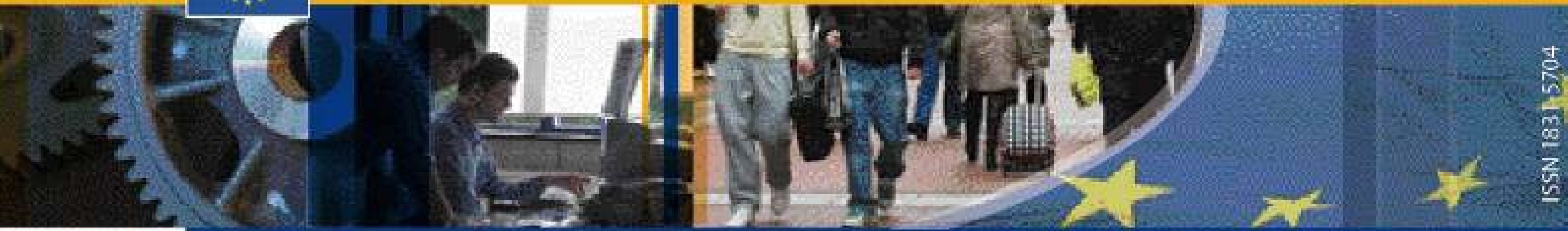
European Commission | Directorate-General for Economic and Financial Affairs

July 2010



European Business Cycle Indicators

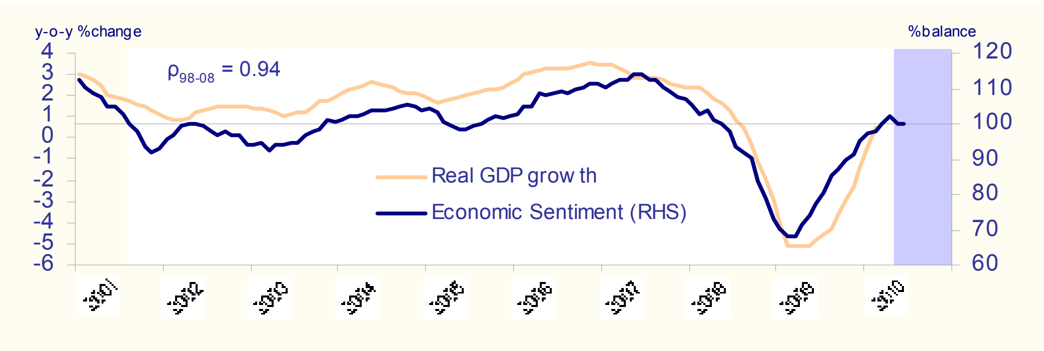
N.B.: Business survey data since May 2010 are now classified in accordance with an updated version of the Nomenclature of Economic Activities (NACE Rev. 2); recent developments should therefore be interpreted with caution.

- Economic sentiment indicator remains unchanged
- No clear cross-sector pattern has emerged
- Consumers stay cautious
- Multispeed recovery apparent

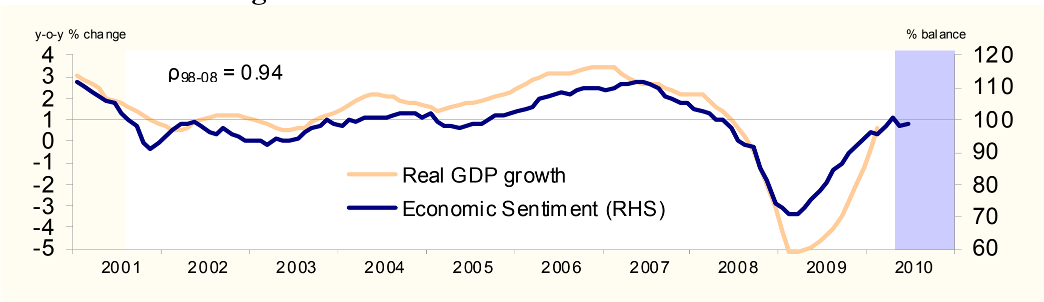
Economic sentiment indicators

In June, the Economic Sentiment Indicator (ESI) remained broadly unchanged, at 100.1 (down by 0.1 points) in the EU and at 98.7 (up by 0.3 points) in the euro area.

GRAPH 1a: ESI and GDP growth for the EU



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



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.
Source: European Commission

'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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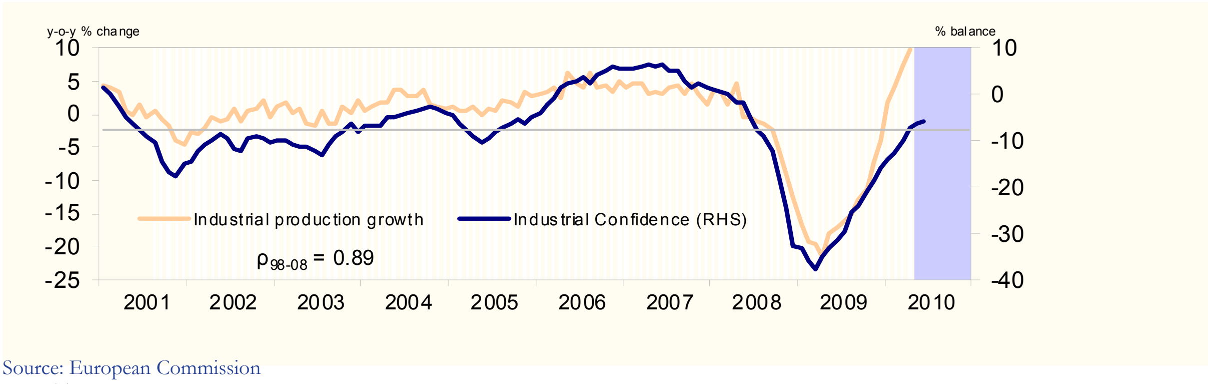
In June, confidence in industry remained unchanged in the euro area (see Graph 2). Fewer managers reported insufficient stocks of finished products. Despite unchanged production expectations, managers were more upbeat about their order books. The current level of the indicator suggests that the recovery of economic activity in industry will continue in the coming months, although it may lose momentum.

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

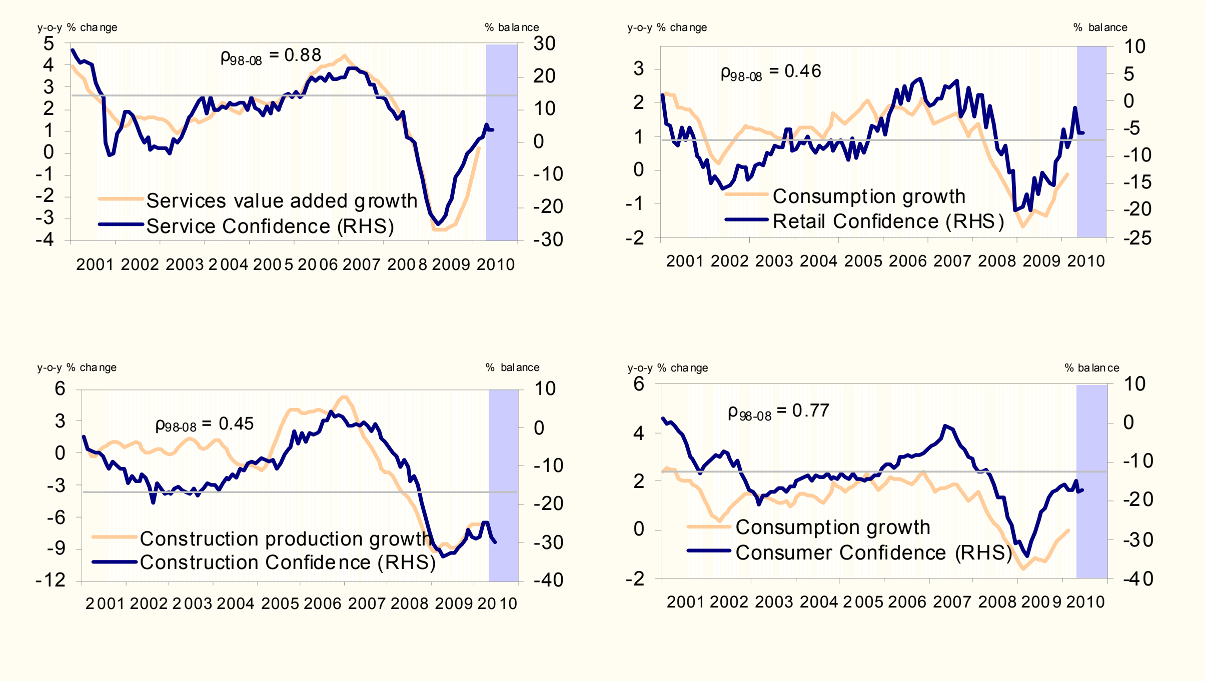


Source: European Commission
Note: The horizontal line marks the long-term average of the confidence indicator.

Confidence in services improved by 1 point in the euro area thanks to a brighter assessment of the past business situation. At the same time, managers' expectations of demand weakened (see Graph 3). Confidence in construction dropped by 2 points in the euro area, while it remained unchanged in the retail sector.

In line with the flash estimate, confidence among consumers improved marginally (by 1 point) after dropping sharply in May. Unemployment fears continued to ease in June and consumers were more optimistic about the general economic situation. However, the level remains below its long-term average, in line with consumers' cautious outlook.

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 four largest euro area Member States and the UK

No clear pattern emerged across the four largest euro area Member States and the UK. Indicators follow diverging trends, suggesting recovery at different speeds (see Graph 4).

Spain reported the most significant increase (+2.3), although the level of its ESI is among the lowest of the euro area. Overall, sentiment benefited from a sizeable rebound in services followed by industry, but was dampened by growing pessimism in the construction. Confidence in retail trade and among consumers remained unchanged.

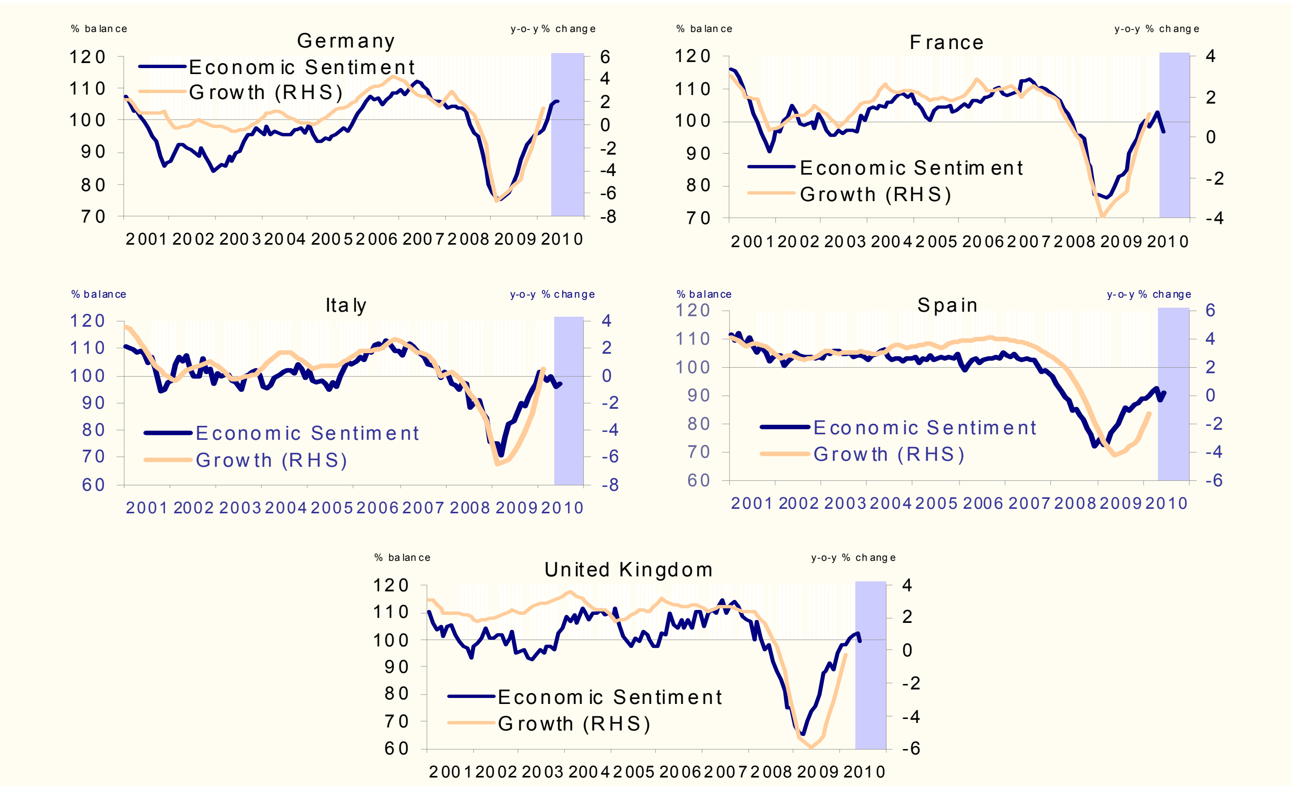
The ESI increase was less pronounced in Italy (+1.4). On the back of a more optimistic general economic outlook, confidence improved significantly among consumers. In contrast, confidence deteriorated in retail trade and construction, while remaining unchanged in industry and services.

Sentiment in Germany remained largely unchanged (+0.4). Despite positive readings in industry and in construction, confidence deteriorated slightly in services and retail trade. Confidence among consumers remained unchanged.

Sentiment declined in France (-2.3), mainly due to pessimistic views in construction and in industry that reported the second drop in sentiment in a row. French consumers are growing increasingly pessimistic as well. Confidence remained unchanged in services and improved in retail trade.

The UK reported the biggest worsening in sentiment (-3.0). Confidence in both industry and construction showed a significant deterioration, followed by retail trade and consumers. By contrast, sentiment in services improved significantly. All the surveys were conducted before unveiling of the budget on June 22.

GRAPH 4: ESI and GDP growth (year-on-year) for the four largest euro area Member States and the UK



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

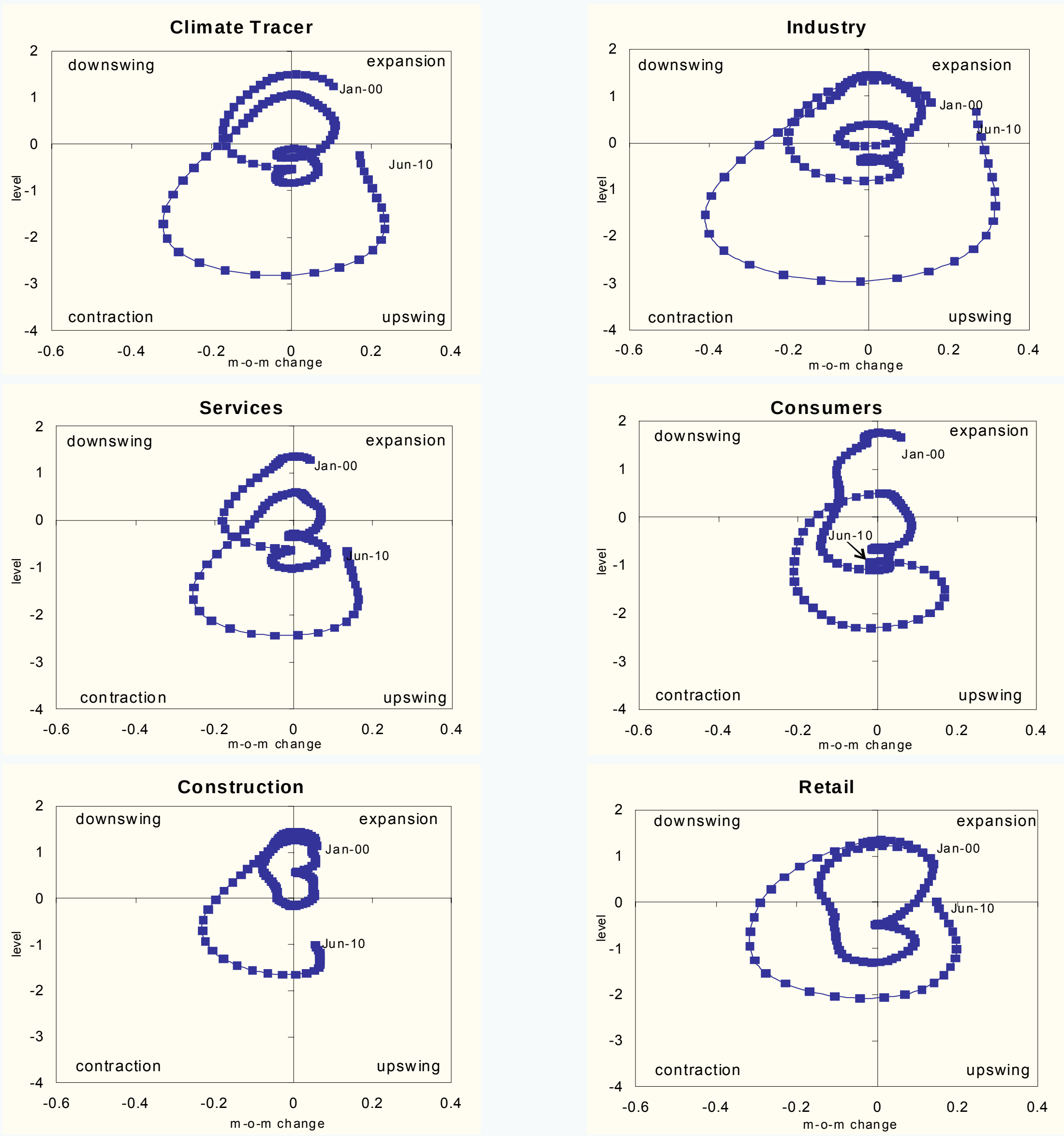
The economic climate tracer

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 remains firmly in the upswing quadrant. The climate tracer for industry is in the expansion area, while the other sectors are still in the upswing phase, with construction lagging behind. There are worrying signals from the consumer climate tracer, which seems to be heading towards the contraction quadrant. By contrast, the retail trade climate indicator is moving into the expansion area.

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 the previous sections.

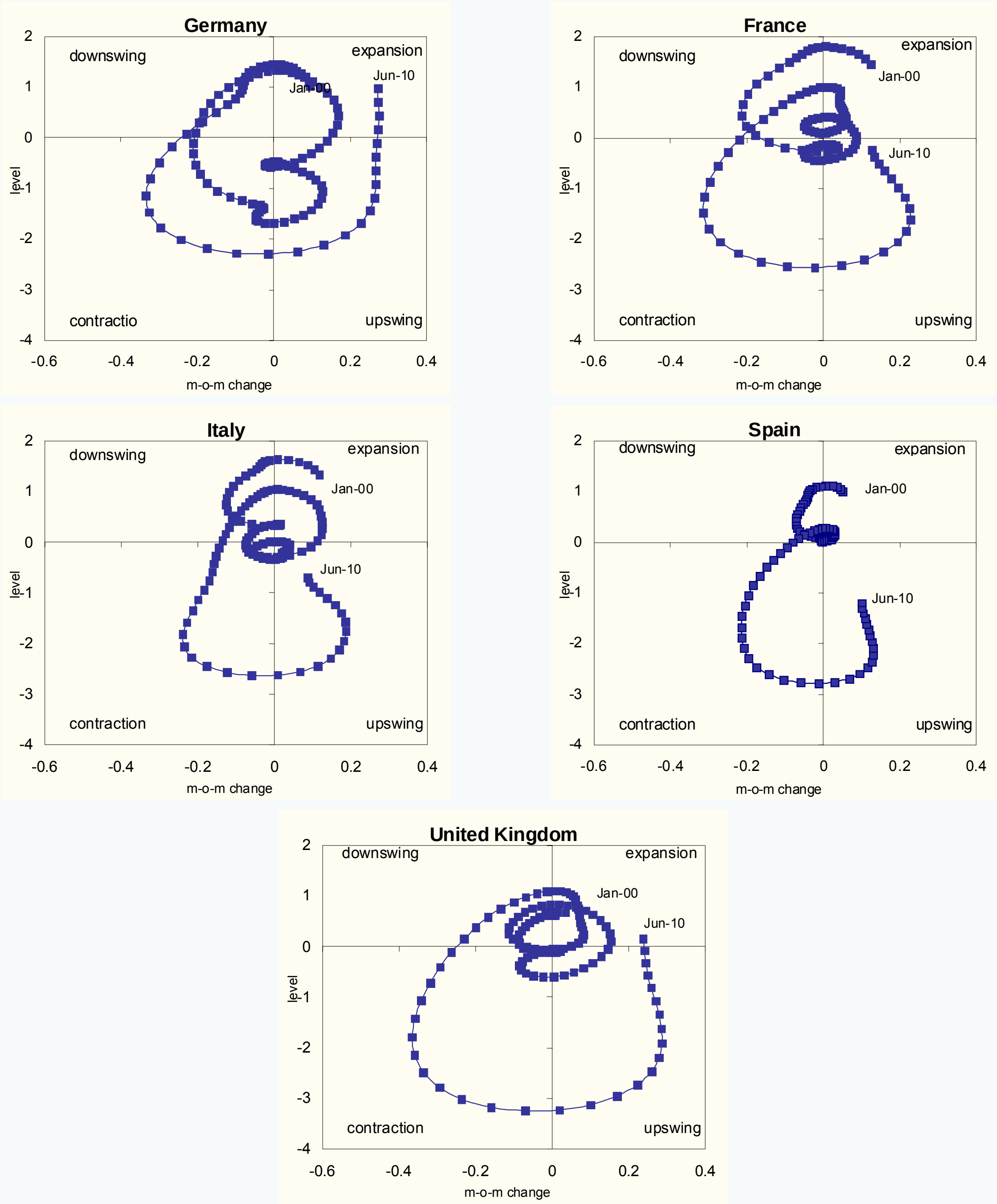
GRAPH 5a: Economic climate tracer across sectors, euro area



Source: European Commission

Graph 5b displays the economic climate tracer for the four largest Member States in the euro area and for the UK. Germany is firmly in the expansion phase, followed by the UK. The other countries are still in the upswing quadrant, with the France leading and Spain lagging behind.

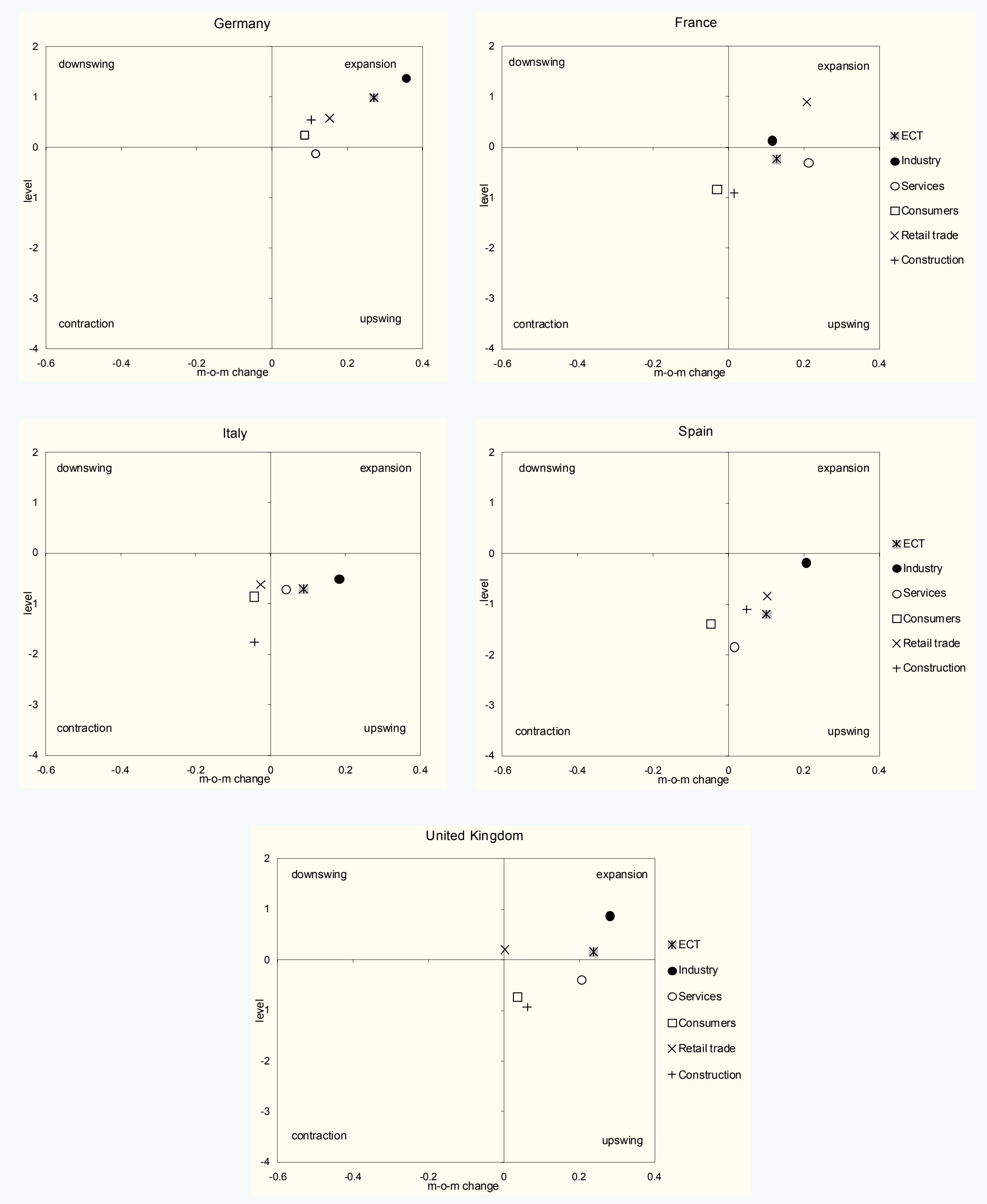
GRAPH 5b: Economic climate tracer for the four largest euro area Member States and the UK



Source: European Commission

Graph 6 shows the latest values for the climate tracer broken down by sector. In Germany, most of the sectoral climate tracers are now in the expansion quadrant. The same is true for retail trade and industry in both France and the UK. All the Spanish sectors are clustered in the upswing quadrant, while this is the case only for industry and services in Italy. The consumer climate indicator has slipped back to the contraction phase in Spain, Italy and France.

GRAPH 6: Sectoral breakdown of the climate tracer for the four largest euro area Member States and the UK



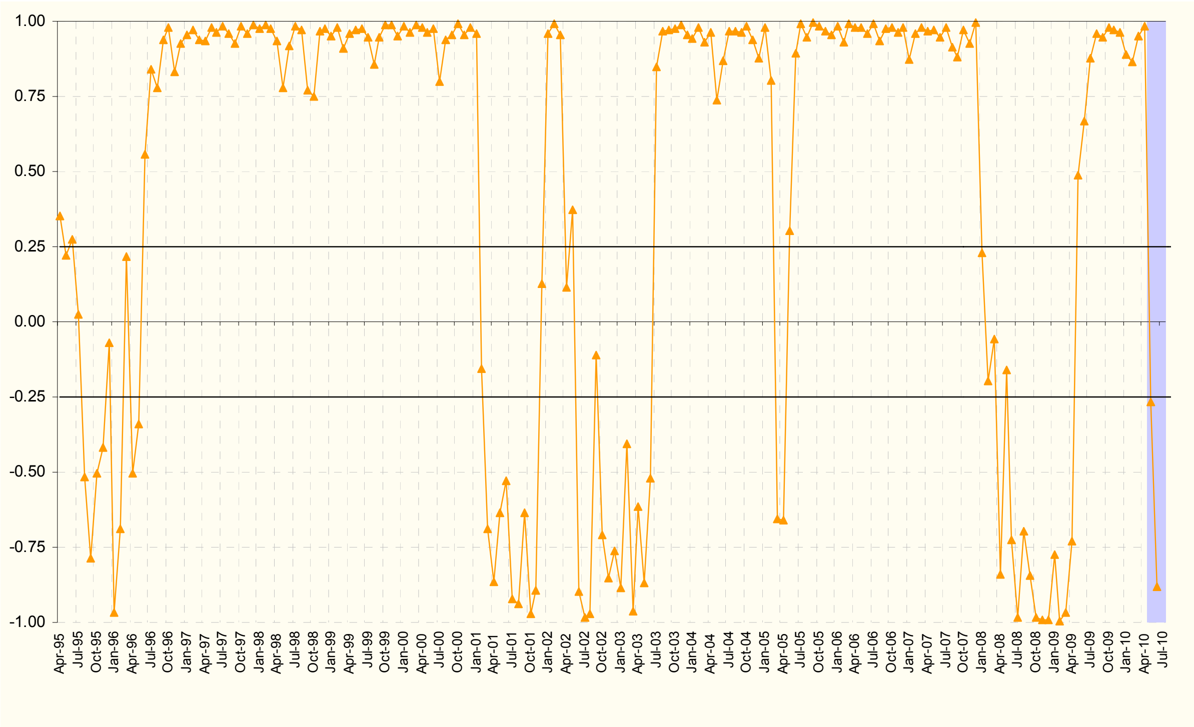
Source: European Commission

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 declined to -0.88 in June.

By design, the turning point's computation (coding step) aims to extract the surprises — positive or negative — from the new information in the surveys. Thus, after a strong recovery in the past months, confidence has lost some of its momentum and is therefore revealing negative change. This set of signals, resulting from considerable economic uncertainty, is finally interpreted as an unfavourable cyclical phase (see Annex 1 for details).

GRAPH 7: Turning point index for the euro area



Source: European Commission

Annex 1: Technical Background

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
Construction	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, construction, 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 sectoral 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 over a period of less than 18 months. The smoothed series are then standardised to a common mean of zero and a 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 turning point index model, based on the work of Grégoir and Lenglart (2000)[1], aims to identify economic growth trends in the euro area, using as input all the confidence indicators derived from the surveys of industry, services, construction, retail trade and consumers. This model is symmetrical in signalling turning points. TPI values within the $\pm$ 0.25 range point to stabilisation, when the pace of activity is around its potential (the signals received are very varied and do not indicate any 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 come very close to or actually reach $\pm$ 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.