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European Business Cycle Indicators

A closer look at labour shortages across
the EU

3rd Quarter 2022

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European Business Cycle Indicators

3rd Quarter 2022

A closer look at labour shortages across the EU.

This document is written by the staff of the Directorate-General for Economic and Financial Affairs, Directorate A for Policy Coordination, Economic Forecasts and Communication, Unit A3 - Economic Situation, Forecasts, Business and Consumer Surveys (http://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys_en).

Contact: Christian.Gayer@ec.europa.eu.

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OVERVIEW

Recent developments in survey indicators

- The EU and euro-area **Economic Sentiment Indicators (ESI)** lost further momentum over the 3rd quarter of 2022, losing 8.9 (EU) and 9.6 (EA) points compared to June. At 92.6 and 93.7 points in September, the indicators are now markedly below long-term average.
- The **Employment Expectations Indicator (EEI)** decreased more moderately, remaining well above long-term average. The indicator finished the third quarter of the year 3.9 (EU) / 3.6 points (EA) lower than in June 2022.
- **Confidence** decreased markedly in industry, services, retail trade and among consumers, while the decline was less severe in construction.
- Sentiment deteriorated strongly in all the **six largest EU economies**, mainly in Germany (-12.3) but also in Italy (-8.6), the Netherlands (-8.3), Poland (-7.4), France (-5.5) and Spain (-5.2). The level of sentiment is now below long-term average in all the six largest EU economies.
- The EU **Economic Uncertainty Indicator (EUI)** climbed 4.5 points from June. Uncertainty rose markedly in all business sectors. Consumer uncertainty reached a new all-time high.
- In July, **capacity utilisation** in manufacturing edged down compared to April. At around 82%, utilisation remained above long-term average in both regions. Capacity utilisation in services increased by 1.2 percentage points to around 91%, above-average readings in both regions.
- The share of EU industry managers pointing to a **shortage of material and/or equipment** decreased by 6.2 percentage points to 44.7% in July. After peaking in April, the percentage of industry managers pointing to **labour shortages** as a limiting factor eased in July to 27.4%.
- Consumers' quantitative **price perceptions** and **expectations** rose further, reaching levels unseen since the beginning of the series in 2004.

Special topic: A closer look at labour shortages across the EU

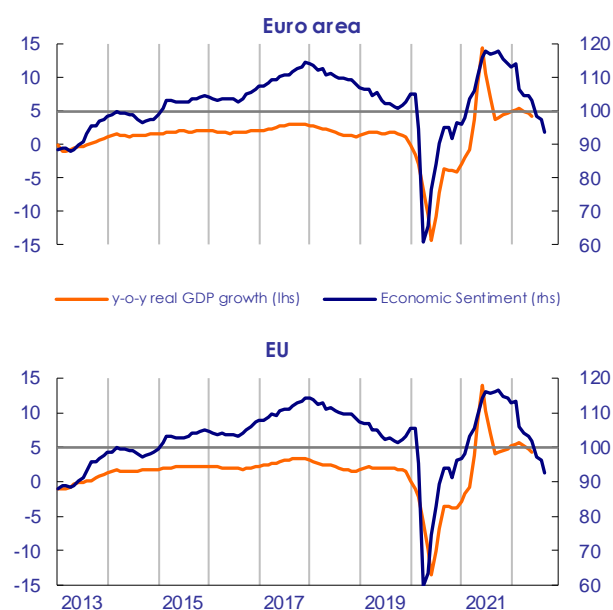
The special topic focuses on labour shortages reported by managers in the framework of the Commission's harmonised EU-wide Business Survey programme. Reported labour shortages are at unprecedented levels, widespread across all three surveyed business sectors (industry, construction and services) and across Member States. While the reported level of labour shortages is markedly lower in southern European countries, even in these countries, the increase after the pandemic was strong across all three sectors. The record-high labour shortages are mainly associated with the unprecedented demand that firms faced after the re-opening of the economies after the COVID-19 pandemic and, in the case of services, the subsequent migration of workers out of contact-intensive services branches such as accommodation and food service activities. In construction, energy transition challenges may entail further structural pressure on building and specialized construction activities.

1. RECENT DEVELOPMENTS IN SURVEY INDICATORS

1.1. EU and euro area

In the 3rd quarter of 2022, the EU and euro-area **Economic Sentiment Indicator (ESI)** continued its downward trend that started towards the end of 2021 and intensified in March 2022 after the Russian invasion of Ukraine¹, (see Graph 1.1.1).

Graph 1.1.1: Economic Sentiment Indicator

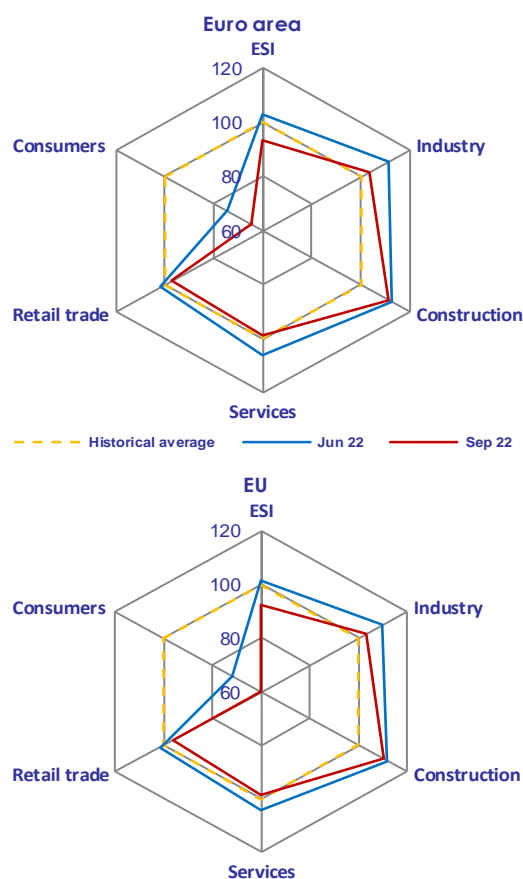


Note: The horizontal line (rhs) marks the long-term average of the survey indicators. Confidence indicators are expressed in balances of opinion and hard data in y-o-y changes. If necessary, monthly frequency is obtained by linear interpolation of quarterly data.

After two significant declines in July and September and a milder decline in August, the ESI finished the third quarter 8.9 (EU) and 9.6 (EA) points below its level of June 2022. The indicator's current reading (92.6 in the EU, 93.7 in the EA) is well below its long-term average of 100.

From a sectoral perspective (see Graph 1.1.2), EU/EA confidence decreased markedly in industry, services, retail trade and among consumers, while the decline in confidence was less severe in construction.

Graph 1.1.2: Radar Charts



Note: A development away from the centre reflects an improvement of a given indicator. The ESI is computed with the following sector weights: industry 40%, services 30%, consumers 20%, construction 5%, retail trade 5%. Series are normalised to a mean of 100 and a standard deviation of 10. Historical averages are generally calculated from 2000q1. For more information on the radar charts see the Special Topic in the 2016q1 EBCI.

The level of confidence fell below its long-term average in services and retail trade. Consumer confidence plummeted to a record low level, far below its long-term average. Confidence in industry and construction remained above long-term average.

Economic sentiment deteriorated strongly in all the six largest EU economies, mainly in

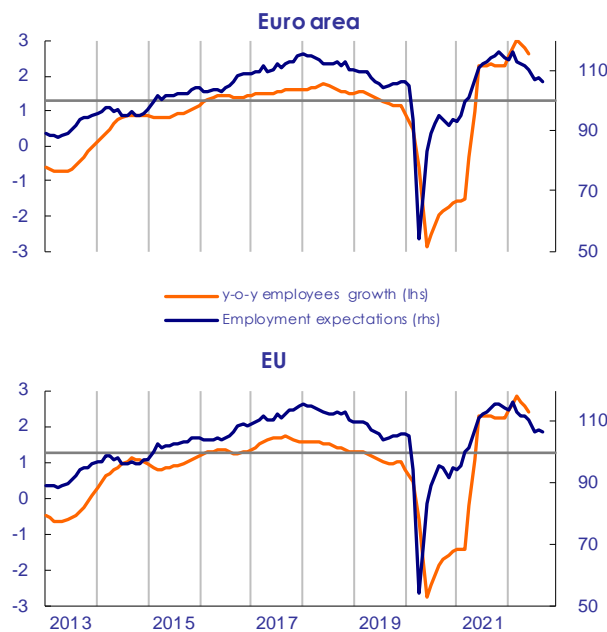
¹ The February readings of the indicators were based on surveys conducted until 18 February and, hence, did not reflect the impact of the invasion.

Germany (-12.3), but also in Italy (-8.6), the Netherlands (-8.3), Poland (-7.4), France (-5.5) and Spain (-5.2). The level of sentiment is now below long-term average in all six largest EU economies.

The recessionary signal emanating from the ESI is in line with the evolution of Standard & Poor's Eurozone Composite PMI, which decreased by 3.9 points over the third quarter, falling below the no-change threshold of 50.0. ESI results are also consistent with the Ifo Business Climate Index (for Germany) which dropped by 8.0 points over the quarter.

The **Employment Expectations Indicator (EEI)** decreased more moderately than the ESI, remaining well above its long-term average. The indicator finished the third quarter 3.9 (EU) / 3.6 points (EA) lower than in June 2022. Employment expectations decreased markedly in industry and - to a lesser extent - in services and retail trade, while remaining broadly stable in construction.

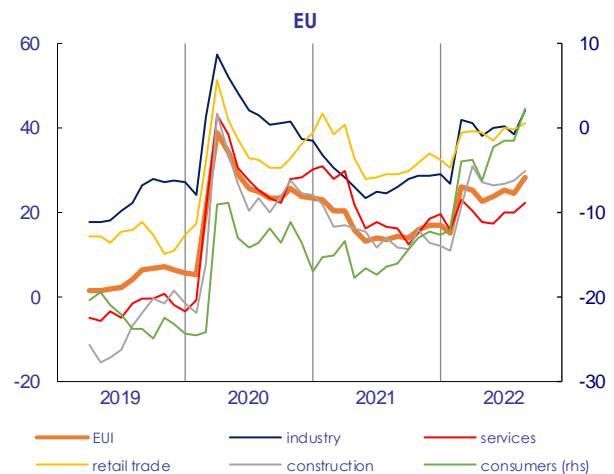
Graph 1.1.3: Employment expectations indicator



After having decreased slightly in the second quarter, the **EU Economic Uncertainty Indicator (EUI)**² rebounded in July, decreased

fractionally in August, and picked up markedly again in June. Overall, the indicator is now 4.5 points higher than in June (see Graph 1.1.4).

Graph 1.1.4: Uncertainty

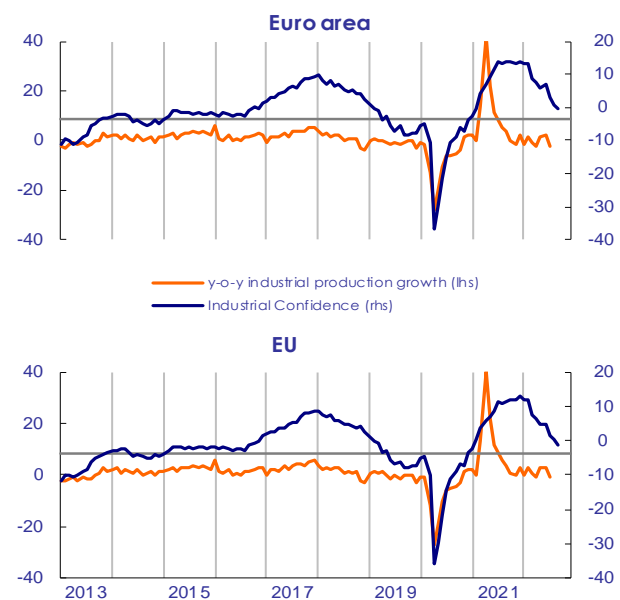


In both the EU and the EA, uncertainty rose markedly over the quarter in all four business sectors and among consumers. Consumer uncertainty has reached a new all-time high.

Sector developments

Industry confidence continued to worsen throughout the quarter, falling by 6.1 (EU) and 7.3 (EA) points, but remaining above its long-term average in both areas (see Graph 1.1.5).

Graph 1.1.5: Industry Confidence indicator



² See the special topic of the [2021-Q3 EBCI](#) for background, and section 3.6 of the [BCS User Guide](#) for methodological details.

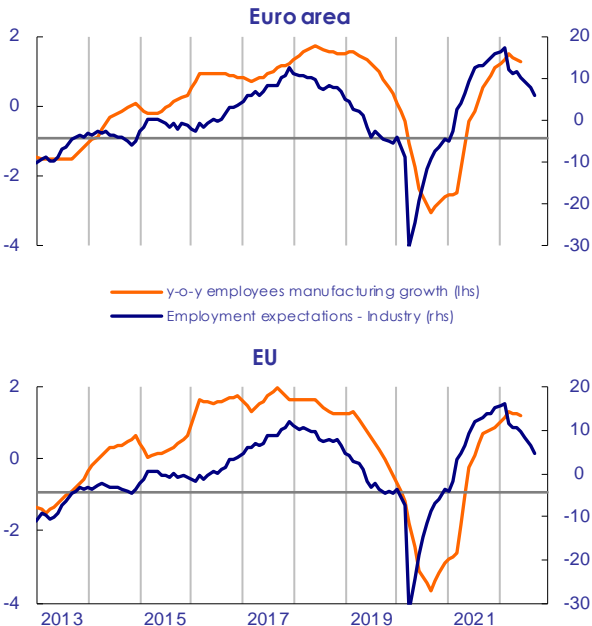
Zooming into the components of industrial confidence, the decline resulted from a sharp deterioration of **production expectations**, **order books** and the assessment of **stocks**. The latter were appraised as more abundant, pointing to weakening sales.

Of the components not included in the confidence indicator, both managers' appraisals of **past production** and their assessment of **export order books** also deteriorated markedly.

Industry managers continued to revise downwards their **employment expectations**, which fell by 4.7 (EU) and 4.2 (EA) points compared to June (see Graph 1.1.6). Managers' **selling price expectations** declined further in July and August, but increased strongly in September, resuming the upward trend that was visible from spring 2020 to spring 2022. All in all, the indicator of price expectations ended the quarter 0.8 (EU) and 0.3 (EA) points lower than in June.

Industry confidence fell markedly in all the six largest economies, particularly in Germany (-11.0), but markedly also in Spain (-6.9), Italy (-6.3), France (-5.9), the Netherlands (-4.7) and Poland (-4.6). Despite the losses, the level of confidence remained above long-term average in Germany, Spain and the Netherlands.

Graph 1.1.6: Employment expectations in Industry

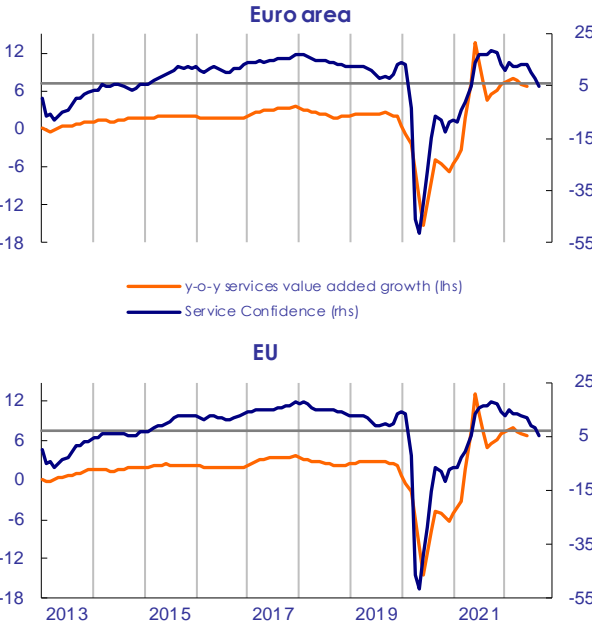


According to the quarterly manufacturing survey (carried out in July), **capacity**

utilisation in manufacturing decreased compared to April in the EU (-0.5 percentage points) and remained broadly stable in the EA (-0.1 percentage points). At 81.7% (EU) / 82.4% (EA), the indicator remained above its long-term average of 80.6% (EU) / 80.7% (EA).

The share of industry managers pointing to a shortage of material and/or equipment as a **factor limiting production** decreased in both the EU (by 6.2 percentage points to 44.7%) and the EA (by 7.3 percentage points to 45.6%) after staying at record high levels in January and April. Also the percentage of managers indicating "shortages of labour force" as a factor limiting production eased in July after reaching a peak in April. Shortage of labour force was indicated by 27.4% (EU) and 26.5% (EA) of managers in July, representing a decrease by 0.5 and 0.8 percentage points compared to April.

Graph 1.1.7: Services Confidence indicator



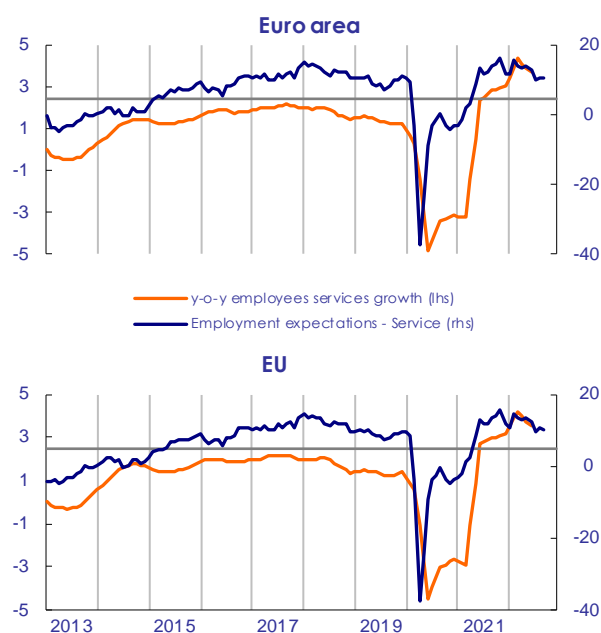
Services confidence declined markedly in both the EU (-6.8) and the euro area (-8.7) over the third quarter of 2022. At 5.1 (EU) / 4.9 (EA) points, services confidence in September was below its long-term average in both areas (see Graph 1.1.7).

Looking into the components of services confidence, managers' assessment of **past demand** fell drastically. Although less dramatically, managers' assessment of the **past business situation** and their **demand**

expectations also deteriorated sharply compared to June 2022.

Employment expectations in services ended the quarter 2.4 (EU) and 2.2 (EA) points lower (see Graph 1.1.8). Managers' **selling price expectations** declined in July and August and picked up in September, resuming the upward trend that was visible from March 2021 to April 2022. In September, the indicator was 0.6 lower than in June in the EU, and 0.7 higher in the EA.

Graph 1.1.8: Employment expectations in services

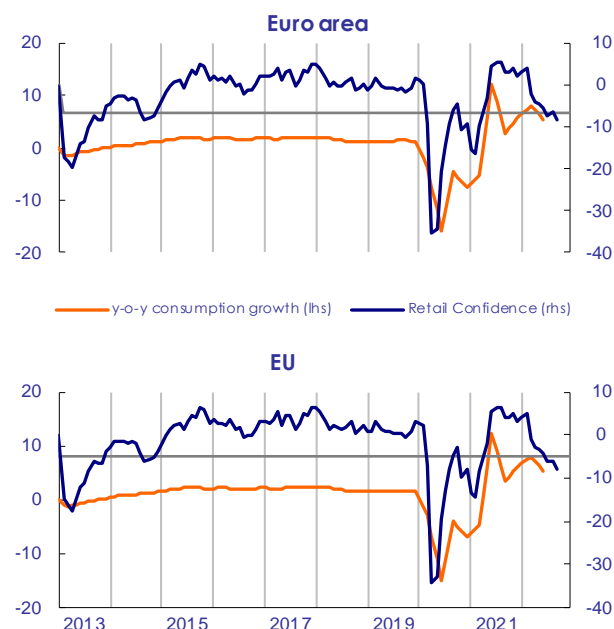


Services confidence dropped in all the six largest EU economies. The decrease was particularly significant in Spain (-10.6), Italy (-10.3), Germany (-9.7) and the Netherlands (-7.4). Confidence worsened also in France (-4.4) and Poland (-2.6).

Compared to April, **capacity utilisation in services** increased by 1.2 percentage points in July in both the EU and the EA, reaching 91.2% and 90.9%, respectively. In both areas, the indicator is above its long-term average (of 88.9% and 88.7%, respectively) and around one percentage point above its level before the outbreak of COVID-19 on the continent.

Retail trade confidence decreased further in the second quarter of the year (-3.7 points in the EU and -3.2 points in the EA), falling below the historical average (see Graph 1.1.9).

Graph 1.1.9: Retail Trade Confidence indicator



The decline in retail trade confidence resulted from marked deteriorations of managers' assessments of the **past** and **expected** business situation, and a strong pick-up in the assessment of the **volume of stocks**, suggesting weakening sales.

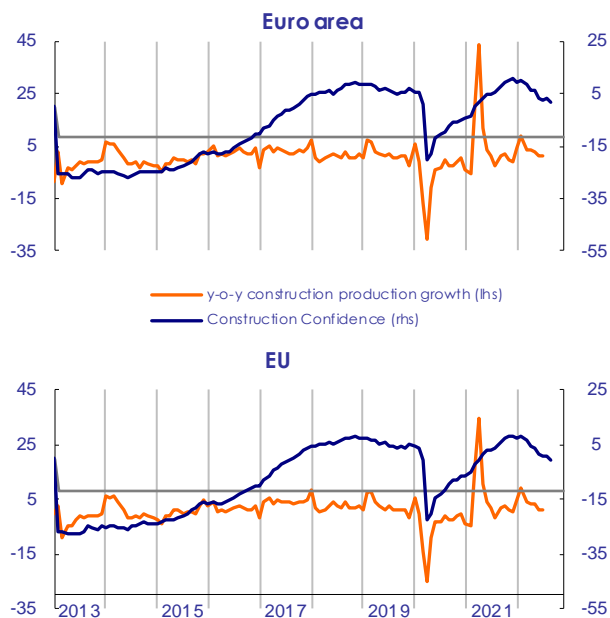
At the level of the six largest EU economies, confidence deteriorated in Germany (-9.7), Spain (-5.5) and Poland (-2.4). By contrast, confidence increased in Italy (+2.5), while it remained broadly unchanged in France (+0.4) and the Netherlands (+0.2).

After having decreased markedly during the second quarter of 2022, **construction confidence** decreased further - though less severely - during the third quarter (-2.3 points in the EU and -1.9 points the EA). The level of confidence remained nevertheless high (see Graph 1.1.10).

In both areas, managers' appraisals of **order books** worsened significantly over the quarter, while their **employment** expectations remained broadly stable at June levels.

The share of construction managers pointing to a **shortage of labour as a factor limiting production** increased compared to June in both the EU (by 3.1 percentage points to 31.9%) and the EA (by 4.3 percentage points to 31.2%). The corresponding shares for **shortages of material and/or equipment** decreased in July and August but then picked up in September. As a result, in September, the indicator was slightly below the June level in the EU (23.0%) and slightly above in the EA (24.0%).

Graph 1.1.10: Construction Confidence indicator

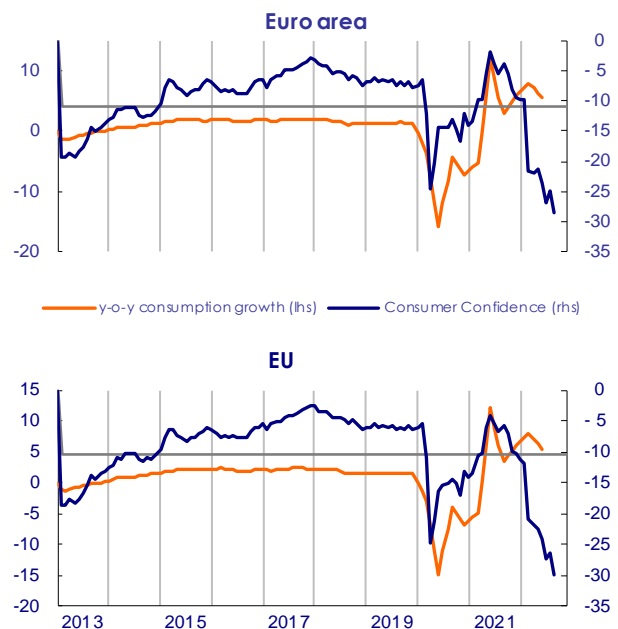


Among the largest EU economies, construction confidence decreased markedly in Germany (-8.7) and, less so, in Poland (-2.2) and France (-1.6). The indicator remained broadly stable in Italy (-0.1) and the Netherlands (+0.9), while it increased in Spain (+3.0).

Consumer confidence continued its steep downward trend visible since mid-2021. Compared to June, the indicator lost another 5.7 (EU) / 5.1 (EA) points (see Graph 1.1.11), falling to record-low levels.

The worsening in confidence resulted from substantial decreases in all its four components. Consumers markedly revised down their expectations about their **country's general economic situation** and their **household's future financial situation**. Though to a slightly lesser degree, consumers revised down also their assessment of their household's **past financial situation** and their **intentions to make major purchases**.

Graph 1.1.11: Consumer Confidence indicator



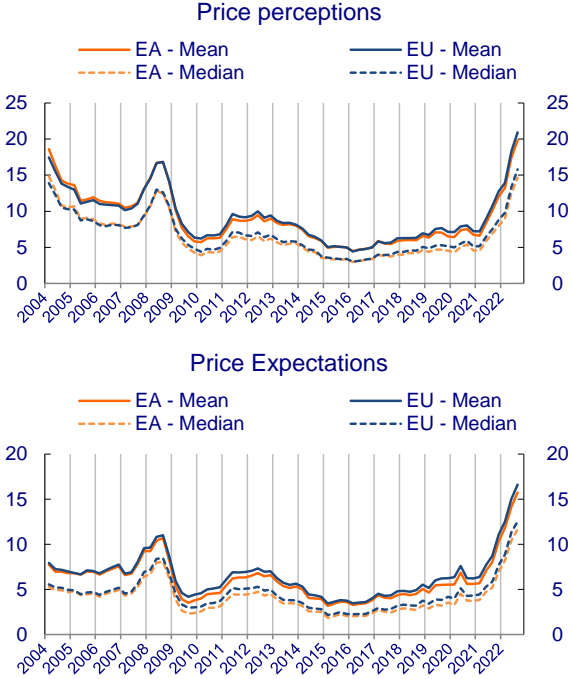
Consumer confidence fell strongly in Germany (-9.5), the Netherlands (-7.9) and Poland (-6.5) and, less so, in Spain (4.1), Italy and (-2.8) France (-1.3). Except for Poland, confidence is now below the trough marked in the first COVID-19 wave across all largest EU economies. The indicator stands at record-low levels in Germany, France, and the Netherlands.

In the EU and the EA, both the mean and the median of **consumers' quantitative price perceptions** and **expectations** continued their steep ascent in 2022-Q3. Price perceptions (change over past 12 months, in %) reached levels unseen since the beginning of the series (2004), when the euro-cash changeover had had a big impact on price perceptions. Consumers' price expectations (change over the next 12 months, in %) reached a new all-time high (see Graph 1.1.12).³ The persistent upward trend was observed across all income, education and age groups, as well as among both men and women.

³ For more information on the quantitative inflation perceptions and expectations, see the special topic in the [EBCI 2019Q1](#).

The detailed results among the different socio-economic breakdowns can be downloaded from the [European Commission’s website](#).

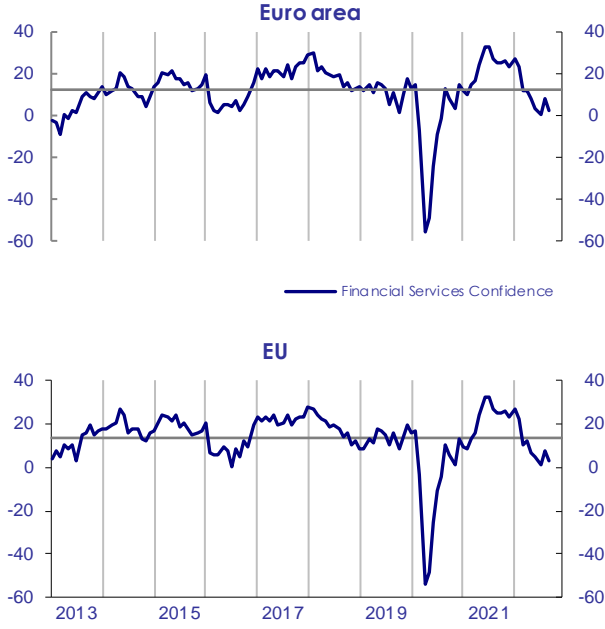
Graph 1.1.12: Euro area and EU quantitative consumer price perceptions and expectations



The **financial services** confidence indicator (not included in the ESI) finished the third quarter slightly below its June level (-1.5 in the EU, -1.7 in the EA, see Graph 1.1.3). Confidence is now well below its long-term average in both areas.

The decrease in confidence was mainly driven by managers’ much more negative views on **their demand expectations** and, though less so, on their **past demand**. By contrast, managers’ appraisal of their **past business situation** improved slightly.

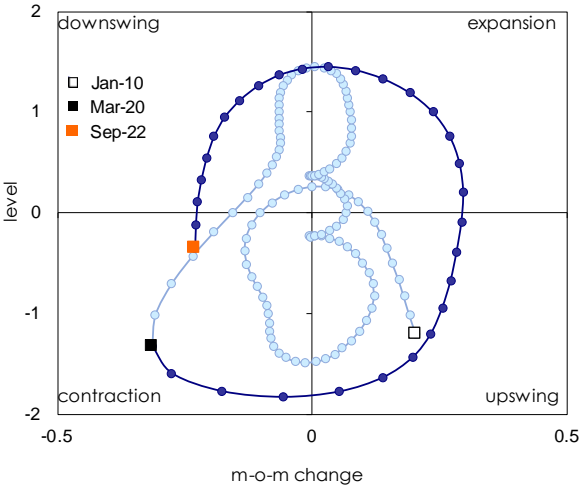
Graph 1.1.13: Financial Services Confidence indicator



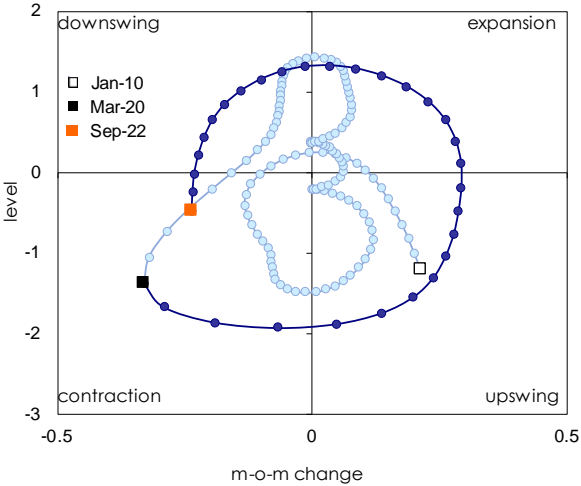
The deterioration of economic sentiment in 2022-Q3, as captured by the ESI, also showed in the EU/EA **climate tracers** (see Annex for details). Both entered into the contraction quadrant (see Graphs 1.1.14 and 1.1.15).

The most significant movement in the EU/EA sectoral climate tracers (see Graph 1.1.16) was for retail trade, which entered in the contraction quadrant. The industry, construction and services tracers moved deeper into the downswing quadrant, the latter touching the border with the contraction quadrant. The consumer tracer finds itself plainly in the contraction area, reflecting the low level and steady deterioration of consumer confidence since the summer 2021.

Graph 1.1.14: Euro area Climate Tracer

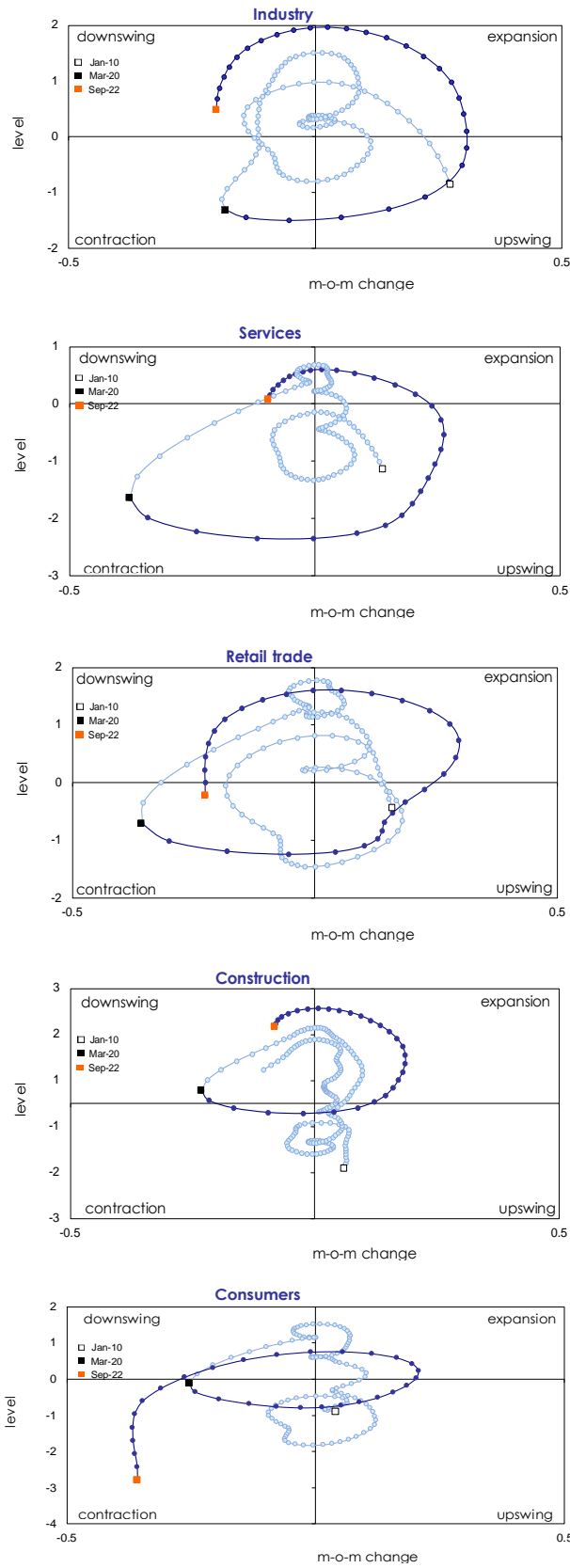


Graph 1.1.15: EU Climate Tracer

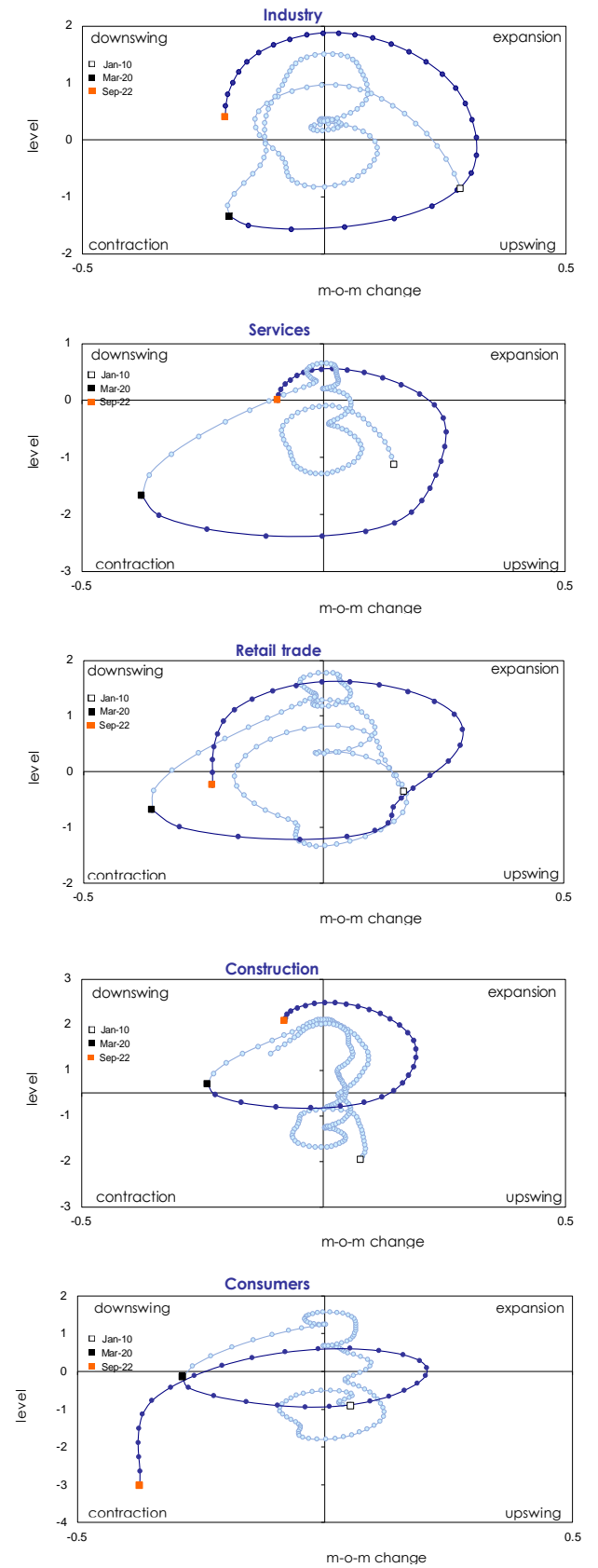


Graph 1.1.16: Economic climate tracers across sectors

Euro area



EU

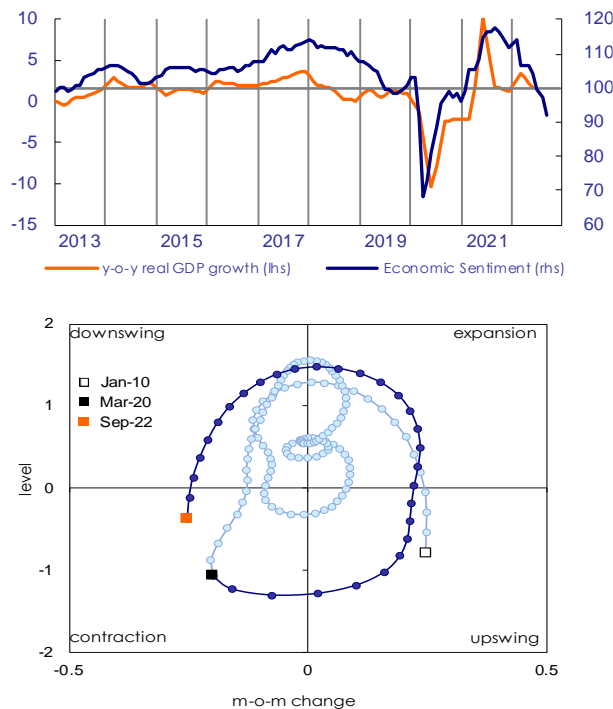


1.2. Selected Member States

The **German** ESI plummeted during the third quarter of 2022, finishing it 12.3 points below its reading at the end of 2022-Q2. At 92.2 points in September, the indicator is now well below its long-term average and pre-pandemic level. The German climate tracer entered the contraction quadrant.

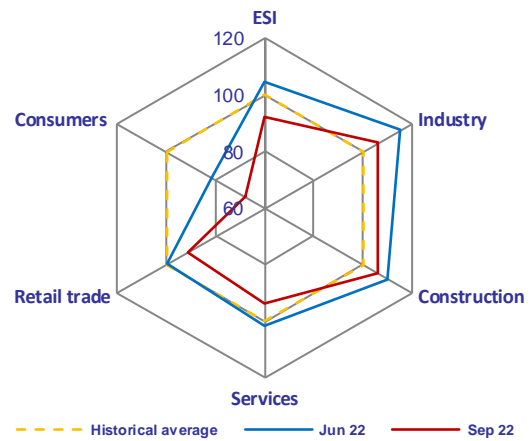
The Employment Expectations Indicator (EEI) fell markedly too, losing 7.6 points over the quarter, due to more downbeat employment expectations in all four business sectors. However, the EEI remained above its long-term average.

Graph 1.2.1: Economic Sentiment Indicator and Climate Tracer for Germany



The German radar graph (see Chart 1.2.2) shows that confidence fell significantly in all business sectors and among consumers. The decline was particularly strong among consumers, where confidence fell to an all-time low. Despite the sharp losses, the level of confidence remained above the long-term average in industry and construction.

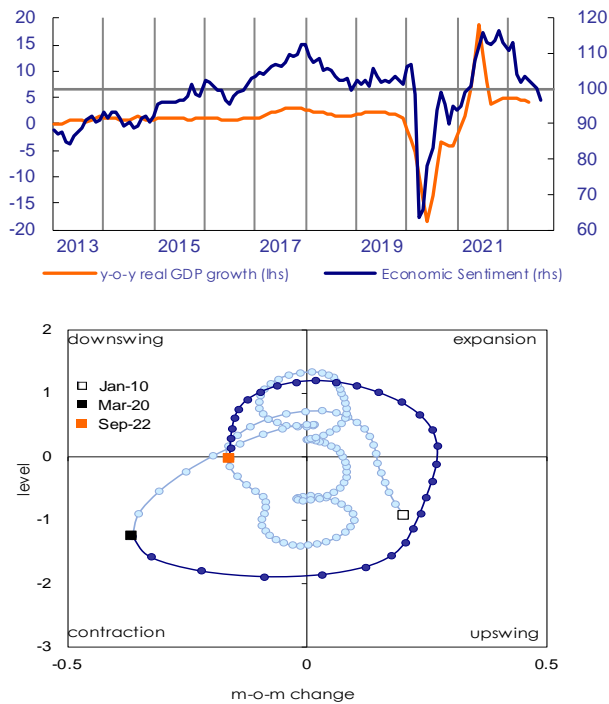
Graph 1.2.2: Radar Chart for Germany



The **French** ESI declined strongly during the third quarter and is now 5.5 points lower than at the end of the second quarter of the year. At 96.8 points in September, the indicator is now below its long-term average. The French climate tracer moved to the border between the downswing and contraction area (see Graph 1.2.3).

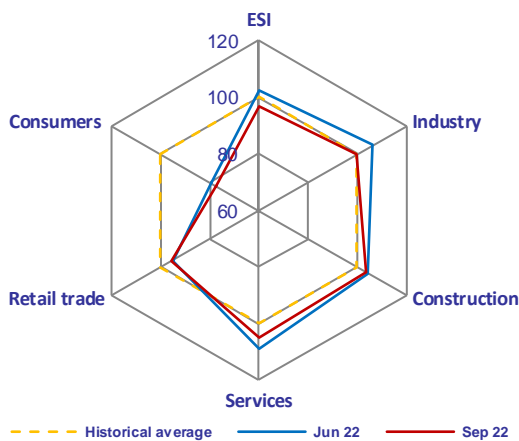
By contrast, the Employment Expectations Indicator (EEI) recorded a marked 3.1-point increase on the quarter, reflecting more optimistic employment plans in services and retail trade, while employment expectations remained broadly stable in industry and construction.

Graph 1.2.3: Economic Sentiment Indicator and Climate Tracer for France



From a sectoral perspective, the French radar chart (see Graph 1.2.4) shows strong decreases in industry and services confidence. Though to a lesser extent, confidence also decreased among consumers, while it stayed virtually unchanged in retail trade and construction. Confidence remained above long-term average in construction and services, while it fell to its long-term average in industry and is well below it in retail trade and, especially, among consumers.

Graph 1.2.4: Radar Chart for France

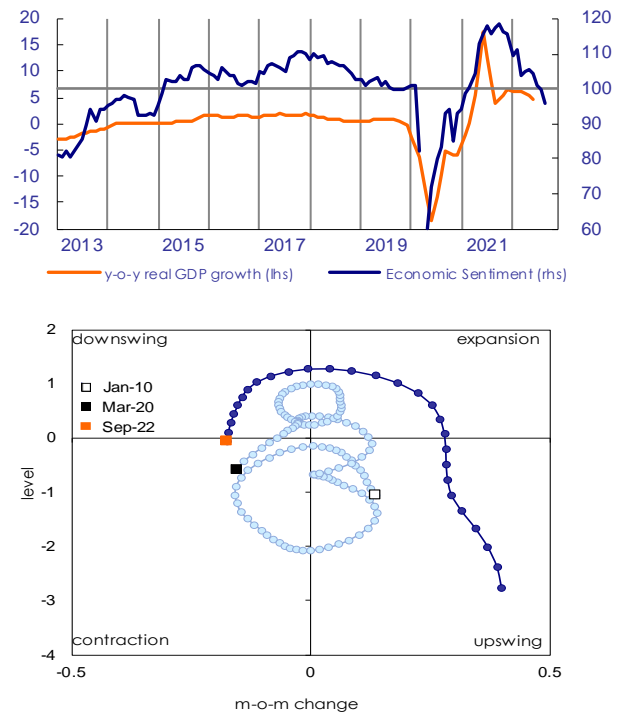


The **Italian** ESI plummeted over the third quarter of the year (-8.6 points compared to

June). At 96.0 points, the indicator is now below its long-term average of 100. The Italian climate tracer reached the border with the contraction area (see Graph 1.2.5).

The Italian EEI worsened by 4.5 points compared to June, squeezed by downbeat employment expectations in industry and services. By contrast, employment plans improved in retail trade and remained broadly stable in construction.

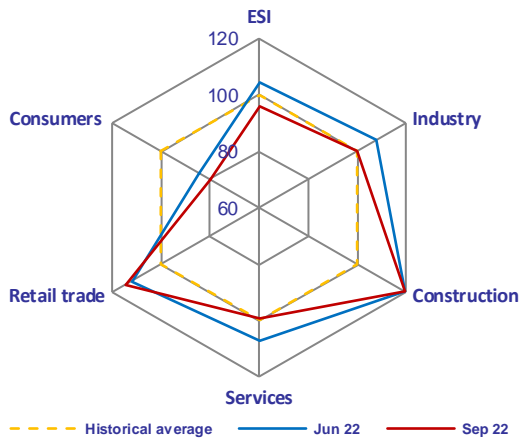
Graph 1.2.5: Economic Sentiment Indicator and Climate Tracer for Italy⁴



From a sectoral perspective, confidence worsened significantly in industry, services and, though less severely, among consumers, while it remained broadly unchanged in construction and improved slightly in retail trade. Confidence stayed markedly above long-term average in retail trade and construction, while confidence in industry and services is just at/slightly below its long-term average. Confidence among consumers remained very subdued, far below its long-term average (see Graph 1.2.6).

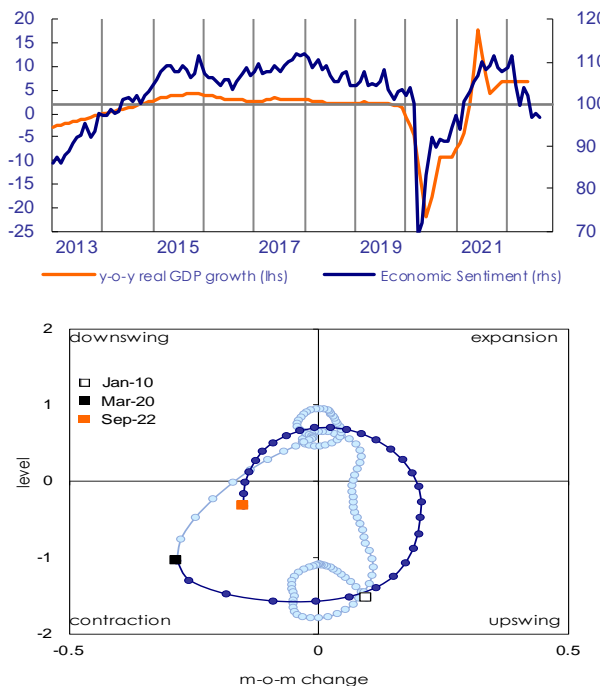
⁴ Due to a missing value for April 2020, the climate tracer for Italy is interrupted between March and May 2020.

Graph 1.2.6: Radar Chart for Italy



The **Spanish** ESI finished the third quarter of 2022 5.2 points below its level at the end of June. At 96.7 points, the indicator fell below its long-term average (see Graph 1.2.7). The Spanish climate tracer dropped into the contraction quadrant (see Graph 1.2.7).

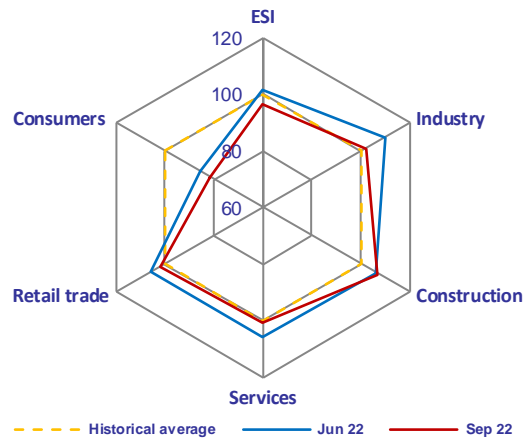
Graph 1.2.7: Economic Sentiment Indicator and Climate Tracer for Spain



The Spanish EEI decreased (-2.5 points in September compared to June), as employment plans took a hit in retail trade and, to a lesser extent, in industry and services, while improving in construction.

As shown in the radar chart (see Graph 1.2.8), confidence fell markedly in industry and, less so, in services, retail trade, and among consumers, while it increased slightly in construction. Confidence stayed well above long-term average in construction and is scoring around long-term average in industry, services, and retail trade. Consumer confidence fell further below its long-term average.

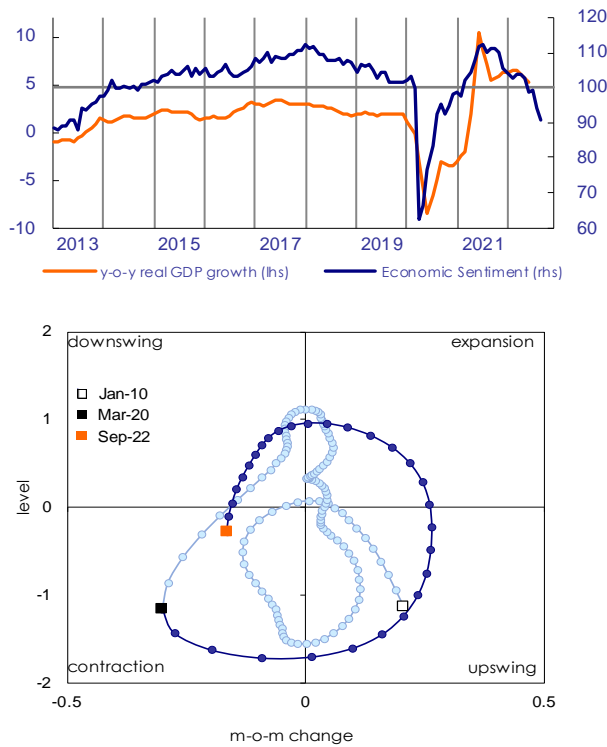
Graph 1.2.8: Radar Chart for Spain



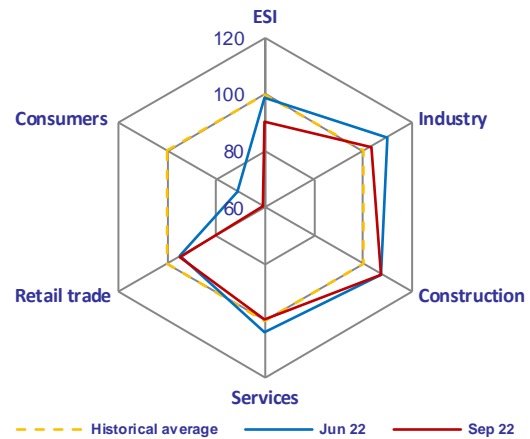
The ESI for the **Netherlands** incurred losses for the fifth quarter in a row. After the very strong decline registered in June, confidence remained broadly stable in July and then booked two strong losses in August and September. As a result, the indicator in September was 8.3 points lower than in June. At 90.6, the Dutch ESI is now well below long-term average.

The climate tracer for the Dutch economy declined further and entered the contraction quadrant (see Graph 1.2.9).

Graph 1.2.9: Economic Sentiment Indicator and Climate Tracer for the Netherlands

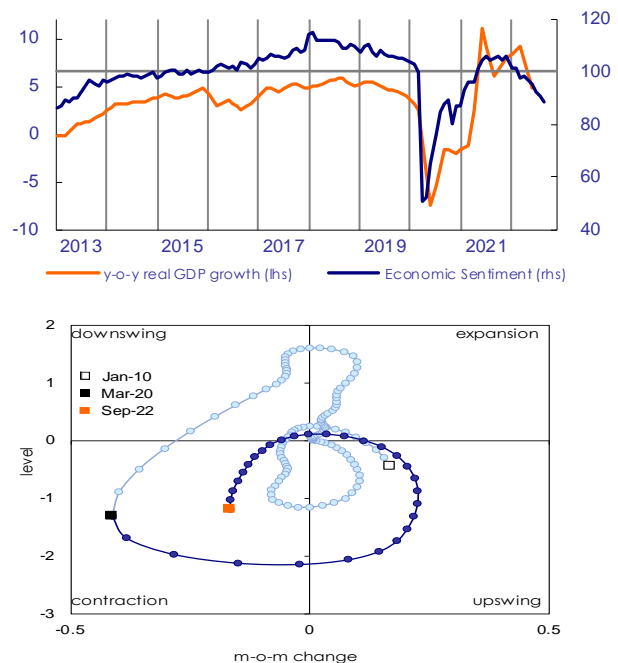


Graph 1.2.10: Radar Chart for the Netherlands



Sentiment in **Poland** recorded strong deterioration (-7.4 points compared to June), pushing the indicator further below its long-term average (88.2 points in September). Accordingly, the Polish climate tracer sank deeper into the contraction quadrant (see Graph 1.2.11).

Graph 1.2.11: Economic Sentiment Indicator and Climate Tracer for Poland



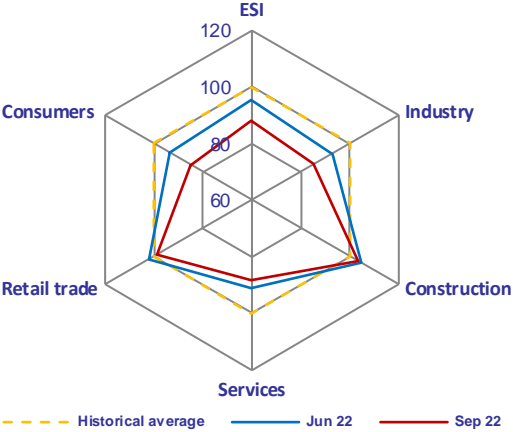
The EEI for the Netherlands deteriorated strongly on the quarter (-4.1 points compared to June 2022), as employment plans decreased in retail trade and also in industry and services. Managers' employment expectations remained broadly unchanged in construction.

As shown in the radar chart (see Graph 1.2.10), consumer confidence took another strong hit. Confidence among services and industry executives also deteriorated, while it remained broadly unchanged in retail trade and construction. While remaining above historical average in industry and construction, confidence fell to its long-term average in services and remained well below it in retail trade. Confidence among consumers plummeted further and registered its all-time low in September.

The Polish EEI also decreased markedly, losing -4.8 points over the third quarter, reflecting significantly more pessimistic employment plans in industry, services, and retail trade. Employment plans in construction decreased only slightly.

As shown in the radar chart (see Graph 1.2.12), confidence declined substantially in industry and among consumers, and less so in services, retail trade and construction. The level of confidence descended markedly below historic average in industry, services and among consumers, while it stands at its long-term average in retail trade and above it in construction.

Graph 1.2.12: Radar Chart for Poland



2. SPECIAL TOPIC: A CLOSER LOOK AT LABOUR SHORTAGES ACROSS THE EU

Labour market performance in the EU has been remarkably strong in recent years. Despite the successive shocks of the Covid-19 pandemic, war and energy price spikes, unemployment has reached historical lows and employment record highs. At the same time, vacancy rates have been on the rise in the first half of the year, pointing to tight labour markets. Against this backdrop, this special topic takes a closer look at the evolution of labour shortages across the EU and industrial sectors.

The shortage of labour force has become a major factor hindering activity across business sectors in the EU. In the framework of its harmonised EU-wide Business Survey programme, the Commission has been collecting information on factors limiting production for several decades. The question “What main factors are currently limiting your activity?” is addressed to managers in construction on a monthly basis, whereas it is addressed to industry and services managers on a quarterly basis – in January, April, July and October.⁵

This special topic will focus on three main aspects. It will (i) examine the recent rise in labour shortages reported by business managers, against the background of other labour market developments, (ii) highlight differences in

the reported increase across countries and sectors and, (iii) identify the sub-sectors most affected by labour shortages.

Labour shortages at all-time highs...

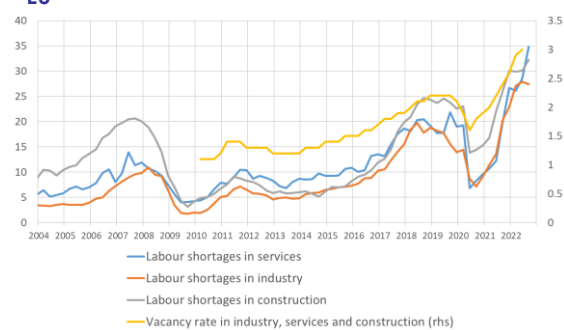
Labour shortages were already at an exceptionally high level before the COVID crisis set in (see Graph 2.1). After the drop induced by the partial economic stand-still during the early phase of the pandemic, reported labour shortages started rebounding in July 2020 and reached historical highs in early 2022. These dynamics closely mirror developments in job vacancies as reported by Eurostat.

The initial rise of labour shortages was rather broad-based, but recent developments in labour shortages point increasingly to sectoral discrepancies. Following stabilisation in April 2022, labour shortages edged down in July in **industry**. By contrast, labour shortages continued to rise steeply in **services**. In July, around 35% of services managers reported that labour is a factor limiting their activity. Also in **construction**, labour shortages increased further in July,⁶ remaining only slightly below the level in services.

⁵ The reply options are: “none”, “insufficient demand”, “shortage of labour force”, “shortage of material (space in services) and/or equipment”, “financial constraints” and “other factors”. In construction, “weather conditions” are also an option.

⁶ Monthly values available for construction for August and September point to stabilisation around the high July value.

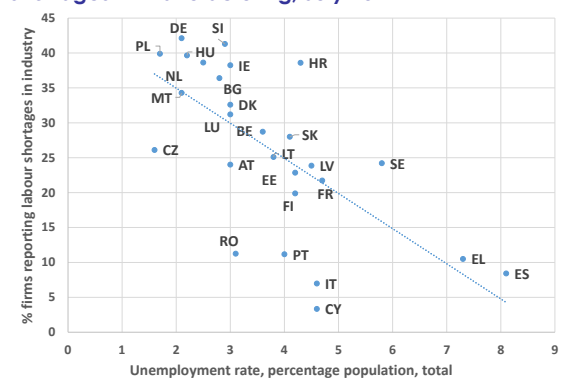
Graph 2.1 – Labour shortages and vacancy rates (%) – EU



Note: Labour shortages: share of firms reporting labour shortages as a factor limiting their production. The vacancy rate is defined as the ratio of vacant posts to all posts (occupied and vacant) in industry, construction and services (Eurostat).

Labour shortages in manufacturing are negatively correlated with national unemployment rates (Graph 2.2). The graph also points to the large variation between Member States when it comes to the labour market situation.⁷

Graph 2.2 – Unemployment rate and labour shortages in manufacturing, July 2022



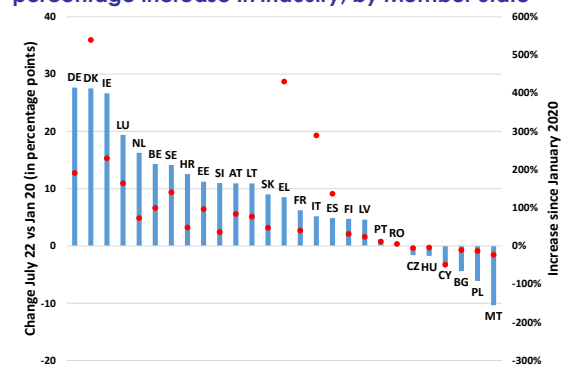
Several Member States display comparatively low unemployment rates and high labour shortages, pointing to tight labour markets (for example, Poland, Germany, the Netherlands, Hungary). By contrast, in Greece, Spain and, to a lesser extent, Italy and Cyprus, the share of firms reporting labour shortages as a limiting factor remained relatively contained, mirroring significantly higher unemployment rates – at over 12% in

⁷ Quarterly Report on Euro Area, N°2 2022

Greece and Spain, and between 6 and 8% in Portugal, Italy and Cyprus in August 2022.

The share of manufacturing managers reporting labour shortages has increased from the pre-crisis readings of January 2020 in most countries, including in the countries where the level has remained contained (Graph 2.3). The share has more than doubled in Spain, Italy and, especially, Greece. In Portugal, the increase was less pronounced, as the share in early 2020 was already at an 11-year-high.

Graph 2.3 – Changes in labour shortage and percentage increase in industry, by Member State

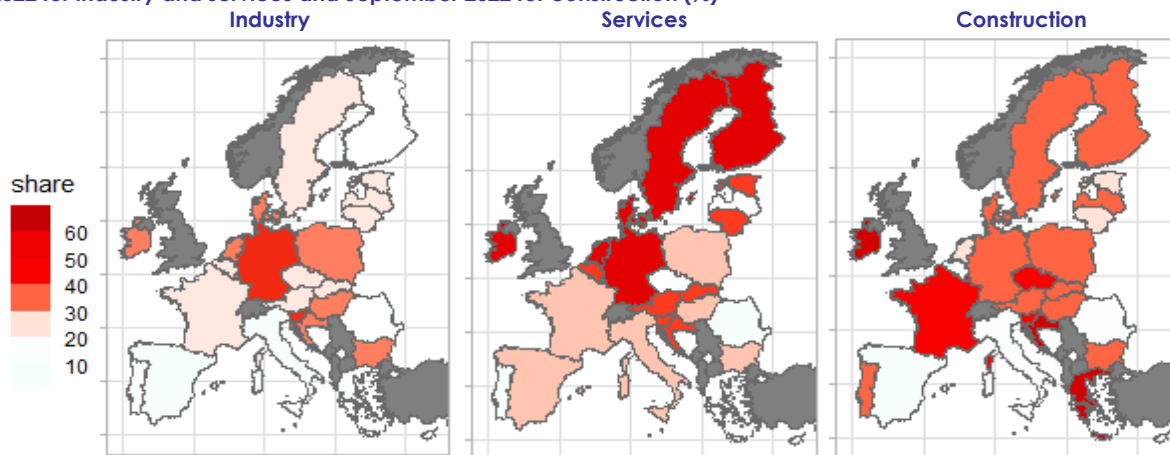


Note: The red dots show the percentage increase in the share of labour shortage from January 2020 to July 2022.

In services, the share of managers reporting labour shortages is exceptionally high in a number of countries (Graph 2.4). The share is highest in Malta (69%), the Netherlands (61%), Ireland and Germany (49%), but has reached record highs in most Member States. Again, even in countries where the level of the reported shortages remained contained compared to other countries, the increase from the pre-crisis situation was significant.⁸

⁸ Between January 2020 and July 2022, the share of managers reporting labour shortages in services increased from 4% to 13% in Greece, from 7% to 21% in Spain, from 5% to 22% in Italy, and from 5% to 9% in Portugal.

Graph 2.4. Proportion of companies reporting labour shortages as a factor limiting production by broad sector - July 2022 for industry and services and September 2022 for construction (%)



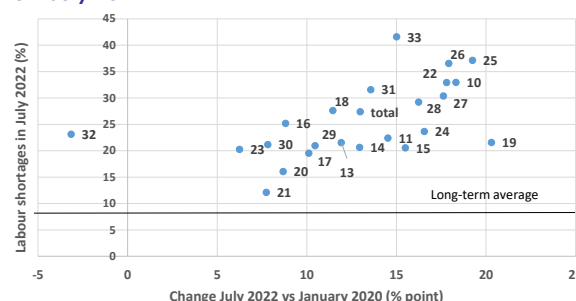
Extreme labour shortage is also widespread in construction. The share of firms citing labour shortages in September 2022 was highest in Greece (88%), Luxembourg (63%), Ireland (58%) and Croatia (53%), and above 40% also in Slovenia, France and Czechia.⁹

Labour shortages in industrial branches go hand in hand with high demand

EU managers in industry have been facing labour shortages since the early stages of the post-pandemic recovery. The rise was broad-based across almost all branches (see Graph 2.5 and the annex for the list of branches). In some branches, the share of labour shortages in July 2022 was significantly higher than the pre-pandemic reading, in particular for manufacturers of fabricated metal products (25), of computer, electronic and optical products (26), of rubber and plastic products (22), of food

products (10), and for the repair and installation of machinery and equipment (33).

Graph 2.5 – Labour shortages in industrial subsectors¹⁰ - EU – July 2022

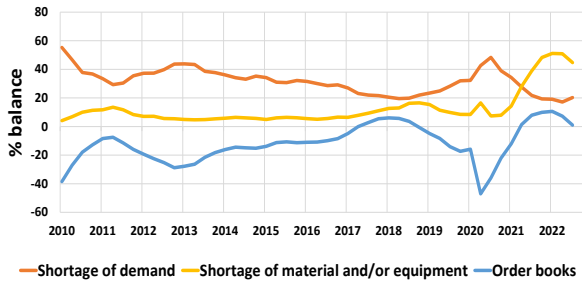


Labour shortages in industry rose in a context of buoyant demand: as Graph 2.6 shows, managers' order assessments rebounded strongly after the COVID crisis and reached their highest level on record in February 2022. Correspondingly, the share of managers reporting lack of demand as a factor limiting production reached its lowest level ever recorded in April 2022 in the EU and remained at a historically low level since (see Graph 2.6).

⁹ While at lower levels, the increase was from 5% to 9% in Spain, from 2% to 16% in Italy, and from 20% to 35% in Portugal between January 2020 and September 2022.

¹⁰ Branches are listed in the Annex (NACE Rev. 2 classification).

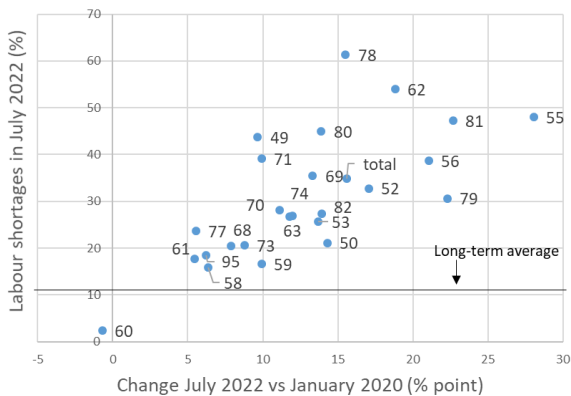
Graph 2.6 – Demand in industry – EU



Labour shortages in services due to high demand and labour shedding

The unprecedented labour shortages reported by services managers reflect historically high demand in the aftermath of the COVID-19 crisis (Graph 2.1). This is especially the case in the contact-intensive services, such as tourism (Accommodation (55), Travel agency, tour operator and other reservation service and related activities (79)) and food and beverage services activities (56). These services were among the last ones to lift the pandemic-related restrictions and arguably also those that shed labour quite significantly¹¹. Severe labour shortages in these branches persist to the present day.

Graph 2.7 – Labour shortages in services - EU – July 2022



Other services that experienced a significant increase in reported labour shortages are services to buildings and landscape activities (81); computer programming, consultancy and related

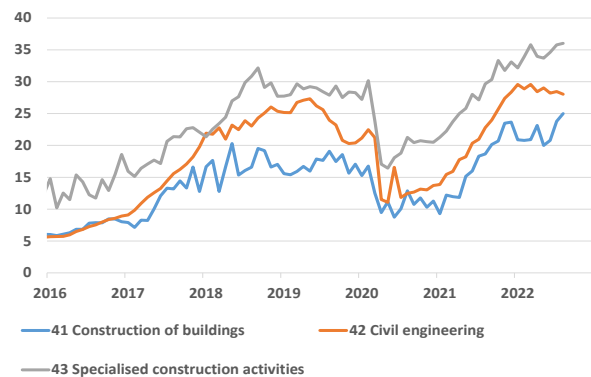
¹¹ IMF (2022), Labor Market Tightness in Advanced Economies.

activities (62), likely due to the accelerated digitalisation following the COVID shock; employment activities¹² (78) and warehousing and support activities for transportation (52).

Construction faced with high demand

After a steep drop in the initial phase of the pandemic, the share of construction managers reporting labour shortages as a factor limiting production increased sharply in 2021, back to and above the high levels prior to the COVID-19 crisis (Graph 2.8). Foreign (non-EU) workers leaving the bloc during the pandemic-related lockdowns may have contributed to this increase.

Graph 2.8 – Percentage of firms reporting labour shortages in construction branches – EU

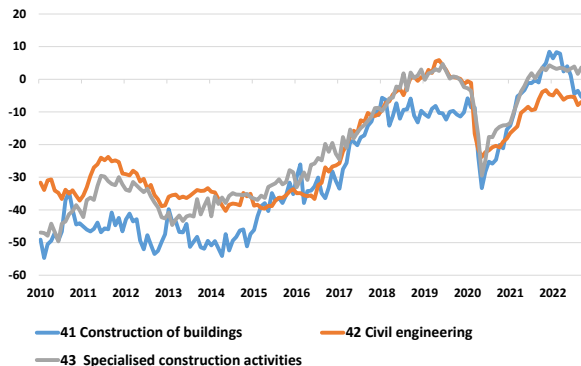


Building activity has been boosted post-COVID. In terms of subsectors, civil engineering (42) had been experiencing exceptionally high demand and correspondingly high labour shortages already prior to COVID (see Graphs 2.8 and 2.9). By contrast, construction of buildings (41) was confronted by much higher demand in 2021/22 than in the years before the

¹² Employment activities include activities of listing employment vacancies and referring or placing applicants for employment, where the individuals referred or placed are not employees of the employment agencies, supplying workers to clients' businesses for limited periods of time to supplement the working force of the client, and the activities of providing other human resources.

pandemic. The highest shortages are reported for specialised construction activities (43), which include works to improve energy efficiency, such as installing heat pumps and solar panels. Order books in this sector have remained stable at a very high level since mid-2021.

Graph 2.9 – Level of order books reported by managers in construction – EU (% balance)



The Commission’s harmonised consumer survey provides evidence of the surge in demand for dwellings and home renovations: between April 2020 and July 2021, the balance of households reporting they are likely to spend large sums of money on home improvements or renovations over the next year increased by 11 points, reaching a record high level in July 2021. The balance of households reporting they are likely to buy a home over the next 12 months also peaked in July 2021, at a 20-year-high.

Conclusion

As the recovery from the pandemic took hold, labour shortages reported by managers rose to record highs – and the increase has been widespread across countries and sectors.

At country level, the share of manufacturing managers reporting labour shortages is highest in Germany, Slovenia and Poland. In services, it is highest in Malta, the Netherlands, Ireland and Germany, and in construction in Greece, Luxembourg and Ireland.

With the exception of the construction sector in Greece, labour shortages in Southern European countries have remained relatively contained. Yet, even in these countries, the increase after the pandemic was strong across sectors.

Overall, while industry shows signs of stabilisation, labour shortages in services have continued to increase, in particular in contact-intensive services such as accommodation and food service activities. In construction, the upward trend in labour shortages has resumed recently, in particular for construction of buildings and specialised construction activities, which include works to improve energy efficiency, such as installation of heat pumps and solar panels.

Looking ahead, as the demand impact from the post-lockdown openings is fading, demand for labour is likely to grow less strongly, at least in industry and contact-intensive services, where seasonal effects have also faded out. At the same time, energy transition challenges may entail further structural pressure on building and specialised construction activities.

ANNEX TO SECTION 2

Classification of sectors (NACE Rev. 2)

Industry	
10	Manufacture of food products
11	Manufacture of beverages
12	Manufacture of tobacco products
13	Manufacture of textiles
14	Manufacture of wearing apparel
15	Manufacture of leather and related products
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
17	Manufacture of paper and paper products
18	Printing and reproduction of recorded media
19	Manufacture of coke and refined petroleum products
20	Manufacture of chemicals and chemical products
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
22	Manufacture of rubber and plastic products
23	Manufacture of other non-metallic mineral products
24	Manufacture of basic metals
25	Manufacture of fabricated metal products, except machinery and equipment
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment n.e.c.
29	Manufacture of motor vehicles, trailers and semi-trailers
30	Manufacture of other transport equipment
31	Manufacture of furniture
32	Other manufacturing
33	Repair and installation of machinery and equipment
Services	
49	Land transport and transport via pipelines
50	Water transport
51	Air transport
52	Warehousing and support activities for transportation
53	Postal and courier activities
55	Accommodation

56	Food and beverage service activities
58	Publishing activities
59	Motion picture, video and television programme production, sound recording and music publishing activities
60	Programming and broadcasting activities
61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
64	Financial service activities, except insurance and pension funding
65	Insurance, reinsurance and pension funding, except compulsory social security
66	Activities auxiliary to financial services and insurance activities
68	Real estate activities
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
77	Rental and leasing activities
78	Employment activities
79	Travel agency, tour operator reservation service and related activities
80	Security and investigation activities
81	Services to buildings and landscape activities
82	Office administrative, office support and other business support activities
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
92	Gambling and betting activities
93	Sports activities and amusement and recreation activities
94	Activities of membership organisations
95	Repair of computers and personal and household goods
96	Other personal service activities
Construction	
41	Construction of buildings
42	Civil engineering
43	Specialised construction activities

ANNEX

Reference series

Confidence indicators	Reference series from Eurostat, via Ecwin (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

Economic Sentiment Indicator

The economic sentiment indicator (ESI) is a weighted average of the balances of replies to 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. EU and euro-area aggregates are calculated on the basis of the national results and seasonally adjusted. The ESI is scaled to a long-term mean of 100 and a standard deviation of 10. Thus, values above 100 indicate above-average economic sentiment and vice versa. Further details on the construction of the ESI can be found [here](#).

Long time series (ESI and confidence indices) are available [here](#).

Economic Climate Tracer

The economic climate tracer is a two-stage procedure. The first stage consists of building economic climate indicators, based on principal component analyses of balance series (s.a.) from five surveys. The input series are as follows: industry: five of the monthly survey questions (employment and selling-price expectations are excluded); services: all five monthly questions except prices; 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. The economic climate indicator (ECI) is a weighted average of the five sector climate indicators. The sector weights are equal to those underlying the Economic Sentiment Indicator (ESI, see above).

In the second stage, 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 normalised (zero mean and unit standard deviation). 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 and 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.

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