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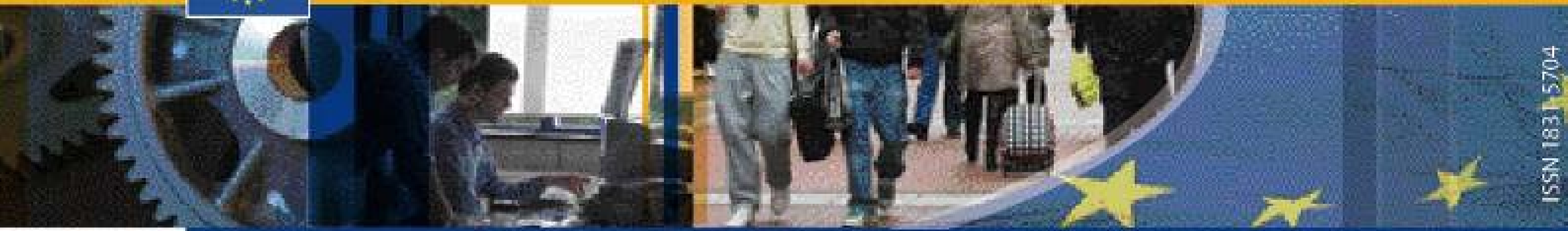

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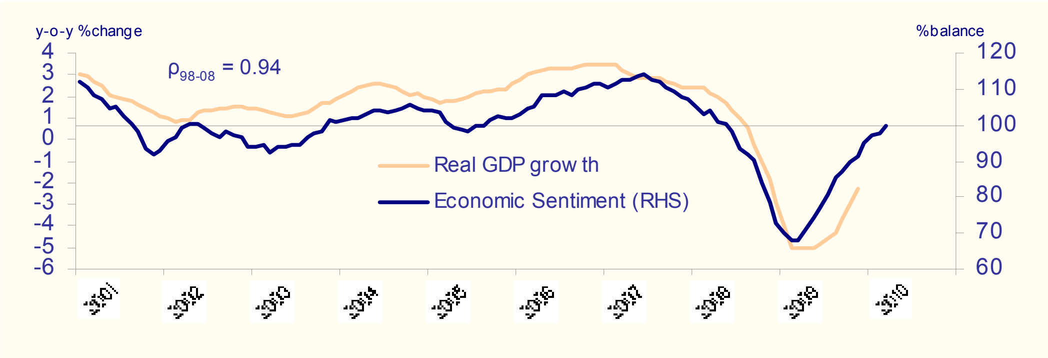
European Business Cycle Indicators

- Economic sentiment regains momentum after a pause in February
- Improvement driven by sentiment in industry
- Increased confidence in services and construction
- Consumer confidence levelled off, with divergent patterns across countries
- Special focus: What kind of recovery? Latest messages from business survey indicators

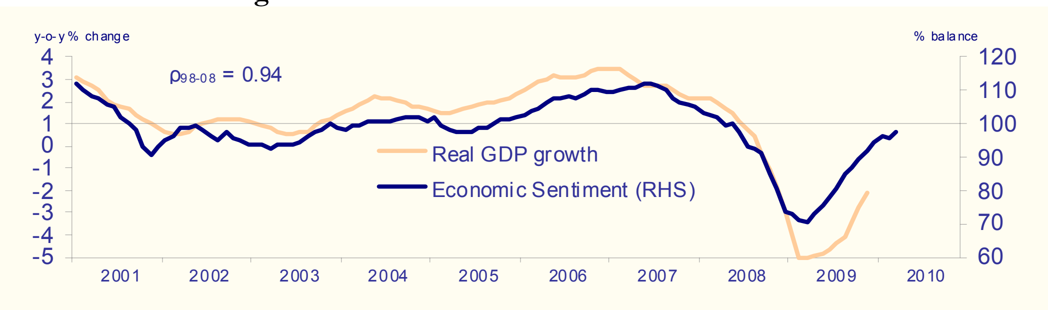
Economic sentiment indicators

In March, the Economic Sentiment Indicator (ESI) improved significantly, reaching 99.6 (+2.0 points) in the EU and 97.7 (+1.8) in the euro area. After the pause recorded in February, the upward trend appears to have regained its momentum. This level of sentiment, which is now close to its long-term average, suggests that year-on-year GDP growth could turn positive in the first quarter of 2010 in both the EU and the euro area (see Graphs 1a and 1b).

GRAPH 1a: ESI and GDP growth for the EU



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



Source: European Commission

Note 1: in RHS 100 = average 90 to 09.
Note 2: both series are plotted at monthly frequency: Monthly GDP data are obtained by linear interpolation of quarterly data.
Note 3: the horizontal line depicts the long-term average of the sentiment indicator

'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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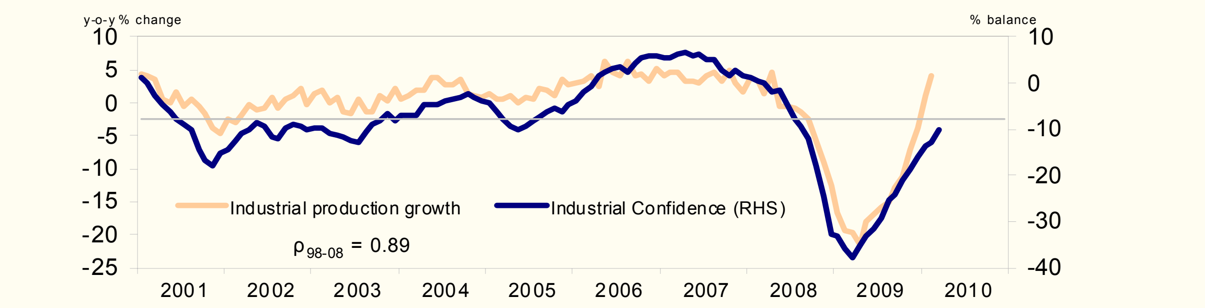
In the euro area, the sharp improvement in sentiment in industry was the main driver of the overall improvement in ESI. In March, the industrial confidence indicator gained 2 points in the EU and 3 points in the euro area (see Graph 2) reflecting managers' improving order books and production expectations. Their assessment of production trends observed in recent months was even more optimistic. The level of stocks was assessed to be below what was considered the optimum level.

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

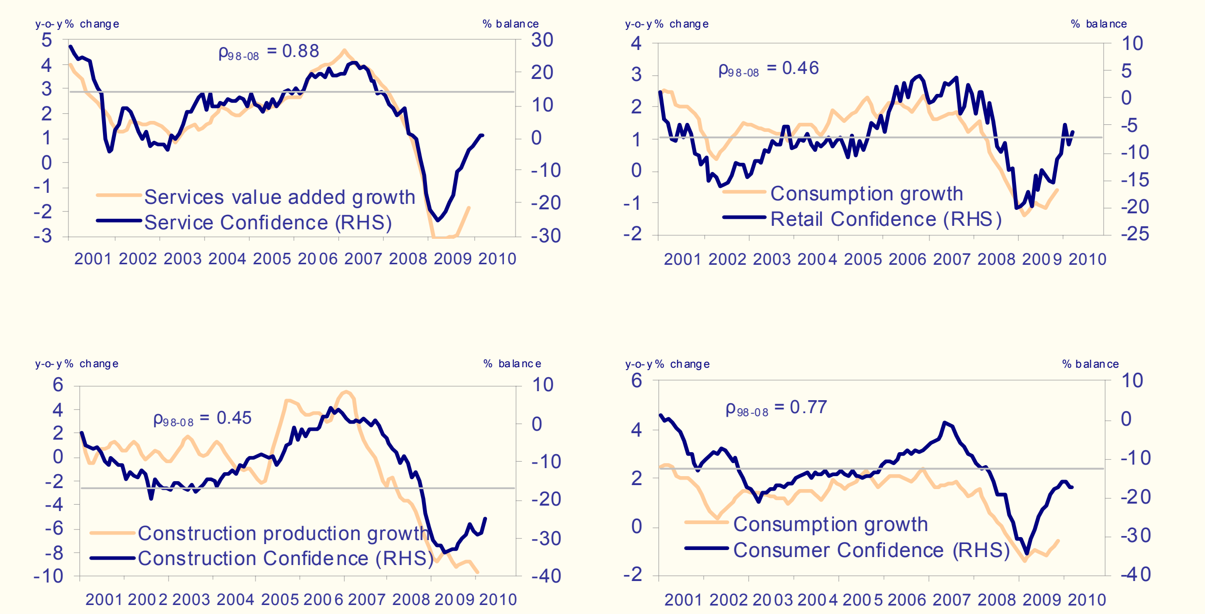


Source: European Commission
Note: the horizontal line depicts the long-term average of the confidence indicator

Confidence in services increased by 1 point in the EU and remained unchanged in the euro area, pushed up by a marked improvement in Germany, which offset a sizeable drop in Italy. Positive signals also emerged in construction, which rose by 2 points in the EU and by 3 points in the euro area. (see Graph 3).

In line with the flash estimate, confidence among consumers remained broadly unchanged. Results were mixed across countries, with views diverging on the general economic outlook and unemployment prospects in particular. Among the large countries, sentiment improved markedly in Germany and Poland, compensating for the strong declines registered in Spain, France and the UK.

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



Source: European Commission
Note: the horizontal line depicts the long-term average of the confidence indicators

Economic sentiment indicators for the four largest euro area Member States and the UK

Across the four largest euro area Member States and the UK no clear pattern emerged (see Graph 4).

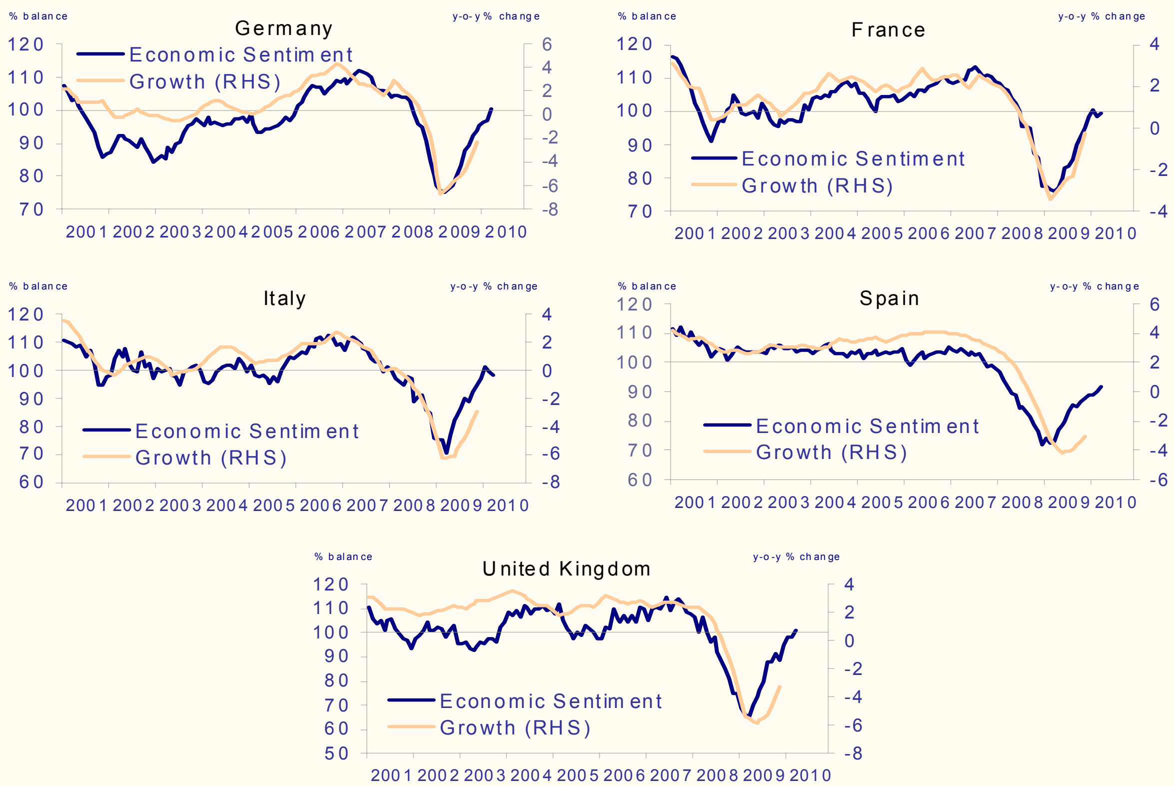
Germany reported the highest increase in economic sentiment (+3.4 points), reflecting sizeable rebounds in all sectors and among consumers. Its ESI now stands above its long term average.

Sentiment also improved substantially in the UK (+2.6). The ESI benefited from sizeable rebounds in industry and services, but was dampened by growing pessimism among consumers and in the retail trade and construction sectors.

The ESI increased, albeit less markedly, in France and Spain (both +1.4), mostly driven by improving sentiment in industry. In France, sentiment in services remained broadly unchanged, while confidence deteriorated in retail and construction, and among consumers. In Spain, sentiment in services increased by 1 point and jumped by 20 points in construction, reflecting managers' upbeat assessment of order books and employment expectations in the non-residential building and the public works sectors. By contrast, confidence among consumers and in retail trade declined in March.

In Italy, overall confidence deteriorated by 1.5 points. The improvements registered in industry and retail trade were offset by a decline in construction and a considerable drop in services, which among consumers remained broadly unchanged.

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



Source: European Commission

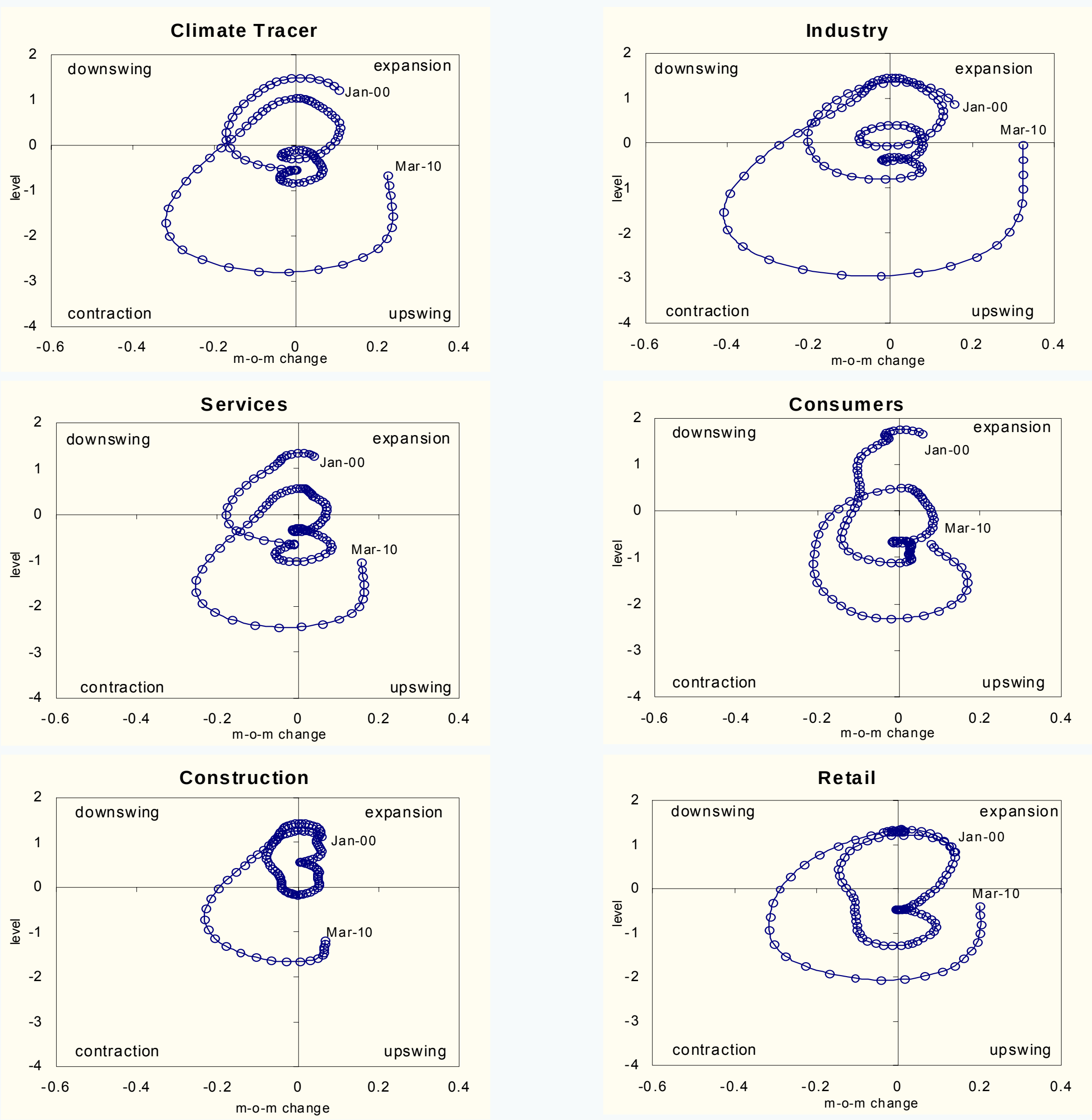
Note: the horizontal line depicts the long-term average of the sentiment indicators

The economic climate tracer

Graph 5a displays the economic climate tracer (and its sectoral components) for the euro area. The cyclical behaviour displayed by the graph -through its four quadrants- distinguishes four business cycle phases, e.g.: ‘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. For the euro area, the economic climate tracer is now firmly in the upswing quadrant. The climate tracer for industry is entering in the expansion area, while for all the other sectors is in the upswing phase. The climate tracer for construction is lagging behind, while the one for consumers it is pointing to the contraction quadrant.

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

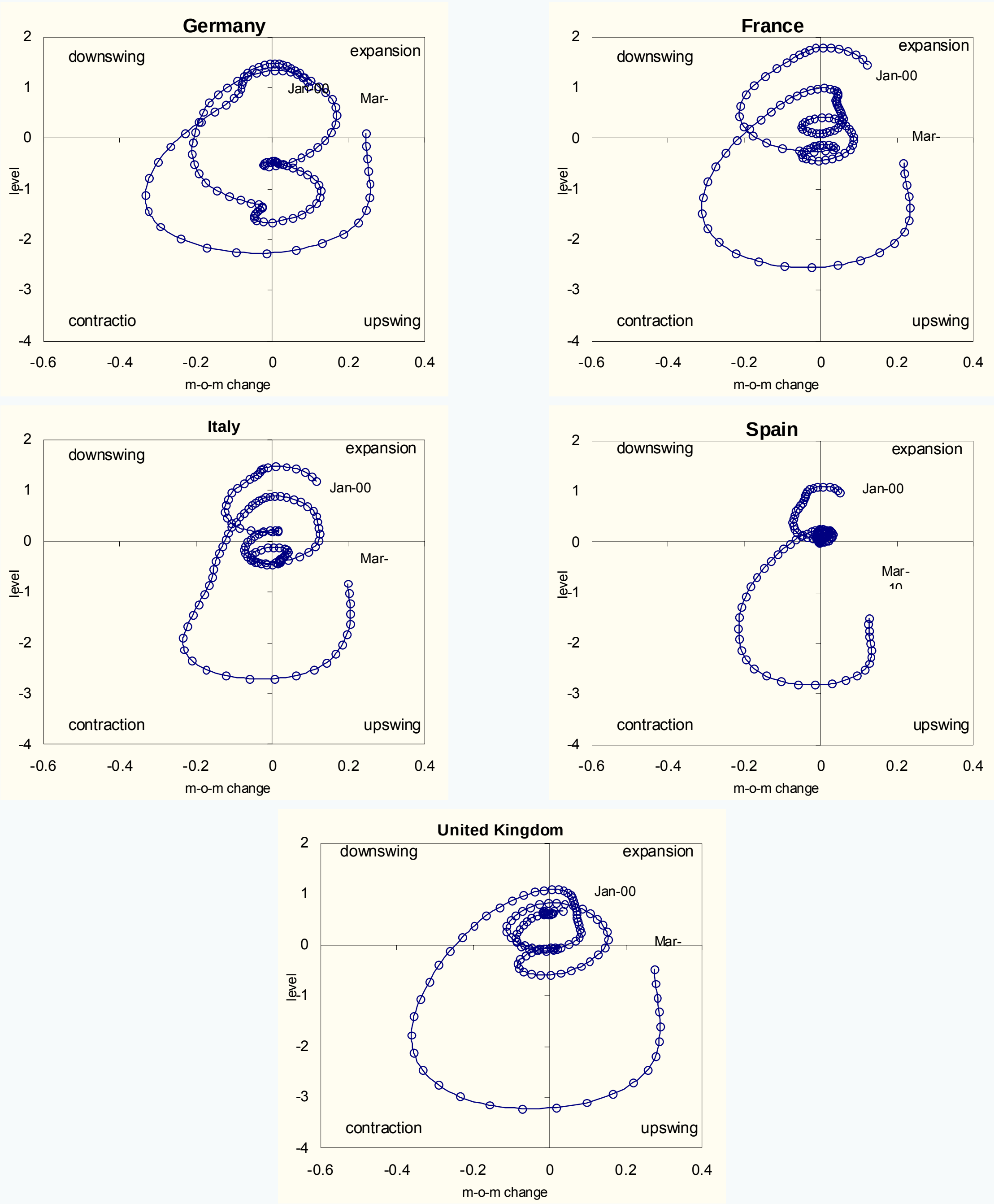
GRAPH 5a: Economic climate tracer across sectors, euro area



Source: European Commission

Graph 5b displays the cyclical movements (based on the economic climate tracer) for the four largest Member States in the euro area and for the UK. Germany is now in the expansion area, whereas the others are all in the upswing quadrant, with Spain lagging behind.

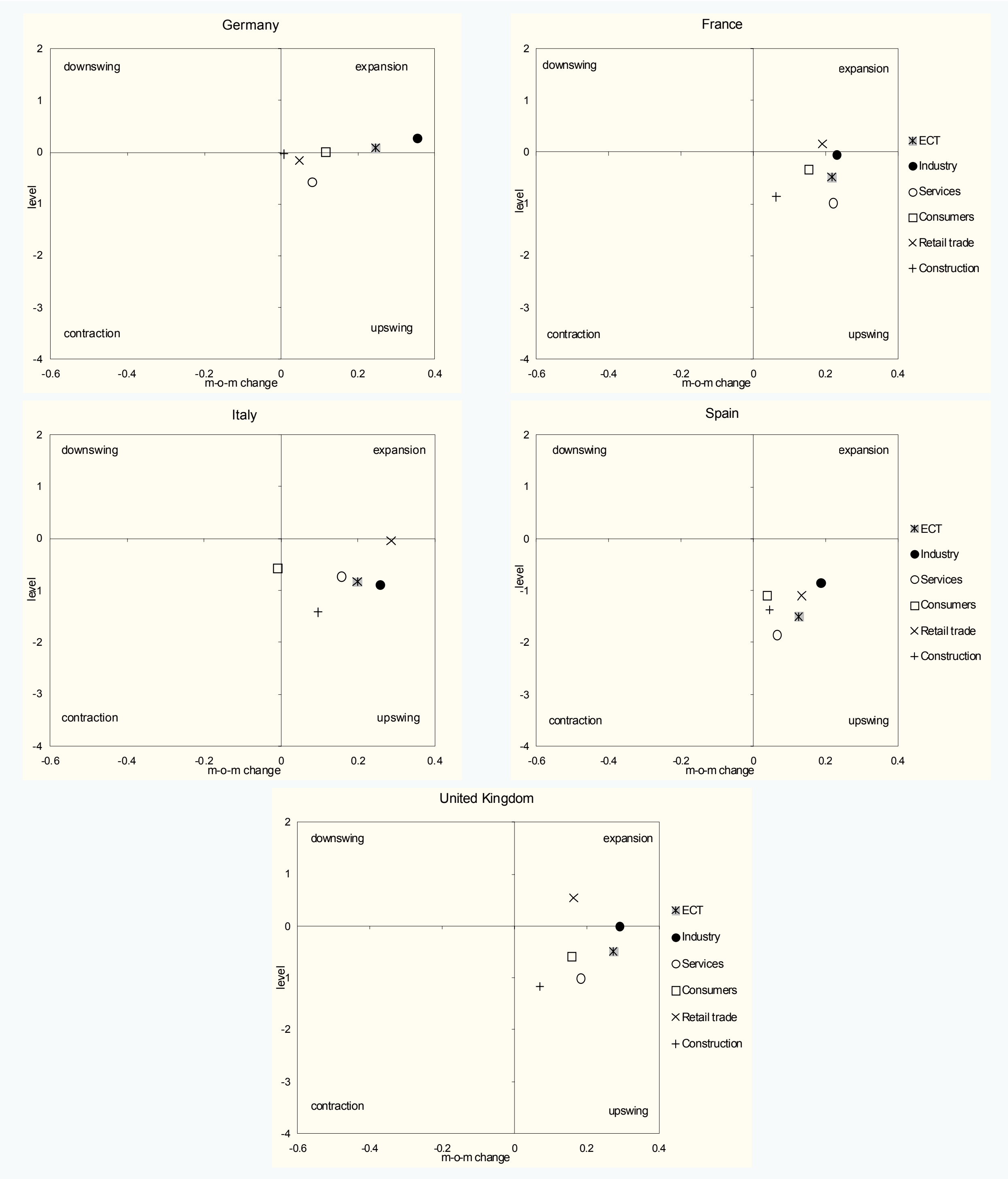
GRAPH 5b: Economic climate tracer for the four largest euro area Member States and the UK



Source: European Commission

Graph 6 shows the sectoral breakdown of the climate tracer. Most sectoral climate tracers across all the countries covered are clustered in the upswing quadrant. In Italy, the consumer climate indicator slipped back into the contraction phase. By contrast, consumers in Germany and retail trade in France entered the expansion phase.

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

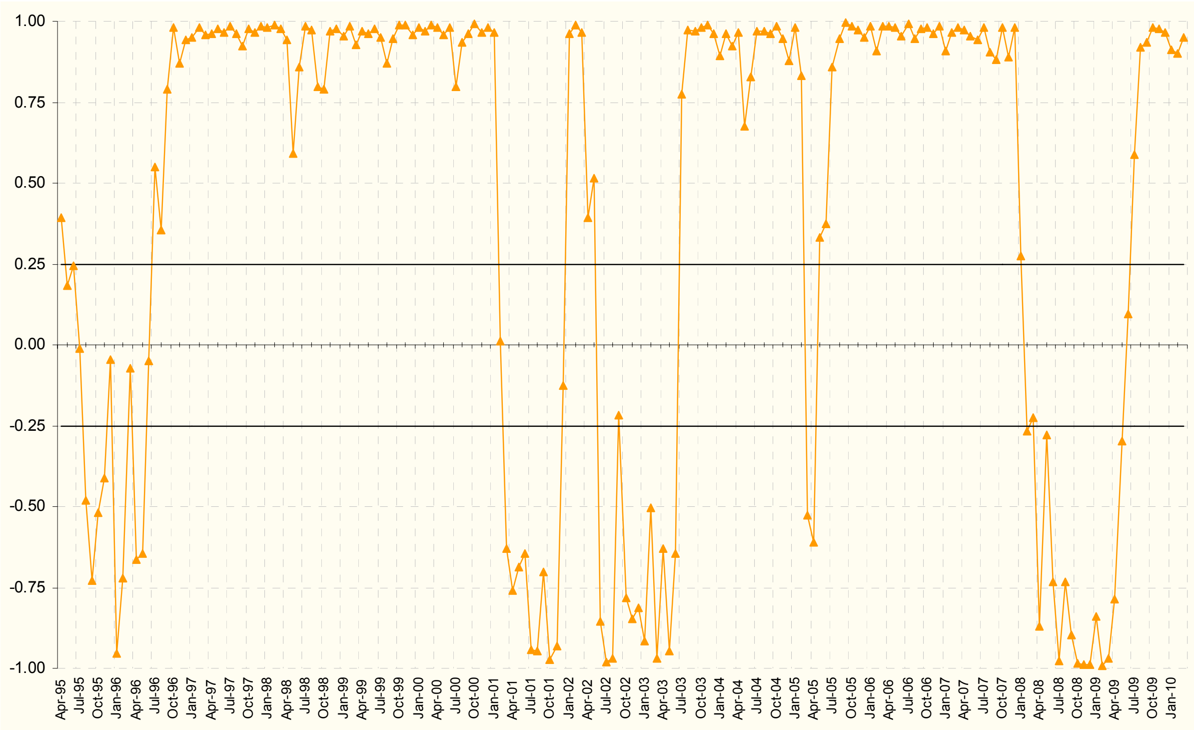


Source: European Commission

Euro area turning point index

Taking the latest survey data, the turning point index - based on a Markov switching model - estimates the difference between high- and low-regime probabilities at 0.95 in March. The turning point index has remained favourable for nine consecutive months. This points to a continuous recovery (see Annex 1 for details).

GRAPH 7: Turning point index for the euro area



Source: European Commission

What kind of economic recovery? Latest messages from business survey indicators

by Olivier Biau, Reuben Borg, Angela D'Elia and Kristine Vlagsma

This month's special focus provides a snapshot of the current state of recovery across the EU economies and takes a closer look at the individual components that make up the Industrial Confidence Indicator. There has been an unusual divergence in the development of stocks, order books and production expectations in the euro area during the recovery process. Not only the strength, but also the drivers of the recovery are not uniform across EU countries.

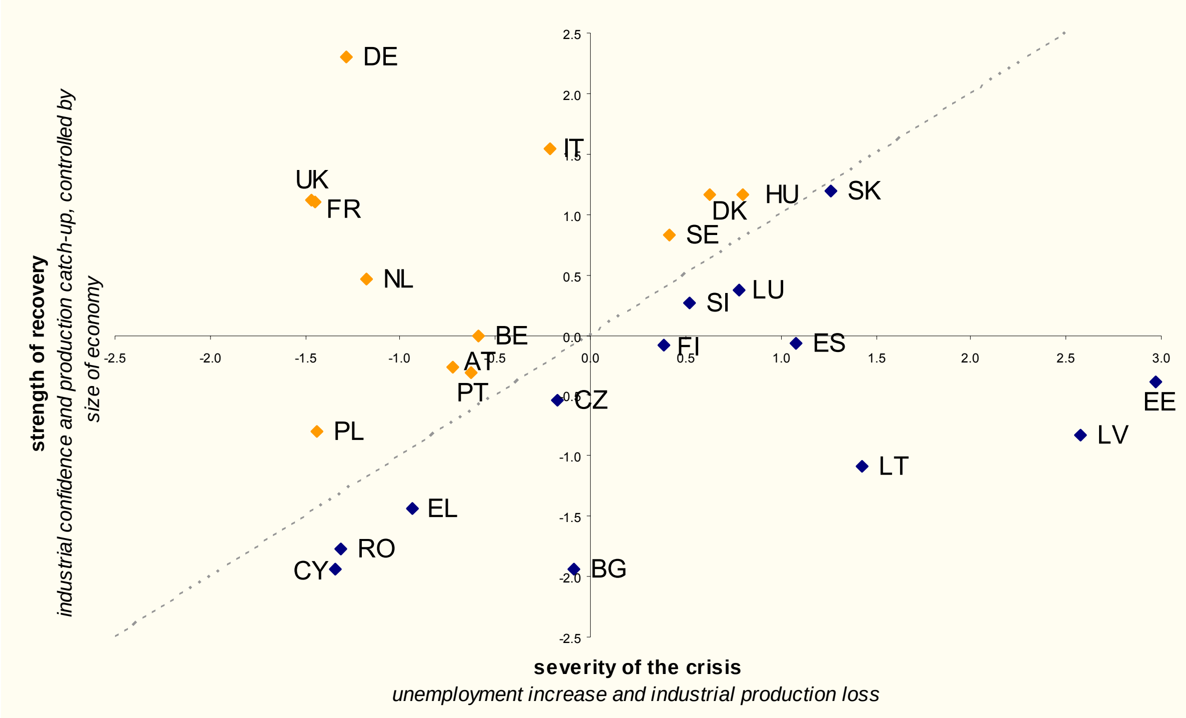
Survey results in industry are driving the recovery in sentiment …

A persistent improvement in sentiment in industry has been the main driver of the overall recovery in both areas since the trough a year ago. At the current juncture, it seems that industry is to play a key role in ensuring sustained economic recovery. The Industrial Confidence Indicator (ICI) is approaching its long term average in the EU, although it is still well below the average level in the euro area.

While the EU economy as whole is starting to recover and the industrial production is gathering steam, the situation differs across the member states. To gain an insight into the current state of recovery and to account for various economic dimensions, the following 5 variables that gave the most meaningful grouping of the economies based on the results of a cluster analysis have been selected: GDP (level), industrial confidence indicator (catch-up from the trough to the latest value), industrial production (catch-up from the trough to the latest value), increase in unemployment (from the pre-crisis levels to the peak) and loss in industrial production (from the pre-crisis levels to the through). Furthermore, these variables have been used as inputs for a principal component analysis, in order to map each country into a two-dimensional space.

Graph 1 provides a snapshot of the current state of the economic recovery of the EU countries, using as coordinates the first two principal components. Economies above the 45-degree line have shown relatively strong recovery judging by improvement in industrial confidence and production.

Graph 1: The state of economic recovery: a cross-country view



Source: European Commission and Eurostat

Note 1: Data for Ireland and Malta was not available for all variables
Note 2: Severity of the crisis increases from left to right: countries on the right side have been hit more in terms of rise of unemployment and loss of industrial production. Strength of recovery increases from bottom to top: countries on the top side are recovering better in terms of industrial confidence and production.

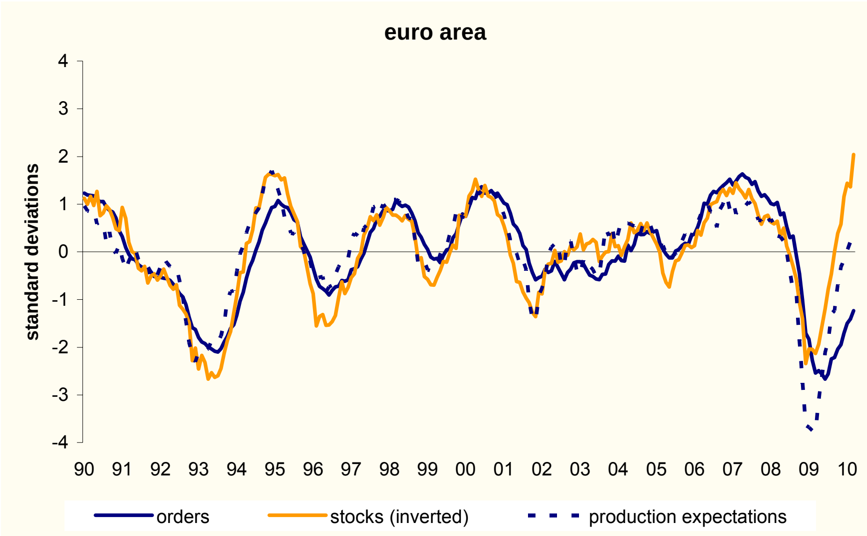
Among the large EU countries, Germany is firmly in the lead, with France and the UK following not too far behind. Italy, which was somewhat harder hit by the crisis, also shows strong signs of recovery. Spain, which suffered even more, is not yet showing any significant improvement. While Poland was the only EU member state, which avoided contraction of its economy in 2009, it has shown no strong improvement in the ICI despite significant increase in the industrial output.

… although order book levels are not showing a substantial improvement …

A closer look at the individual components of the ICI reveals that the current recovery is largely driven by the inventory cycle.

The ICI is the average of the balances of the negative and positive answers to the questions on order books, stocks and production expectations. Graph 2 shows results separately for these components in the euro area. The first general observation to be made is that this recovery is characterised by an unprecedented divergence among the three components. During the recession of 1992-1993, order books, stocks and expectations all followed similar patterns. This is not the case during the current recession: the levels of the three components are very different in all countries, with a stronger recovery being seen in stocks (which are considered to be well below normal levels) and a weaker recovery in orders.

Graph 2: Co-movement in orders, stocks and production expectations in the euro area



Source: European Commission

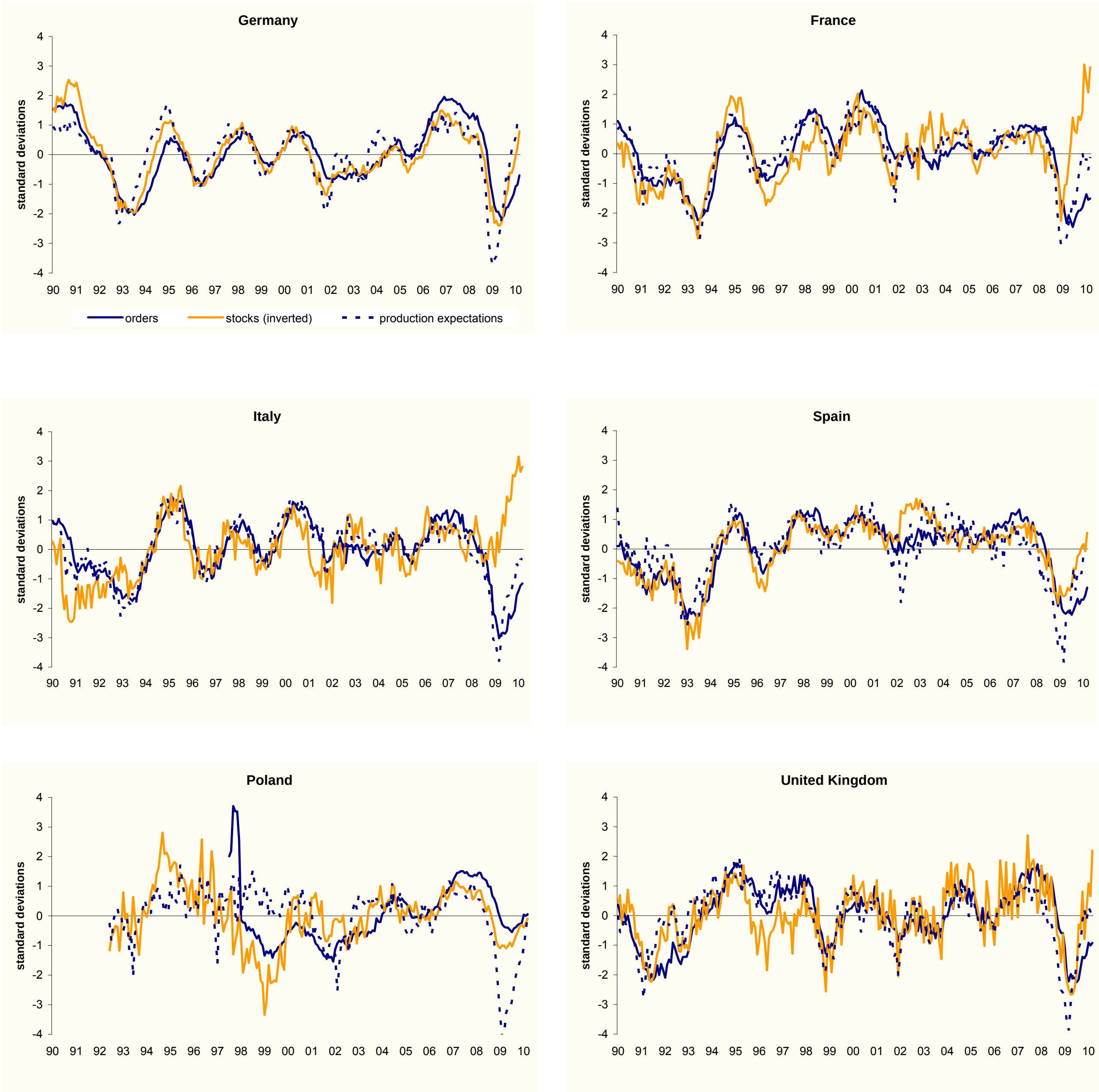
How are we to interpret these divergent developments? Declining stock levels have been contributing substantially to the overall improvement in the sentiment indicator and are now considered to be well below normal. In the meantime, production expectations have been catching up and are now above the historical averages in the euro area. Low stock levels and increasing production expectations are consistent with the recovery observed in industrial production, as companies have to replenish their stocks at some point. However, most managers still consider that their order book levels are not sufficient, possibly due to current low levels of capacity utilisation.

Overall, these findings suggest that the current recovery in industrial production might be fragile going forward.

… and there are noticeable differences across countries

In Germany, the balance on production expectations is now well above its historical mean, and also above the balance on stock levels. Low stock levels and very high production expectations point to a possibly substantial stock re-adjustment in the coming months. Managers in Germany still consider order book levels to be below normal, even though the reported level is still significantly higher than the total for the euro area. The experience in Poland is different: the decline in order books and stocks has been far more moderate than in the other large European economies during the recession. All the components have now converged to their average levels suggesting stable economic activity.

Graph 3: Co-movement in orders, stocks and production expectations in the large EU countries



Source: European Commission

The divergence in the development of the components of the ICI appears particularly strong in France, Italy and the UK. In these countries, stock levels are markedly low. Production expectations are around their historical average, while order books are still weak; the UK is in a somewhat better position. Very low stock levels coupled with moderate production expectations could reflect an uncertain situation in which firms are hesitant to produce and invest. Thus, despite the encouraging global picture (Graph 1) the recovery may prove to be fragile.

In Spain, the situation appears to be worse because the pace of destocking has been moderate; when combined with subdued expectations and order books, the strength of the recovery may be even weaker.

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 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, building, retail trade and consumers. This model is symmetrical in signalling turning points. TPI values within the ± 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 ± 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.