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## European Business Cycle Indicators

Low consumer confidence and the economy - Insights from the euro area

2<sup>nd</sup> Quarter 2024

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# European Commission Directorate-General for Economic and Financial Affairs

### **European Business Cycle Indicators**

2<sup>nd</sup> Quarter 2024

#### **Special topic**

Low consumer confidence and the economy – Insights from the euro area

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

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#### **OVERVIEW**

#### Developments in survey indicators over the second guarter of 2024

- Continuing the flat trend observed in the first quarter of the year, the EU and euro-area (EA) **Economic Sentiment Indicators** moved broadly sideways over the second quarter of 2024, below their long-term average of 100. Between March and June, the ESI for the EU decreased by 0.2 points to 96.4, while the ESI for the EA declined by 0.4 points to 95.9.
- After a period of broad stagnation between Autumn 2023 and Spring 2024, the EU/EA **Employment Expectations Indicator** slipped in the second quarter of 2024. In June, the indicator stood 1.8 (EU)/2.8 (EA) points below its March reading, approaching (EU) or undercutting (EA) its long-term average.
- **Confidence** worsened in retail trade and, to a lesser extent, in industry and construction over the second quarter of 2024. Confidence remained virtually unchanged in services, while it edged up among consumers.
- Economic sentiment improved in two of the largest six EU economies, namely Germany (+2.1) and the Netherlands (+2.0). In Spain (+0.4) and Poland (-0.2), the indicator remained broadly unchanged from March to June, while it decreased significantly in France (-3.7) and, to a lesser extent, in Italy (-1.2) over the same period. The level of confidence is below long-term average in Germany and, slightly and recently so, in France, while it is close to its long-term average in Italy and the Netherlands. In Spain and Poland, sentiment remains slightly above its long-term average.
- The EU/EA Economic Uncertainty Indicator decreased throughout the second quarter, with its June reading 1.5 (EU) / 1.3 (EA) points below its March print. From a sectoral perspective, levels of perceived uncertainty continued to decrease in services, retail trade, construction and among consumers and remained broadly stable in industry.
- In April, **capacity utilisation** in industry continued its broad downward trend observed since spring/summer 2022, decreasing by 0.4 (EU) / 0.3 (EA) percentage points compared to January. Capacity utilisation in services increased in both the EU (+0.4 pps) and EA (+0.3 pps).
- In April, in the EU, the share of industry managers indicating insufficient demand as a factor limiting
  their production gained further prominence. The percentage of managers pointing to shortages of
  material and/or equipment as a factor limiting production decreased slightly further from the record
  level of early 2022. The share of managers indicating shortage of labour force as a factor limiting
  production eased marginally, but remains relatively high.
- Consumers' quantitative perceptions of price developments over the past 12 months eased for the fourth quarter in a row. Their quantitative price expectations for the next 12 months edged down as well.

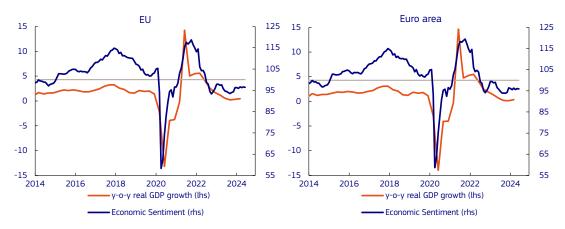
#### Special topic: Low consumer confidence and the economy - Insights from the euro area

This Special Topic examines the relationship between consumer sentiment and various measurable economic variables over the past two decades. After sharp volatility during the COVID-19 crisis, the economic 'vibe' in the euro area, as measured by consumer sentiment, deteriorated to its lowest level on record in September 2022. It has since rebounded, but recent readings of consumer confidence have remained below long-term average, despite unemployment being at historic lows and headline inflation having fallen significantly. The disconnect between subdued consumer confidence and a relatively healthy economic environment in the US has been referred to as a 'vibecession'. This special topic explores the extent to which such a disconnect, or vibecession, also characterises the euro area economy, with a focus on the period from 2023 onwards.

#### RECENT DEVELOPMENTS IN SURVEY INDICATORS IN EU AND EA

Continuing the flat trend observed in the first quarter of the year, the EU and euro-area (EA) **Economic Sentiment Indicators (ESI)** moved broadly sideways over the second quarter of 2024, below their long-term average of 100. Between March and June, the ESI for the EU decreased by 0.2 points to 96.4, while the ESI for the EA declined by 0.4 points to 95.9 (see Graph 1.1).

**Graph 1.1: Economic Sentiment Indicator** 

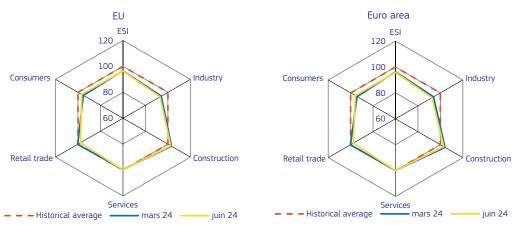


(1) The horizontal line (rhs) marks the long-term average of the survey indicators. Confidence indicators are expressed in balances of opinion and hard data in y-o-y changes. If necessary, monthly frequency is obtained by linear interpolation of quarterly data.

Source: European Commission

From a sectoral perspective, EU confidence worsened in retail trade and, to a lesser extent, in industry and construction over the second quarter of 2024. Confidence remained virtually unchanged in services, while it edged up among consumers (see Graph 1.2). Developments in the EA were broadly in line with those in the EU. In June, EU/EA confidence was above long-term average only in construction, while it remained low by historical standards in industry. Consumer confidence has continued approaching its average level, whereas confidence in retail fell slightly below average. Services confidence was roughly in line with average readings.

Graph 1.2: Radar Charts



(1) 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 2000g1. For more information on the radar charts see the Special Topic in the 2016g1 EBCI.

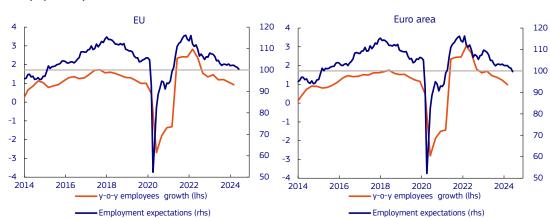
**Source:** European Commission

In the second quarter, economic sentiment improved in two of the largest six EU economies, namely Germany (+2.1) and the Netherlands (+2.0). In Spain (+0.4) and Poland (-0.2), the indicator remained broadly unchanged from March to June, while it decreased significantly in France (-3.7) and, to a lesser extent, in Italy

(-1.2) over the same period. The level of economic sentiment is below long-term average in Germany and, slightly and recently so, in France, while it is close to its long-term average in Italy and the Netherlands. In Spain and Poland, sentiment remains slightly above its long-term average.

In line with the ESI, the HCOB Flash Eurozone Composite PMI Output Index (¹) barely changed over the quarter, improving by just 0.5 points compared to its March reading. At 50.9 points, it is slightly above the critical 50-points threshold separating spells of positive and negative growth. Contrary to the ESI, PMI does not include consumer, construction, and retail trade data, and is based on a different set of questions.

After a period of broad stagnation between Autumn 2023 and Spring 2024, the EU/EA **Employment Expectations Indicator (EEI)** slipped in the second quarter of 2024 (see Graph 1.3). In June, the indicator stood 1.8 (EU)/2.8 (EA) points below its March reading, approaching (EU) or undercutting (EA) its long-term average. At the sector level, employment expectations weakened in retail trade and, to a lesser extent, in services and construction, while they were virtually unchanged in industry.



Graph 1.3: Employment expectations indicator

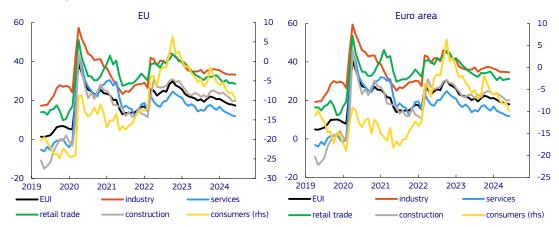
Source: European Commission

The EU/EA **Economic Uncertainty Indicator (EUI) (**<sup>2</sup>**)** decreased throughout the second quarter, with its June reading 1.5 (EU) / 1.3 (EA) points below its March print. From a sectoral perspective, levels of perceived uncertainty continued to decrease in services, retail trade, construction and among consumers and remained broadly stable in industry (see Graph 1.4).

<sup>(1)</sup> Contradictory signals from the EA ESI and the eurozone PMI can also occur due to differences in their geographic coverage. For a systematic comparison of the two indicators, see the special topic in the 2017-Q2 EBCI.

<sup>(</sup>²) See the special topic of the <u>2021-Q3 EBCI</u> for background, and section 3.6 of the <u>BCS User Guide</u> for methodological details.

Graph 1.4: Uncertainty



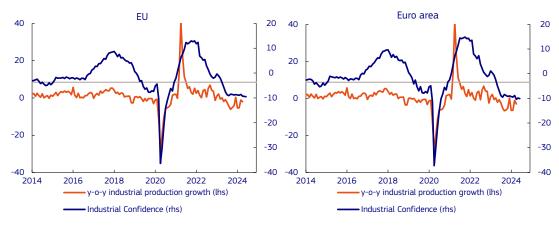
#### Sector developments

**Industry confidence** dipped slightly by 0.9 points (EU) and 1.3 points (EA) in the second quarter, falling further below its long-term average (see Graph 1.5).

Zooming into the components of industrial confidence, managers' **production expectations** deteriorated over the quarter. Managers' assessments of their **order books** and of **stocks of finished products** remained broadly stable at around their March level.

Of the components not included in the confidence indicator, managers' appraisals of changes in production over the past 3 months deteriorated significantly, while their assessments of the current export order books remained broadly stable.

Graph 1.5: Industry Confidence indicator

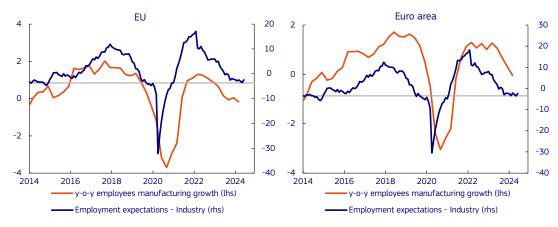


Source: European Commission

Industry managers' **employment expectations** (see Graph 1.6) remained broadly stable over the second quarter (+0.1 in the EU and -0.2 in the EA). Similarly, their **selling price expectations** saw minimal changes over the quarter (+0.5 in the EU, +0.6 in the EA), staying 1.8 (EU) and 1.7 (EA) points below their respective historical means.

Industry confidence decreased in three of the six largest EU economies, namely France (-4.5), Italy (-2.0) and Poland (-2.0), while it remained broadly stable in Germany (-0.4) and Spain (-0.1) and increased in the Netherlands (+2.0). Except for Spain, where confidence is above historical average, industry confidence is weak by historical standards, particularly in Germany.

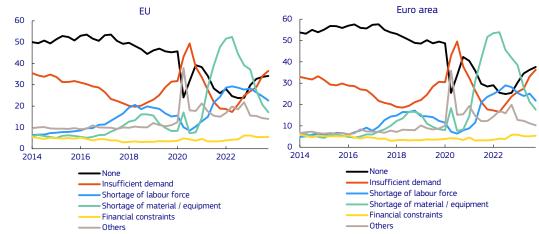
Graph 1.6: Employment expectations in Industry



According to the quarterly manufacturing survey (carried out in April), **capacity utilisation** continued its broad downward trend observed since spring/summer 2022, decreasing by 0.4 (EU) / 0.3 (EA) percentage points compared to January. At 78.7% (EU) / 78.9% (EA), the indicator is below its long-term average of 80.6% (EU) / 80.7% (EA).

The share of industry managers indicating insufficient demand as a **factor limiting their production** gained further prominence in April in the EU (see Graph 1.7). It increased for the eighth consecutive month in the EU (+0.7 percentage points (pps.) compared to January, to 37.9%) and picked up also in the EA (+1.2 pps. to 37.5%). Meanwhile, the percentage of managers pointing to shortages of material and/or equipment as a factor limiting production decreased slightly further from the record level of early 2022 in both the EU (-0.5 pps. compared to January to 13.8%) and the EA (-0.3 pps. to 13.3%). The share of managers indicating shortage of labour force as a factor limiting production eased marginally (EU: -0.3 pps. compared to January to 22.5%, EA: -0.4 pps. to 19.6%). The shares remain at a relatively elevated level by historical standards. The prevalence of financial constraints also reduced slightly (-0.4 pps. in the EU and -0.5 pps. in the EA) at comparatively low levels (EU: 5.3%, EA: 5.0%).

Graph 1.7: Industry - Factors limiting production (in %)

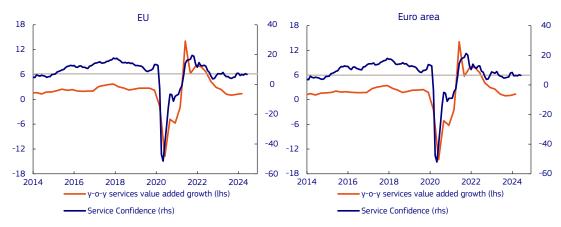


Source: European Commission

**Services confidence** was virtually unchanged over the quarter  $(\pm 0.1 \text{ pps.})$  in the EU /  $\pm 0.0 \text{ in the EA}$ ). The indicator remains roughly in line with its long-term average in both regions (see Graph 1.8).

Looking into the components of services confidence, the stable trend over the quarter reflects a slight improvement in managers' assessment of the **past business situation**, partly offset by a mild worsening in their assessments of **past demand**, while their **demand expectations** weakened only marginally.

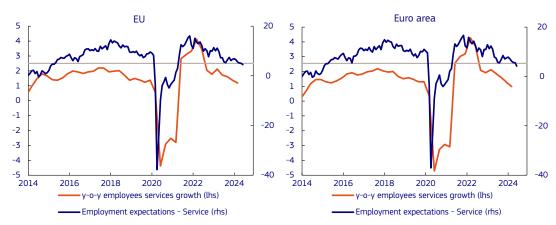
**Graph 1.8: Services Confidence indicator** 



Source: European Commission

Compared to their March level, **employment expectations in services** decreased by 1 point in the EU and by 2 points in the EA, falling slightly below their long-term average (see Graph 1.9). While remaining at historically high levels, managers' **selling price expectations** decreased further over the quarter, by 1.2 points in the EU and by 1.1 points in the EA.

Graph 1.9: Employment expectations in services



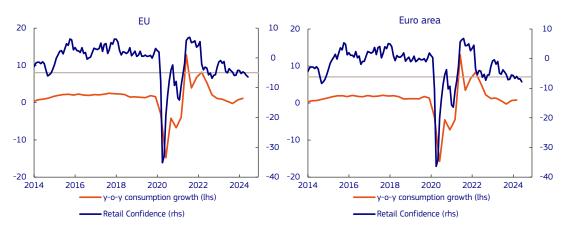
**Source:** European Commission

Among the six largest EU economies, services confidence increased markedly in Germany (+4.1) and, less so, in Spain (+1.9) and the Netherlands (+0.9), while it worsened in France (-1.8), Italy (-1.5), and Poland (-1.4). Confidence levels remained above long-term average in Italy, Spain, and the Netherlands, while registering below in Germany, France and Poland.

In April compared to January, **capacity utilisation in services** increased in both the EU (+0.4 pps) and EA (+0.3 pps). At 90.3% in the EU and 90.2% in the EA, capacity utilisation inched further above its long-term average of around 89%.

Following a broad sideways trend that started in spring 2023, **retail trade confidence** slipped, ending the second quarter 1.7 (EU) and 1.8 (EA) points below its March level, and falling below its long-term average (see Graph 1.10).

Graph 1.10: Retail Trade Confidence indicator



In both areas, retailers' assessments of the **past** and **future business situation** worsened, while their assessment of the **volume of stocks** was lower in June than in March, indicative of higher demand.

At the level of the six largest EU economies, retailers' confidence dipped in five countries, namely the Netherlands (-2.7), Italy (-2.3), Poland (-2.2), Spain (-2.0), and France (-1.6) and stayed broadly flat in Germany (-0.1).

**Construction confidence** fell slightly further over the second quarter of 2024 (EU: -0.9, EA: -1.3 compared to March), but remained well above its long-term average (see Graph 1.1.11).

In both the EU and the EA, builders declared more downbeat appraisals of **order books** and, to a lesser extent, of **employment expectations**.

Graph 1.11: Construction Confidence indicator



**Source:** European Commission

Despite a slight dip (-0.6 (EU) / -0.4 (EA) pps. from March to June), **insufficient demand** was the most prevalent **factor limiting building activity**, cited by 31.6% (EU) / 32.0% (EA) of construction managers in June. It was followed by **shortage of labour** which remained a wide-spread concern (EU: 25.1%, EA: 21.8%), but further down against 3 months ago (-2.4 (EU) / -3.0 (EA) pps.). The share of builders identifying **material and/or equipment** as factors limiting production fell by 2.3 (EU) and 2.4 (EA) pps. to 6.2% (EU) / 3.7% (EA). The percentage of managers reporting **financial constraints** as limiting factors remained low at 8.0% (EU) / 7.6% (EA).

Among the largest EU economies, construction confidence fell sharply in Spain (-9.2) ( $^3$ ) and, to a lesser extent, in France (-1.1) and Poland (-1.0), while it improved in the Netherlands (+1.9) and Germany (+1.4) and remained broadly stable in Italy (+0.3).

**Consumer confidence** edged up, by 0.9 points in both the EU and the EA compared to March. At -12.9 (EU) and -14.0 (EA) points, consumer confidence still falls slightly short of its long-term average (see Graph 1.12).

Consumers' assessments of their households' **past financial situation** and their **intentions to make major purchases** brightened, while their expectations regarding the **future financial situation** and their **country's general economic** situation remained broadly stable.



Graph 1.12: Consumer Confidence indicator

Source: European Commission

Consumer confidence improved in three of the six largest EU economies, most so in Germany (+3.5) and, to a lesser extent, in Spain (+1.7) and Poland (+1.6). In the Netherlands (-2.0) and France (-1.1), the indicator slipped, while it remained broadly unchanged in Italy (-0.4).

Consumer Confidence (rhs)

In the EU and the EA, **consumers' quarterly quantitative perceptions of price developments** (change over the past 12 months, in %) eased for the fourth quarter in a row, both in terms of their arithmetic mean and their median (which is less sensitive to the presence of extreme values). In spite of the renewed decline, price perceptions remained exceptionally high (see Graph 1.13). (4) **Quantitative price expectations** (change over the next 12 months, in %), edged down as well. The results at total level were mirrored across almost all income, education and age groups, as well as among both men and women.

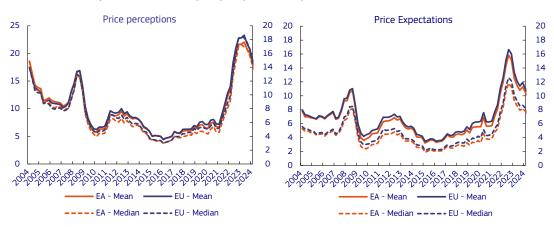
The detailed results among the different socio-economic breakdowns can be downloaded from the <u>European</u> Commission's website.

Consumer Confidence (rhs)

<sup>(3)</sup> The Spanish construction confidence indicator has a comparatively high month-to-month volatility.

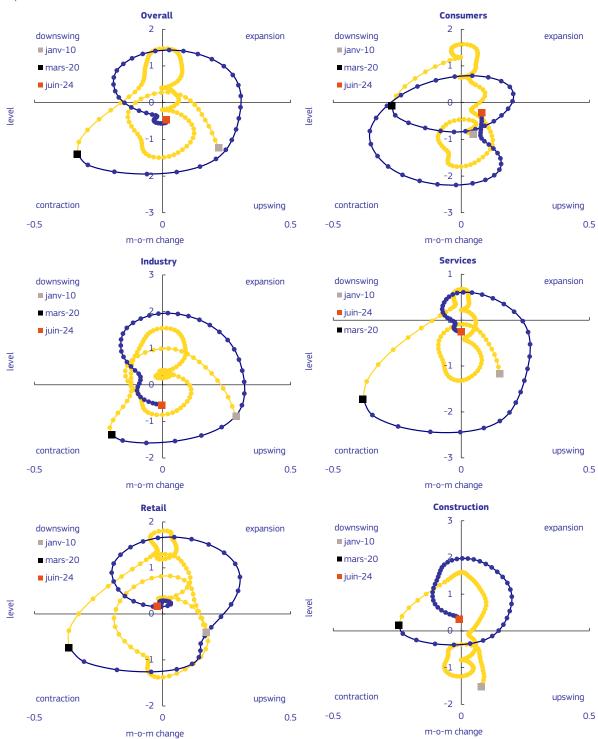
<sup>(4)</sup> For more information on the quantitative inflation perceptions and expectations, see the special topic in the EBCI 201901.

Graph 1.13:Euro area and EU quantitative consumer price perceptions and expectations



Stable economic sentiment in 2024-Q2, as captured by the ESI, also shows in the **climate tracers** for the EU and EA (see Annex for details). Both stagnated at the border between the contraction and the upswing quadrants (see Graphs 1.14 and 1.15). Developments in the sectoral EU/EA confidence indicators broadly reflect the sectoral climate tracers: both industry and services tracers settled on the border between the contraction area and the upswing quadrant. The consumer tracer remained in the upswing area pointing to the expansion quadrant. The construction tracer stayed in the downswing area but moved closer to the expansion quadrant in the EU while pointing to the contraction area in the EA. The retail trade tracer remained in the downswing quadrant and points to (EU) / approaches (EA) the contraction area.

Graph 1.14: Economic climate tracers across sectors - EU



**Overall** Consumers downswing expansion downswing expansion ■ janv-10 ■janv-10 ■ mars-20 ■ mars-20 ■ juin-24 ■ juin-24 level contraction upswing contraction upswing -3 -3 0 -0.5 0 -0.5 0.5 0.5 m-o-m change m-o-m change Industry Services 3 downswing downswing expansion expansion ■janv-10 ■ janv-10 mars-20 ■ juin-24 mars-20 ■ juin-24 level contraction upswing contraction upswing -2 -3 -0.5 0 0.5 -0.5 0.5 0 m-o-m change m-o-m change Construction Retail 2 г 3 expansion downswing downswing expansion ■ janv-10 ■ janv-10 ■ mars-20 mars-20 ■ juin-24 ■ juin-24 level contraction upswing upswing contraction

Graph 1.15:**Economic climate tracers across sectors – Euro area** 

m-o-m change

-0.5

-0.5

0.5

0

m-o-m change

0.5

## RECENT DEVELOPMENTS IN SURVEY INDICATORS IN SELECTED MEMBER STATES

#### Germany

The German ESI improved by 2.1 points in June compared to March. At 92.1 points, the indicator remains well below its long-term average of 100 (see Graph 2.1). The German climate tracer moved from the contraction quadrant to the upswing area (see Graph 2.2).

By contrast, the Employment Expectations Indicator (EEI) slipped (-0.9 points compared to March, to 97.0) further below its long-term average. The slight dip was due to more gloomy employment plans among retail and industry managers, which were only partially offset by brighter plans in construction. Employment expectations remained broadly unchanged in services.

As shown in the radar chart (see Graph 2.3), confidence picked up in services, among consumers and, to a lesser

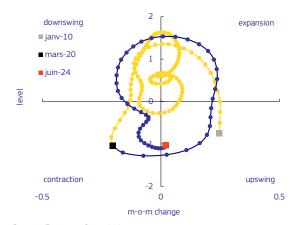
Graph 2.1: Economic Sentiment indicator for Germany



Source: European Commission

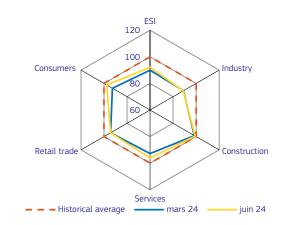
extent, among construction managers, while it remained broadly unchanged in industry and retail trade. The level of confidence, however, remains below historical average in all surveyed sectors.

Graph 2.2: Climate Tracer for Germany



**Source:** European Commission

Graph 2.3: Radar chart for Germany



#### France

After a short-lived upturn in the first quarter, the **French** ESI fell back to the level around which it has been oscillating since autumn 2022. Down 3.7 points compared to March, the indicator, at 97.2 in June, is again below its long-term average of 100 (see Graph 2.4). The French climate tracer moved closer to the contraction area (see Graph 2.5).

The Employment Expectations Indicator (EEI) remained virtually stable (+0.1 points compared to March) as more subdued employment plans among industry, retail and construction managers, were counterbalanced by improved employment expectations among services managers.

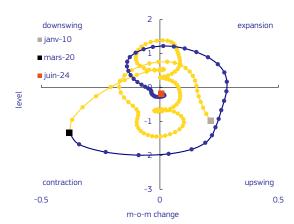
As evidenced by the radar chart (see Graph 2.6), **source:** European Commission confidence dropped across all surveyed sectors, and particularly in industry. The level of confidence is now below historical average in all surveyed sectors.

20 120 15 110 10 100 5 0 90 -5 80 -10 70 -15 2024 2014 2016 2018 2020 2022 y-o-y real GDP growth (lhs)

Economic Sentiment (rhs)

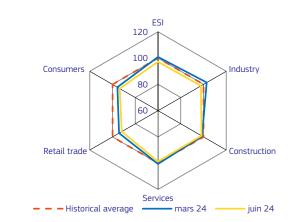
Graph 2.4: Economic Sentiment indicator for France

Graph 2.5: Climate Tracer for France



Source: European Commission

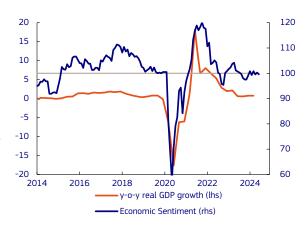
Graph 2.6: Radar chart for France



#### Italy

Oscillating around its long-term average of 100 since Graph 2.7: Economic Sentiment Indicator for Italy December 2023, the Italian ESI ended the second quarter 1.2 points down compared to March, slipping just below average to 99.6 points (see Graph 2.7). The Italian climate tracer stayed close to the neutral intersection between the four possible states of the business cycle (see Graph 2.8).

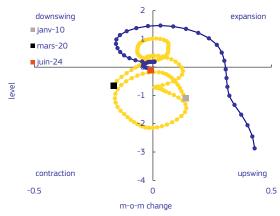
In parallel with the ESI, the Italian EEI decreased by 2.2 points over the quarter, the main difference being that its level in June (104.2 points) remained comfortably above its long-term average of 100. The setback was due to a sharp deterioration in employment plans among retail trade managers, while plans in construction, services and industry remained broadly stable.



Source: European Commission

As shown in the Italian radar chart (see Graph 2.9), confidence dropped in retail trade, industry and services, while it remained stable in construction and among consumers. Confidence levels remained high by historical standards in construction, retail trade and services, while falling short of their long-term averages in industry and among consumers.

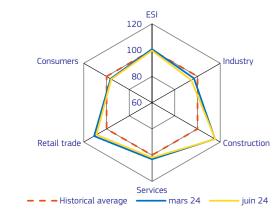
Graph 2.8: Climate Tracer for Italy



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

**Source:** European Commission

Graph 2.9: Radar chart for Italy



#### **Spain**

The Spanish ESI finished the second quarter broadly at Graph 2.10:Economic Sentiment Indicator for Spain its March level (+0.4) and, at 102.4 points, discernibly above its long-term average of 100 (see Graph 2.10). Accordingly, the Spanish climate tracer remained in the expansion quadrant (see Graph 2.11).

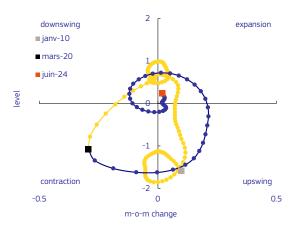
The Spanish EEI, however, dipped slightly (-1.1), but remained at a level (107.0 points) well above its longterm average. Markedly less upbeat expectations in construction and, to a lesser extent, in services were only partially offset by brighter employment plans in industry and retail trade.

As shown in the radar chart (see Graph 2.12), confidence improved in services, and among consumers, while recording a significant drop in source: European Commission construction and, to a lesser extent, in retail trade.



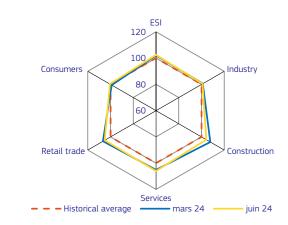
Industry confidence remained broadly stable. Confidence still exceeds long-term averages in all surveyed business sectors, and now also among consumers.

Graph 2.11: Climate Tracer for Spain



Source: European Commission

Graph 2.12: Radar chart for Spain



#### The Netherlands

Consolidating the upward trend that started at the Graph 2.13:Economic Sentiment Indicator for the Netherlands beginning of the year, the ESI for the Netherlands improved by a further 2.0 points over the second quarter. At 99.9 points it is scratching its long-term average (see Graph 2.13). The Dutch climate tracer remained in the upswing quadrant, moving towards the expansion area (see Graph 2.14).

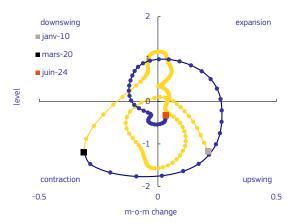
By contrast, the EEI for the Netherlands dipped (-3.0). At 101.1 points, the indicator remains only slightly above its long-term average. Employment plans deteriorated in retail trade and services but strengthened in industry and construction.

As shown in the radar chart (see Graph 2.15), confidence improved among industry, construction and, source: European Commission more marginally, services managers, while it declined in



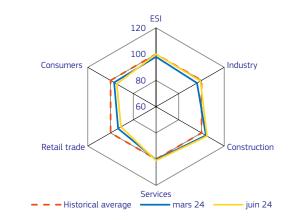
retail trade and among consumers. Compared to historical standards, confidence remained elevated in construction, slightly exceeded its long-term average in services, while remaining lower in retail trade and among consumers. In industry, confidence is nearly at its long-term average.

Graph 2.14: Climate Tracer for the Netherlands



Source: European Commission

Graph 2.15: Radar chart for the Netherlands



#### **Poland**

Compared to March, the ESI for Poland remained Graph 2.16:Economic Sentiment Indicator for Poland virtually stable (-0.2), halting the upward trend that began in autumn 2022. At 101.5, the indicator remained above its long-term average of 100 (see Graph 2.16). The Polish climate tracer inched into the expansion territory but remains close to the intersection with the upswing quadrant (see Graph 2.17).

The Polish EEI dipped, ending the second quarter of 2024 at 98.5 points, 3.5 points below its March level and below its long-term average of 100. Employment plans sharply deteriorated in industry and were less optimistic in services and construction, while improving slightly in retail trade.

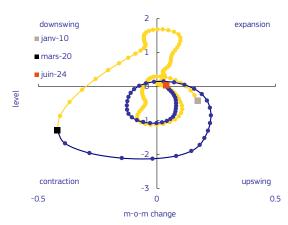
As shown in the radar chart (see Graph 2.18), source: European Commission confidence deteriorated in all business sectors but

brightened further among consumers. It exceeded historical averages among consumers, and in construction and retail trade, while falling further below in industry and services.

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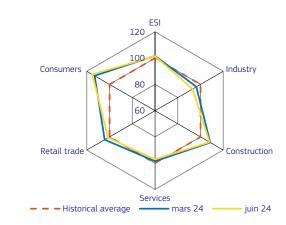


Graph 2.17: Climate Tracer for Poland



Source: European Commission

Graph 2.18: Radar chart for Poland



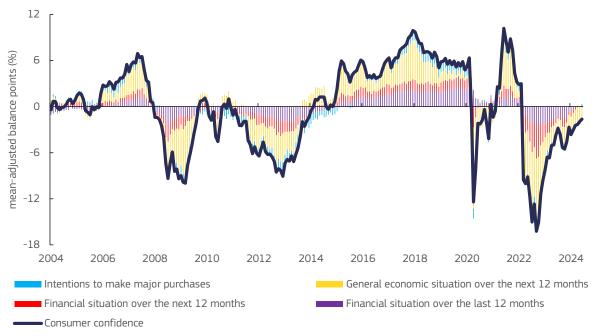
# 3. SPECIAL TOPIC: LOW CONSUMER CONFIDENCE AND THE ECONOMY - INSIGHTS FROM THE EURO AREA

Following sharp volatility during the COVID crisis, the economic 'vibe' in the euro area economy – as measured by consumer sentiment – soured again when inflation started to mount, in late 2021, and plunged to its lowest reading on record in September 2022, as inflation was about to peak. Thereafter, consumer sentiment recovered. However, in June 2024, the consumer confidence indicator remained below its long-term average, despite unemployment being at its historical low and headline inflation having declined strongly from its double-digit peak in October 2022 to 2.5% in the same month.

In the US, the disconnect between the relatively good performance of the US economy and the general public's negative perception of it has been a puzzle for economists. In a June 2022 newsletter, K. Scanlion (5) coined the term 'vibecession' to describe this disconnect. While the economy of the euro area has underperformed that of the US in recent years, the evidence above seems to also point to a disconnect between actual economic outcomes and consumers' perceptions of them. Is the euro area economy also undergoing a vibecession? This Special Topic tries to answer this question by exploring the relationship between consumer confidence and its potential economic drivers over the past two decades – starting in January 2004 and until early 2024.

#### Consumer confidence on a bumpy road over the past two decades

Graph 3.1: Consumer confidence in the EA and contribution of its components



(1) Consumer confidence and its components: the past (Q1) and expected (Q2) financial situation of households, the expected general economic situation (Q4) and the intentions to make major purchases over the next 12 months (Q9).

Graph 3.1 shows the evolution of the consumer confidence indicator in the euro area over the past two decades. The indicator took a double dip in the four years between 2008 and 2012, when the global financial crisis was followed, after a short-lived recovery, by the sovereign debt crisis. After being relatively upbeat in the years that followed, consumer confidence collapsed in Spring 2020, under the immediate impact of the

<sup>(5)</sup> Scanlon, Kyla (2022-06-30). "The Vibecession: The Self-Fulfilling Prophecy". Kyla's Newsletter. Retrieved 2024-02-10.

COVID-19 pandemic, and quickly recovered to a peak of -2.2 points in June 2021. The ensuing decline steepened in March 2022, after Russia's war of aggression on Ukraine unleashed an energy shock that can be likened to the oil crises of the early 1970s. The consumer confidence indicator for the euro area slumped to -22 points, from -9.4 points in March 2022 and reached its lowest point on record in September 2022 (-28.6 points). Thereafter, consumer confidence recovered, but the recovery stalled in the summer 2023 and resumed at slow pace early this year. By June 2024, consumer confidence was still below its long-term average (Graph 3.1).

Looking at the behaviour of the four components of the consumer confidence indicator, it is interesting to note that consumers' perception of their country's overall economic situation over the next 12 months has the most significant impact, while (changes in) intentions to make major purchases play only a very limited role. During the Great Financial Crisis and subsequent euro area crisis, the deterioration of consumers' expectations about the general economic situation dragged the indicator down, but concerns about the personal financial situation, both past and future, also played a role. Changes in the indicator during the COVID crisis were again mostly driven by the sharp deterioration of consumers' assessments of the general economic situation. In the high inflation period starting towards the end of 2021, concerns about the past and especially expected financial situation also played an important role.

#### Consumer confidence in the euro area explained by inflation and unemployment

Joblessness and a rising cost of living have an important bearing on consumer sentiment. This was the intuition behind the 'misery index' conceived by economist Arthur Okun in the aftermath of the first oil crisis of the 1970s. As Okun's label suggests, when the misery index is higher, people feel worse off. The first step in our exploration of the drivers of consumer confidence is therefore the estimation of a simple regression model using HICP inflation and the unemployment rate as explanatory variables.

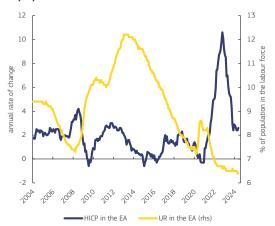
Before looking at the results of this first step, it is worth reviewing the dynamics of the two variables over the observed period. Starting with inflation, the surge of inflation as from late 2021 came after a protracted period of low inflation, below ECB target, and occasional deflation. In particular, as Graph 3.2 shows, the 2008 Global Financial Crisis and the mobility restrictions that governments adopted to contain the spread of COVID-19 in 2020 unleashed recessionary and deflationary forces. Starting in late summer 2021, a combination of pandemic-related factors and an emerging energy price shock (6) pushed inflation up to unprecedented rates, culminating at a peak of 10.6 percent in October 2022. Subsequently, inflation declined, at fast pace throughout 2023 – to 2.9% by December 2023 – and more moderately this year. In June 2024, HICP inflation in the euro area was at 2.5%.

The unemployment rate was on a downward trajectory when the global financial crisis hit the euro area labour markets. Between May 2008 and spring 2013, it increased significantly, to a peak of just above 12%. Its subsequent steady decline was interrupted by a partial reversal in 2020, under the immediate impact of the COVID-19 pandemic. The unemployment rate resumed its decline in spring 2021, reaching successive historical lows. In May 2024, it was at its record low of 6.4%. (7)

<sup>(6)</sup> See e.g <u>Economic forecasts - European Commission (europa.eu)</u>.

<sup>(&</sup>lt;sup>7</sup>) See <u>Unemployment statistics - Statistics Explained (europa.eu)</u> for the latest unemployment figures for the EU and the EA and individual Member States on a monthly basis.

Graph 3.2: Harmonised Index of Consumer prices and Unemployment rate in the EA



(1) HICP (annual rate of change) and unemployment rate (percentage of population in the labour force), monthly data. (January 2004 – May 2024)

Source: Eurostat

Graph 3.3: Consumer confidence estimated by inflation and unemployment



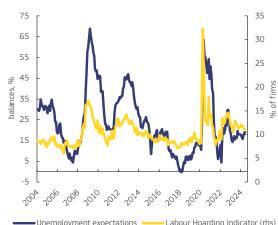
(1) Estimated consumer confidence by HICP (annual rate of change) and unemployment rate (percentage of population in the labour force), monthly data.

Source: European Commission and Eurostat

The unemployment and HICP inflation rates have limited explanatory power of the evolution of consumer confidence over the past two decades (adjusted R<sup>2</sup> 36%, see Table 3.1 in Annex), as they fail to explain its dynamics in the most acute cyclical phases. Graph 3.3 highlights four episodes when a 'negative confidence gap' between observed and modelled consumer confidence opens up: the financial crisis of 2008/2009, the subsequent sovereign debt crisis, the initial phase of the COVID-19 pandemic of 2020/2021, and the more recent period starting in 2023. It also shows three episodes of 'positive confidence gaps', with observed consumer sentiment being more upbeat that the estimated one: the two years preceding the global financial crisis, the years 2017/2018 and 2021/2022, when the COVID-19 restrictions were lifted.

For the first three episodes of negative confidence gap, two intuitive key factors clearly undermine the capacity of inflation and unemployment to explain the evolution of consumer confidence. First, these are recessionary periods characterised by very low inflation or even deflation, which is interpreted by the model as having a positive impact on consumer confidence (since the inflation rate enters the model with negative sign). Second, during these periods, significant labour hoarding in several euro area countries helped to put a lid on employment adjustment. Especially during the COVID-19 induced recession, the extensive use of jobretention schemes played a crucial role in preventing mass unemployment. Despite this, concerns about job security among workers and their households may have affected consumer sentiment, over and above observed labour market outcomes. Graph 3.4 shows the evolution of the new indicator of labour hoarding (8) - which measures the percentage of managers expecting their

Graph 3.4: Consumers' unemployment expectations and labour hoarding in the EA



Source: European Commission and Eurostat

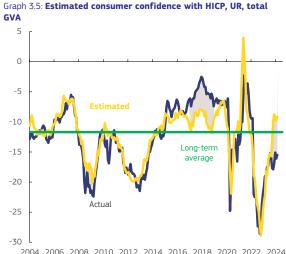
<sup>(8)</sup> See the special topic of the 2023-Q2 EBCI for background, and section 3.6.9 of the BCS User Guide for methodological details.

firm's output to decrease, but employment to remain stable or increase – against the dynamics of consumers' unemployment expectations (9). Both indicators increase during the three mentioned episodes. Neither of these two factors – the disinflationary impact of a recession and the heightened concerns for job security that a recession raises – can reasonably help explain the most recent episode of negative confidence gap. As to the three episodes of positive confidence gap, they are periods of economic expansion.

As seen above, consumers' assessment of the general economic situation is a key driver of economic sentiment, and the general economic situation cannot be proxied by unemployment and inflation. To help capture developments in the overall economic performance, the next step in our analysis is the addition of gross value added (GVA) in the model.

#### Enhancing Consumer Confidence Models with Additional Economic Indicators

The addition of gross value added in the model significantly increases the regression accuracy. The estimated consumer confidence since 2004 correlates much better with the observed consumer confidence values (adjusted R² is now 72% - see Table 3.2 in Annex). Most notably, the reaction of consumer confidence to the initial impact of the COVID-19 pandemic in 2020/21 is now well captured. The negative confidence gap during the global financial crisis and the positive gap during 2017/2018 are also reduced, but remain significant. Finally, the negative confidence gap in the recent period after 2023 persists, indicating the need to incorporate additional variables (see Graph 3.5).



(1) Estimated consumer confidence by HICP, UR, GVA total EA20 excl. IE y-o-y % (10) quarterly data (11)) convert to monthly **Source:** European Commission and Eurostat

<sup>(9)</sup> Question 7 reads "How do you expect the number of people unemployed in this country to change over the next 12 months? The number will...increase sharply; increase slightly; remain the same; fall slightly; fall sharply; don't know".

<sup>(10)</sup> Ireland is excluded from the euro-area (EA) aggregate for gross value added included in this analysis, due to its large volatility. This volatility has increased substantially over the past decade, as the weight of foreign-owned multinational enterprises (MNEs) progressively rose. Ireland is not the only EU Member State hosting MNEs, yet their weight is so large in Ireland that it can affect national accounts aggregates for the domestic economy, but also the EU economy at large. See European Commission (2022), European Economic Forecast – Summer 2022, Institutional Paper 183, July.

<sup>(11)</sup> Available only up to 1st quarter of 2024.

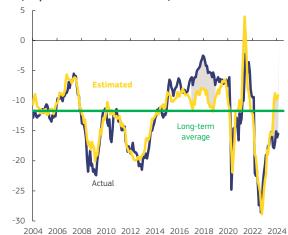
#### Income and wealth

Indicators of disposable income and share prices provide crucial insights into the financial situation of consumers, in terms of both income and wealth. Their inclusion in the model appears therefore appropriate.

Changes in disposable income impact consumers' ability to spend and save, with potential effects on consumer confidence (13). Similarly, changes in the STOXX600 index, which tracks the performance of the 600 largest European companies, can affect consumers' wealth position, in turn affecting sentiment.

The addition of these two variables further closes the negative confidence gap during the Global Financial Crisis period. However, there remains a persistent positive discrepancy between observed and estimated consumer confidence during the 2017/2018 period and a negative confidence gap after 2023 (see Graph 3.6).

Graph 3.6: Estimated consumer confidence with HICP, UR, total GVA, disposable income of households, Stoxx600



(1) Estimated consumer confidence by HICP, UR, GVA total EA19 excl. IE y-o-y % quarterly data convert to monthly, gross disposable income of households (growth rate) y-o-y % quarterly data (12) convert to monthly, stoxx600 euro price index value, m-o-m %.

Source: European Commission, European Central Bank and Eurostat.

<sup>(</sup> $^{12}$ ) Available only up to  $\mathbf{1}^{st}$  quarter of 2024

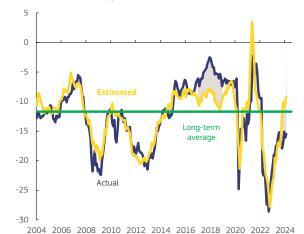
<sup>(13)</sup> Eurostat. (2023, December 8). Glossary: Households disposable income. Retrieved from Eurostat, Statistics Explained: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Households\_disposable\_income

#### **Borrowing costs**

The cost of money can also affect consumer confidence, as demonstrated by Bolhuis *et al.* (2024) (<sup>14</sup>) or the case of the US. To check whether this is the case also for the euro area (<sup>15</sup>), the regression model was augmented with bank interest rates on loans for consumption (new business). Household loans for consumption typically encompass various forms of credit extended to individuals for purchasing goods or services, such as personal loans, credit card debt, or instalment plans.

The significant and negative coefficient for this new independent variable confirms the intuition that higher interest rates of household loans for consumption are associated with lower consumer confidence. However, the addition of the interest rate variable does not improve in any meaningful way the explanation of consumer confidence over the observed period. The fit of the model increases only marginally (the adjusted  $R^2$  increases by only roughly one percentage point, to 76% – see Table 3.4 in Annex). And more importantly, unlike

Graph 3.7: Estimated consumer confidence by UR, GVA total, disposable income, stoxx600, bank interest rates - loans to households for consumption



(1) Estimated consumer confidence by HICP, UR, GVA total EA19 excl. IE y-o-y % quarterly data convert to monthly, gross disposable income of households (growth rate) y-o-y % quarterly data convert to monthly, stoxx600 euro price index value. m-o-m %, bank interest rates (new

Source: European Commission, European Central Bank and Eurostat.

business) loans to households for consumption v-o-v %

in the US (<sup>16</sup>), interest rates on consumer loans do not seem to be able to explain the low level of consumer confidence in the period since 2023 (see Graph 3.7).

#### **Uncertainty**

Uncertainty can affect consumer confidence and prompt higher precautionary savings and reduced spending (17). The observed confidence gap in the years 2023-2024 could be attributable to concerns about ongoing geopolitical tensions and military conflicts as well as policy uncertainty. The Economic Policy Uncertainty Index (EPUI) (18) - an index constructed based on newspaper articles regarding policy uncertainty from leading newspapers - was added to the model. However, it did not turn out to be significant in the context of the regressors already included in the model (Table 3.5 in the Annex) (19).

<sup>(14)</sup> Bolhuis, M.A., Cramer, J.N.L., Schulz, K.O., Summers, L.H., The cost of money is part of the cost of living: new evidence on the consumer sentiment anomaly, NBER WP 32163, Feb 2024.

<sup>(15)</sup> While credit-based-consumption and consumer credits are essential in both the EU and the US, its influence is more significant in the US economy. The EU's updated rules aim to balance consumer protection with fostering a healthy credit market (see Consumer credits: why updated EU rules are needed | Topics | European Parliament (europa.eu)) On average, consumer credits constituted around 16% of mortgage credits in European countries in 2019. In the United States, consumer represented a higher proportion at 33% See Lissowska, M. (2021). Trends and role of consumer credits in the European economy. In Springer eBooks (pp. 5–30). https://doi.org/10.1007/978-3-030-88231-0\_2.

<sup>(16)</sup> Bolhuis et al. (2024), idem.

<sup>(17)</sup> See Bloom, N. (2014). Fluctuations in uncertainty. the Journal of Economic Perspectives/the Journal of Economic Perspectives, 28(2), 153–176. https://doi.org/10.1257/jep.28.2.153

<sup>(18)</sup> See Baker, S., Bloom, N., & Davis, S. (2015). Measuring Economic Policy Uncertainty. NBER. https://doi.org/10.3386/w21633

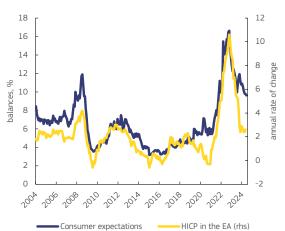
<sup>(19)</sup> In further analysis, it could be advantageous to incorporate an alternative measure of economic uncertainty from the Joint Harmonised EU Programme of Business and Consumer Surveys. The Commission's Economic Uncertainty Indicator (EUI) could provide a more relevant insight into uncertainty perceived by consumers. However, this indicator is only available since May 2021. See European Business Cycle Indicators – 3rd Quarter 2021 - European Commission (europa.eu)

#### Model with consumers' inflation expectations

Measurable economic variables do not seem to be able to fully explain consumer sentiment, especially in the most recent period. As a final attempt to enhance the accuracy of the regression model, consumers' inflation expectations were incorporated alongside measured HICP inflation. In the Joint Harmonised EU Consumer Survey, consumers' inflation expectations reflect respondents' subjective opinions about future inflation developments, which may be based on their personal day-to-day purchasing habits and their personal consumption basket of goods and services. Consumers are asked each month their expectations of price changes in both quantitative (Q61) and qualitative (Q6) (20) terms. This analysis uses consumer expectations of price changes in quantitative terms (Q61). Following the significant increase in consumer prices as measured by HICP, from mid-July 2021 until October 2022, the series in qualitative terms (measured in % balances) declined sharply mainly because fewer consumers chose the answer "will increase more rapidly" (while the share of respondents selecting the option "will increase at the same rate" or "will increase at a slower rate" remained high). By contrast, in quantitative terms, we see that consumers still expect marked price increases, which indicates the persistence of inflation fears (see Graph 3.8).

Consumers expected a significant increase in inflation in the years 2007-2009 and in the years 2021-2022, broadly in line with developments in measured inflation (see Graph 3.8). However, unlike the HICP inflation rate, consumer's inflation expectations expressed in quantitative terms remained high in 2023 and throughout 2024.

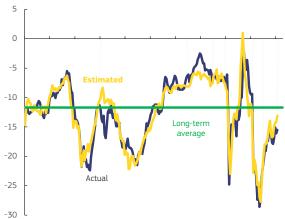
Graph 3.8: Consumer inflation expectations compared to measured inflation



(1) Consumer price expectations, monthly question from the Joint harmonised consumer survey; (Q61: 'By how many per cent do you expect consumer prices to change in the next 12 months?").

**Source:** European Commission, European Central Bank and Eurostat.

Graph 3.9: Estimated consumer confidence by UR, HICP, GVA total, disposable income, stoxx600, loans to households for consumption, consumer price expectations



2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024

(1) Estimated consumer confidence by HICP, UR, GVA total EA19 excl. IE y-o-y % quarterly data convert to monthly, gross disposable income of households (growth rate) y-o-y % quarterly data convert to monthly, stoxx600 euro price index value, m-o-m %, bank interest rates (new business) loans to households for consumption.

Source: European Commission, European Central Bank and Eurostat.

When adding consumers' quantitative inflation expectations, the regression model achieves an adjusted R<sup>2</sup> of 87% (Table 3.6 in Annex), and the negative gap between observed and estimated consumer sentiment in the

<sup>(20)</sup> Question Q6 reads "By comparison with the past 12 months, how do you expect that consumer prices will develop in the next 12 months? They will...(1) increase more rapidly/(2) increase at the same rate/(3) increase at a slower rate/(4)stay about the same/(5) fall/(6) don't know". Then, if question Q6 was answered by 1, 2, 3 or 5, respondents are asked (Q61) "By how many per cent do you expect consumer prices to go up/down change in the next 12 months?... Consumer prices will increase by , % / decrease by , %

period after 2023 closes almost completely. Likewise, the gap in the years 2017/2018 is reduced significantly (Graph 3.9).

#### Conclusions

This analysis examines the relationship between consumer sentiment and a number of measurable economic variables. It finds that consumer confidence is boosted by growth in gross value added and disposable income, while high inflation, unemployment and, to a lesser extent, bank interest rates have a negative impact. Overall, the inclusion in the model of measurable economic variables fails to fully explain the low consumer sentiment over the past year. In other words, there is a disconnect between consumer sentiment and underlying economic fundamentals. In this sense, the question raised in the introduction concerning the existence of a vibecession in the euro area can be answered affirmatively.

However, as the analysis shows, the inclusion in the model of consumers' (persistently elevated) inflation expectations fills the negative gap between observed and estimated consumer sentiment. This highlights the importance of looking at consumer perceptions and expectations of some variables, as they can diverge substantially from official statistics. Such perceptions can impact spending and saving decisions by consumers, just like measurable economic variables do.

#### Annex to the Special Topic

Table 3.1: Regression model with unemployment rate and inflation (HICP)

Dependent Variable: CONS CONF EA Method: Least Squares Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HICP_EA UR EA C	-1.957809 -1.431181 4.882751	0.165588 0.202889 2.082369	-11.82339 -7.054002 2.344806	0.0000 0.0000 0.0199
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.370352 0.365083 4.420281 4669.792 -701.5349 70.28851 0.000000	Mean depen S.D. depend Akaike info d Schwarz cri Hannan-Qui Durbin-Wats	dent var criterion terion nn criter.	-12.36983 5.547423 5.822603 5.865854 5.840026 0.165565

**Source:** European Commission

Table 3.2: Regression model with unemployment rate, HICP, GVA total

Dependent Variable: CONS CONF EA

Method: Least Squares

Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UR EA HICP EA GVA TOTAL EA C	-1.470585 -2.505496 1.199595 5.003522	0.133801 0.113508 0.067947 1.373103	-10.99084 -22.07333 17.65473 3.643951	0.0000 0.0000 0.0000 0.0003
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.727380 0.723944 2.914675 2021.888 -600.2479 211.6701 0.000000	Mean depen S.D. depend Akaike info d Schwarz cri Hannan-Qui Durbin-Wats	dent var criterion terion nn criter.	-12.36983 5.547423 4.993784 5.051453 5.017015 0.371017

Table 3.3: Regression model with unemployment rate, HICP, GVA total, disposable income, stoxx600

Dependent Variable: CONS CONF EA

Method: Least Squares

Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HICP EA INCOME EA STOXX600 UR EA GVA TOTAL EA	-2.626659 0.545490 0.048857 -1.220787 0.870567 1.546743	0.130743 0.202874 0.013438 0.178880 0.099742 1.978829	-20.09029 2.688811 3.635601 -6.824616 8.728163 0.781646	0.0000 0.0077 0.0003 0.0000 0.0000 0.4352
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.750287 0.744997 2.801329 1851.997 -589.6280 141.8172 0.000000	Mean depen S.D. depend Akaike info d Schwarz cri Hannan-Qui Durbin-Wats	dent var dent var criterion terion nn criter.	-12.36983 5.547423 4.922546 5.009048 4.957392 0.375063

**Source:** European Commission

Table 3.4: Regression model with unemployment rate, HICP, GVA total, disposable income, stoxx600, loans to households for consumption

Dependent Variable: CONS CONF EA

Method: Least Squares

Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HICP EA INCOME EA STOXX600 UR_EA GVA TOTAL EA IR CONSUMPTION C	-2.493236 1.052874 0.042223 -1.092904 0.742953 -12.36381 -1.076186	0.133400 0.246112 0.013271 0.178635 0.104146 3.553295 2.075570	-18.68987 4.278025 3.181709 -6.118075 7.133730 -3.479534 -0.518501	0.0000 0.0000 0.0017 0.0000 0.0000 0.0006 0.6046
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.762522 0.756459 2.737647 1761.257 -583.5494 125.7610 0.000000	Mean depen S.D. depend Akaike info d Schwarz cri Hannan-Qui Durbin-Wats	dent var dent var criterion terion nn criter.	-12.36983 5.547423 4.880574 4.981493 4.921228 0.396318

Table 3.5: Regression model with unemployment rate, HICP, GVA total, disposable income, stoxx600, loans to households for consumption, Economic Policy Uncertain

Dependent Variable: CONS CONF EA

Method: Least Squares

Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EPU HICP EA INCOME EA STOXX600 UR EA GVA TOTAL EA IR CONSUMPTION C	-0.655860 -2.431848 1.036357 0.032082 -1.100645 0.765949 -13.44653 -0.975397	0.518141 0.141782 0.246144 0.015487 0.178512 0.105588 3.650381 2.074445	-1.265794 -17.15200 4.210376 2.071574 -6.165680 7.254132 -3.683596 -0.470197	0.2068 0.0000 0.0000 0.0394 0.0000 0.0000 0.0003 0.6387
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.764137 0.757081 2.734146 1749.280 -582.7237 108.3002 0.000000	Mean depen S.D. depend Akaike info d Schwarz crit Hannan-Qui Durbin-Wats	dent var criterion terion nn criter.	-12.36983 5.547423 4.882014 4.997351 4.928476 0.400697

**Source:** European Commission

Table 3.6: Regression model with unemployment rate, HICP, GVA total, disposable income, stoxx600, loans to households for consumption, consumer price expectations

Dependent Variable: CONS CONF EA

Method: Least Squares

Sample (adjusted): 2004M01 2024M02 Included observations: 242 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Q61 INCOME EA GVA TOTAL EA HICP EA STOXX600 UR EA IR CONSUMPTION C	-1.735958 0.922107 0.592527 -0.622798 0.054796 -1.772037 -6.767108 12.94713	0.121714 0.180624 0.077061 0.163581 0.009767 0.139323 2.633835 1.811390	-14.26265 5.105109 7.689086 -3.807268 5.610423 -12.71893 -2.569298 7.147619	0.0000 0.0000 0.0000 0.0002 0.0000 0.0000 0.0108 0.0000
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.872961 0.869161 2.006599 942.1866 -507.8543 229.7075 0.000000	Mean depen S.D. depend Akaike info d Schwarz cri Hannan-Qui Durbin-Wats	dent var criterion terion nn criter.	-12.36983 5.547423 4.263258 4.378595 4.309720 0.479949

#### ANNEX

#### Reference series

Confidence	Reference series from Eurostat
indicators	(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 <a href="here">here</a>.

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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