

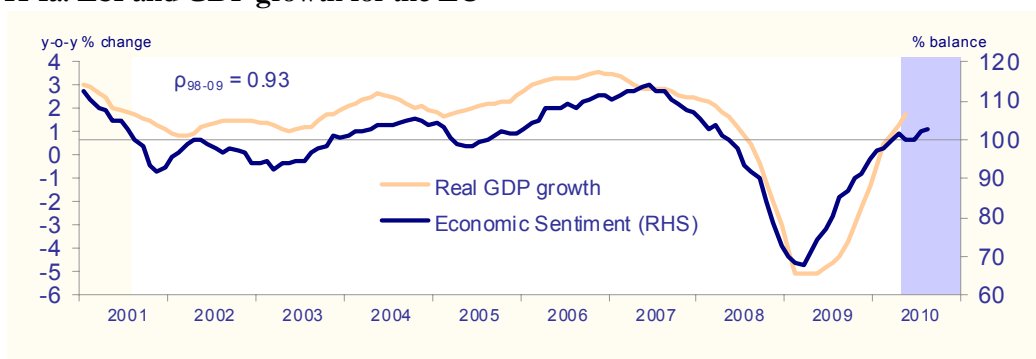
European Business Cycle Indicators

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.

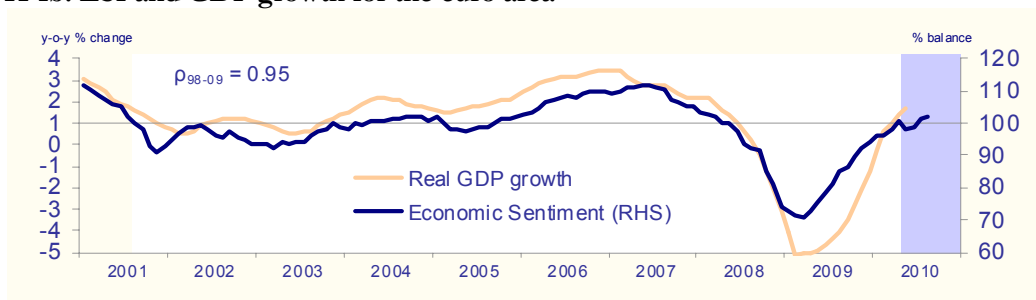
- Economic sentiment further up after July's surge
- Industry may level off, while services catch up
- Marked rise in consumer confidence sets overall tone
- Multispeed recovery at country level

After a surge in July, the Economic Sentiment Indicator (ESI) continued to improve in both the EU as a whole and the euro area in August, albeit at a slower pace. The indicator rose to 102.7 (up by 0.6 point) in the EU and to 101.8 (up by 0.7 point) in the euro area. In both the EU and the euro area, the ESI is now above its long-term average.

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.

'European Business Cycle Indicators' provides short-term analysis based on Business and Consumer Survey data. It appears monthly, using the latest available data.

European Commission - Economic and Financial Affairs Directorate-General

Directorate A - Economic studies and research

Unit A3 - Economic studies and business cycle surveys

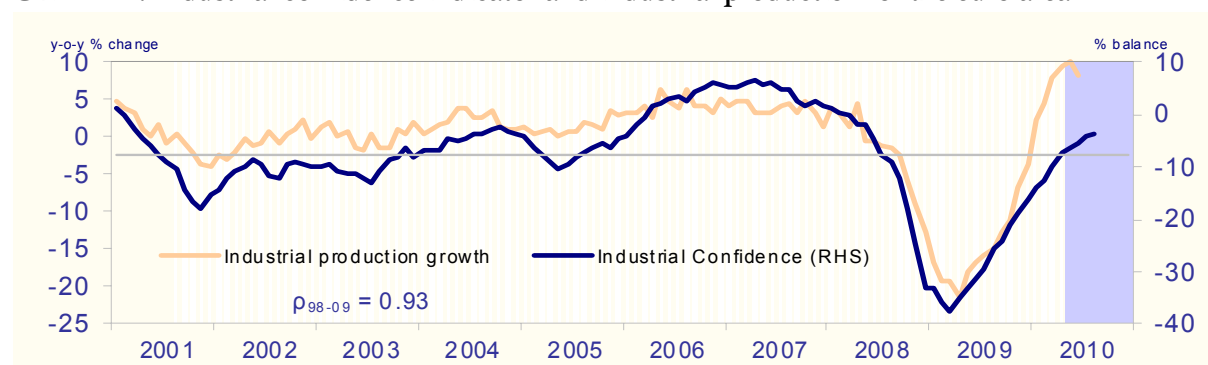
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Sentiment in industry remained broadly unchanged in the euro area. The majority of respondents in this sector reported sizeable improvements in their (export) order books. However, managers were cautious regarding their production expectations. The recent trend in the indicator suggests that the recovery of economic activity in industry may be levelling off, with y-o-y growth rate stabilizing (Graph 2).

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



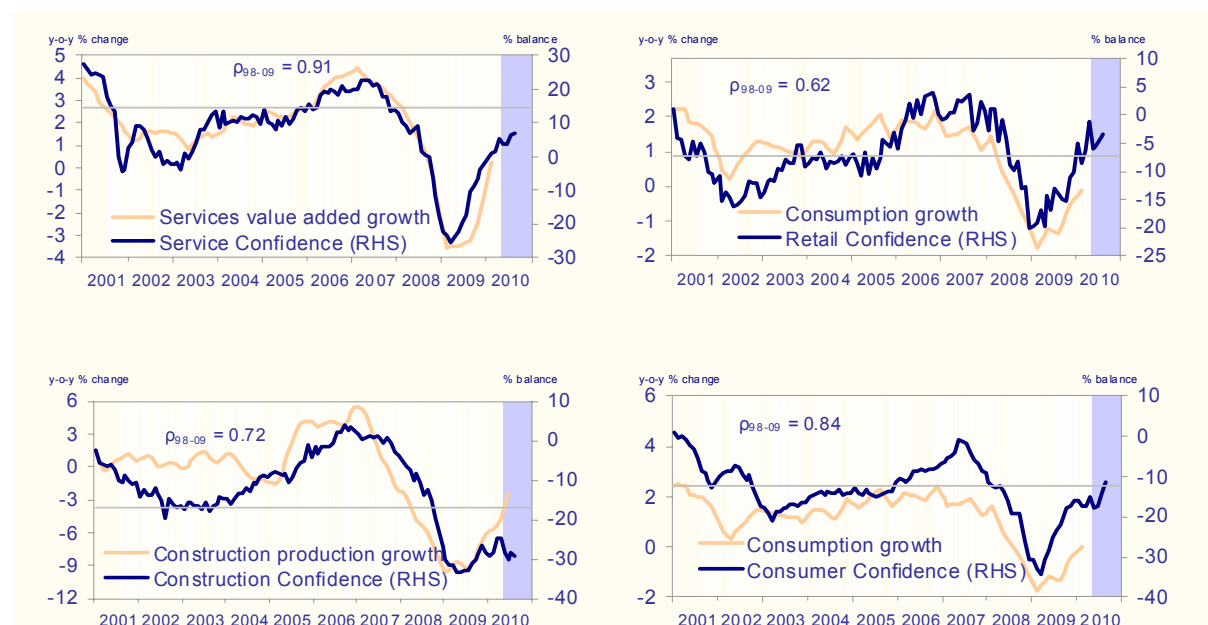
Source: European Commission

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

Confidence in services improved by 1 point in the euro area, driven by brighter assessments of expected demand, and signalling that this sector is catching up. Confidence remained broadly unchanged in both the retail trade and in construction (Graph 3).

Confidence among consumers improved markedly (+3 in the euro area) and made a big contribution to the overall improvement in sentiment. Widely-felt optimism about the general economic situation as well as further considerable easing of fears of unemployment set the tone. The consumer confidence indicator is now above its long-term average (for the first time since April 2008).

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

All countries but Italy reported an improvement in the ESI in August, against the backdrop of diverging trends registered in previous months (Graph 4).

Germany again reported an increase (+1.1) in the ESI, following a record rise the previous month. Upbeat export order books in industry confirmed that businesses are experiencing strong external demand. At the same time, the marked ongoing increase in consumers' sentiment since last June, as well as in retail, signal a possible rebalancing towards growth driven by domestic demand.

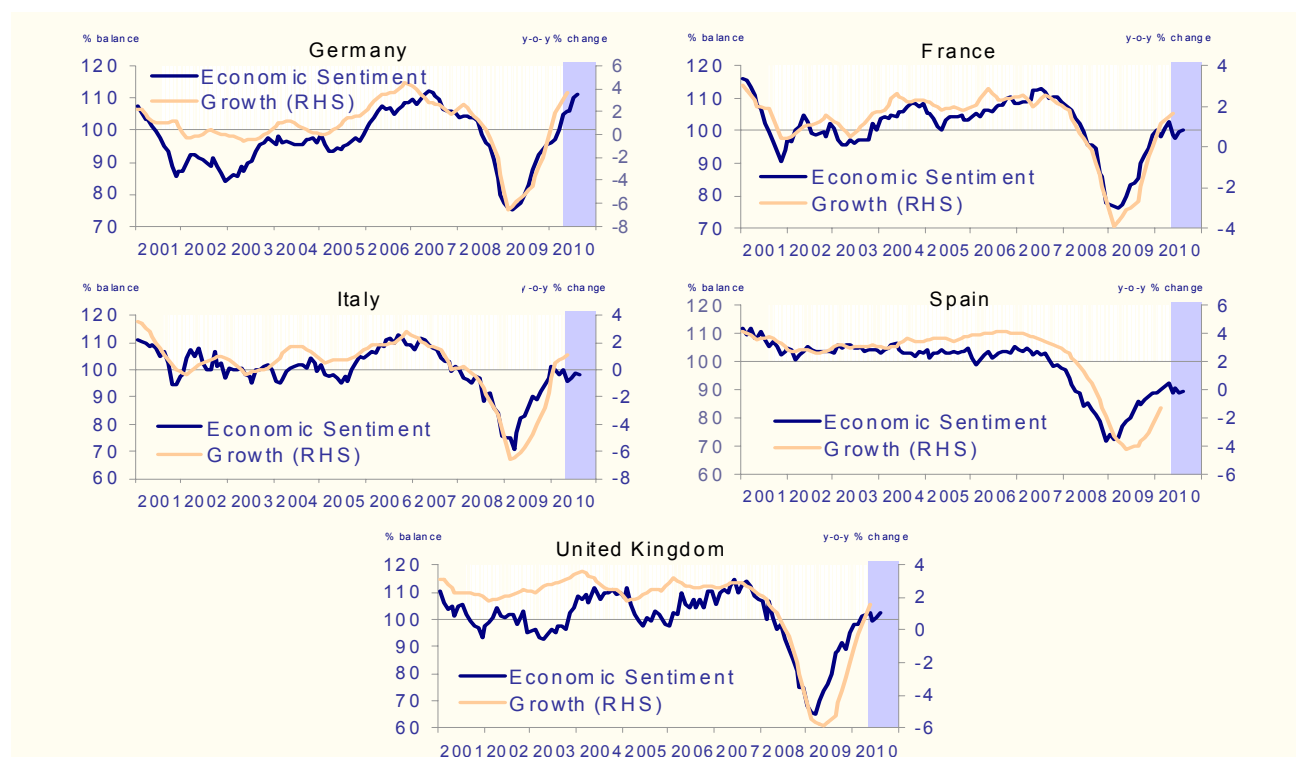
Sentiment also improved in Spain (+0.9), mainly thanks to the optimistic views of consumers. Spanish confidence also improved in industry and construction on the back of upbeat assessments of order books, though it weakened in services.

The rise in the ESI was less pronounced in France (+0.4). After having been decreasing for 6 months in a row, sentiment among consumers recorded a significant improvement. In contrast, confidence deteriorated in industry.

Italy reported a decline (-0.9) in the ESI. Overall, the decline in sentiment resulted from a drop in all sectors apart from services. Confidence among consumers worsened on the back of more pessimistic views on the general economic situation. Among the largest euro-area member states, only Italian consumers did not share widely-felt optimism about the general economic situation.

The UK reported a significant improvement in sentiment (+1.5). Confidence improved in all sectors except services, where it worsened substantially. Consumers were mostly positive, particularly about the general economic situation, which partially offset the drop recorded last month.

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.

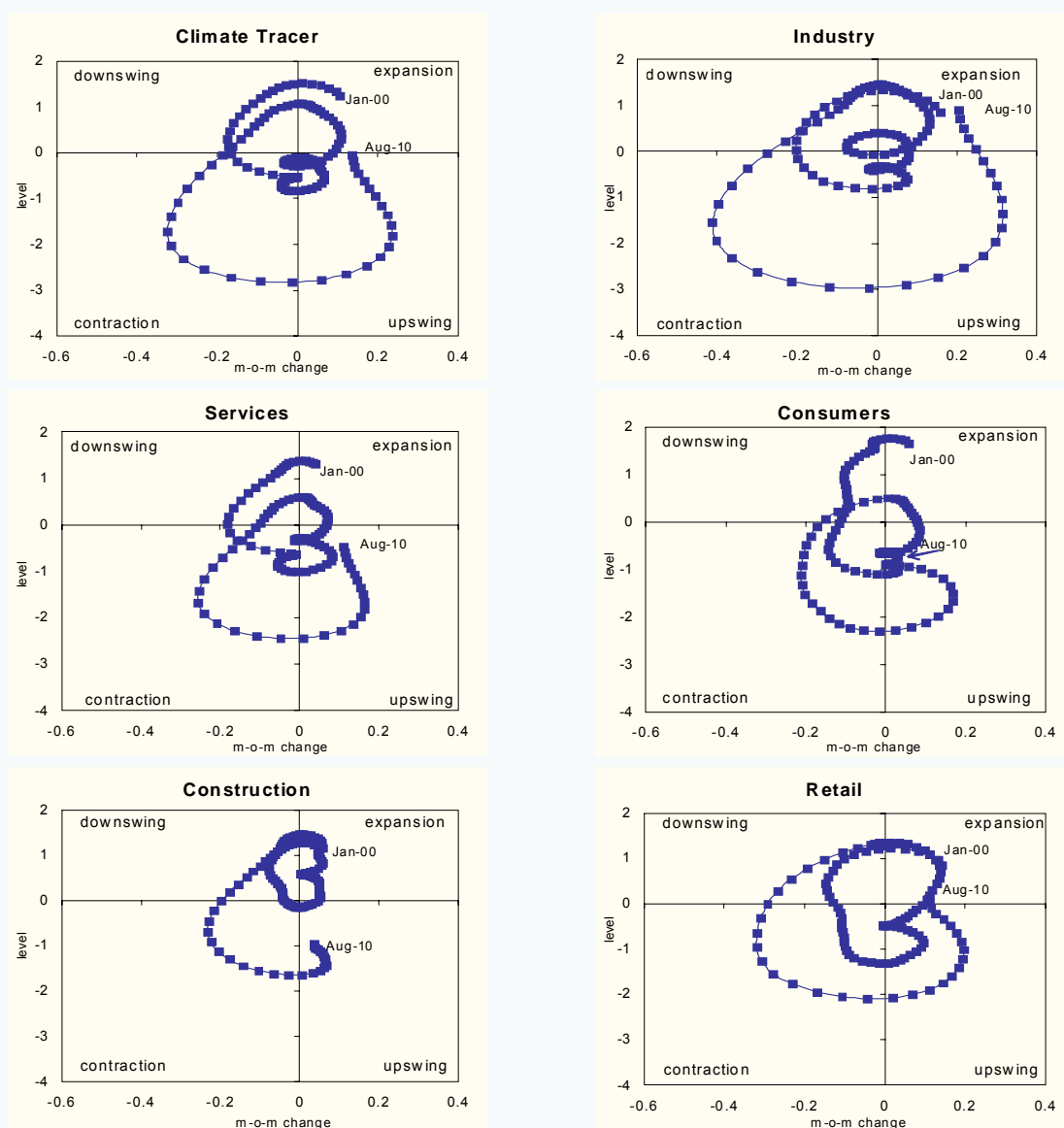
The economic climate tracer

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, closely approaching that for expansion. The climate tracers for industry and the retail trade are already in the expansion area, while services and construction are still in the upswing phase, with construction lagging behind. The consumer climate tracer has moved back to the upswing 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.

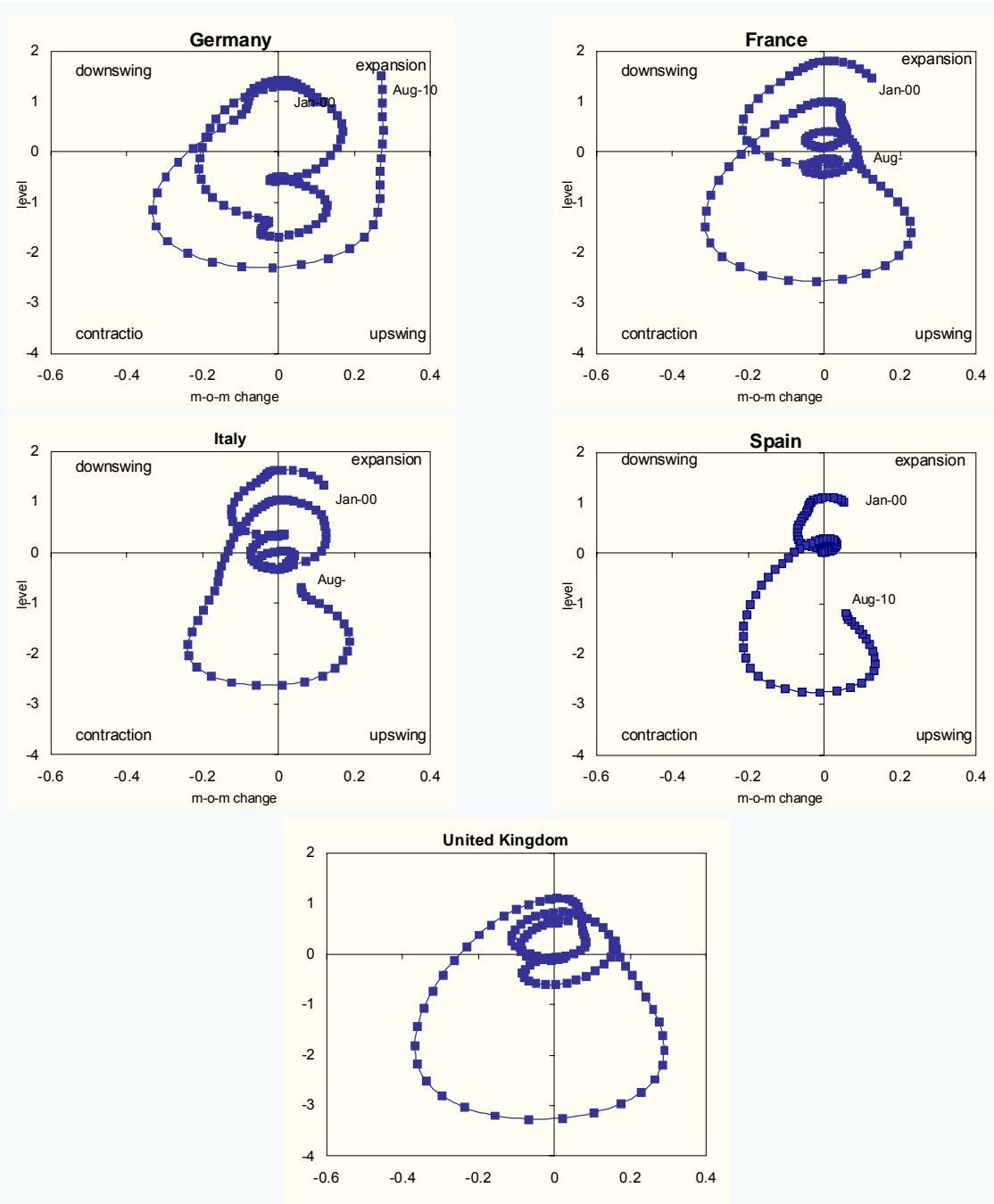
GRAPH 5a: Economic climate tracer across sectors, euro area



Source: European Commission

Graph 5b displays the economic climate tracer for the 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 France leading and closely approaching expansion.

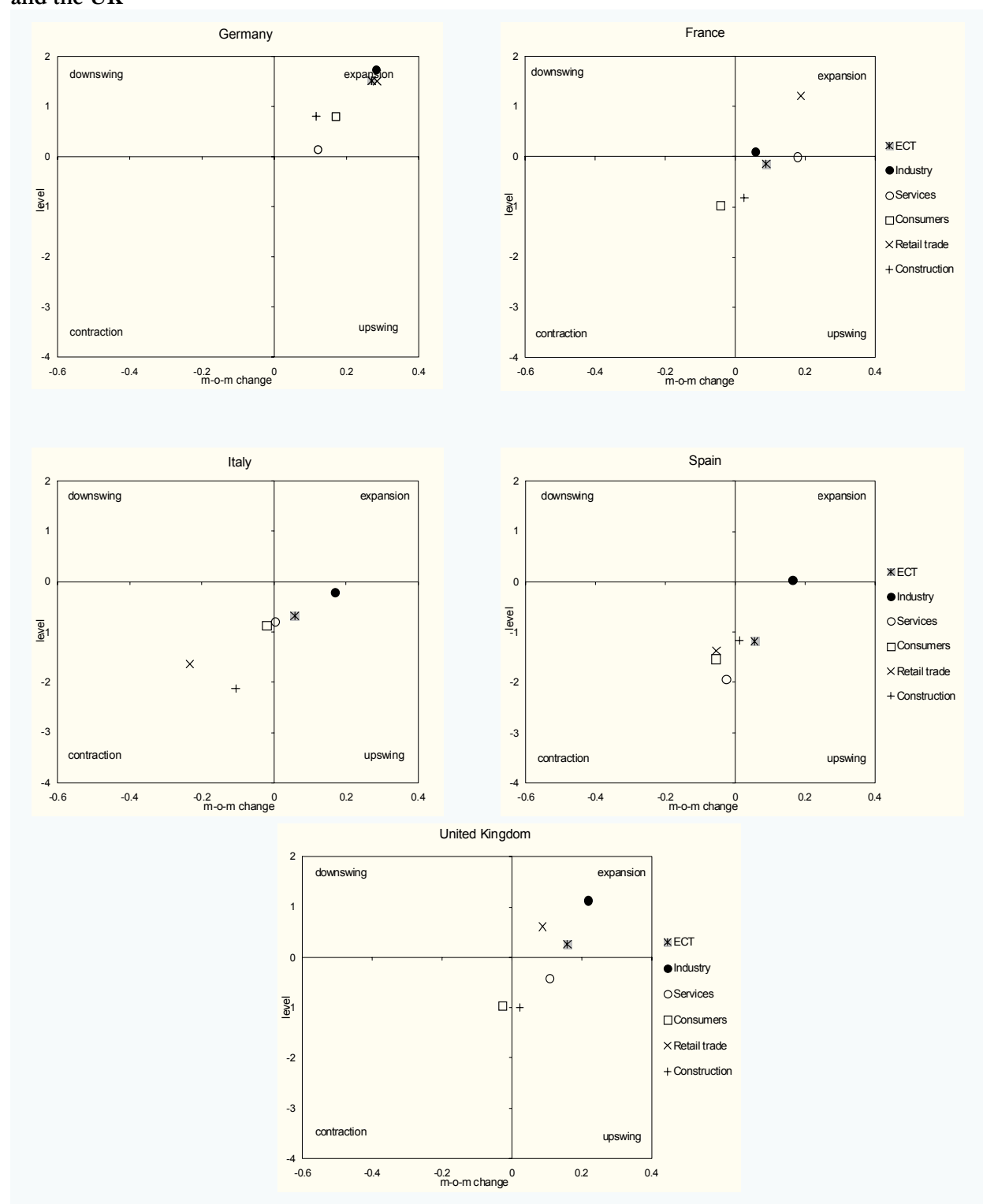
GRAPH 5b: Economic climate tracer for the four largest euro area Member States and the UK



Source: European Commission

Graph 6 shows the latest values for the climate tracer broken down by sector. Germany is firmly in the lead, with all its sectoral climate tracers in the expansion quadrant. Other countries show a more mixed picture. Industry is in the upswing quadrant in the UK, Spain and France. The same is true for the retail trade in both France and the UK.

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



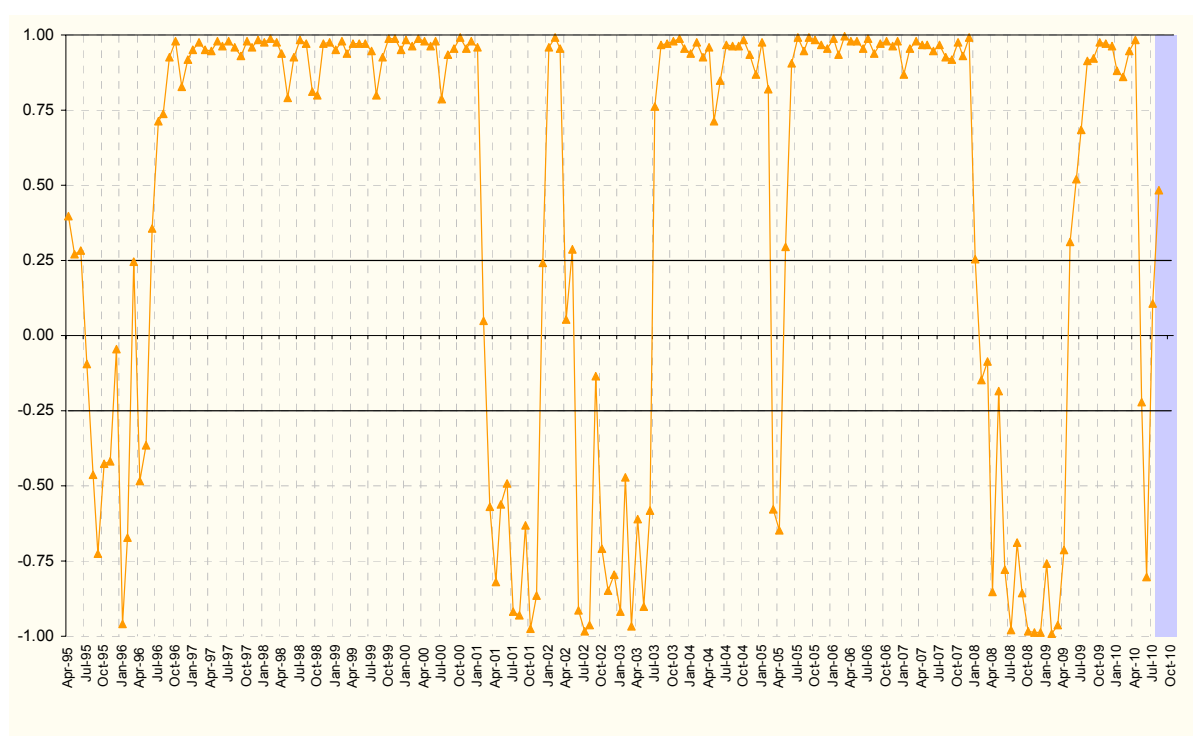
Source: European Commission

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 (TPI) moved above zero (+0.48) in August, but is still far from approaching 1.

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 positive change and signals a possible favourable cyclical phase, suggesting 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 Ecwin:

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 turning point index model, based on the work of Grégoir and Lenglart (2000)¹, aims at identifying 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 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.