some stabilisation in 2011. Given the absence of evidence of a possible restocking process, one explanation for the increase in production in the industry relative to sales of passenger cars is a rebound in extra-euro area exports of cars, which rose by

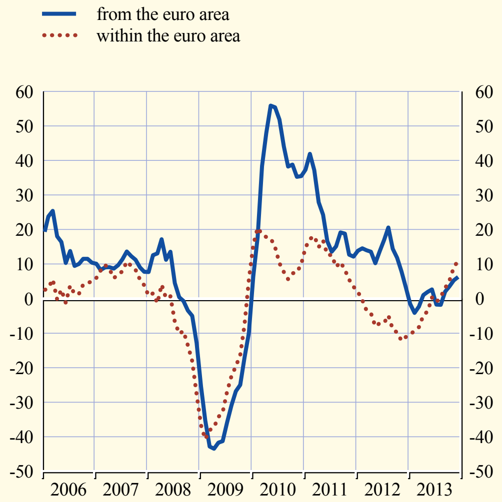
1 For more information on production and sales over the period 2008-10, see the box entitled "The effects of vehicle scrapping schemes across euro area countries", *Monthly Bulletin*, ECB, October 2009, and the box entitled "Developments in the euro area and global car industries", *Monthly Bulletin*, ECB, December 2010. Passenger car registrations include those made by households, car retailers themselves and all other firms more generally (i.e. for company cars). While this box likens registrations to sales, the two concepts differ in terms of timing; moreover, car registration statistics count numbers, not purchasing volumes.

2 These so-called car scrapping schemes provided monetary incentives for the replacement of old cars.

3 Although production in the industry and sales of passenger cars are not strictly comparable for various reasons (such as the roles of commercial vehicles and extra-euro area trade), the destocking process described in the text also relies on supporting anecdotal evidence. Concerning extra-euro area exports (based on Eurostat data that are nominal and unadjusted for seasonality or the number of working days), they initially contributed to mitigating somewhat the fall in euro area production, as they expanded by 3.3% in 2008, while constraining the recovery of 2009, when they fell by some 30% (see Chart B). Intra-euro area exports of cars are part of euro area demand and thus associated with sales. The measurement of exports differs from that of production, in that the latter is computed on a value-added basis. Finally, any contribution of firms' car demand to the destocking process must have been minor, since new commercial vehicle registrations dropped more or less in tandem with production (see Chart A).

Chart B Exports of motor vehicles, trailers and semi-trailers

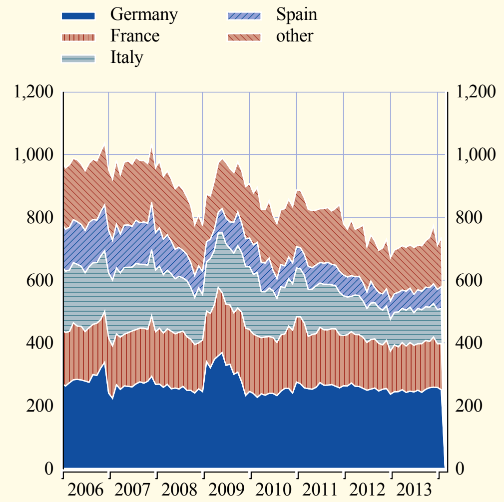
(monthly data; year-on-year percentage changes; three-month moving averages)



Source: Eurostat.

Chart C New passenger car registrations in the four largest euro area countries and other euro area countries

(monthly data; absolute values in thousands)



Source: ACEA.

42% in 2010 and by 21% in 2011 (see Chart B). Another possible explanation is that demand for commercial vehicles was lifted by euro area firms, as captured by rising new commercial vehicle registrations (see Chart A).

The period since 2012 does not exhibit a clear trend in sales of passenger cars and production in the industry. Production in 2012 showed high volatility, with some tendency to fall alongside deteriorating sales (see Chart A). This lacklustre performance in car production occurred despite strong growth in euro area exports of cars (see Chart B). The level of car sales in 2012 was depressed compared with the pre-crisis period, partly as a result of lower real disposable income in stressed countries (see Chart C).

In 2013, there were some signs of a recovery in production and sales of passenger cars – in the latter case from historically low levels. The robust pace of new passenger car registrations in the fourth quarter of 2013 partly reflected forward purchasing ahead of tax hikes in some countries at the start of 2014. From around mid-2013, there was also greater demand for commercial vehicles (e.g. trucks) from firms in the euro area, the latest acceleration being attributable in part to the anticipated introduction of the Euro VI emission standards. Survey data are in line with the recent improvement in production.[4]

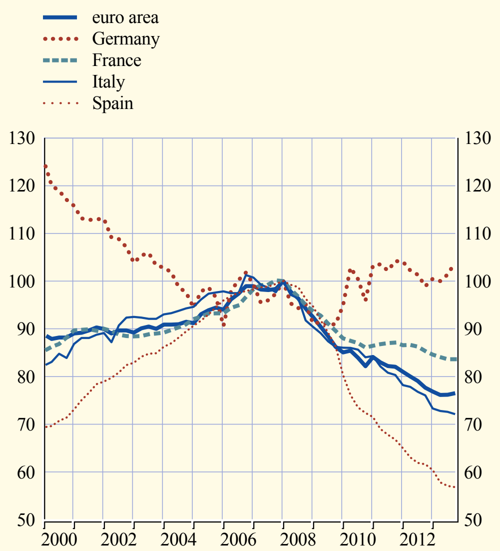
4 This increasingly favourable assessment of output developments could, however, understate the difficulties faced by the car industry in which some producers are offering discounts to encourage customers to buy more cars. Throughout the first three quarters of 2013, survey data indicated that prices charged in the industry were declining. In the fourth quarter of 2013, these surveys pointed to price increases.

3.2 CONSTRUCTION

The construction sector has been the most strongly and persistently affected of the three main economic sectors since 2008. In year-on-year terms, it has been characterised by virtually uninterrupted contractions and a continuous decline in employment since mid-2008. Its share in real total euro area value added has shrunk by 1.7 percentage points since early 2000, to just below 5%, albeit with marked differences across countries.[13] In spite of its low share, the construction sector plays a significant role for the business cycle, monetary policy transmission and financial stability, owing to spillover effects to the other productive branches and its impact both on households' housing wealth and on household and corporate financial flows.[14] The virtually uninterrupted decline in construction output since mid-2008 is observable at the euro area level (see Chart 8) and in the largest euro area economies, with the exception of Germany. As Germany had already experienced a housing boom after reunification and as property prices there had increased only slightly prior to 2008, value added is already above its pre-recessionary peak.

Chart 8 Real value added in construction: the euro area and its four largest economies

(index: Q1 2008 = 100)



Source: Eurostat.

Elsewhere, construction value added declined strongly in many other euro area countries, as imbalances and housing bubbles had built up before the recessionary period as a consequence of eased housing finance conditions, strong income growth and high levels of confidence. A tightening of credit standards, a collapse of confidence, a fall in demand, a devaluation of property assets (making building and renovating less profitable) and a decline in households' housing wealth strongly affected construction activity, as well as consumption and employment.

In contrast to the other economic sectors, construction generally did not rebound in 2010-11 owing, in part, to tight financing conditions, low or negative real income growth and a considerable property overhang in some countries, which curbed demand and dampened property prices, in turn further discouraging construction activity.[15]

The main driver of total construction activity is the construction of buildings (representing almost 80% of total construction activity). This segment was particularly hard hit by the recessionary period, because it is more sensitive to the business cycle and the factors mentioned above than civil engineering. Civil engineering, by contrast, was supported by several governments in order to

13 In Spain, the construction sector represented 13.7% of total value added at its peak and still accounts for 8.1% today. By contrast, the share of the construction sector in Germany is only 3.8%.

14 See, for example, Mishkin, F.S., "Housing and the monetary transmission mechanism", *NBER Working Papers*, No 13518, National Bureau of Economic Research, October 2007; Leamer, E.E., "Housing IS the business cycle", *NBER Working Papers*, No 13428, National Bureau of Economic Research, September 2007; and Duca, J. V., Muellbauer, J. and Murphy, A., "Housing markets and the financial crisis of 2007-2009: Lessons for the future", *Journal of Financial Stability*, Vol. 6(4), 2010, pp. 203-217.

15 See the box entitled "Recent house price developments in the euro area" in the November 2013 issue of the Monthly Bulletin.

stimulate domestic demand in the aftermath of the 2008-09 recession. Nevertheless, these measures have been mostly scaled back in the context of fiscal consolidation since the emergence of the sovereign debt concerns in 2010. Overall, adjustment of the euro area construction sector is still ongoing, reflecting, in part, the still significant supply overhang and tight credit conditions in some euro area countries, weak income growth and low construction confidence.

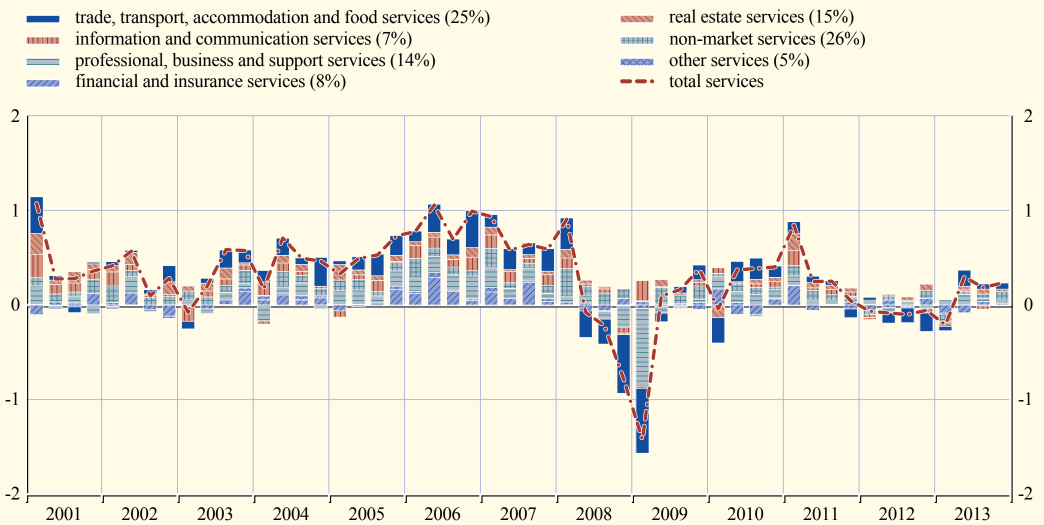
3.3 SERVICES

Services activity has been more resilient since 2008 than activity in the industrial and construction sectors. This notwithstanding, quarter-on-quarter growth in services real value added was negative for a prolonged period during the last two euro area recessions (see Chart 9).

These developments have been strongly determined by developments in trade, transport, accommodation and food services. This subsector accounts for around 25% of euro area services and includes a range of both business-to-business and business-to-consumer services. Some of these are largely domestically provided and consumed by households (such as retail trade, hotels and accommodation), while others depend heavily on broader business-to-business developments and global trade patterns (such as the air and sea cargo transportation or business travel). Transport was particularly affected by a slowdown in global trade and disruptions in supply chain flows, especially during the 2008-09 recession. Retail trade as a whole was affected by declining consumption, with a marked shift in the structure of demand towards cheaper, non-branded goods, which led to a decline in demand for more costly goods. Sales of food products held up somewhat better, owing to their lower elasticity with respect to the economic cycle, as well as price cuts and special offers by retailers.

Chart 9 Growth in euro area real value added in the services sector and subsector contributions

(quarter-on-quarter percentage changes and percentage point contributions)

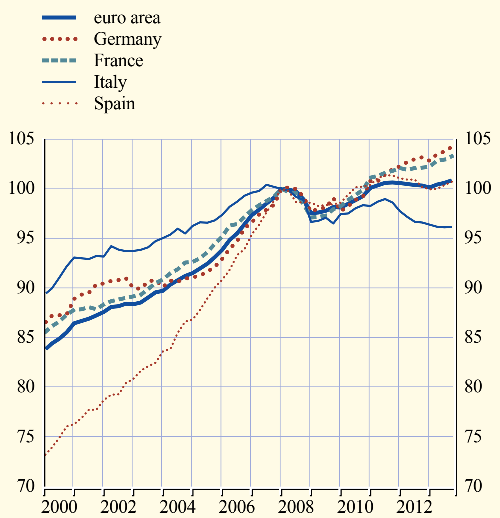


Sources: Eurostat and ECB calculations.
Note: Figures in brackets denote shares in total services value added in 2013.

At the depth of the 2008-09 recession, the professional and business support services segment also acted as a strong drag on services sector growth. During this period, there were widespread indications that business services companies were cutting back investment projects and that there was a strong focus on working capital needs. Demand was shifting towards services typical of recession periods, with postponements of services related to long-term projects, declines in one-off and "transactions" business, and cutbacks in temporary staff and contracts. At the same time, services demand benefited from an increasing need for compliance activity, greater recourse to outsourcing and a focus on cost-saving activities.

Chart 10 Real value added in services: the euro area and its four largest economies

(index: Q1 2008 = 100)



Source: Eurostat.

The financial and insurance sector has contributed negatively or only slightly positively to total services value added growth since 2008, with the exception of more positive contributions in the first quarters of 2010 and 2011. This stagnation of the euro area financial sector since 2008 is in line with broadly unchanged euro area bank assets over the period 2008-13,[16] but stands in sharp contrast to pre-recessionary years when the financial sector contributed positively to growth in services value added.

During the sharp fall in services activity in the first quarter of 2009, only information and communication activities contributed positively to growth in total services value added. On the back of technological progress and the new business platforms provided by the internet, information and communication activities boosted growth in the euro area during the first recession since the start of EMU. Real value added of the more acyclical segment of non-market services (public administration, education, health care and social services) has continued to grow largely uninterrupted at the euro area level since 2008. Non-market services contributed positively to growth in total services value added in the euro area, in particular during the 2008-09 recession, whereas its contribution was more or less neutral in the most recent recession in the context of increased fiscal consolidation efforts.

Developments in the services sector at the euro area level obscure marked differences across the largest euro area countries (see Chart 10). Among the largest euro area countries, the services sector in Italy has been the worst performer since 2008. Real value added of market services and non-market services are still below pre-recessionary levels in Italy. By contrast, in Germany and France, real value added of both market and non-market services have been at record high levels in recent quarters.

16 Schoenmaker, D. and Peek, T., "The state of the banking sector in Europe", *OECD Economics Department Working Papers*, No 1102, OECD, January 2014.

4 CONCLUDING REMARKS

The global financial and economic crisis led to a remarkably turbulent period in the euro area economy, resulting in two recessions in quick succession and overall lacklustre growth, despite a strong rebound from the initial trough in activity in 2009. During this period, the economic sectors have displayed very different developments. While services sector activity at the aggregate level has rebounded to pre-recessionary levels, the construction sector has endured a more permanent downsizing, in part as a correction of previously overheated housing markets in some euro area countries. The cyclical industrial sector was also severely affected by the sharp downturn in global demand during the crisis. While industrial activity has rebounded from its trough in 2009, it has remained somewhat below its pre-recessionary peak. Among the largest euro area countries, activity in industry including construction in Italy and Spain has continued to be a drag on aggregate euro area developments since 2008. Services real value added in Italy has also been comparatively weak. By contrast, the French services sector has performed comparatively strongly since the crisis. In Germany, real value added in all three sectors was at or above pre-recessionary levels in 2013.