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European Business Cycle Indicators

2nd Quarter 2020

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European Commission
Directorate-General for Economic and Financial Affairs

European Business Cycle Indicators

2nd Quarter 2020

Special topic

- Are some categories of consumers more affected by the effects of the pandemic than others?

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OVERVIEW

Recent developments in survey indicators

- After two months of dramatic declines in March and April due to the strict containment measures enacted across Europe to fight the coronavirus, the Economic Sentiment Indicators (ESI) for the euro area (EA) and the EU recovered somewhat in May and June.
- Losing 27.7 (EA) and 28.2 (EU) points over the period from February to June 2020, the ESI has so far recovered some 30% of the combined losses of March and April. The indicators for both the EA and EU lie firmly below their long-term average of 100. The current levels of 75.7 (EA) and 74.8 (EU) points were last seen in 2009, during the recovery following the financial crisis.
- The spread of COVID-19 and the measures implemented to contain it also determined the evolution of the Employment Expectations Indicator (EEI), which posted sharp declines (−46.1 in the EA and −44.9 in the EU) in March and April combined, before recovering around half of these losses in May and June.
- The services and retail trade sectors were hit much harder by the confinement measures than the other sectors. While confidence in services still lies at levels unseen before the pandemic, confidence in retail trade recovered in June some 30% of the earlier loss. In industry, confidence fell comparatively less sharply and recovered already part of the fall in May and June. In the construction sector, the drop was much less marked than in the other business sectors. Finally, confidence among consumers did not fall as dramatically as in services and retail trade, and already recovered in May and June some 50% of the combined losses of March and April.
- Differences across Member States are pronounced. Focussing on the six largest EU economies, over the period from February to June, sentiment plummeted in Poland (−41.6), Italy (−30.1), and France (−28.4), followed by the Netherlands (−24.8), Germany (−19.9), and Spain (−19.6).

Special topic: are some categories of consumers more affected by the effects of the corona pandemic than others?

The outbreak of COVID-19 and the ensuing lockdown measures dealt a very large blow to economic activity, and consequently, consumer confidence, which indeed plummeted in March and April. One of the major concerns related to the fallout from the lockdown is that the effects may not be equally distributed but will have distributional implications, raising inequality. This special topic examines consumer survey data broken down by income, occupation and age of the respondents to check whether (mounting) inequalities are visible in consumer confidence across different categories of people. The analysis shows that high-income earners report the sharpest declines, both in terms of their assessments relating to the past and their expectations. When divided into different occupation categories, there is a slight tendency for people in jobs requiring a more sophisticated skill set to have been less affected by the crisis than those exercising jobs with simpler skill requirements. Finally, the youngest (16 to 29 years) were hardest hit – no age group suffered a comparable blow to their (past) financial situation.

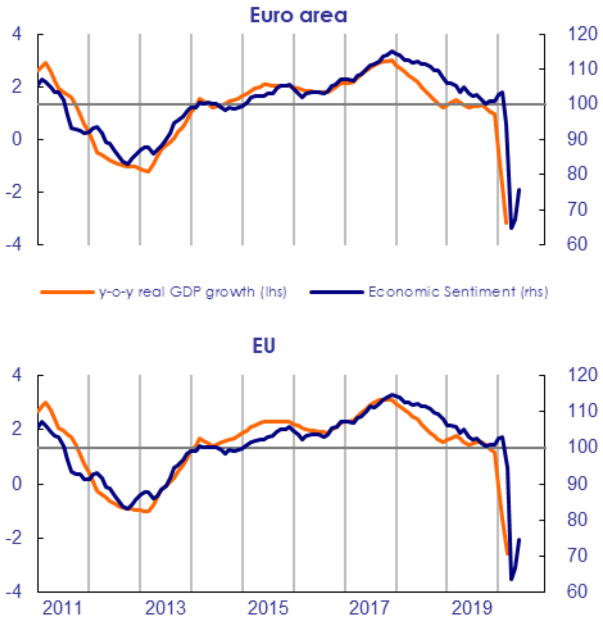
1. RECENT DEVELOPMENTS IN SURVEY INDICATORS

The present edition of the European Business Cycle Indicators (EBCI) reports on developments in survey data over the second quarter of 2020. It would therefore normally focus on developments in the surveys between March and June. However, in view of the COVID-19 crisis, March is not an ideal reference point for three reasons. First, the March surveys already showed first drops due to the spreading of coronavirus across the continent. They are therefore not suitable as a reference point for a recovery toward a 'normal' pre-coronavirus level. Second, not all European Member States were affected at the same time by the pandemic, so comparisons across countries based on March readings would be difficult to interpret. Finally, the data collection in March took place both before and after strong containment measures were introduced. As most of those measures were enacted towards the middle of the month, while the bulk of the survey responses were collected in the first half, the March results do not capture the full initial extent of the corona crisis on sentiment.[1] *Against this background, the present EBCI edition presents developments in the surveys between February and June.*

1.1. EU and euro area

After two months of dramatic falls in March and April due to strict containment measures enacted across Europe, the Economic Sentiment Indicators (ESI) for the euro area (EA) and the EU recovered somewhat in May and June. Scoring 27.7 (EA) and 28.2 (EU) points below their February levels in June 2020, the indicators have so far recovered only some 30% of the combined losses of March and April. Both indicators thus remain firmly below their long-term average of 100. The indicators' current levels of 75.7 (EA) and 74.8 (EU) points were last seen in 2009, during the recovery following the financial crisis.

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.

The spread of COVID-19 and the measures implemented to contain it also determined the evolution of the Employment Expectations Indicator (EEI)[2], which posted sharp declines (−46.1 in the EA and −44.9 in the EU) in March and April combined. While recovering around half of the losses incurred in May and June, the indicators remain significantly below their February levels (−22.2 points in the EA and −21.8 in the EU), and clearly below their long-term average of 100. At 82.8 in the EA and 82.7 in the EU, such levels were last seen in 2009. Zooming into the sectoral components of the indicator, (see Graphs 1.1.5 and 1.1.7 below) employment plans in June were recovering in all sectors, while the fall recorded in March and April had been much sharper in services and retail trade than in industry and construction.

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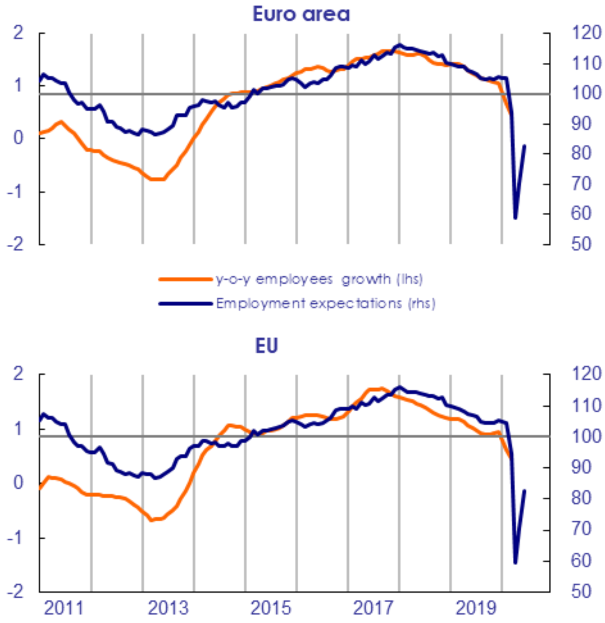
[1] Across all surveyed sectors, the average share of responses collected before significant confinement measures were taken was at 50-70% in BE, CY, CZ and MT, at 71-85% in DE, DK, EL, ES, HU, IT and LT, at 86-95% in AT, BG, EE, FI, NL, PT, SK and SE and at more than 95% in FR, HR, IE, PL and RO. No information on the share of early responses is available for LU, LV and SI.

[2] The new indicator has been presented in the 2019-Q4 special topic of the European Business Cycle Indicators publication (see also the Methodological User Guide to the Joint Harmonised EU Programme of Business and Consumer Surveys, p. 22, for a description of the EEI).

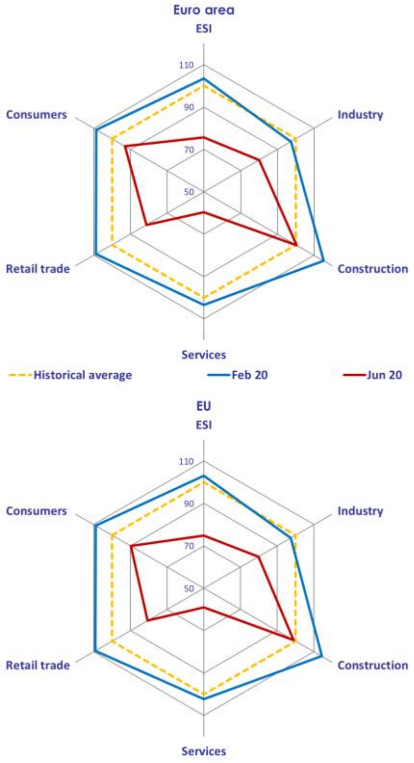
Graph 1.1.2: Employment expectations indicator



The ESI's crash in March and April was in line with developments in other survey-based bellwethers for the EA/EU. Although superlatives are hard to compare, the fall in Markit Economics' PMI Composite Output Index was even much sharper than in the ESI and,[3] importantly, the PMI's April level was much lower than it ever was during the Great Financial Crisis. The latter does not hold true for the ESI, which went "only" as low as in 2009. While the ESI recovered in May and June some 30% of the combined losses in March and April, the PMI recovered much quicker, already offsetting some 90% of the initial drop. While the discrepancy is partly explicable by differences in the sectoral coverage of the two indicators and the time horizons to which the underlying survey questions refer, the still comparably subdued level of the ESI appears justified against the background of remaining uncertainty about the further course of the pandemic and social distancing measures remaining in place.

The ESI's slide also chimes with the results of the Ifo Business Climate Index for Germany, which posted in April the lowest level since the German reunification, before recovering around 50% of the losses in May and June.

Graph 1.1.3: 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.

Looking at the sectoral drivers of the ESI's slump (see Graph 1.1.3), one can see that confidence in the services sector was hit much harder than the other sectors, and still lies at levels unseen before the pandemic. While confidence in retail trade was also severely affected by the confinement measures, it recovered in June some 30% of the earlier loss. In industry, confidence fell comparatively less sharply and already recovered part of the fall in May and June. The current level of the industry confidence indicator was last seen during the financial crisis, while the level of the retail trade confidence indicator was last seen in the aftermath of the sovereign debt crisis. In the construction sector, the confidence indicator was clearly above its long-term average in February, and the drop was much less marked than in the other business sectors. As a result, confidence in the construction sector is currently just above its long-term average. Finally, confidence among consumers did not fall as dramatically as in services and retail trade and in May and June already recovered some 50% of the combined losses of March and April. Consequently, while consumer confidence lies below its long-term average, it is much closer to it than in industry, services and retail trade.

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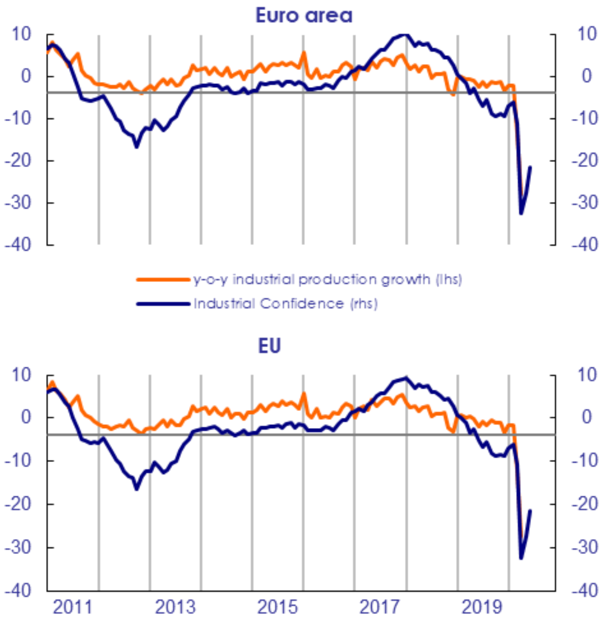
[3] Technically speaking, the combined fall in March and April corresponded to about nine standard deviations vs. about four in the case of the ESI.

Focussing on the six largest EU economies, the starkest combined losses of March and April were registered in Poland (−52.0), France (−37.6) and the Netherlands (−36.6), while the slide in sentiment was comparatively less severe in Germany (−29.7) and Spain (−29.4). No data could be collected in April in Italy due to the strict confinement measures. Taking into account the recovery, the losses over the period from February to June were the strongest in Poland (−41.6), Italy (−30.1), and France (−28.4), followed by the Netherlands (−24.8), Germany (−19.9), and Spain (−19.6).

Graph 1.1.4: Industry Confidence indicator



Sector developments

Industry confidence fell dramatically in March and April (−26.3 points in the EA, −26.1 points in the EU), but remained above the record low of March 2009. In May and June, industry confidence recovered some 40% of the loss, bringing the total decreases from February to June to −15.5 (EA) and −15.3 (EU). At −21.7 (EA) and −21.5 (EU), both indicators are currently at levels well below their respective long-term averages (see Graph 1.1.4).

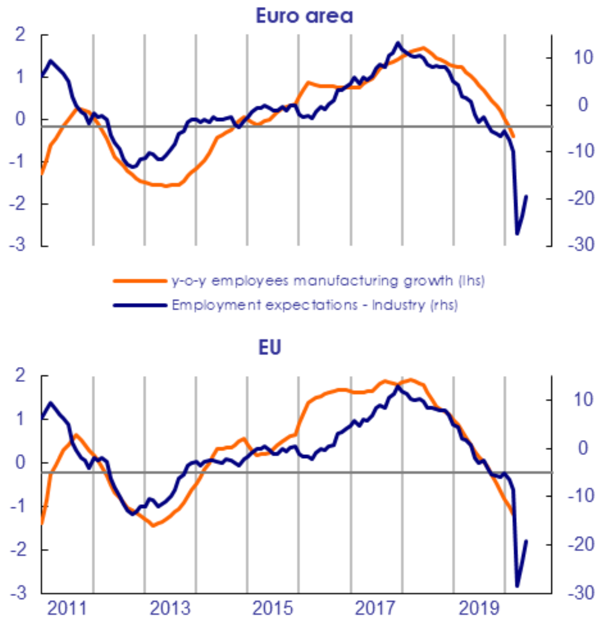
Zooming into the individual components of EA/EU industrial confidence, the crashes of March and April were to a large extent due to dramatically lower production expectations. In both the EA and EU, production expectations recovered firmly in May and June with the end of strong confinement measures. As a result, expectations contributed only a little to the total loss in industry confidence over the period until June. At the same time, managers' assessments of order books showed much less severe developments in March, but kept deteriorating throughout the second quarter. The assessment of order books is by far the largest drag on industry confidence in June. Finally, managers' assessment of the volume of stocks booked strong increases from February to June, however the order of magnitude of these developments is not commensurate to that in the other two components of the indicator.

Of the components not included in the confidence indicator, managers' views on past production deteriorated throughout the quarter and reached their lowest level on record in May before showing first signs of recovery in June. Meanwhile, their appraisals of export order books deteriorated in line with those of overall order books.

In line with EA/EU managers' dramatically lowered production expectations, both their selling price and **employment expectations** (see Graph 1.1.5) worsened, but to a lesser extent.

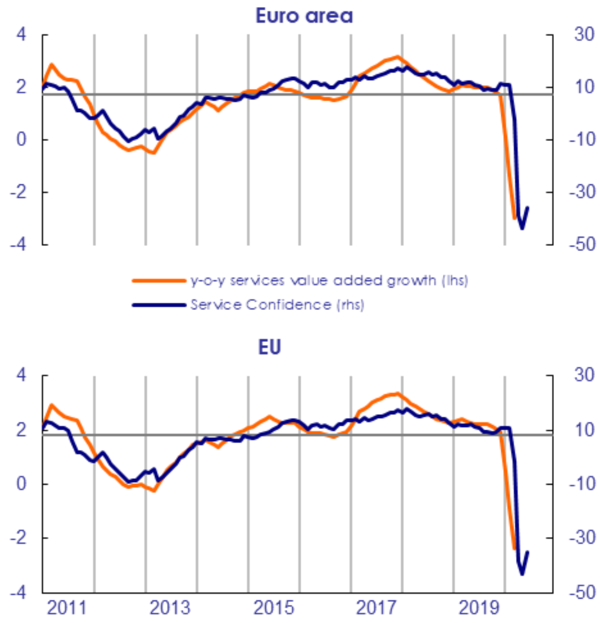
Among the six largest EU Member States, industry confidence saw the largest slumps from February to June in Italy (−20.0), Spain (−19.2), the Netherlands (−18.2), and Poland (−16.6). Significant losses were also booked in France (−13.2) and Germany (−11.4).

Graph 1.1.5: Employment expectations in Industry



According to the quarterly manufacturing survey (carried out in March), **capacity utilisation in manufacturing** plummeted in both the EA (−11.1 percentage points) and the EU (−10.7 percentage points) compared to the last survey wave of January. At 69.7% (EA) and 70.1% (EU), both indicators were in March well below their respective long-term averages of 81.0% (EA) and 80.8% (EU).

Graph 1.1.6: Services Confidence indicator

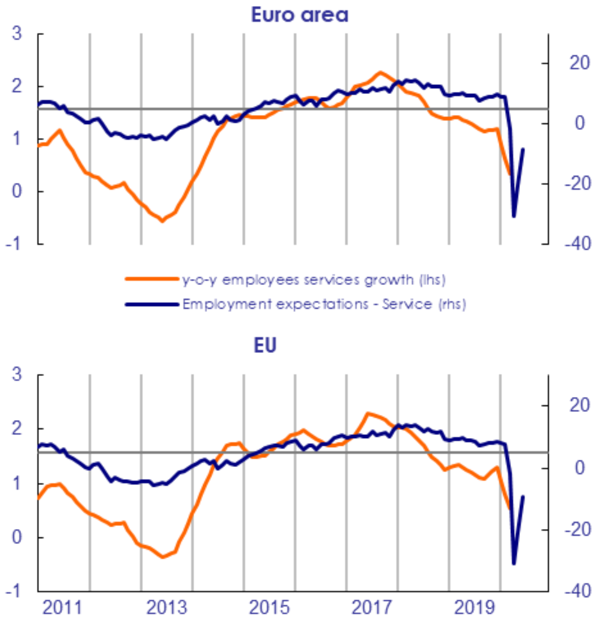


Since the spread of coronavirus on the continent and the far-reaching confinement measures, **services confidence** crashed. In both the EA and the EU, it registered dramatic falls in March, April, and May, amounting to total combined losses over the three months of 54.7 points (EA) and 53.9 points (EU) and reaching the lowest levels on record. Only in June services confidence showed first signs of recovery, easing the losses from February to June to −46.7 (EA) and −45.9 (EU). This clearly identifies the sector as the hardest hit by the confinement measures (together with retail trade). In both the EA (−35.6) and the EU (−35.3), the level of services confidence is now far below its respective long-term averages, at levels unprecedented before the pandemic (see Graph 1.1.6).

In line with industry managers, EA/EU services executives first posted, in March and April, the sharpest declines in business expectations. While their expectations recovered partially in May and June, the appraisals of past demand and the past business situation kept deteriorating over the quarter and have not noticeably started recovering in June.

Employment expectations in services plummeted in both the EA and the EU in March and April (see Graph 1.1.7), before recovering partially toward the end of the quarter. The same holds true for managers' selling price expectations.

Graph 1.1.7: Employment expectations in services

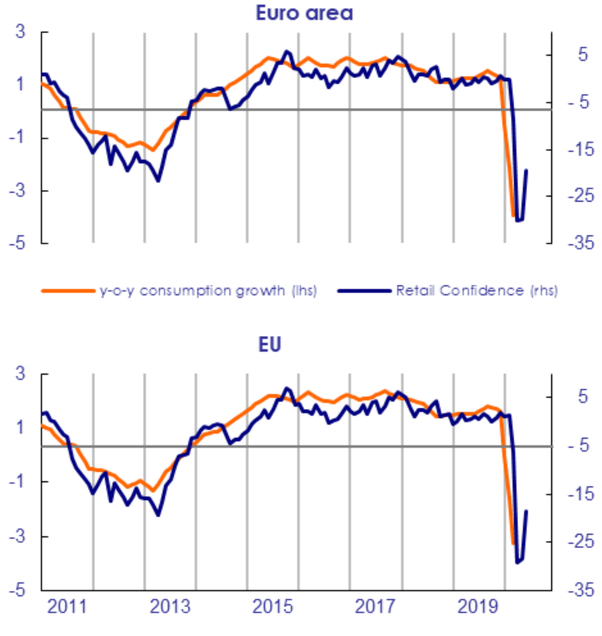


Focussing on the six largest EU economies, the period from February to June brought exceptional declines in services confidence in all six countries, namely in Spain (−50.1), France (−46.5), Italy (−46.3), the Netherlands (−43.7), Germany (−42.1), and Poland (−36.8).

Capacity utilisation in services, as measured by the quarterly survey conducted in March, booked by far the strongest decline on record (since 2011) in the EA (−4.7 percentage points) and the EU (−4.4 percentage points). At 85.6% (EA) / 86.1% (EU), the rates recorded in March were markedly below their respective long-term averages (as calculated from 2011 onwards).

Reflecting the confinement measures targeting non-food stores in most of Europe, **retail trade** turned out to be the business sector hardest hit by the corona crisis (together with services) from March to May. After losing 29.9 (EA) and 30.4 (EU) points in March and April combined, retail trade confidence roughly stabilised in May and recovered some 30% of the total losses in June, with the end of the most severe confinement measures. From February to June, retail trade confidence shed 19.2 (EA) and 19.8 (EU) points, sending both indicators far below their long-term averages, at levels unseen since 2013 (see Graph 1.1.8).

Graph 1.1.8: Retail Trade Confidence indicator



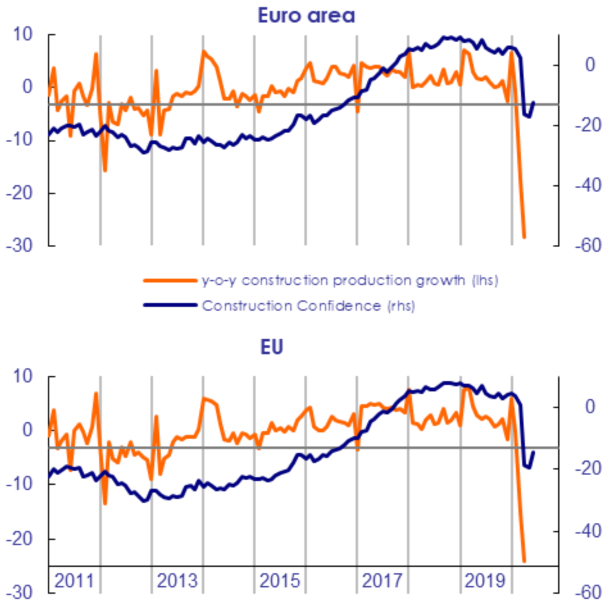
As in industry and services, managers' rampant concerns started mainly with expectations in respect of the future business situation. With the end of the most severe confinement measures, their expectations improved, while their assessment of the past business situation kept deteriorating until May and has barely recovered since then. The assessments of the level of stocks only deteriorated mildly in comparison.

For the six largest EU economies, confidence posted the largest decline in Italy (−27.4), Spain (−27.2), and Poland (−27.0). Losses in France (−17.5), Germany (−12.4), and the Netherlands (−7.7) were comparatively less dramatic.

Compared to the other business sectors, **construction confidence** posted a mild deterioration by 17.8 (EA) / 18.2 (EU) points. In both regions, the indicators are now close to their long-term average, just above in the EA and slightly below in the EU (see Graph 1.1.9).

At component level, managers' views on order books and their **employment expectations** fell during the confinement, but only the latter have shown strong signs of recovery since then.

Graph 1.1.9: Construction Confidence indicator

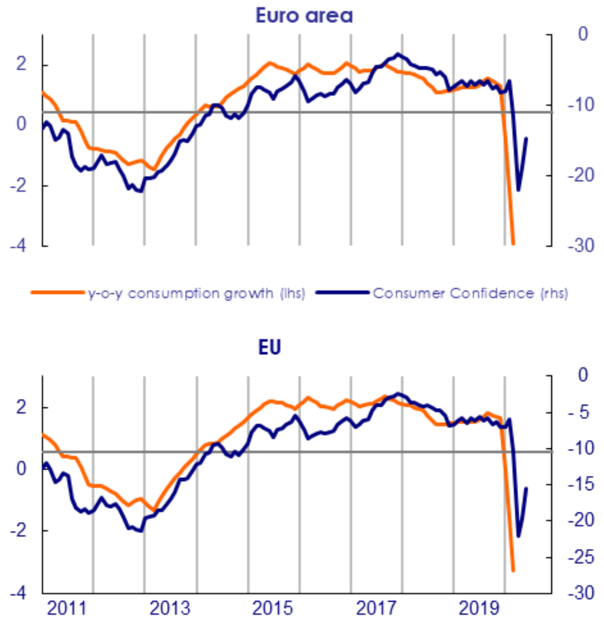


Among the six largest EU economies, construction confidence was hardest hit in France (−26.9), Poland (−22.6), followed by the Netherlands (−15.7), Germany (−15.4), Italy (−12.7), and Spain (−9.7).

Consumer confidence also booked comparatively mild declines by 8.1 (EA) / 9.7 (EU) points from February to June. For the first time since 2014, the indicator in both regions fell below its long-term average (see Graph 1.1.10).

A glance at the individual components underlying the indicator shows that consumers' concerns focussed on the general economic situation, rather than their personal finances: while their views on the future general economic situation crashed in March and April and recovered only partially since then, consumers' appraisals of their past and future personal financial situation, as well as their intentions to make major purchases worsened to a much lesser extent.

Graph 1.1.10: Consumer Confidence indicator

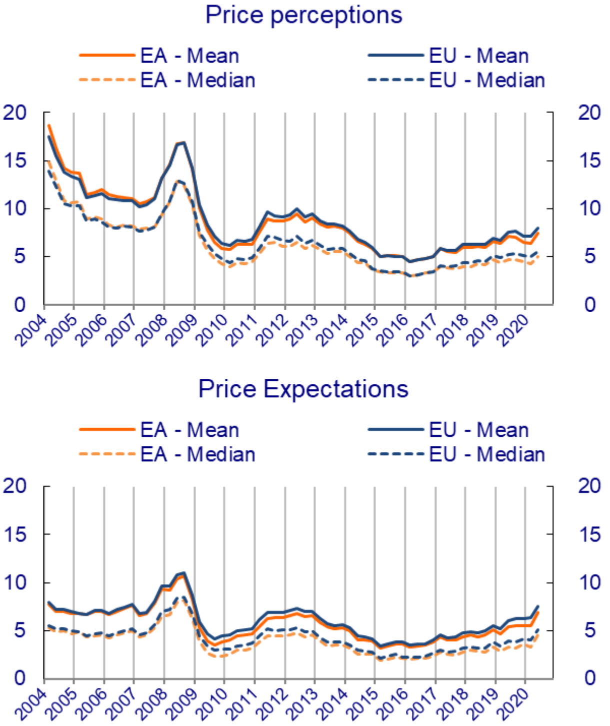


At the country level, consumer sentiment took the hardest hit in Spain (−17.7), Poland (−15.9), and the Netherlands (−10.8), followed by Germany (−8.2), and France (−5.6), while the decrease was moderate in Italy (−1.0).

In the EA and the EU, the mean and median of **consumers' quantitative price perceptions** firmed in 2020-Q2 compared to 2020-Q1. As regards consumers' price expectations, the mean and median scores at both EA- and EU-level firmed markedly (see Graph 1.1.11).[4]

More detailed results, broken down by different socio-economic groups, are available in tables A.1.1 and A.1.2 of the Annex to section 1.

Graph 1.1.11: Euro area and EU quantitative consumer price perceptions and expectations



The **financial services confidence** indicator (not included in the ESI) shed 34.5 (EA) / 39.3 (EU) points from February to June. Despite some recovery over May-June, both indicators remain significantly below their respective long-term averages (see Graph 1.1.12).

Taking a look at the individual components underlying the indicator, waning confidence emerges as a broad phenomenon, reflected in managers' assessments of past demand and the past business situation, and, to a lesser extent, in their expectations for future demand.

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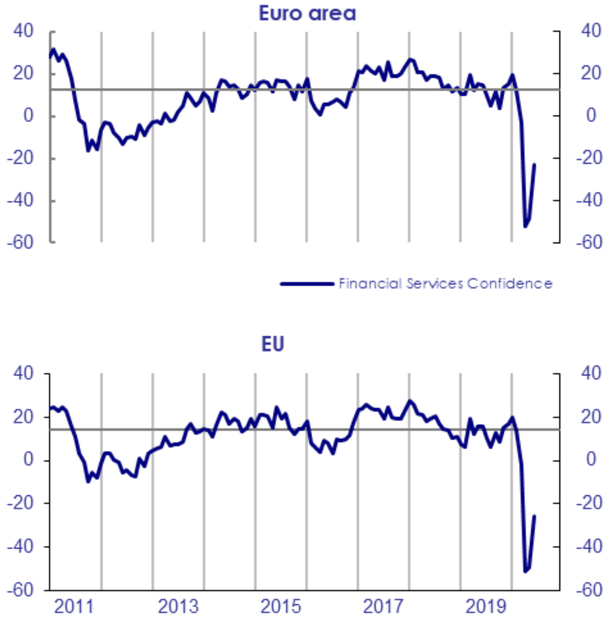
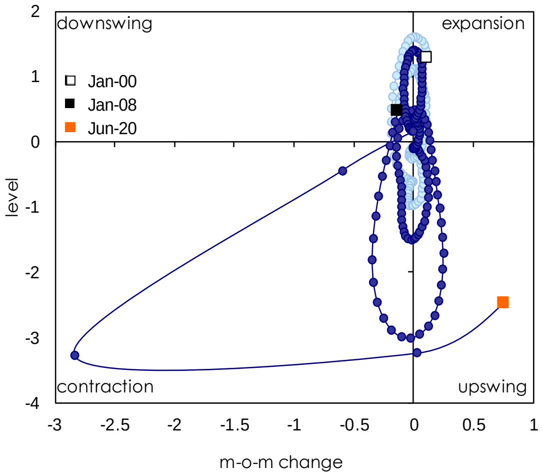
[4] For more information on the quantitative inflation perceptions and expectations, see the special topic in the previous EBCI 2019Q1.

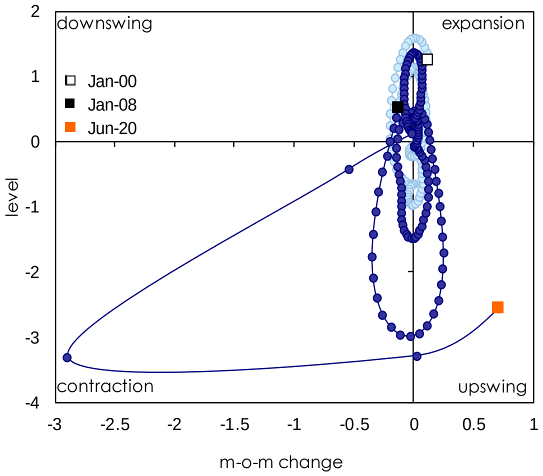
Graph 1.1.12: Financial Services Confidence indicator



Graph 1.1.13: Euro area Climate Tracer



Graph 1.1.14: EU Climate Tracer



Demonstrating the extreme extent of the deterioration of sentiment in March and April (with unprecedented month-on-month changes), both the EA and the EU **climate tracers** (see Annex for details) rushed deep into the quadrant signalling economic contraction. While the significant rebound of May and June lifted the tracers to the upswing quadrant, the level of the indicators remains historically low (see Graphs 1.1.13 and 1.1.14).[5]

Similar to overall sentiments, the dedicated climate tracers for all surveyed sectors (see Graph 1.1.15) saw a forceful deterioration in both the EA and the EU. The tracers fell deep into the contraction quadrant before moving to the upswing quadrant in June.

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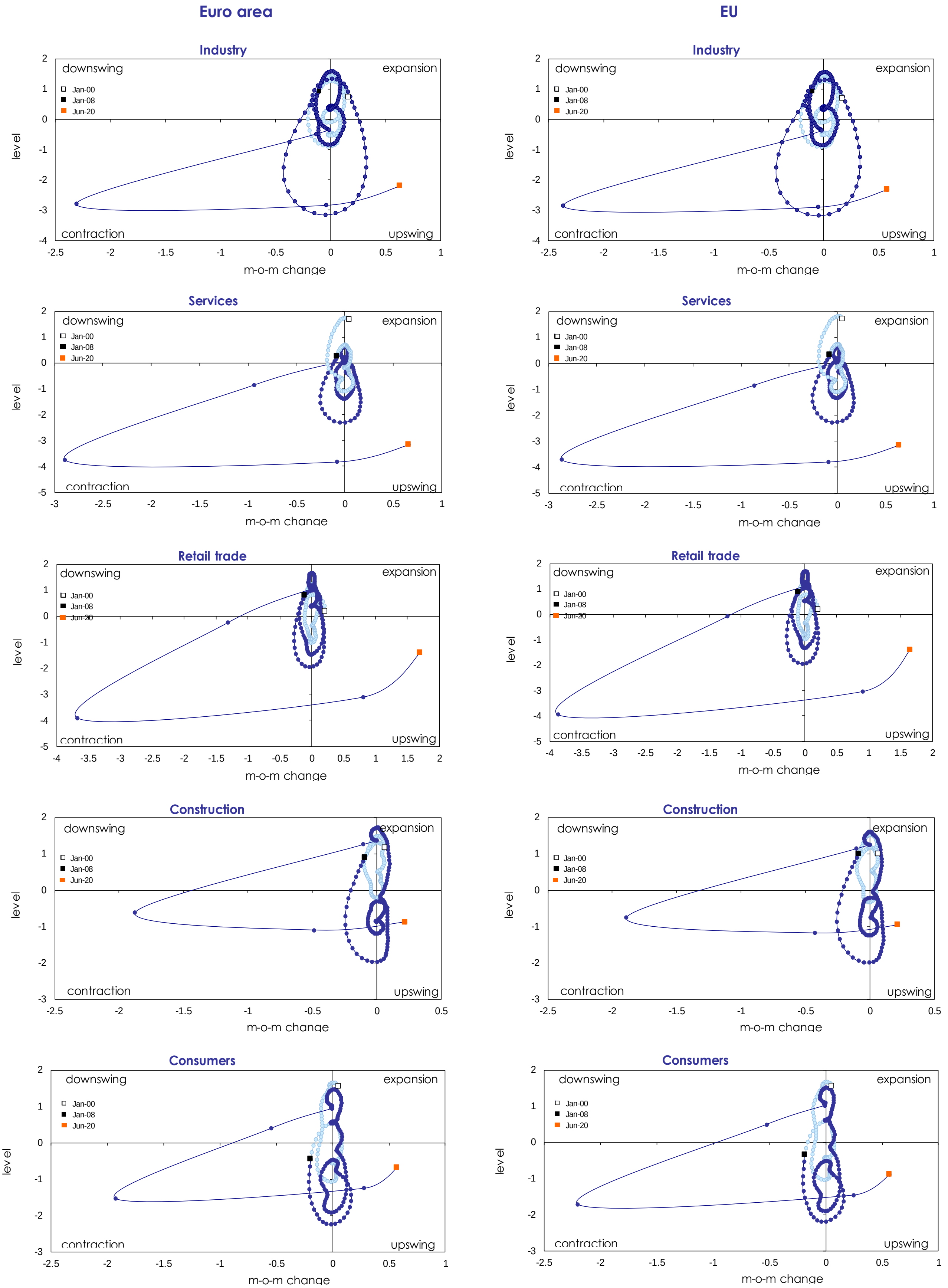
[5] To avoid that the recent sudden declines and recoveries in the indicators are smoothed out by averaging with pre-crisis observations, the observations since March, unlike all previous observations, have not been run through the usual HP filter. This applies to all climate tracer graphs in this edition.

Graph 1.1.15: Economic climate tracers across sectors



1.2. Selected Member States

Differences in the development of confidence are large across Member States and sectors. Over the period from February to June, sentiment plummeted in Poland (−41.6), Italy (−30.1), and France (−28.4), followed by the Netherlands (−24.8), Germany (−19.9), and Spain (−19.6).

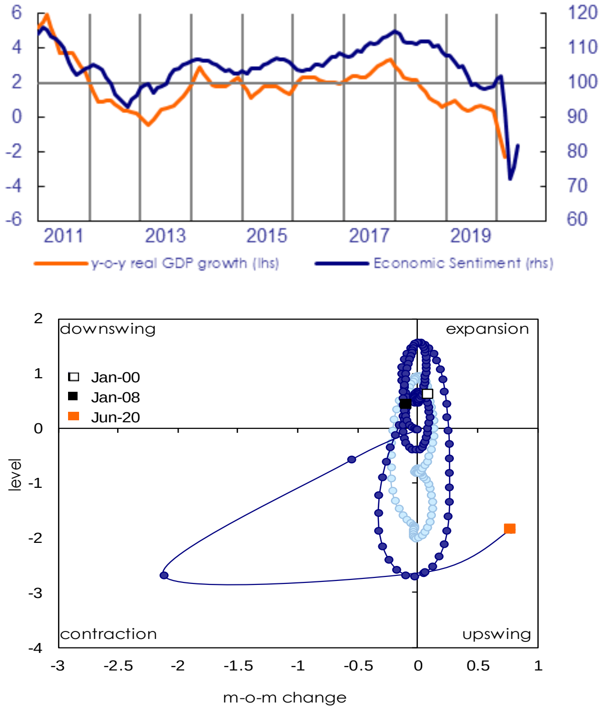
Compared with February, sentiment in **Germany** lost 19.9 points until June. Sentiment plunged in March and April, shedding a total of 29.7 points and dragging the ESI down to levels unseen since the Great Recession. Sentiment recovered some 30% of the total loss in May and June, bringing the ESI to 81.9 points, still markedly below the long-term average of 100.

The sudden deterioration of survey results projected the German economy deep into the contraction quadrant of the climate tracer, before moving to the upswing quadrant with the first signs of recovery (see Graph 1.2.1).[6]

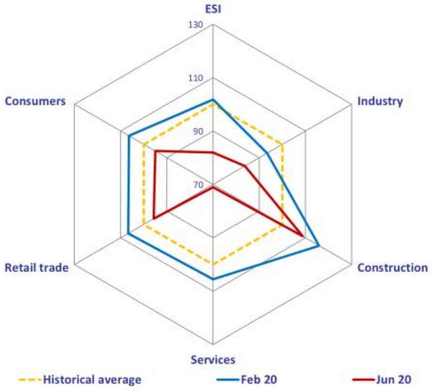
Also the Employment Expectations Indicator (EEI) dived (−12.4 points in June compared to February), reflecting significantly worsened employment plans across all four business sectors.

From a sectoral perspective, confidence crashed in services and fell strongly in industry, retail trade and among consumers. By contrast, the decline in construction was markedly less severe. Confidence indicators for industry and services are now scoring far below their long-term averages, while confidence in retail trade and among consumers is below but closer to its long-term average. By contrast, confidence in construction is still scoring firmly above its long-term average (see Graph 1.2.2).

Graph 1.2.1: Economic Sentiment Indicator and Climate Tracer for Germany



Graph 1.2.2: Radar Chart for Germany



In **France,** the ESI plummeted in March and April, losing a total of 37.6 points over two months, and showed first signs of a recovery only in June. From February to June, the ESI plunged by 28.4 points. At 77.1 points, the indicator is far below its long-term average of 100.

Based on the latest sentiment data, the French climate tracer plunged into the contraction quadrants before recovering to the upswing quadrant in June (see Graph 1.2.3).

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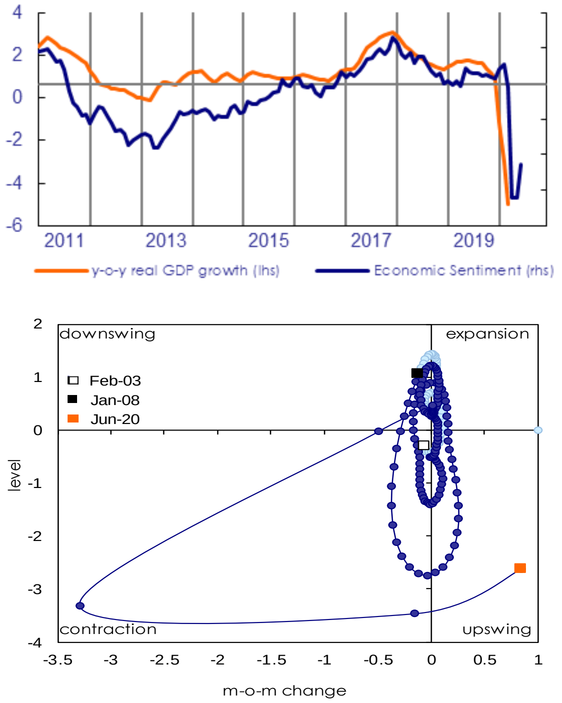
[6] All observations since March of all climate tracers have not been smoothed (filtered), see footnote 5.

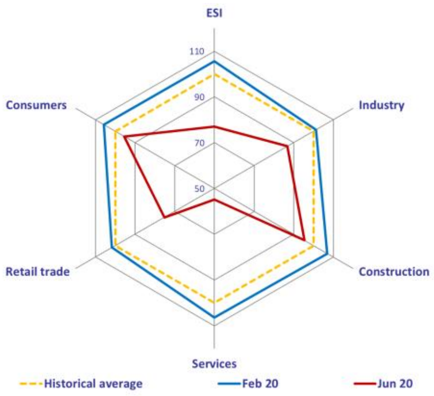
Graph 1.2.3: Economic Sentiment Indicator and Climate Tracer for France



The EEI plummeted (−23.3 points in June compared to February), due to substantially worsened employment plans across all four business sectors, in particular in services and retail trade.

A look at the French radar chart (see Graph 1.2.4) reveals that the services sector was the hardest hit, being now far below its long-term average. Confidence also dived in retail trade, while the fall was slightly less marked in industry, construction, and among consumers. Confidence in industry and retail trade now scores markedly below long-term average, while confidence in construction and among consumers is below, but close to it.

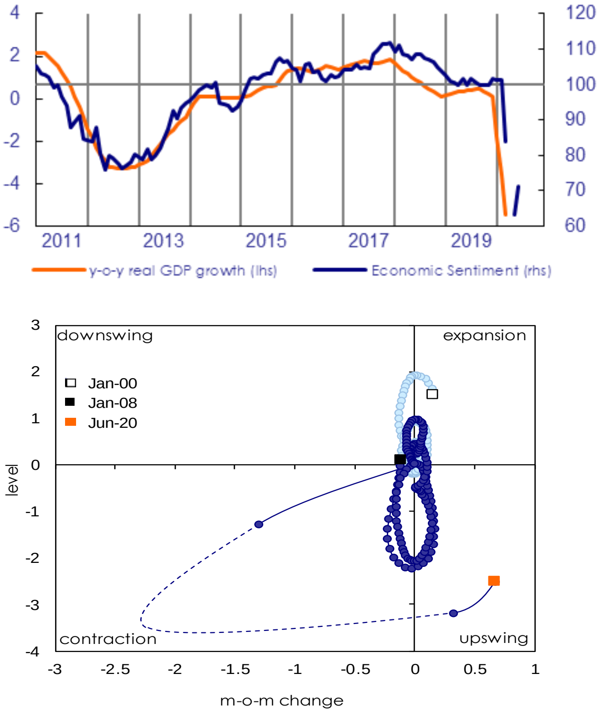
Graph 1.2.4: Radar Chart for France



Sentiment in **Italy** plummeted (−30.1) from February to June. The trough of the crisis is not known as data could not be collected in April. At 71.2 points, the indicator is markedly below its long-term average of 100. In line with the crashing sentiment indicator, the Italian climate tracer moved in June from the contraction quadrant to the upswing quadrant (see Graph 1.2.5).

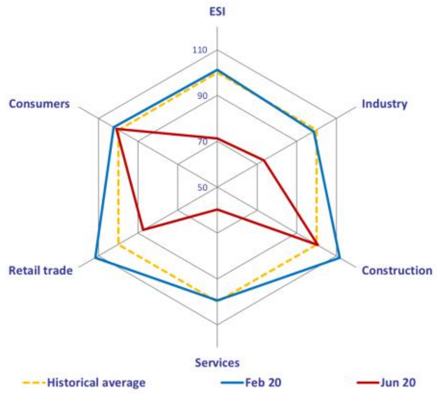
Also the Italian EEI collapsed (−19.2 points in June compared to February), reflecting significantly worsened employment plans across all four business sectors, in particular in services.

Graph 1.2.5: Economic Sentiment Indicator and Climate Tracer for Italy



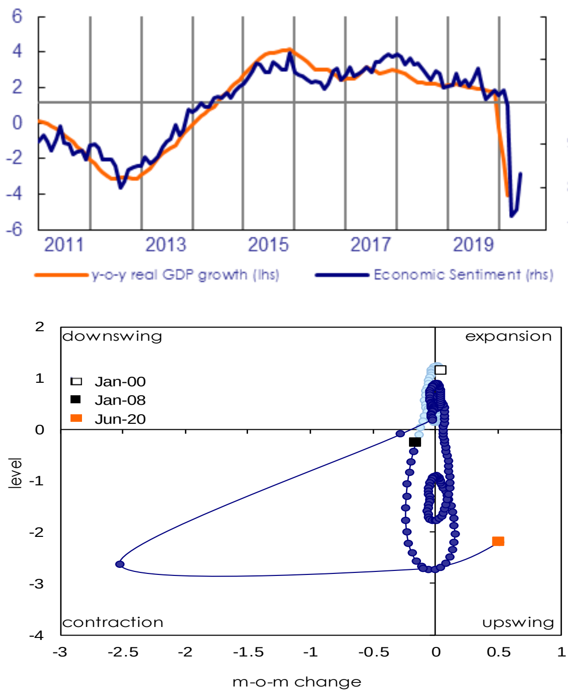
A look at the Italian radar chart (see Graph 1.2.6) shows crashing confidence in industry, retail trade, and, in particular, services. In construction the decline in confidence, although dramatic, was comparatively less strong, while confidence among consumers merely edged down. Confidence levels are far below their long-term averages in industry, services and retail trade, while they remain just above average among consumers and in construction.

Graph 1.2.6: Radar Chart for Italy



In **Spain**, the ESI currently scores at 83.1 points, i.e. 19.6 points below its February reading, after recovering partially from a dramatic fall of 29.4 points in March and April combined. Mirroring the recent developments, the Spanish climate tracer jumped deep into the contraction area and then moved swiftly into the upswing quadrant in May and June (see Graph 1.2.7).

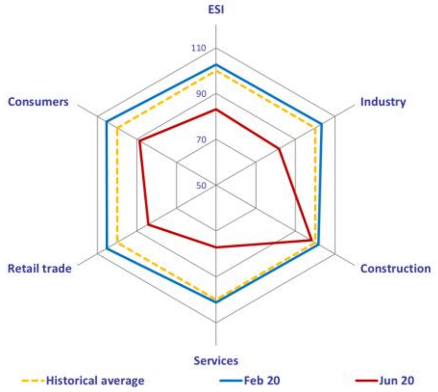
Graph 1.2.7: Economic Sentiment Indicator and Climate Tracer for Spain



The Spanish EEI dived (−17.6 points in June compared to February), mirroring marked declines in employment plans across all business sectors, in particular industry.

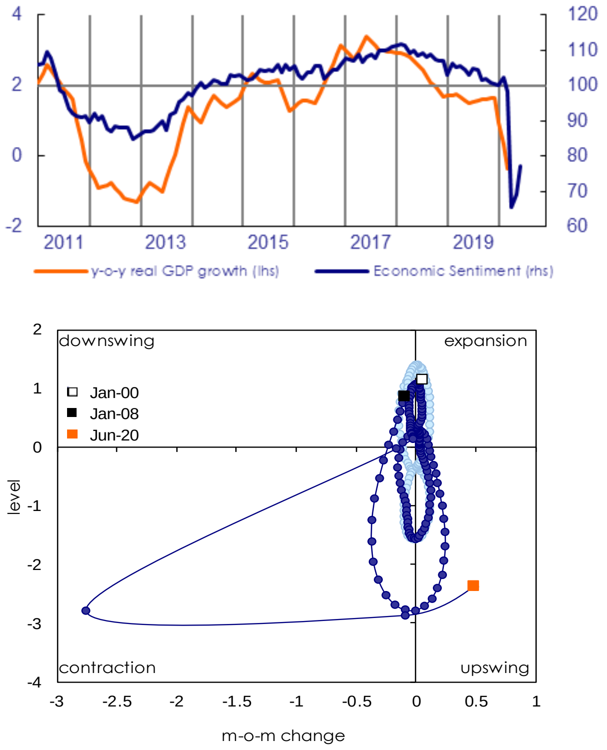
As shown in the radar-chart (see Graph 1.2.8), lower confidence resulted from plummeting confidence in all sectors except construction, where the decrease was comparatively mild. Except for confidence in construction, which is now just below its long-term average, the indicators in the other sectors are now far below their respective long-term averages.

Graph 1.2.8: Radar Chart for Spain



In the **Netherlands**, sentiment lost 24.8 points from February to June, pushing the ESI far below its long-term average of 100, down to 77.4 points. This resulted from a crash of 36.6 points in March and April combined, which was then partially offset by a recovery of around 30% of the loss. Consequently, the Dutch climate tracer rushed deep into the contraction quadrants before moving to the upswing area with the recovery (see Graph 1.2.9).

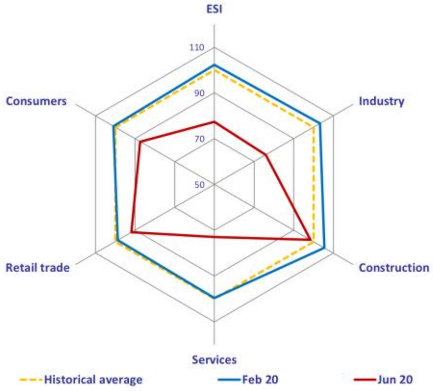
Graph 1.2.9: Economic Sentiment Indicator and Climate Tracer for the Netherlands



Also in the Netherlands, the EEI declined markedly (−16.1 points in June compared to February), due to strong declines in managers' employment plans across all four business sectors, in particular in the services sector.

Since February, sentiment has plummeted in services and industry, while it dived comparatively less markedly among consumers, in retail trade, and in construction. Confidence is markedly below long-term average in all sectors but construction, where it lies just below average (see Graph 1.2.10).

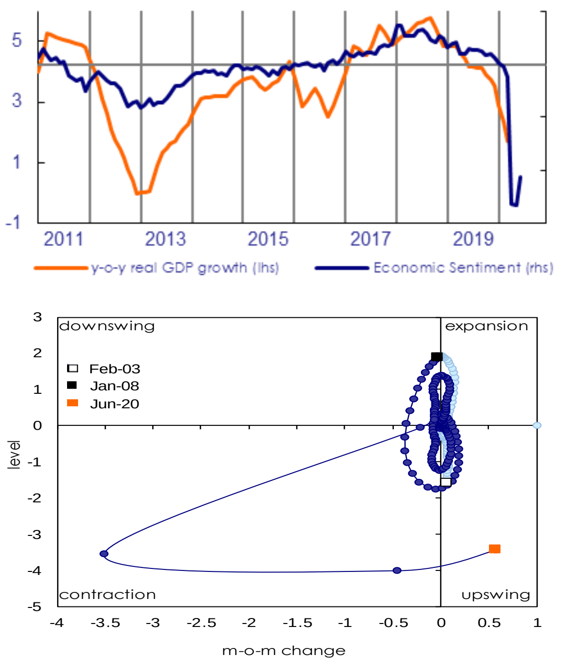
Graph 1.2.10: Radar Chart for the Netherlands



In **Poland** sentiment crashed even more sharply than in all the countries previously mentioned. The ESI shed 41.6 points from February to June, showing first signs of recovery only in June after a combined loss of 52.3 points from February to May. At 57.6 points, the indicator is now far below its long-term average of 100. Diving confidence sent the Polish climate tracer into the contraction area, before moving to the upswing quadrant in June (see Graph 1.2.11).

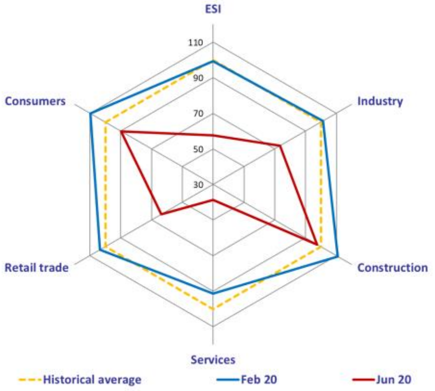
The fall in the Polish EEI (−15.8 points in June compared to February) resulted from worsened employment plans across all four business sectors.

Graph 1.2.11: Economic Sentiment Indicator and Climate Tracer for Poland



As the radar chart shows (see Graph 1.2.12), confidence plunged in services, industry and retail trade, while the fall was comparatively less severe in construction and among consumers. The level of confidence is markedly below long-term average in all sectors, except for construction, where confidence is just below its long-term average.

Graph 1.2.12: Radar Chart for Poland



2. SPECIAL TOPIC: ARE SOME CATEGORIES OF CONSUMERS MORE AFFECTED BY THE EFFECTS OF THE CORONA PANDEMIC THAN OTHERS?

The outbreak of COVID-19 and the ensuing lockdown measures dealt a huge blow to economic activity, and consequently, consumer confidence.

Despite the various measures implemented in most EU Member States to reduce the financial impact of the containment measures on income, consumers have significantly lowered their economic expectations.

One of the major concerns related to the fallout from the lockdown is that the effects may not be equally distributed but will have distributional implications, raising inequality.[7]

This special topic examines consumer survey data broken down by income, occupation and age of the respondents to check whether (mounting) inequalities are visible in consumer confidence across different categories of people. To set the stage for the analysis, the report starts off with a summary of the latest developments in consumer confidence and an analysis of the degree to which they reflect cross-country differences in respect of the severity of the enacted confinement measures.

Effects of the lockdown on consumer confidence

In March[8] and April 2020, consumer confidence plummeted in the euro area. The confidence indicator lost 5.0 points in March compared to February. In April, confidence dove further and lost another 10.4 points (both losses were the sharpest on record). In May and June, the indicator rebounded (by 3.2 points in May and 4.1 points in June) neutralising about half of the combined slump of March and April. At rock bottom, in April, the indicator had fallen to a level of -22.0, just a whisker above the all-time low reached at the height of the financial crisis (-23.9). An important difference to the financial crisis is the breakneck speed at which confidence fell: the outbreak of the corona pandemic spelled losses of 15.4 points in just two months. The financial crisis, by contrast, had to rage for an entire year before confidence had fallen by the same margin (notably between July 2007 and July 2008).

As visible in Graph 2.1, both the fall and the rebound in the euro-area consumer confidence indicator (CCI) resulted mainly from consumers' expectations regarding their final situation (question Q2), the general economic situation of their country (question Q4) and their spending intentions (major purchases, Q9). By contrast, consumers' assessment of their past financial situation (Q1) decreased only slightly in March and April but continued to decline in May and June. In other words, people immediately felt that the lockdown was harmful to the economy in general and were conscious that this had the potential to hit their financial situation in the future. However, at least in the first months of the crisis, they did not feel a very strong effect on their personal finances. The likely reasons are that (i) labour hoarding avoided an immediate rise in unemployment, and (ii) most of the governments enacted schemes providing income support.

Among the questions not included in the CCI, the (macroeconomic) unemployment expectations (question Q7) and consumers' judgment as to whether it is the right moment to make major purchases (question Q8) worsened dramatically in March and April and recovered somewhat in May and June. At the same time, consumers' assessment of the past general economic situation of their country (question Q3) worsened further – and dramatically - in May and June.

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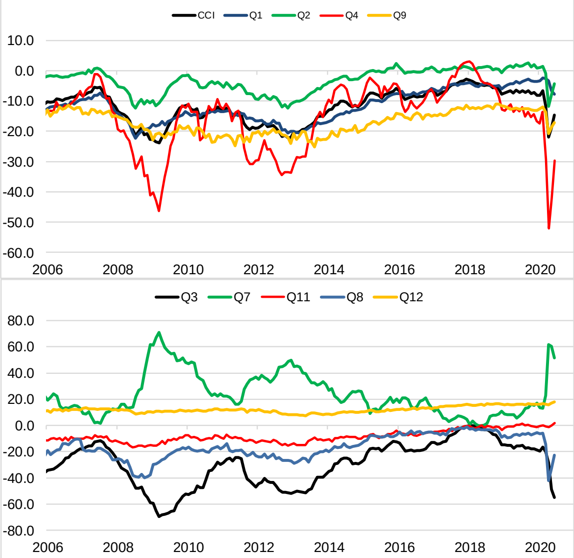
[7] See, for example, Palomino et al. 2020, *Inequality and poverty effects of the lockdown in Europe*, and Furceri et al. 2020, *COVID-19 will raise inequality if past pandemics are a guide*.

[8] March results reflected only partially the extent of the corona crisis as the bulk of the survey responses were collected before confinement measures were put in place.

Generally, the extent of the losses for the different questions is quite similar to the ones observed during the 2008 financial crisis, but, as in the case of aggregate confidence, the decreases were registered in a fraction of the time (two to four months vs. one full year).

Consumers' savings expectations (question Q11) and the assessments of their current economic situation (question Q12) remained broadly unchanged in March and April and increased slightly in May and June. In line with Q12 (from which it is derived), the financial distress indicator[9] (not included in Graph 2.1), remained broadly unchanged in the last four months.

Graph 2.1: Euro Area CCI and selected questions

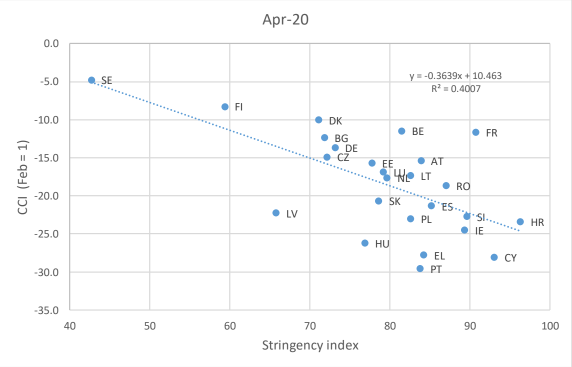


The impact of countries' response to COVID-19 on consumer confidence

The severity of coronavirus in terms of the number of infected and hospitalised people, as well as the total number of fatalities varies significantly across EU Member States. The same goes for the severity of the confinement measures taken by governments to contain the pandemic and the enacted economic support schemes to cushion the economic fallout. Using a measure of the stringency of the confinement measures from Hale et al. (2020),[10] we can shed light on the degree to which the fall in confidence is correlated with the severity of the response of national governments to the pandemic.[11]

As shown in Graph 2.2, there is a negative relationship between the stringency index and the change in consumer confidence: the stricter the confinement measures were, the more pessimistic consumers became. In April, when most containment measures were taken, the cross-correlation was at around -0.6.

Graph 2.2: EU Member States CCI (Feb 2020 = 1) and Stringency measure



Sources: Own calculations based on The Oxford COVID-19 Government Response Tracker (OxCGRT), and European Commission.

Zooming in on individual survey questions, it turns out that the confinement measures have taken a particularly hefty toll on consumers' expectations. As visible in Table 2.1, the stringency index has a strong negative correlation with consumers' expectations, notably with consumers' expectations concerning their financial situation (Q2).

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[9] The financial distress indicator is the sum of the respondents stating that they *are having to draw on their savings*, and that they *are running into debt*.

[10] Data are available daily, to compare them with monthly consumer confidence, the average over the period from the 1st to the 20th of each month (same period of the consumer survey collection of data) is taken into consideration.

[11] Using collected data on deaths due to COVID-19 from Hale et al. (2020), we found a positive correlation with consumer confidence. That somewhat unintuitive finding, probably obtained by chance, is an indication that consumer confidence most likely does not react to the number of total fatalities. What seems to matter is, indeed, the severity of the lockdown measures which have an immediate bearing on the economic prospects of a country.

By contrast, the stringency index is positively correlated with consumers' assessment of their past financial situation (Q1). Although puzzling on first glance, the finding can be rationalised when considering that the more expansive national lockdown measures were, the less opportunities people had to actually spend their money on services (think restaurants, cafes, etc.) and on non-essential retail. Countries with particularly strict lockdown measures are thus likely to have seen the most significant improvements in households' balance sheets due to this consumption reducing effect. Meanwhile, the flipside of this positive confinement effect, namely the total or partial loss of financial revenue due to the lockdown (due to rising unemployment, short-time working, lost revenue for entrepreneurs), has been considerably cushioned through governments' various support schemes so that there might be, a *degressive* proportionality between the strictness of the confinement measures in the different countries and the average income reductions suffered by households. Taken together, the two effects could be an explanation why the smallest deteriorations in households' financial situation (and the biggest improvements – in the case of some ten countries where the positive savings effect prevailed over the negative income effect) tend to have been found in the countries with the strictest lockdown measures.

Table 2.1: Cross-correlation between stringency index and CCI and its components (Feb 2020 = 1)

	Apr-20
Consumer Confidence Indicator (CCI)	-0.63
Financial situation of households over last 12 months (Q1)	0.40
Financial situation of households over next 12 months (Q2)	-0.58
General economic situation over next 12 months (Q4)	-0.50
Major purchases over next 12 months (Q9)	-0.12

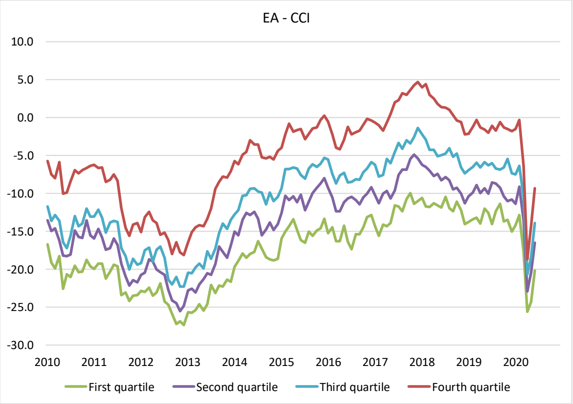
As confinement (and support) measures put in place in most EU Member States affect different people in different ways, the following sections report how confidence developed across different categories of consumers. We look at the breakdown of survey results by income quartile, occupation, and age of the respondent. The variables looked at comprise the CCI, its four components (Q1, Q2, Q4, and Q9), as well as consumers' unemployment expectations (Q7) and the financial distress indicator.

Confidence by income categories

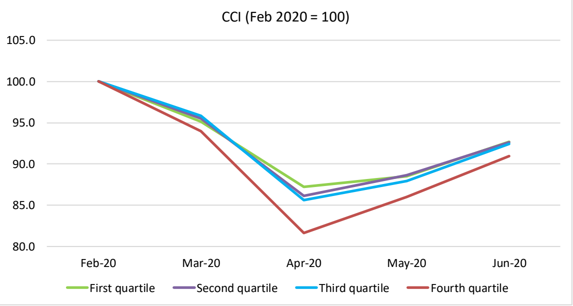
The consumer survey results are broken down into four income quartiles, the first one comprising consumers with the lowest and the fourth one those with the highest income.

Graph 2.3 shows the results for the euro-area CCI. In general, the level of confidence rises with the level of income. When coronavirus struck, the confidence indicator plummeted across all four income categories (see results for March and April). To compare the magnitude of the losses between the different income groups, Graph 2.4 shows the evolution of their respective CCIs, taking February 2020 = 100 as a base month. It clearly emerges from the graph that the pandemic dealt the strongest blow to sentiment in the fourth quartile, i.e. high-income consumers. Among the other groups of consumers, the first quartile, i.e. low-earners, seems to have suffered a slightly smaller deterioration of sentiment.

Graph 2.3: Euro Area CCI by income quartiles



Graph 2.4: Euro Area CCI by income quartiles (Feb 2020 = 100)



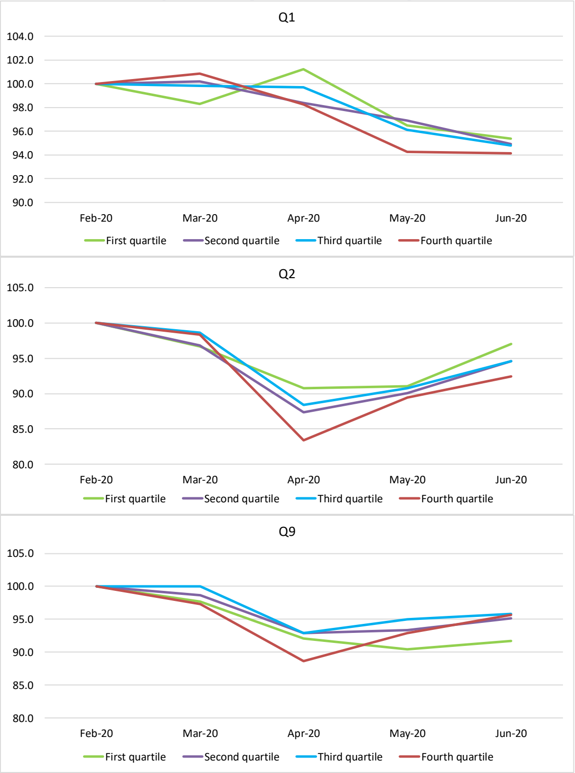
Turning to selected components of the CCI (see Graph 2.5), we notice that the immediate impact (i.e. in March/April) of the pandemic and accompanying confinement measures was stronger in respect of consumers' expectations (Q2 and Q9) than their assessments of the past situation (Q1). The observation holds across all income groups.

Within the context of a given survey question, we can observe that the deteriorations are generally most severe among the high income respondents, while more muted for the lowest income quartile.

These results are at first hand surprising in view of the literature mentioned above, which suggests an inequality-increasing impact of COVID-19. The survey results get more plausible when considering, again, that the immediate impact of the confinement measures was to bar people from spending money on customer-facing services (restaurants, cafés, etc.) and non-essential retail. One aspect of the lockdown was thus a positive effect on households' balance sheets, at least as long as income is protected. For low-income households, that beneficial impact seems to have been counteracted to a lesser extent by the negative financial effects of the crisis than was the case among higher earning households (tellingly, the past financial situation of low-income households even improved in April). Indeed, the most frequent way in which households' finances were dented by the crisis was through (involuntary) short-time working. While most EU countries cushioned the impact of the losses through a system of wage subsidies, the bulk of those systems were capped (i.e. governments only topped up incomes until a defined maximum). That limitation, obviously, only affected high-income earners.

A second way in which the incomes of high-income households might have been, relatively, harder hit than their low-income counterparts is through developments on the financial markets. When coronavirus sent stock markets plunging, the effect is likely to have been mainly felt by higher-income earners. That is because higher income households (i) are more likely to own financial assets such as stocks, bonds and mutual funds and (ii), conditional on ownership of such assets, have a higher median stock of them.[12]

Graph 2.5: Euro Area selected questions by income quartiles (Feb 2020 = 100)



Turning to the financial distress indicators (see Graph 2.6), an effect of the pandemic and the accompanying lockdown measures seems to be largely absent, as evidenced by the broadly horizontal paths for all income groups. While the line representing the low-income group follows some zig-zag pattern, a look at the scale of the graph (which differs from the previous graphs), forecloses reading too much into the data. In sum, the graph suggests that, across all income groups, the government-financed wage support measures have so far been effective in limiting the number of cases in which income-losses due to the crisis led to situations of existential financial distress.

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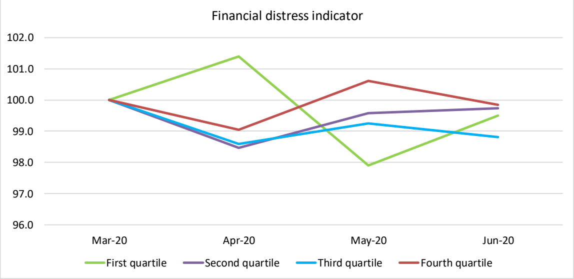
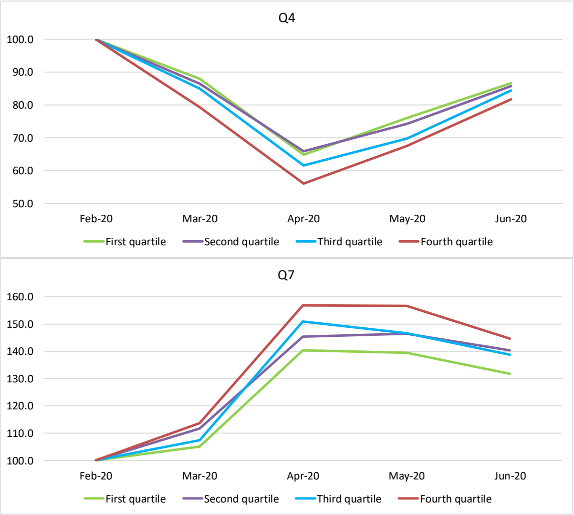
[12] See the ECB Household Finance and Consumption Survey (Wave 2017) for more information.

Graph 2.6: Euro Area financial distress indicator by income quartiles (Feb 2020 = 100)



Finally, looking at the expectations of consumers about the general economic developments in their country (so-called "macro" variables, namely Q4 and Q7), high-earning households are the ones that posted the sharpest drops at the height of the crisis. A possible explanation is that people extrapolate from their personal experience of the crisis to the macro-level. Considering that the previous paragraphs have shown high-income households to report the strongest deterioration of their past financial situation, it makes sense that the crisis also took the heftiest toll on their expectations for the economy as a whole.

Graph 2.7: Euro Area selected questions by income quartiles (Feb 2020 = 100)



Confidence by occupation categories

Since 2016, the breakdown of survey results by the occupation of the respondent includes eights groups (based on the ISCO-08 nomenclature), and two sub-aggregates.[13]

- **WO1**: Managers and professionals (ISCO-08: 11 to 14 and 21 to 26)
- **WO2**: Technicians and associate professionals (ISCO-08:31 to 35)
- **WO3**: Clerical and support workers, services and sales workers (ISCO-08: 41 to 44 and 51 to 54)
- **WO4**: Skilled agricultural, forestry and fishery workers; craft and related trade workers (ISCO-08: 61 to 63 and 71 to 75)
- **WO5**: Plant and machine operators, assemblers and elementary occupations (ISCO-08: 81 to 83 and 91 to 96)
- **WO7**: Unemployed
- **WO8**: In retirement or early retirement/widow/widower receiving pension after partner died / permanently disabled or chronically ill
- **WO9**: Other occupations (Student or further training experience or unpaid work experience/ Fulfilling domestic task/housekeeper or child care/ In compulsory military or community service/ Other)

As is readily apparent, the occupation groups (with the exception of WO7 and WO8) differ significantly in terms of the required skill level. While WO1 assembles people who perform rather complex tasks and have, in most cases, completed university studies, WO5 groups together people exercising simple and routine physical or manual tasks which usually require at most basic education.

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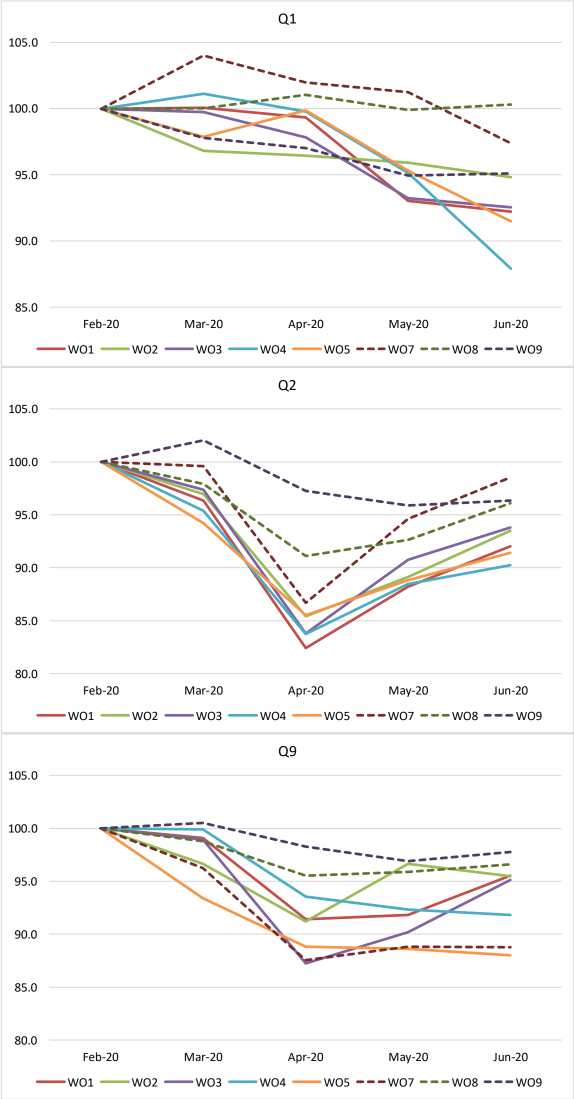
[13] Namely the WO6: Total employed (WO1 + WO2 + WO3 + WO4 + WO5) and the WO10: Total unemployed and other occupations (WO7 + WO8 +WO9).

While there are only marginal differences between the various occupation groups in respect of their assessments of macro-economic developments (hence not reported here), there are some interesting divergences when the personal situation of the respondents is concerned (i.e. the so-called micro-questions Q1, Q2 and Q9).

Graph 2.8: Euro Area selected questions by occupation of the respondent (Feb 2020 = 100)



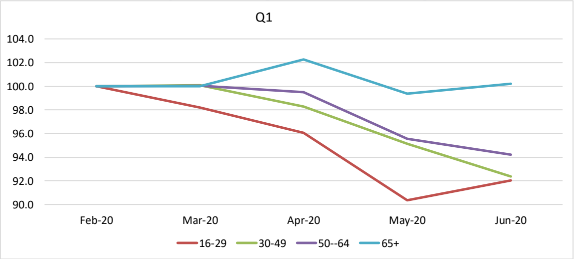
First of all, the unemployed and retired are the only groups that saw virtually no change in the assessment of their past financial situation (Q1), which makes sense considering that the level of social/unemployment benefits and pensions did not drop in the course of the crisis. Importantly though, they seem to fear that this might change in the future (their expected financial situation (Q2) dropped almost as much as among working people). In the case of the unemployed, rising concerns about the future level of social/unemployment benefits seem to also have translated into a more precautionary spending behaviour, as evidenced by the fact that the unemployed reported the sharpest decrease of all occupations in respect of their intentions to make major purchases.

A second observation relates to the relative impact of the crisis on the various categories of working people. While there are no significant differences in respect of peoples' expectations about their future finances (Q2), a joint reading of peoples' evaluation of past financial developments (Q1) and their intentions to make major purchases (Q9) suggests that people in jobs requiring a more sophisticated skill set (WO1 and WO2) tend to have been less affected by the crisis than those exercising jobs with simpler skill requirements (WO3-WO5).

Confidence by age categories

Turning to a comparison of the impact of the crisis on different age categories, the survey data clearly suggest that the youngest people (16 to 29 years) were hardest hit – no age group suffered a comparable blow to their (past) financial situation (see graph 2.9). A possible explanation is that the youngest tend to be the employees with least "seniority" in an enterprise and are therefore the first ones to be laid off. Another potential reason is the increasing liberalisation of the labour market in a number of EU countries over the last twenty years, which engendered graduates getting more flexible work contracts than those of the incumbent employees. The consequence is that, today, the prevalence of low-security contracts in the younger age groups (16-29 and 30-49) can be assumed to be higher than among older employees.

Graph 2.9: Euro Area question Q1 by age of the respondent (Feb 2020 = 100)



Surprisingly, there are no major differences among the different age groups in respect of their expectations (both when it comes to their own financial situation and the general economic developments in their countries).

Conclusions

This special topic took a look at the most recent consumer survey data for the euro area to assess the impact of the corona pandemic and its accompanying confinement measures on citizens and compare its intensity across different demographic sub-categories.

The first finding is that consumer confidence suffered a blow comparable to that caused by the financial crisis, but, this time around, sentiment plummeted in a matter of two months, rather than a full year. The observation lends support to a frequent description of the current crisis as the sharpest post-war downturn.

When combining information on the losses in consumer confidence and the strictness of confinement measures across EU countries a clear and intuitive picture emerges: the stricter the confinement measures were, the more consumer sentiment slipped between February and the height of the confinement measures in April.

Interestingly, this result is driven by the components of the confidence indicator which relate to consumers' expectations. When looking at consumers' assessment of their past financial situation, the countries with the strictest confinement measures tend to have seen the smallest deteriorations (in some cases even moderate improvements). The finding probably results from the interplay of two forces: (i) through 'forced savings', the immediate effect of confinement measures on households' finances is actually positive (consumers actually have less options to spend their money, which improves their balance sheets). (ii) The negative impact of income losses caused by the crisis has been considerably mitigated by the various government support schemes, so that cross-country differences in income-losses are not as large as differences in the intensity of the confinement measures would suggest.

When comparing the impact of the crisis on different income groups of consumers, high-income earners show the sharpest drops in sentiment, both in terms of assessments relating to the past and their expectations. This points to the effectiveness of governments' various support schemes in cushioning the negative impact of the lockdown were in particular for the earners of lower incomes. Furthermore, high-income earners are also more likely to own financial assets which saw a sharp downward correction in value at the start of the pandemic.

When divided into different occupation categories, there is a slight tendency for people in jobs requiring a more sophisticated skill set to have been less affected by the crisis than those exercising jobs with simpler skill requirements.

Finally, an analysis of the impact of the crisis on different age groups shows that the youngest (16 to 29 years) were hardest hit – no age group suffered a comparable blow to their (past) financial situation. A possible explanation is that the youngest tend to be the employees with least "seniority" in an enterprise and are therefore the first ones to be laid off. Furthermore, work contracts offering little job security, which spread across Europe in the wake of labour market reforms conducted over the past 20 years, are most prevalent among the younger age groups.

ANNEX TO SECTION 1

Table A.1: Inflation perceptions by socio-demographic category of respondent (in %)

	weighted mean adjusted for outliers					25% quartile					median					75% quartile				
	Average	2019		2020		Average	2019		2020		Average	2019		2020		Average	2019		2020	
	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2
	Total																			
EU	3.8	3.0	3.0	2.9	3.3	11.0	9.3	8.8	8.5	9.7	8.8	7.7	7.1	7.1	7.9	6.5	5.3	5.1	5.0	5.5
EA	3.6	2.6	2.5	2.4	3.0	10.9	8.7	8.2	7.8	9.1	8.7	7.1	6.5	6.4	7.4	6.3	4.7	4.5	4.3	5.0
	Gender: Male																			
EU	3.4	2.8	2.7	2.6	2.9	9.7	8.1	7.3	7.4	8.4	7.8	6.5	6.1	6.0	6.7	5.8	4.7	4.5	4.3	4.8
EA	3.2	2.4	2.2	2.1	2.6	9.4	7.5	6.6	6.6	7.9	7.6	6.0	5.4	5.3	6.3	5.5	4.2	3.9	3.6	4.3
	Gender: Female																			
EU	4.2	3.3	3.3	3.3	4.0	12.6	11.3	10.5	10.4	12.1	10.0	8.9	8.4	8.5	9.3	7.3	6.1	5.9	5.8	6.7
EA	4.1	2.8	2.8	2.8	3.7	12.6	10.7	10.0	9.8	11.5	10.0	8.3	7.8	7.8	8.8	7.1	5.4	5.4	5.1	6.1
	Age: 16 to 29																			
EU	3.9	3.1	3.1	2.9	2.6	11.9	10.4	9.9	9.3	9.6	9.1	7.9	7.7	7.3	7.2	6.9	5.8	5.3	5.2	4.8
EA	3.8	2.7	2.8	2.5	2.4	12.0	9.9	9.3	8.8	9.2	9.2	7.4	7.1	6.7	6.9	6.8	5.3	4.7	4.7	4.4
	Age: 30 to 49																			
EU	3.9	3.1	3.0	3.0	3.6	11.4	9.6	8.9	8.8	10.4	9.0	7.8	7.3	7.3	8.3	6.6	5.3	5.1	5.2	6.0
EA	3.7	2.7	2.5	2.5	3.4	11.3	9.0	8.4	8.1	9.9	8.9	7.3	6.7	6.6	7.9	6.5	4.8	4.5	4.5	5.5
	Age: 50 to 64																			
EU	3.8	3.1	3.0	3.1	3.8	10.9	9.5	8.6	9.1	10.2	8.7	7.7	6.9	7.4	8.1	6.4	5.5	4.9	5.2	6.0
EA	3.6	2.6	2.4	2.5	3.4	10.7	8.7	8.0	8.5	9.6	8.5	7.0	6.2	6.7	7.5	6.1	4.8	4.3	4.5	5.5
	Age: 65+																			
EU	3.9	3.1	3.1	2.8	3.4	10.6	9.0	8.1	7.8	9.3	8.6	7.2	6.7	6.5	7.4	6.4	5.2	5.1	4.7	5.5
EA	3.7	2.6	2.5	2.3	3.0	10.2	8.0	7.1	6.8	8.4	8.3	6.3	5.9	5.6	6.5	6.1	4.4	4.3	3.9	4.7
	Income: 1st quartile																			
EU	4.5	3.7	3.8	3.4	4.2	14.1	12.8	12.5	12.1	13.2	10.9	10.1	9.8	9.5	10.0	7.9	7.0	6.6	6.3	7.0
EA	4.3	3.2	3.3	2.9	4.0	14.1	12.1	11.8	11.7	12.6	10.9	9.6	9.3	8.9	9.6	7.8	6.4	6.0	5.7	6.6
	Income: 2nd quartile																			
EU	4.0	3.5	3.2	3.2	3.8	11.8	10.2	8.8	9.2	10.4	9.3	8.7	7.4	7.7	8.4	6.9	5.9	5.5	5.4	6.4
EA	3.8	3.1	2.6	2.8	3.4	11.6	9.6	8.1	8.5	9.6	9.1	8.3	6.8	7.0	7.7	6.6	5.3	5.0	4.8	5.8
	Income: 3rd quartile																			
EU	3.7	3.1	3.0	2.7	3.4	10.5	9.2	8.1	7.8	10.0	8.3	7.2	6.7	6.4	7.7	6.2	5.2	5.0	4.8	5.6
EA	3.5	2.7	2.5	2.2	3.1	10.3	8.5	7.5	7.1	9.5	8.2	6.6	6.1	5.7	7.2	6.0	4.6	4.4	4.0	5.1
	Income: 4th quartile																			
EU	3.2	2.6	2.6	2.5	2.7	8.9	7.2	6.9	6.7	7.5	7.0	5.8	5.5	5.5	6.0	5.3	4.2	4.2	4.0	4.4
EA	3.0	2.1	2.0	1.9	2.3	8.6	6.4	6.2	5.8	6.8	6.8	5.1	4.8	4.6	5.5	5.1	3.6	3.5	3.2	3.9
	Education: Primary																			
EU	4.3	3.8	3.2	3.7	4.1	12.8	12.8	10.8	11.2	12.4	10.1	9.6	8.7	8.9	9.4	7.3	6.5	5.7	6.0	6.7
EA	4.0	3.3	2.7	3.3	3.7	12.7	12.1	10.0	10.5	11.8	10.0	9.1	8.1	8.3	8.8	7.0	5.8	5.1	5.4	6.1
	Education: Secondary																			
EU	3.8	3.2	3.1	2.9	3.5	11.1	9.9	9.1	9.1	10.4	8.8	8.1	7.6	7.6	8.4	6.5	5.7	5.5	5.2	5.9
EA	3.6	2.7	2.7	2.4	3.2	11.0	9.3	8.5	8.5	9.8	8.7	7.6	7.0	6.9	7.9	6.3	5.2	4.9	4.5	5.3
	Education: Further																			
EU	3.2	2.8	2.6	2.5	2.9	9.0	7.7	7.3	6.8	7.8	7.1	6.3	5.8	5.4	6.3	5.3	4.5	4.2	4.0	4.7
EA	3.0	2.3	2.1	1.9	2.6	8.8	6.9	6.4	5.9	7.3	6.9	5.6	5.0	4.6	5.7	5.1	3.8	3.5	3.3	4.2

Table A.2: Inflation expectations by socio-demographic category of respondent (in %)

	weighted mean adjusted for outliers					25% quartile					median					75% quartile				
	Average	2019		2020		Average	2019		2020		Average	2019		2020		Average	2019		2020	
	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2	2004-2020	Q3	Q4	Q1	Q2
Total																				
EU	2.3	2.2	2.3	2.3	2.7	7.4	7.5	7.3	7.4	9.7	6.0	6.2	6.2	6.3	7.6	4.2	3.8	4.2	4.0	5.1
EA	2.0	1.7	1.8	1.8	2.3	6.9	6.6	6.5	6.5	8.9	5.7	5.5	5.5	5.5	6.9	3.8	3.2	3.6	3.3	4.5
Gender: Male																				
EU	2.2	2.0	2.1	2.1	2.2	6.6	6.3	6.2	6.3	8.3	5.5	5.5	5.4	5.5	6.4	3.8	3.5	3.7	3.6	4.4
EA	1.9	1.5	1.6	1.5	1.8	6.1	5.5	5.4	5.3	7.6	5.1	4.9	4.8	4.7	5.8	3.4	2.9	3.0	2.9	3.9
Gender: Female																				
EU	2.5	2.4	2.5	2.5	3.3	8.5	9.1	9.5	9.2	11.3	6.7	7.2	7.3	7.5	9.0	4.7	4.8	4.9	4.9	6.2
EA	2.2	1.9	2.0	2.0	2.8	8.0	8.2	8.7	8.4	10.4	6.4	6.4	6.6	6.7	8.2	4.3	4.1	4.3	4.2	5.5
Age: 16 to 29																				
EU	2.3	2.3	2.4	2.3	2.0	8.1	8.4	9.4	8.2	10.3	6.3	6.7	6.9	6.6	7.3	4.4	4.5	5.1	4.6	4.9
EA	2.1	1.8	1.9	2.0	1.6	7.8	7.8	8.7	7.5	9.7	6.0	6.1	6.2	5.9	6.7	4.2	4.0	4.5	4.0	4.5
Age: 30 to 49																				
EU	2.3	2.0	2.2	2.3	2.6	7.7	8.0	7.9	7.8	9.7	6.2	6.4	6.5	6.4	7.7	4.2	4.0	4.2	4.2	5.4
EA	2.0	1.6	1.8	1.7	2.2	7.3	7.3	7.4	6.9	9.0	5.9	5.7	5.9	5.6	7.1	3.9	3.4	3.6	3.5	4.8
Age: 50 to 64																				
EU	2.4	2.3	2.4	2.4	3.0	7.4	7.2	7.4	7.8	10.0	6.1	6.2	6.1	6.7	7.8	4.2	4.1	4.1	4.3	5.5
EA	2.1	1.8	1.8	1.9	2.5	6.8	6.2	6.5	6.8	9.0	5.6	5.5	5.4	5.9	7.1	3.8	3.4	3.4	3.6	4.8
Age: 65+																				
EU	2.5	2.3	2.3	2.3	3.0	7.1	6.8	6.7	6.9	9.0	5.7	5.6	5.7	5.8	7.3	4.2	3.8	3.9	3.9	5.3
EA	2.1	1.7	1.8	1.7	2.5	6.4	5.6	5.7	5.7	7.9	5.2	4.7	4.8	4.8	6.3	3.6	3.0	3.2	3.0	4.5
Income: 1st quartile																				
EU	2.7	2.5	3.0	2.8	3.2	9.4	10.3	10.9	10.2	12.2	7.4	8.2	8.6	8.4	9.2	5.1	5.2	5.6	5.2	6.2
EA	2.4	2.0	2.5	2.2	2.8	9.0	9.7	10.2	9.4	11.2	7.0	7.5	7.9	7.7	8.4	4.7	4.6	5.0	4.6	5.7
Income: 2nd quartile																				
EU	2.5	2.5	2.4	2.6	2.9	8.1	8.9	8.0	8.7	11.0	6.4	7.0	6.6	6.8	8.3	4.5	4.6	4.6	4.5	5.9
EA	2.2	2.0	2.0	2.1	2.5	7.6	8.1	7.2	7.8	10.1	6.0	6.3	5.9	6.1	7.6	4.1	3.9	3.9	3.7	5.2
Income: 3rd quartile																				
EU	2.3	2.3	2.3	2.2	2.8	7.2	7.6	6.9	6.9	9.6	5.8	6.0	5.7	5.7	7.5	4.1	3.9	4.0	3.8	5.4
EA	2.0	1.9	1.8	1.6	2.3	6.7	6.8	6.0	6.0	8.7	5.4	5.3	5.0	4.9	6.7	3.7	3.3	3.4	3.0	4.8
Income: 4th quartile																				
EU	2.1	2.0	2.1	2.0	2.1	6.1	5.8	6.0	6.2	8.0	5.0	4.9	5.0	5.1	6.0	3.5	3.2	3.5	3.4	4.3
EA	1.8	1.5	1.6	1.5	1.7	5.6	5.0	5.0	5.0	7.2	4.6	4.1	4.2	4.2	5.4	3.1	2.5	2.8	2.6	3.8
Education: Primary																				
EU	2.6	2.8	2.6	2.4	3.2	8.6	10.4	10.3	9.0	11.3	6.8	8.1	7.8	7.2	8.9	4.7	5.0	5.9	4.5	6.2
EA	2.2	2.4	2.1	2.0	2.8	8.0	9.7	9.5	8.2	10.3	6.4	7.4	7.1	6.5	8.1	4.3	4.3	5.5	3.9	5.7
Education: Secondary																				
EU	2.3	2.3	2.4	2.5	2.9	7.6	7.8	8.2	8.5	10.3	6.2	6.5	6.5	7.0	8.2	4.3	4.2	4.5	4.5	5.5
EA	2.0	1.8	1.9	2.0	2.5	7.2	7.0	7.5	7.6	9.6	5.8	5.9	5.9	6.3	7.5	3.9	3.6	3.9	3.8	4.9
Education: Further																				
EU	2.1	2.1	2.1	2.1	2.3	6.3	6.3	6.2	6.5	8.0	5.1	5.3	5.3	5.2	6.1	3.6	3.6	3.6	3.5	4.3
EA	1.8	1.7	1.6	1.5	1.9	5.9	5.3	5.3	5.2	7.2	4.8	4.4	4.5	4.2	5.4	3.3	2.8	2.9	2.8	3.7

ANNEX

Reference series

Confidence indicators	**Reference series from Eurostat, via Ecowin (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. In order to make the graphs more readable, two colours have been used for the tracer. The darker line shows developments in the current cycle, which in the EU and euro area roughly started in January 2008.

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