Box 6

FACTORS BEHIND THE FALL AND RECOVERY IN BUSINESS INVESTMENT

The level of business investment has shrunk considerably since the peak in activity in 2008, contributing strongly to the decline in euro area GDP.[1] Business investment began to recover in the second quarter of 2013 and, according to the March 2014 ECB staff macroeconomic projections for the euro area, is projected to continue firming – albeit well below its pre-crisis peak – until 2016.[2] This box provides stylised facts about the decline in business investment, reviews factors behind this decline and draws conclusions concerning the projected recovery.

Since 2008, business investment in the euro area has displayed some of the typical patterns of financial crises, with a more pronounced downturn followed by a slower recovery than is usually observed in recessions that are not associated with financial crises ("normal" recessions) (Chart A). In 2011, the euro area experienced another recession in the context of a sovereign bond crisis in several euro area countries, accompanied by a pronounced decline in business investment.

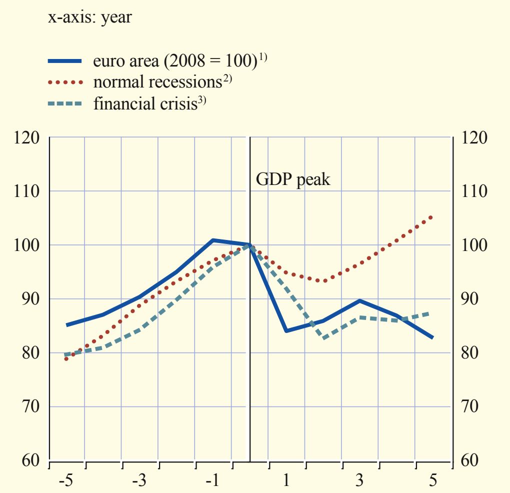
From an international perspective, a comparison of business investment in the euro area with that in some other advanced economies shows that, while investment in the euro area developed broadly in line with investment in other advanced economies over the period 2008-10, it has been relatively weaker since 2011, especially in comparison with the United States (Chart B).

A comparison of investment developments in the euro area by sector shows that the contractions recorded in 2009 and 2012 were driven mainly by the decline in the services sector (Chart C). While investment in the construction sector has displayed the greatest fall (45%), its contribution to the decline has been rather modest, owing to its relatively small share of total investment. Overall, in comparison with previous cycles, the declines in the services and construction sectors have been exceptional, while the decline in the industrial sector (excluding construction) since 2009 has been similar to earlier downturns.

There are several factors which play a role in firms' investment decisions. Some are standard factors, such as profitability and demand. Indeed, the weakness in business investment since 2008 has corresponded to weak demand,

Chart A Business investment during normal recessions and financial crises

(index, GDP peak = 100)

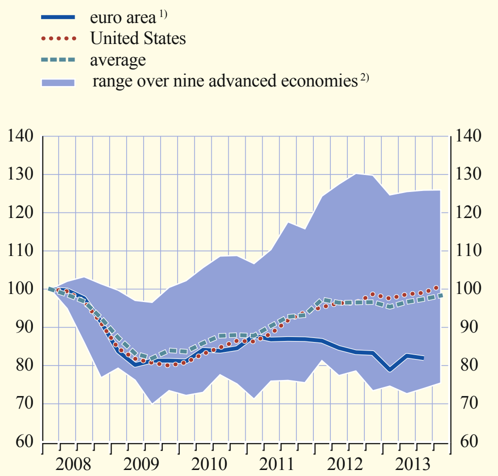


Sources: OECD and Eurostat.
1) Euro area business investment is measured using gross fixed capital formation of non-financial corporations. The price-adjusted series is derived using the gross fixed capital formation deflator.
2) Normal recessions are defined as recessions not associated with financial crises. Median development is based on a dataset for 16 advanced economies from 1970 to 2012.
3) According to Laeven and Valencia (2013), 17 financial crises have been identified.

1 For more details on the decline in business investment, see the box entitled "Business investment – signs of a modest recovery ahead", *Monthly Bulletin*, ECB, January 2014.
2 See the article entitled "March 2014 ECB staff macroeconomic projections for the euro area", *Monthly Bulletin*, ECB, March 2014.

Chart B International comparison of business investment since 2008

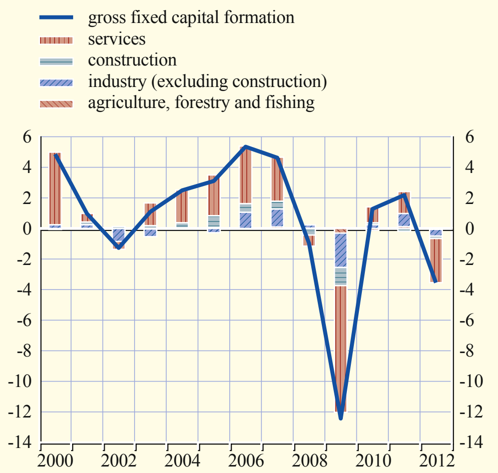
(index; Q1 2008=100)



Sources: OECD, computations on national accounts.
1) Euro area business investment is measured using gross fixed capital formation of non-financial corporations. The price-adjusted series is derived using the gross fixed capital formation deflator.
2) The nine advanced economies are Australia, Canada, Denmark, Japan, Norway, South Korea, Sweden, the United Kingdom and the United States.

Chart C Gross fixed capital formation and sectoral contributions; euro area

(annual percentage change and contributions)



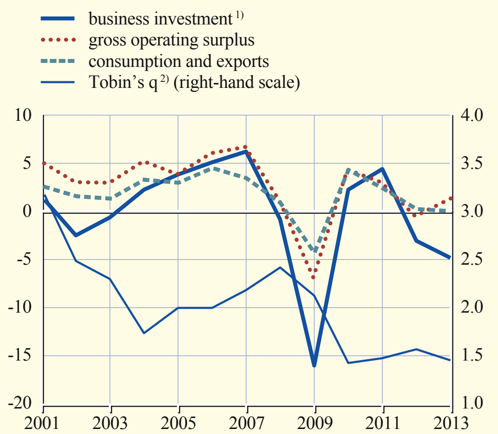
Sources: Eurostat and ECB staff calculations.

low profitability growth and weak investment incentives, as shown by the ratio between the market value of an asset and its replacement value, or Tobin's q (Chart D). There are also some other more crisis-specific factors, such as uncertainty, financial conditions and structural factors, which have been particularly prominent since 2008.

First of all, there is evidence that business investment reacts to changes in uncertainty owing to the irreversibility of investment decisions and adjustments costs. According to the indicators available, the sharp increases in 2008 and 2011 in financial market uncertainty, economic uncertainty and policy uncertainty are correlated with the decline in business investment (Chart E).[3] Thereafter, financial market uncertainty decreased considerably. Policy uncertainty has come closer to normal levels in recent quarters, while economic uncertainty remains elevated.

Chart D Business investment and some of its determinants

(year-on-year percentage change)



Sources: Datastream, Eurostat and March 2014 ECB staff macroeconomic projections for the euro area.
1) Euro area business investment is measured using gross fixed capital formation of non-financial corporations. The price-adjusted series is derived using the gross fixed capital formation deflator.
2) Tobin's q is defined as the ratio of the market value of an asset to its replacement value.

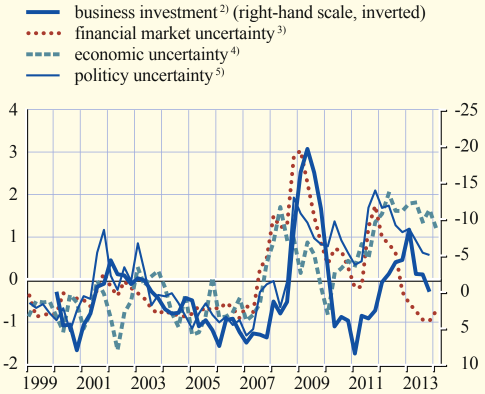
3 For a detailed description of the three measures of uncertainty, see the box entitled "How has macroeconomic uncertainty in the euro area evolved recently?", *Monthly Bulletin*, ECB, October 2013.

According to these indicators, uncertainty has become less of a drag on business investment.

Second, unfavourable financial conditions are likely to have compounded the weakness in business investment. Credit-supply constraints have had an impact on investment in some countries, given the relatively high dependence of non-financial corporations on bank loans to finance investment in the euro area and the strong increase in corporate debt before the financial crisis. Recently, financial conditions have improved and the real cost of financing currently stands at a historically low level in the euro area as a whole. Moreover, the cash holdings of non-financial corporations are high. This suggests that financial conditions are currently constraining business investment considerably less than during the financial crisis.

Chart E Business investment growth and uncertainty in the euro area

(left-hand scale: standard deviations from the mean[1]), right-hand scale: annual percentage change, inverted; quarterly)



Sources: ECB financial market database, European Commission and Baker, Bloom and Davis (2013).
Note: Latest observations refer to Q3 2013 for investment and to Q1 2014 for uncertainty.
1) Mean over the period Q1 1999 to Q4 2013.
2) Euro area business investment is measured using gross fixed capital formation of non-financial corporations. The price-adjusted series is derived using the gross fixed capital formation deflator.
3) Based on the composite systemic stress indicator.
4) Uncertainty among private households and firms based on European Commission Consumer and Business Surveys.
5) Indicator based on newspaper coverage of policy-related economic uncertainty and disagreement among forecasters on inflation and budget balances.

Third, lower growth potential may have contributed to the weakness in business investment. The level and growth rate of potential output are currently estimated to be considerably lower than anticipated before 2008. Consequently, the need for business investment to expand capacity also appears to be lower compared with previous cycles, in which potential output was less adversely affected. Moreover, several indicators show that there is still a large amount of slack in the economy, which also points to a relatively low need for extension investment.[4] Survey data from the European Commission suggest that firms' replacement investment will be greater than usual in 2014. Furthermore, some sectors of the economy are apparently suffering from particularly high overcapacity, pointing to the need for a further restructuring process that might weigh on business investment for some time. While a sectoral analysis indicates that the construction sector in particular is experiencing overcapacity, the unusually strong decline in investment in the services sector indicates that overcapacity also exists in this sector.

Overall, since its strong decline in 2008, business investment in the euro area has remained subdued, reflecting the typical features of severe financial crises. A sectoral analysis shows that this weakness is attributable mainly to unusually weak investment in the services and construction sectors. In addition to standard factors such as weak demand, low profitability growth and weak incentives to invest, high uncertainty, unfavourable financial conditions and lower growth potential also appear to have been important factors behind subdued investment in the euro area. Looking ahead, the gradual strengthening in demand and profitability, unwinding uncertainty and more favourable financial conditions should support the expected recovery in business investment. At the same time, owing to the lower estimated growth potential, the high degree of remaining slack in the economy and the lagged effects of the ongoing restructuring process in some sectors and countries, the recovery in investment is expected to gain momentum only gradually.

4 See the box entitled "Slack in the euro area economy" in this issue of the Monthly Bulletin.