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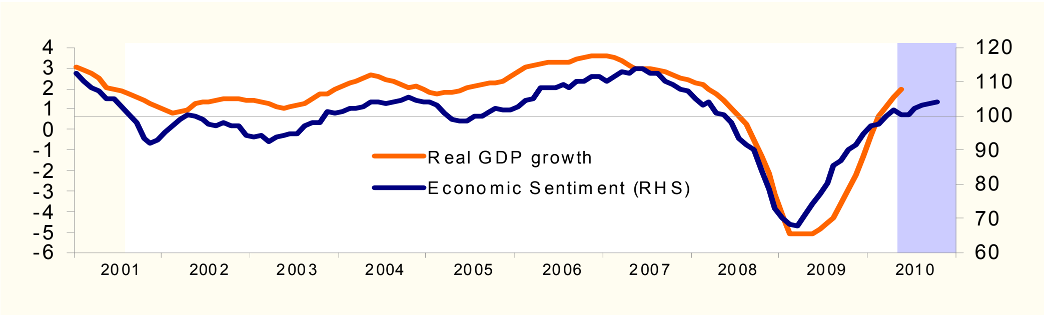
European Business Cycle Indicators

N.B.: Business survey data since May 2010 are classified in accordance with an updated version of the Nomenclature of Economic Activities (NACE Rev. 2); recent developments should therefore be interpreted with caution.

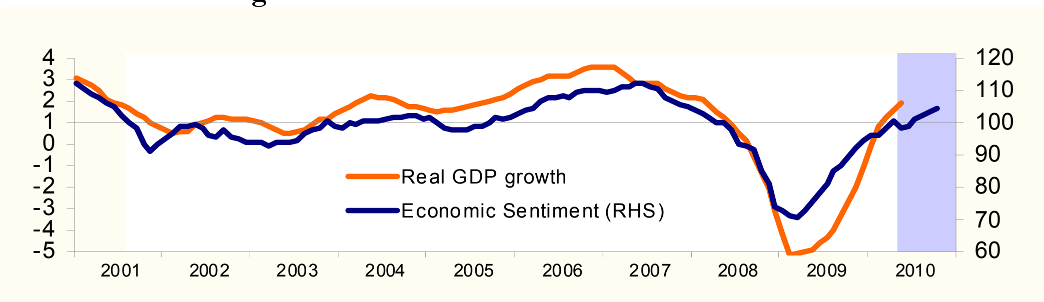
- Economic sentiment continues to improve
- Confidence in industry strengthens further
- Consumer confidence broadly stable, but unemployment expectations worsen
- Economic sentiment improves in most Member States

In October, the Economic Sentiment Indicator (ESI) continued to improve in both the EU and the euro area. The indicator increased by 0.5 of a point in the EU and, more significantly, by 0.9 of a point in the euro area, reaching 104.1 in both areas. In both the EU and the euro area the ESI stands above its long-term average and is now back at a level last seen in early 2008.

GRAPH 1a: ESI and GDP growth for the EU



GRAPH 1b: ESI and GDP growth for the euro area



Source: European Commission

Note 1: The horizontal line (RHS) marks the long-term average of the sentiment indicator (100 = average for 1990 to 2009).
Note 2: Both series are plotted at monthly frequency. Monthly GDP data are obtained by linear interpolation of quarterly data.

Sentiment in industry was the main driver of the overall improvement; it increased by 2 points in the euro area and by 1 point in the EU. Gains in confidence in this sector were broad-based while reflecting in particular sizeable improvements in order books and production expectations. Industrialists' employment expectations have also become more upbeat, particularly in the euro area. The recent trend of the

'European Business Cycle Indicators' provides short-term analysis based on Business and Consumer Survey data. It appears monthly, using the latest available data.
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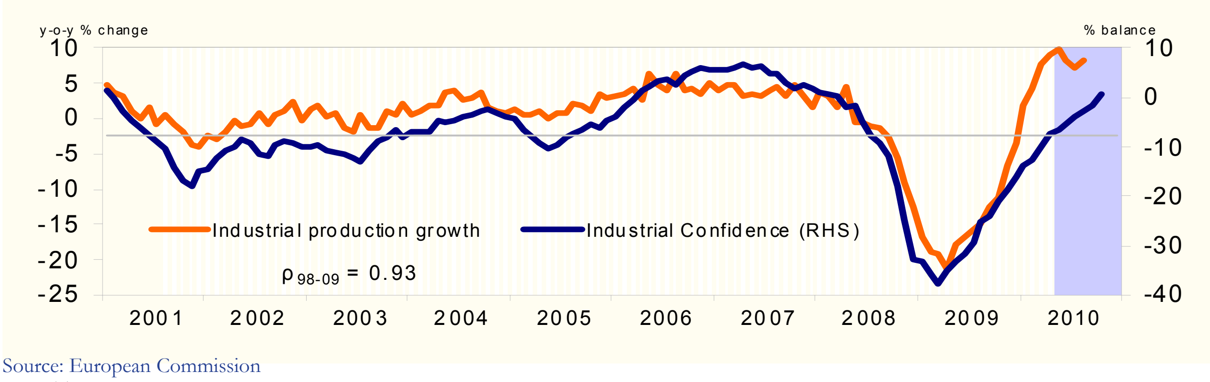
indicator suggests that the recovery of economic activity in industry will continue in the coming months (Graph 2). In addition, the quarterly manufacturing survey (also released this month) indicates a strong improvement in export volume expectations. Somewhat at odds with the general improvement, capacity utilisation edged up only modestly. Indeed, a decoupling between capacity utilisation and the confidence indicator has been visible since the beginning of 2009. Capacity utilisation now stands at about 78 % in both the EU and the euro area, still below the long-term average (81 %) and significantly below the rate usually associated with the current level of industrial output.

GRAPH 2: Industrial confidence indicator and industrial production for the euro area

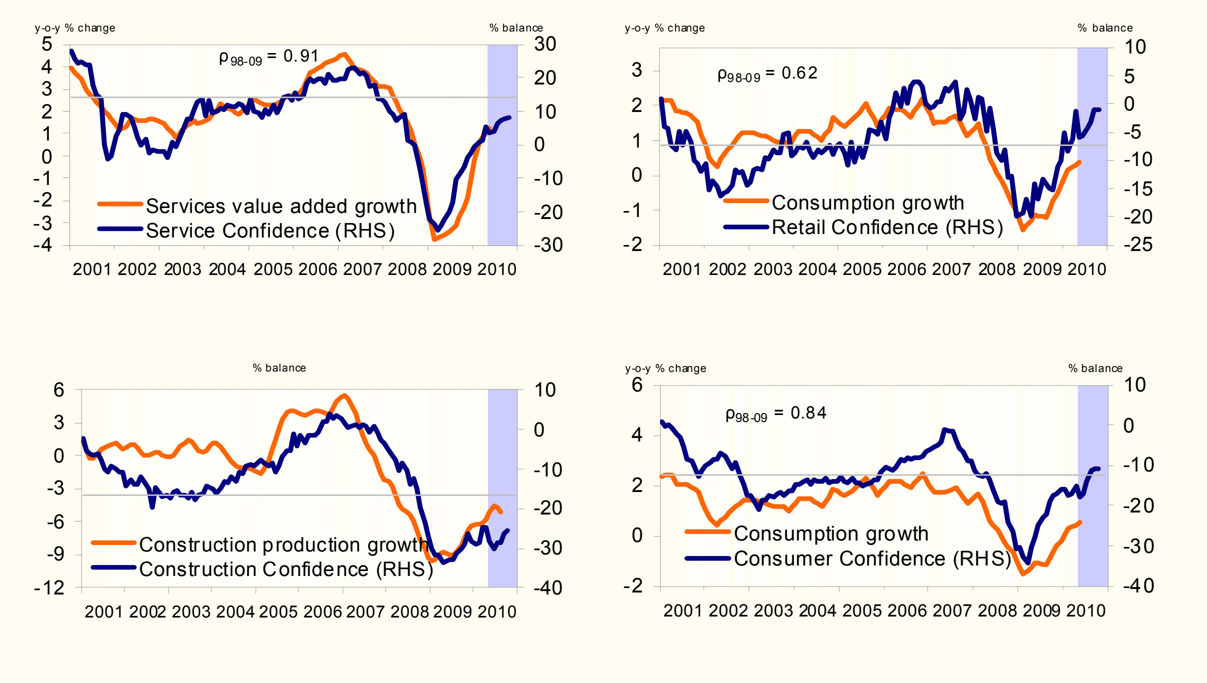


Source: European Commission
Note: The horizontal line marks the long-term average of the confidence indicator.

In both the EU and the euro area, confidence in services remained broadly unchanged while it increased by 1 point in construction. In the construction sector, improvement in managers' assessment of their order books was somewhat levelled off by a worsening of employment expectations. Sentiment in the retail sector increased by 1 point in the EU, mainly driven by a buoyant assessment of the present business situation in the UK, and remained unchanged in the euro area (Graph 3).

As indicated in the flash estimate of 21 October, confidence was broadly unchanged among consumers, remaining somewhat below its long-term average in the EU and slightly above its long-term average in the euro area. In both the EU and the euro area, consumers were more pessimistic about the unemployment prospects in the coming months — contrasting with managers' optimism in terms of employment in the industry and services surveys — while their savings expectations increased.

GRAPH 3: Sectoral confidence indicator and reference series for the euro area



Source: European Commission
Note: The horizontal line marks the long-term average of the confidence indicators.

Economic sentiment indicators for the five largest EU Member States

In general, the ESI improved in most Member States. Increases were particularly marked in the Baltic countries, which are now all above 100. Sentiment improved also across the three largest euro-area Member States and the UK (Graph 4). Developments were more mixed in the euro-area periphery, with Greece registering some gains but Spain and Portugal both reporting a deterioration.

France reported the most significant increase (+3.4) in the ESI. Strong increases were registered in all the business sectors while confidence among consumers remained broadly unchanged.

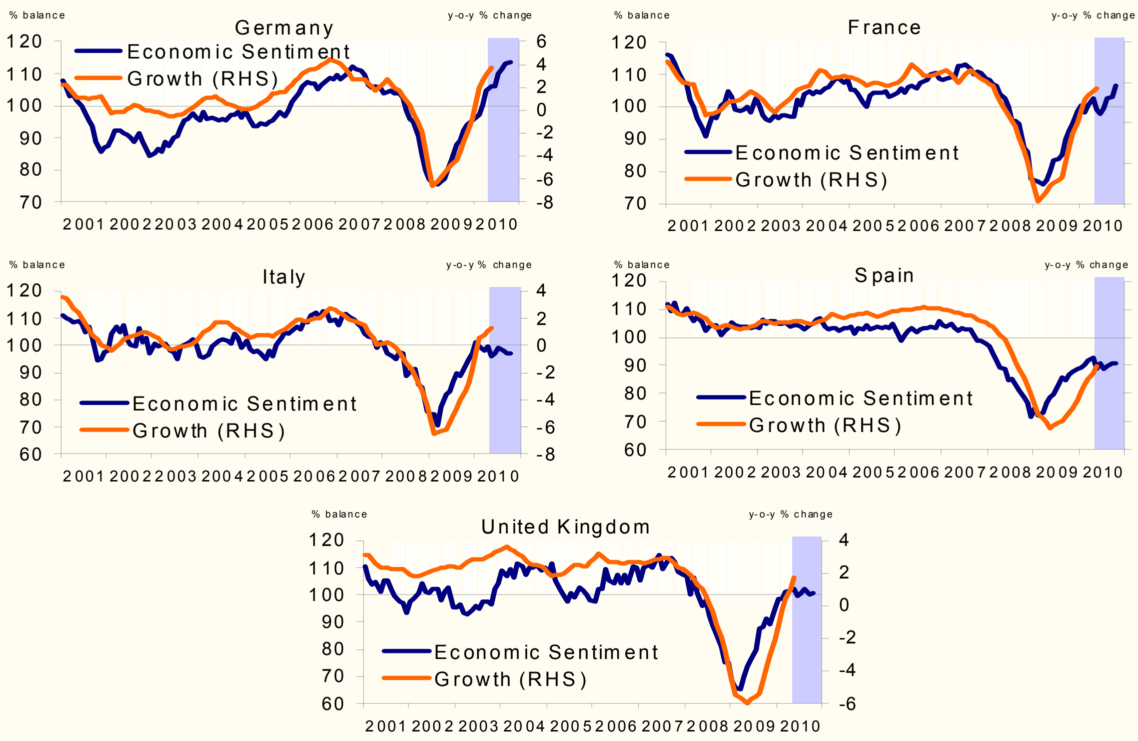
After several months of strong increases, sentiment in Germany rose by a mere 0.3 of a point. Improved confidence in industry, construction and among consumers was partly offset by a marked decline in retail trade mainly due to a steep deterioration in managers' assessment of stocks. Sentiments in services remained broadly unchanged.

Italy reported an increase (+0.3) in the ESI too. The improvement in sentiment was broad-based among business sectors, while consumer confidence remained broadly stable. In particular, confidence in retail trade showed a significant improvement in October, which reflected an upbeat assessment of the present and future business situation.

In Spain, sentiment worsened slightly (-0.2), and the level of the ESI remains the lowest among the largest EU Member States. This decrease was driven by strong declines in services, retail trade and construction and a minor drop among consumers. In contrast, Spanish confidence improved markedly in industry, reverting to its long-term average.

The UK reported a small increase in the sentiment indicator (+0.3), as gains in optimism were registered across all the sectors except services, which showed a significant deterioration on the back of a sharp fall in managers' demand expectations.

GRAPH 4: ESI and GDP growth (year-on-year) for the five largest EU Member States



Source: European Commission
Note: The horizontal line marks the long-term average of the sentiment indicators.

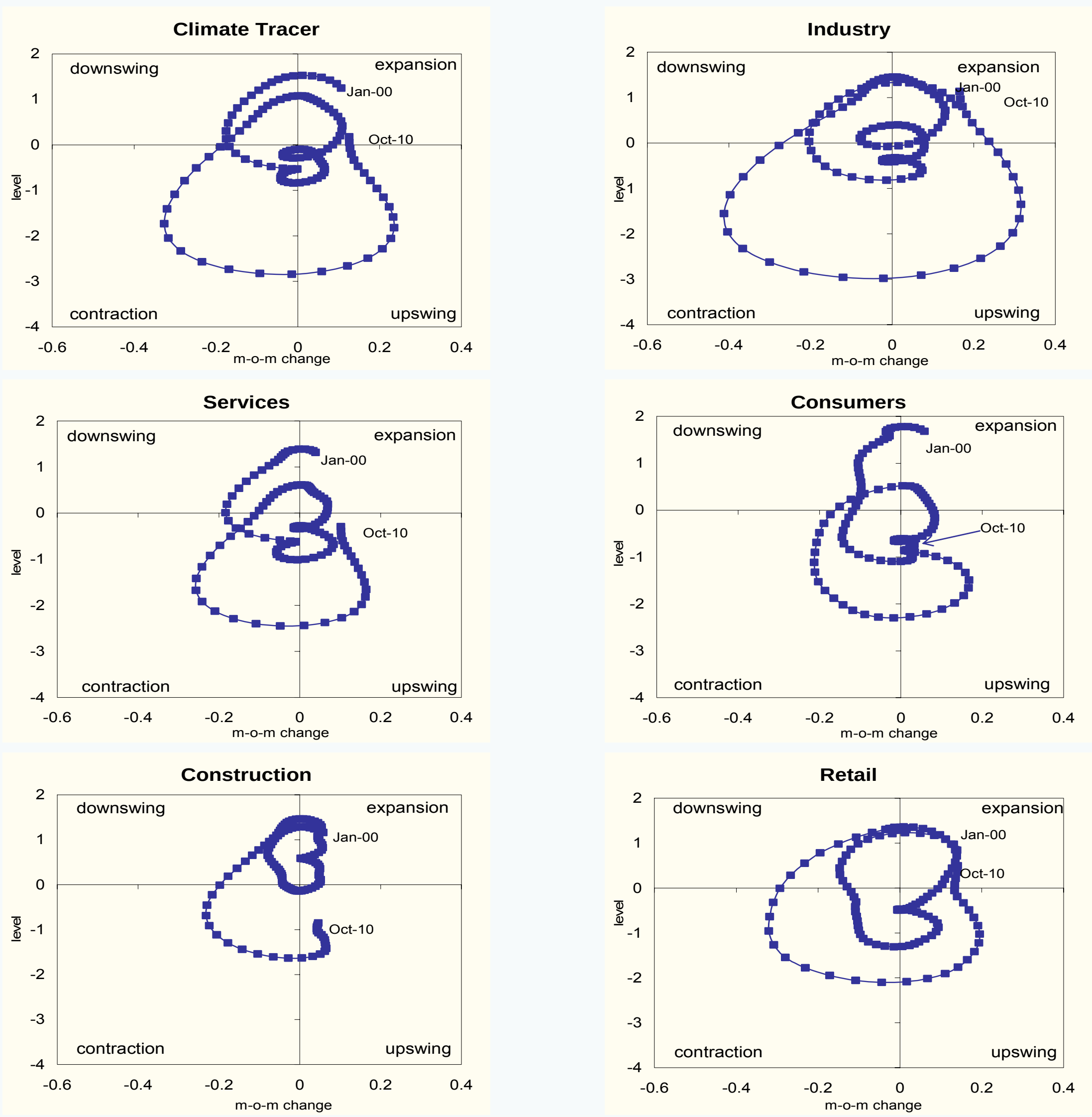
The economic climate tracer

Graph 5a shows the economic climate tracer (and its sectoral components) for the euro area. The graph distinguishes between four phases of the business cycle — represented by its four quadrants — namely 'expansion' (top right), 'downswing' (top left), 'contraction' (bottom left) and 'upswing' (bottom right). Cyclical peaks are positioned in the top centre of the graph, and troughs in the bottom centre.

Based on NACE Rev. 2 input data since May 2010 and NACE Rev. 1 data until April, the economic climate tracer for the euro area is currently in the expansion quadrant. The climate tracers for industry and the retail trade are firmly in the expansion quadrant, while services and construction are still in the upswing phase, with construction lagging behind. The consumer climate tracer is also in the upswing quadrant, although still close to the contraction quadrant.

This section shows the economic climate tracer (ECT): both cyclical movements (Graphs 5a and 5b) and its most recent values across sectors (Graph 6). The economic climate tracer is compiled from a larger set of series than the ESI and involves a smoothing step (see Annex 1 for details). As a consequence, the resulting message may differ from the analysis set out in previous sections.

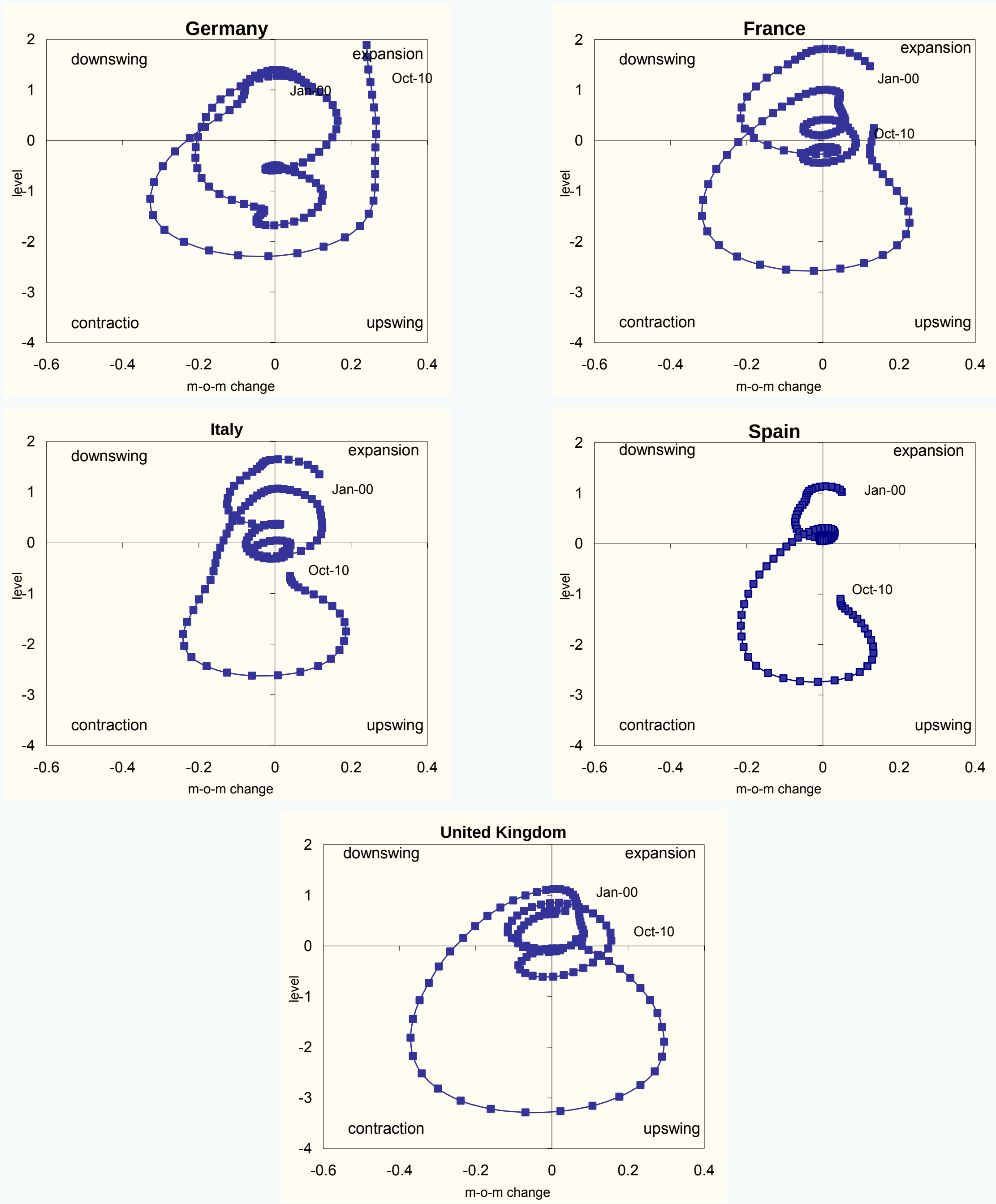
GRAPH 5a: Economic climate tracer across sectors, euro area



Source: European Commission

Graph 5b displays the economic climate tracer for the five largest Member States in the EU. Germany is firmly in the expansion phase, and is followed by France. The UK is also in the expansion area but just above the border with the upswing phase. Italy and Spain are still in the upswing quadrant, with Spain lagging behind.

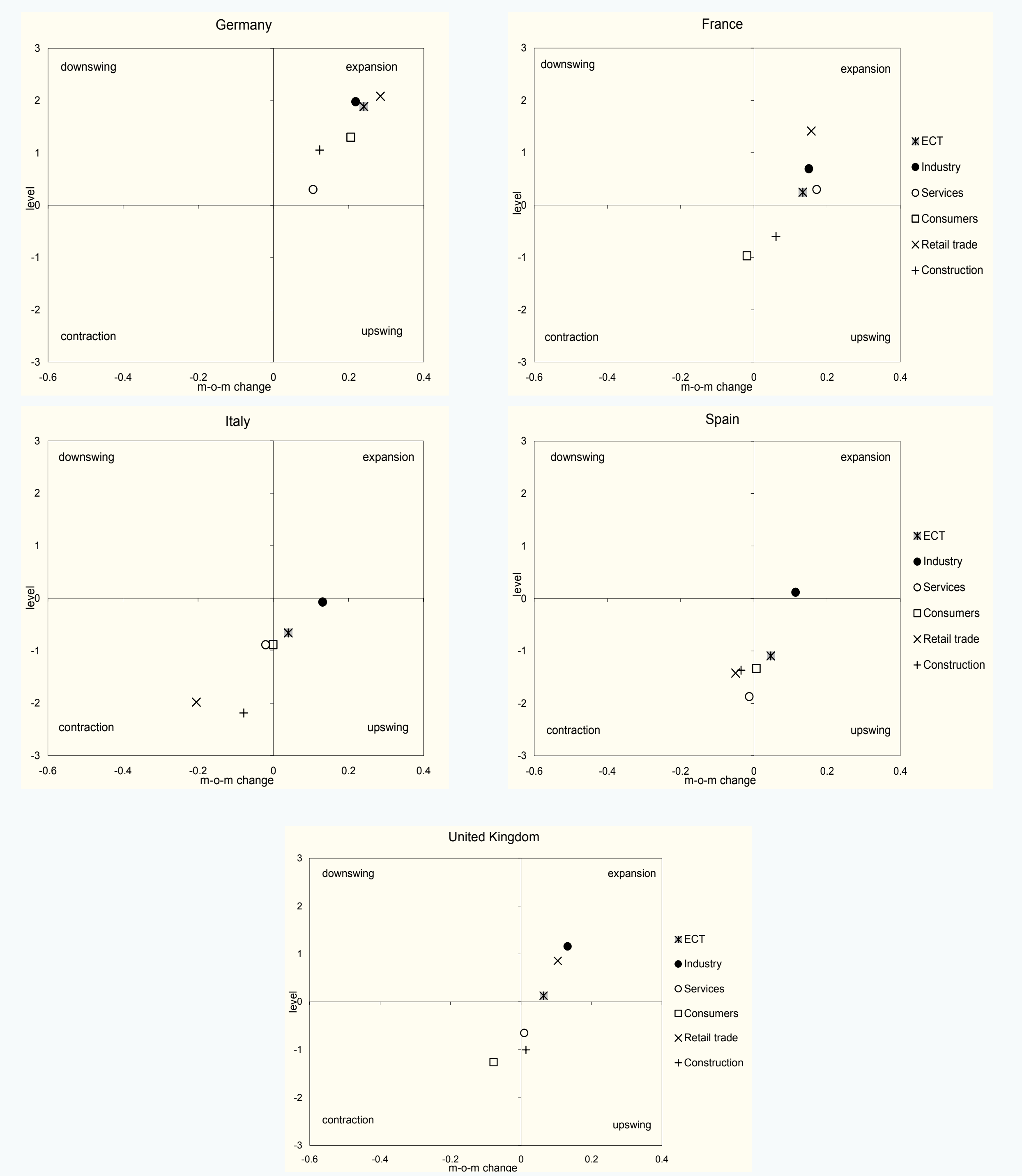
GRAPH 5b: Economic climate tracer for the five largest EU Member States



Source: European Commission

Graph 6 shows the latest values for the climate tracer, broken down by sector. Germany is firmly in the lead, with all the sectoral climate tracers being in the expansion quadrant. The picture is more contrasted for the other countries. In particular, industry is in the expansion quadrant in the UK, France and Spain. The same is true for retail trade in both France and the UK. The climate tracer of the services sector is now in the expansion phase in Germany and France, while it moved to contraction in Italy and Spain. In the UK the tracer is approaching the contraction area although it remains in the upswing quadrant. The consumer climate indicator is still in the contraction phase in France and the UK and just on the border with the upswing quadrant in Italy and Spain.

GRAPH 6: Sectoral breakdown of the climate tracer for the five largest EU Member States



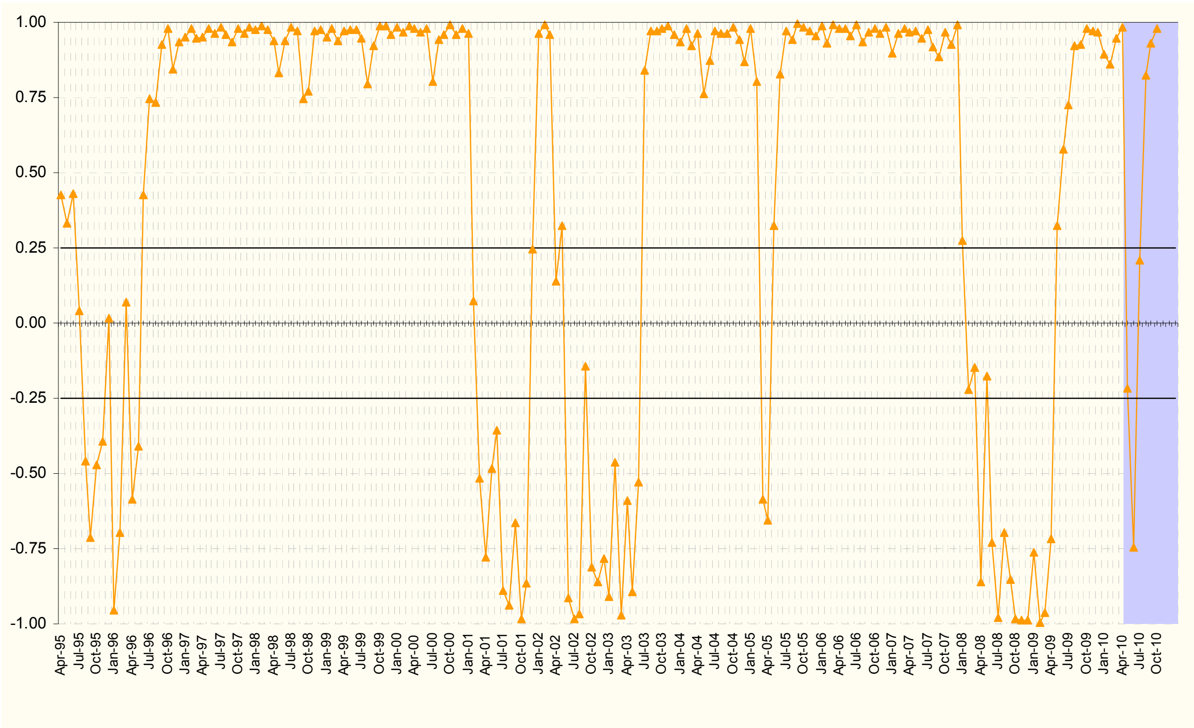
Source: European Commission

Euro area turning point index

The turning point index — based on a Markov switching model — estimates the difference between high- and low-regime probabilities. On the basis of the latest survey data for the euro area, the turning point index (TPI) edged up to 0.98 in September.

By design, the turning point's computation aims to extract the surprises — positive or negative — from new information in the surveys. As confidence picked up again, the TPI therefore reveals a positive change and signals a possible favourable cyclical phase, suggesting that GDP growth (q-o-q) is likely to be above the rate of potential growth in 2010Q3 (see Annex 1 for details).

GRAPH 7: Turning point index for the euro area



Source: European Commission

Reference series

The reference series are from Eurostat, via Ecowin:

Confidence indicators	Reference series (volume/year-on-year growth rates)
Total economy (ESI)	GDP, seasonally- and calendar-adjusted
Industry	Industrial production, working-day-adjusted
Services	Gross value added for the private services sector, seasonally- and calendar-adjusted
Consumption	Household and NPISH final consumption expenditure, seasonally- and calendar-adjusted
Retail	Household and NPISH final consumption expenditure, seasonally- and calendar-adjusted
Building	Production index for building and civil engineering, trend-cycle component

Note: Monthly data are obtained by linear interpolation of quarterly data.

Economic Sentiment Indicator

The economic sentiment indicator (ESI) is a weighted average of the balances of selected questions addressed to firms and consumers in five sectors covered by the EU Business and Consumer Surveys Programme. The sectors covered are industry (weight 40 %), services (30 %), consumers (20 %), retail (5 %) and construction (5 %).

Balances are constructed as the difference between the percentages of respondents giving positive and negative replies. The Commission calculates EU and euro area aggregates on the basis of the national results and seasonally adjusts the balance series. The indicator is scaled to have a long-term mean of 100 and a standard deviation of 10. Thus, values greater than 100 indicate above-average economic sentiment and vice versa. Further details on construction of the ESI can be found at:
http://ec.europa.eu/economy_finance/db_indicators/surveys/method_guides/index_en.htm
Long time series of the ESI and confidence indicators are available at:
http://ec.europa.eu/economy_finance/db_indicators/surveys/time_series/index_en.htm.

Economic Climate Tracer

The economic climate tracer is a two-step procedure. The first consists of building economic climate indicators. They are based on principal component (PC) analyses of balance series (s.a.) from the surveys conducted in industry, services, building, retail trade and among consumers. In the case of industry, five of the monthly questions in the industry survey are used as input variables (employment and selling-price expectations are excluded). For the other sectors the number of input series is: services: all five monthly questions; consumers: nine questions (price-related questions and the question about the current financial situation are excluded); retail: all five monthly questions; building: all four monthly questions. In the case of the euro area, the first principal component explains between 65 % (retail) and 92 % (industry) of the variance of the input balance series in question.

The economic climate indicator (ECI) is a weighted average of the five PC-based sector climate indicators. The sector weights equal those underlying the economic sentiment indicator (ESI), i.e. industry 40 %; services 30 %; consumers 20 %; construction 5 %; and retail trade 5 %. The weights were allocated broadly on the basis of two criteria: the representativeness of the sector in question and historical tracking performance vis-à-vis GDP growth.

In the second step of the procedure, all climate indicators are smoothed using the HP filter in order to eliminate short-term fluctuations of a period of less than 18 months. The smoothed series are then standardised to a common mean of zero and standard deviation of one. The resulting series are plotted against their first differences. The four quadrants of the graph, corresponding to the four business cycle phases, are crossed in an anti-clockwise movement. The phases can be described as: above average and increasing (top right, 'expansion'), above average but decreasing (top left, 'downswing'), below average and decreasing (bottom left, 'contraction') and below average but increasing (bottom right, 'upswing'). Cyclical peaks are positioned in the top centre of the graph and troughs in the bottom centre.

Markov Switching Turning Point Index

The purpose of the turning point index model, based on the work of Grégoir and Lenglart (2000)[1], is to identify economic growth trends in the euro area, using as input all the confidence indicators derived from the surveys of industry, services, building, retail trade and consumers. This model is symmetric in signalling turning points. TPI values within the ± 0.25 range imply stabilisation, when the pace of activity is around its potential (the signals received are very varied and indicate no clear-cut upward or downward movement). The economy is performing a soft landing or soft take-off, depending on whether the previous period was marked by acceleration or deceleration. By contrast, the signal is very consistent when TPI values draw very close to or reach ± 1: the cyclical phase is deemed to be clearly favourable or unfavourable; economic activity is in a period of sharp acceleration (or sharp deceleration or even contraction).

[1] Grégoir, S. and Lenglart, F. (2000), 'Measuring the probability of a business cycle turning point by using a multivariate qualitative hidden Markov model', Journal of Forecasting, 19.