

ECOPULSE

July 2023

MONTHLY PULSE OF OECD COUNTRIES' ECONOMIC INDICATORS



BNP PARIBAS

The bank for a changing world

In July, there was still divergence between the main OECD economies. Economic surveys showed signs of a more marked slowdown in Europe than in the United States, where various indicators (non-manufacturing ISM, household surveys) even improved.

At the same time, disinflation continued in the main economic zones, but with different degrees of progress: in the United States, this led the Federal Reserve to keep its policy rates unchanged in June, unlike the ECB. The momentum is different in the UK where inflation remains high, which should lead the BoE to continue tightening its monetary policy. In Japan, inflation is continuing to accelerate but still insufficiently (only being passed on to wages to a limited extent) for the BoJ to consider tightening.

Throughout the world, the labour market situation still seems favourable, particularly in the United States, which should encourage the Federal Reserve to resume its monetary tightening in July. Signs of a slowdown in terms of job creation are more noticeable in Europe: fewer jobs created in Germany and France, and job losses in the United Kingdom and Spain. However, this still relative deterioration has no impact on wage growth, which is actually accelerating, justifying the vigilance of the ECB and, above all, the BoE.

EUROZONE: WATCH OUT FOR A RELAPSE

GERMANY: MULTIPLE CONSTRAINTS ON GROWTH

FRANCE: WIDESPREAD WEAKNESS IN DEMAND

ITALY: FALLING UNEMPLOYMENT AND INFLATION BOOST HOUSEHOLD MORALE

SPAIN: INFLATION FALLS BELOW 2%

UNITED STATES: GROWTH IS RESILIENT

UNITED KINGDOM: COMBATTING INFLATION REMAINS DIFFICULT

JAPAN: SALARIES FINALLY INCREASE



Watch out for a relapse

Economic activity in the eurozone is showing clearer signs of weakening, and our Nowcast now foresees a stagnation in real GDP in the second quarter of 2023. Retail sales were stable during the first two months of Q2. Survey data also offers little reassurance and seems to indicate a possible relapse in activity in Q3 which we currently estimate at -0.1% q/q: the composite PMI index deteriorated significantly in June, falling below the threshold of 50, to 49.9. The manufacturing sector index fell further into contraction and is now at levels comparable to those seen during 2020, in the midst of the pandemic.

Although a lower gap in inflation between Euro member countries is expected in the second half of 2023, the divergence was still significant in June. Average harmonised inflation in the eurozone slowed to 5.5% in June, compared to 6.1% the previous month. However, almost 9 points still separate Luxembourg, Spain and Belgium, where the inflation rate fell below 2%, from Slovakia, where the rise remains above 11%. In the eurozone, only services recorded higher inflation in June (increasing from 5.0% to 5.4%). The latter slowed but remained very high in "food, alcohol & tobacco" (11.7%) while deflation in energy prices intensified (-5.6%).

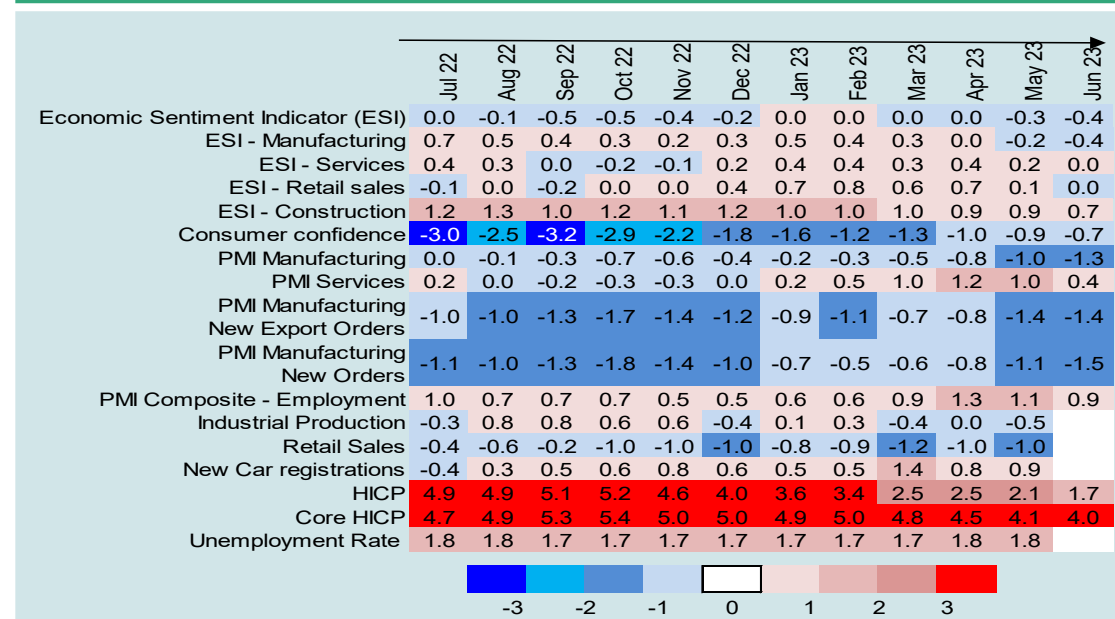
As the Bank of Italy's current governor, Ignazio Visco, pointed out, the downward trend in energy prices should have knock-on effects on the prices of other consumer items¹. Nevertheless, the scale and speed of this phenomenon will remain conditional on the development of other factors, particularly wage growth. This strengthened significantly during the first quarter (+4.3% year-on-year), according to the ECB's indicator, which reflects the results of collective bargaining.

With an unemployment rate at its lowest ever level in May, at 6.5%, greater increases in wages are conceivable, which would delay a lasting drop in inflation in the eurozone, and, in particular, a return to the 2% target. We therefore expect the deposit rate to rise again at the monetary policy meeting on 27 July before a final increase in September, bringing the terminal rate to 4.0%.

Guillaume Derrien (completed on 19 July 2023)

1 See *ECB's Visco Says Inflation May Drop More Quickly Than Forecast*, Bloomberg, 18 July 2023.

Eurozone: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | Carry-over | Nowcast | Forecast | | Annual forecasts (y/y) | | |
|---------|---------|------------|---------|----------|---------|------------------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 0.8 | 0.4 | -0.1 | -0.1 | 0.2 | 0.0 | 0.2 | -0.1 | |
| | | | | | | 3.5 | 0.4 | 0.6 |

See the [Nowcast methodology](#). Contact: [Tarik Rharrab](#)
Source: Refinitiv, BNP Paribas

Multiple constraints on growth

Economic surveys pointed once again to a downturn, including the ifo Business Climate Index (88.5 in June compared to 93.4 in April) and the ZEW Indicator of Economic Sentiment (-14.7 in July compared to 28.1 in February). The erratic momentum of factory orders, which were up 6.4% m/m in May (after a low point in April 2023 not seen since May 2013), underlines one of the constraints at work: the irregularity of activity in transport equipment, which remains subject to sporadic supply difficulties. This phenomenon is generating high volatility in production, both in the aeronautics sector and the automotive sector (lower in April with an upturn in May, as also seen in France).

Another constraint is household spending intentions. German households are still worried about their purchasing power despite the disinflation which has begun (which led to a relative drop in the GFK index in June to -25.4 compared to -24.4 in May), and this disinflation had a marginal impact on their willingness to buy (-14.6 in June). Only 6.6% of households are considering making a major purchase in the immediate future (according to the European Commission), one of the lowest historic levels.

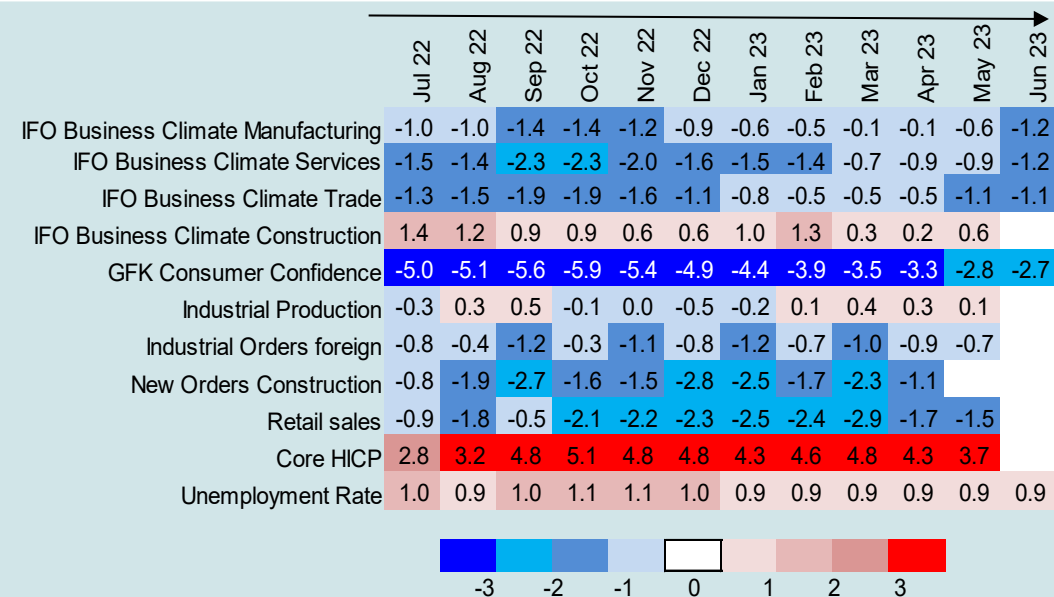
Disinflation was clear, between the peak seen in October 2022 and the figure seen in May 2023 (from 11.6% to 6.3% y/y), mainly driven by the drop in energy inflation. However, this was interrupted in June (6.8% y/y) and the additional disinflation should be modest over the summer. Energy-related base effects are expected to become more favourable again in autumn 2023 (the increase was marked in autumn 2022). Excluding energy and food, disinflation remains less noticeable (5.8% y/y in June, close to its peak in March).

Still significant in Q1, the momentum of the labour market (150,000 job creations) has somewhat slowed since then, as shown by the employment climate in the ifo survey (98.4 in June, close to its historic average, 97.8). Job creation is weaker in Q2 (16,000 jobs created in April-May).

We expect growth to reach 0.2% q/q in Q2, driven by recovery in the consumption of services, but representing an exception between two more difficult periods: a recession (-0.5% q/q in Q4 2022 and -0.3% in Q1 2023) and relative stagnation which we are expecting in H2 2023, consistent with the recent downturn in economic indicators.

Stéphane Colliac (article completed on 20 July 2023)

Germany: economic indicators monthly changes



The Indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero. Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | Carry-over | | Forecast | | Annual forecasts (y/y) | | | |
|---------|---------|------------|---------|----------|---------|------------------------|-----------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| -0.1 | 0.5 | -0.5 | -0.3 | -0.5 | 0.2 | 0.0 | 1.9 | -0.4 | 0.5 |

Source: Refinitiv, BNP Paribas



Widespread weakness in demand

The downturn in economic surveys highlights a drop in demand (contraction of balance of opinion on global and export order books), particularly in the manufacturing sector. The sectors most sensitive to the economic cycle (chemicals, plastics, metals, packaging, wholesale trade and transport services) are all experiencing a marked drop in their synthetic confidence index. In the construction sector, the balance of opinion on the activity in new housing fell again to -22.5 in July (-10.7 in April). By contrast, leisure-related services, information-communication, transport equipment and part of the construction sector (new building excluding housing, maintenance-renovation) are still growing.

Household confidence averaged 82 between June 2022 and May 2023, a level from which it deviated very little until June 2023, when it rebounded to 85. This improvement is linked to the marked reduction in inflation expectations (indicator at -55 in June). However, households consider that the opportunity to save is still high (+33 in June), while the opportunity to make major purchases has deteriorated further (-47 in June, a record low outside the Covid period), boding ill for any upturn in spending.

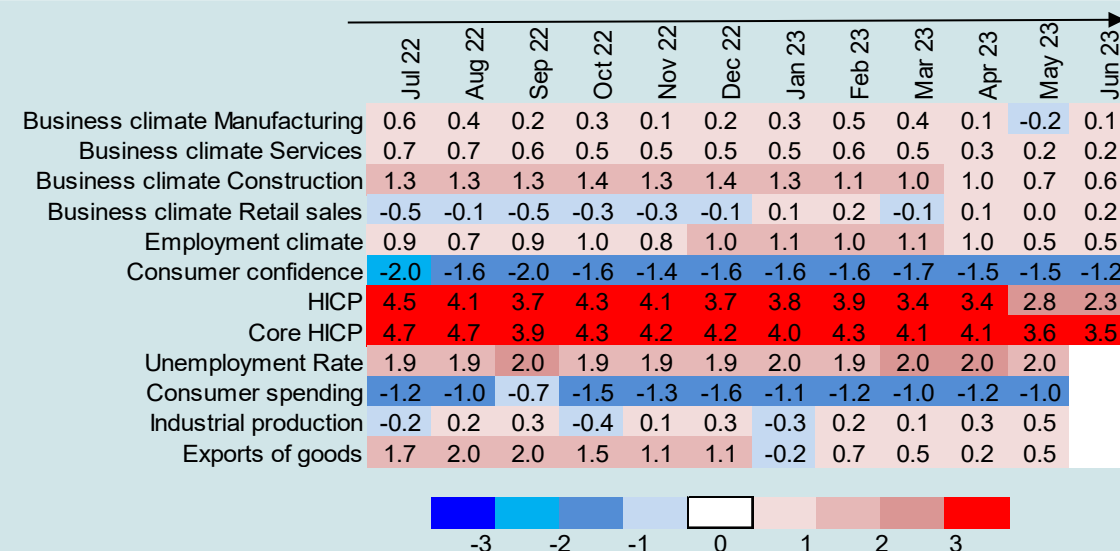
Disinflation is now fairly clear (5.5% y/y in June according to the harmonised index, compared to 7.3% in February). This is primarily driven by the drop in energy costs (-3% y/y in June), while food inflation fell from its peak (13.6% y/y in June compared to 15.9% y/y in March), a disinflation that should continue, as seen with the disinflation in manufactured products (selling prices outlook at 7.1 in July compared to 43.9 in December 2022). Services inflation is expected to demonstrate slightly more persistence, but at around the current level of inflation (2.9% y/y in June).

The labour market remains a resilient factor, both in terms of job creation (92,000 net new jobs in Q1, although there are areas of weakness in construction and temporary work) and wage increases (which we expect to reach 5% in 2023, and even 6.7% for broad compensations, including bonuses and variable pay). However, the momentum of the labour market seems to have slowed, with the employment climate deteriorating to 106 in June-July from 110 in April.

We forecast growth of 0.2% q/q in Q2, a figure close to that seen in Q1, due to consumption of household services (mainly leisure), as well as transport equipment. However, economic surveys highlight a downward risk, which is reflected in our nowcast (0.1% q/q).

Stéphane Colliac (article completed on 20 July 2023)

France: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero. Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | | | Carry-over | Nowcast | Forecast | | Annual forecasts (y/y) | | |
|---------|---------|---------|---------|------------|---------|----------|---------|------------------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 0.5 | 0.2 | -0.0 | 0.2 | 0.4 | 0.1 | 0.2 | 0.0 | 2.5 | 0.5 | 0.6 |

[See the Nowcast methodology.](#) Contact: [Tarik Rharrab](#)
Source: Refinitiv, BNP Paribas



Falling unemployment and inflation boost household morale

Real GDP growth should halve in the second quarter compared to the previous quarter, at 0.3% q/q, before a further slowdown in Q3. Industrial production (down 0.5% over the first two months of Q2) and retail sales (slightly up by 0.1%) demonstrate the fragility of activity in the country. The composite PMI for new export orders also continued to deteriorate in June (-4.4 points to 43.3).

Inflation slowed but less drastically than in Spain and France in particular. After a peak at 12.6% in November 2022, the annual increase in the HICP declined during the first half of 2023 to 6.7% in June, which remains a high level. As the main contributor to this drop, the fall in inflation in energy goods intensified in June, going from 11.5% the previous month to 2.1%. A shift in energy prices to deflationary territory seems likely this summer, in the wake of producer prices, which were already down 4.3% year-on-year in May.

Services prices are now the driving force behind inflation in the country, which should nonetheless fall below the 2% threshold in the fourth quarter of 2023, according to our current forecasts. The latest PMI indices, as well as European Commission surveys, suggest a more pronounced decline to come inflation in services, although its magnitude will be mainly conditional on wage increases in the sector. The slowdown in growth in Italy and the eurozone should also dampen price increases in the capital goods and consumer goods segment.

Nevertheless, household confidence is recovering, buoyed by the fall in inflation and the resulting improvement in savings prospects. The dynamism of job creation and the drop in the number of jobseekers also favourably affect consumer morale: according to the European Commission's survey, the outlook for unemployment at one year fell in June to its lowest level since 2018. Indeed, after stagnation in recent months, the unemployment rate in the country fell back to 7.6% in June. Employment rose for the sixth consecutive month to 1% above the last cyclical peak in June 2019.

Guillaume Derrien (article completed on 20 July 2023)

Italy: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value. Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | Carry-over | | Forecast | | Annual forecasts (y/y) | | | |
|---------|---------|------------|---------|----------|---------|------------------------|-----------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 1.0 | 0.4 | -0.1 | 0.6 | 0.9 | 0.3 | 0.2 | 3.8 | 1.3 | 1 |

Source: Refinitiv, BNP Paribas



Inflation falls below 2%

Economic activity in Spain remains dynamic. The fall in inflation, combined with employment gains this year, constitutes significant support for activity, which will counteract the increase in mortgage payments faced by some households. We now anticipate stable and moderate growth in activity at 0.4% q/q for the second and third quarters of this year. Retail sales in volume terms recovered in April (+4.1% m/m) before edging back down the following month (-0.4% m/m). Tourism activity in the spring suggests a summer season that will be, if not exceptional, at least as successful as 2019, which has been a record year to date: in May 2023, several indicators (number of foreign tourists entering the country, hotel stays) were above the levels recorded in the same period in 2019.

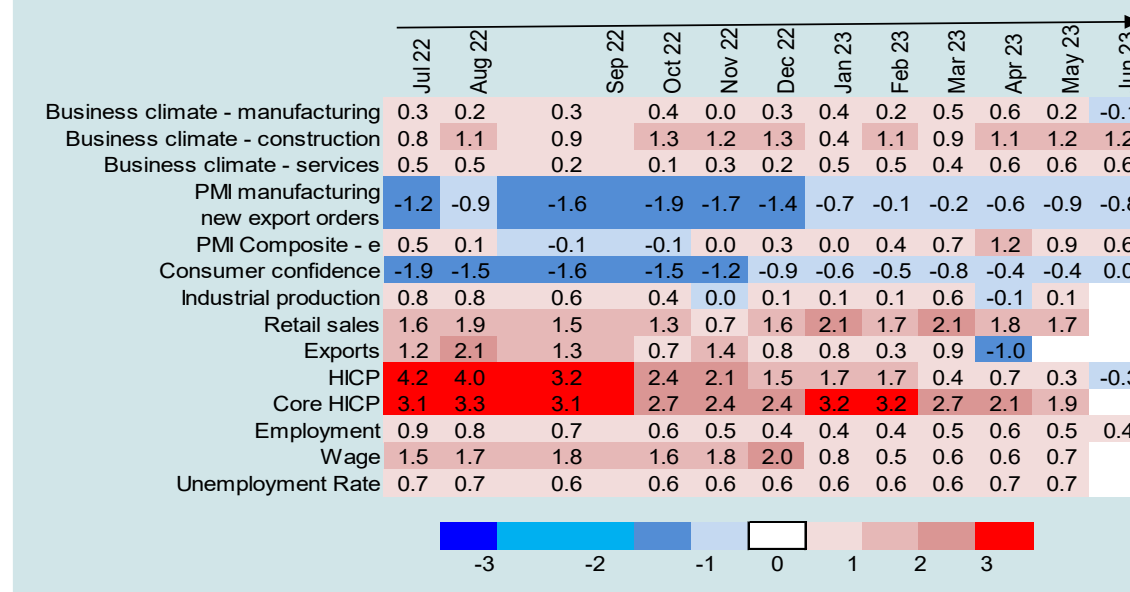
The upturn in household confidence gathered momentum in June (+4.2 points, the strongest improvement in two and a half years), buoyed by the fall in inflation. The rise in consumer prices is now among the lowest in Europe, up just 1.6% year-on-year in June (harmonised index)¹. This is the smallest annual increase since March 2021. Inflation has now fallen below its long-term level, as illustrated by the negative figure in the table here. Core inflation is still only falling modestly, going from 6.1% in May to 5.9% in June. Nevertheless, growth in the 3m/3m annualised index fell sharply and is now close to 2% (2.2% in June).

Spanish household purchasing power is rising again when we compare current inflation with average wage increases in industry agreements, which reached 3.3% year-on-year in June, according to figures from the Ministry of the Economy and Finance. The latest report from the Spanish employment agency (SEPE) indicates that job creation dipped 0.1% (-20,119) in June for the first time since July 2022. The increase in the first half of 2023 is still significant at 2.2%. The unemployment rate fell by 0.3 percentage points between the end of 2022 and May 2023, to 12.7%. With an expected increase in real GDP of 2.4% in 2023, Spain still offers one of the best growth prospects in the eurozone this year.

¹ The non-harmonised index rose 1.9% year-on-year in June

Guillaume Derrien (article completed on 19 July 2023)

Spain: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | | | Carry-over | Forecast | | Annual forecasts (y/y) | | |
|---------|---------|---------|---------|------------|----------|---------|------------------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 2.6 | 0.4 | 0.5 | 0.6 | 1.8 | 0.4 | 0.4 | 5.5 | 2.4 | 1.5 |

Source: Refinitiv, BNP Paribas



Growth is resilient

Although in May, the business climate might well have suggested a future recession, in June, things looked less clear. Admittedly, the further drop in the manufacturing ISM, to 46 in June, brought it to its lowest level since the 2008 crisis (excluding the Covid period). However, the message conveyed by the non-manufacturing ISM was noticeably different, with a rebound to 53.9 in June, compared to 50.3 in May.

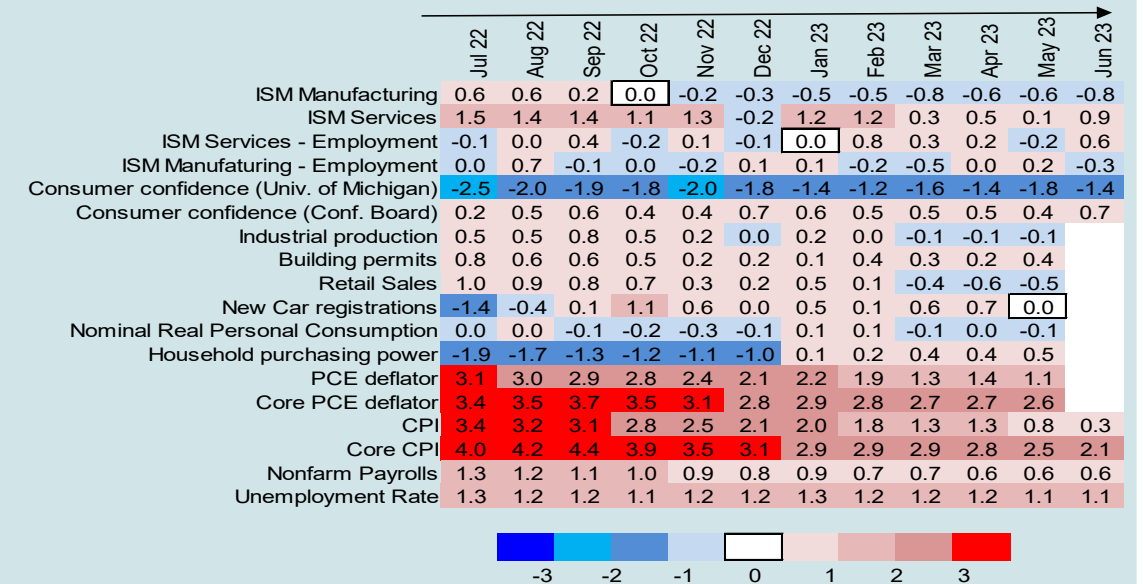
Consumer surveys also point to an improvement: the Conference Board Consumer Confidence Survey and the University of Michigan Consumer Sentiment Survey saw an uptick in June, confirmed in July for the latter (to 72.6, the highest seen since September 2021), while inflation continued to fall in June to 3% y/y (-1.9 pp in two months). This downturn is confirmed and spreading, since core inflation reached only 4.8% y/y in June (the lowest seen since October 2021).

This gradual disinflation led to stability of policy rates at the FOMC meeting (13-14 June). However, we believe that the next meeting (25-26 July) should produce a hike of 25 bps, in particular because the strength of the labour market should slow the decline in underlying inflation. Although job creation (nonfarm payrolls) slowed somewhat in June (to 209K), it remains significant and posted an even higher figure in May (306K).

The Atlanta Federal Reserve GDPNow estimate has improved somewhat in recent weeks (+0.6% q/q on 18 July compared to +0.5% q/q a month ago), which is consistent with the positive messages observed in surveys. This highlights not only that growth was positive in Q2, but also that momentum even improved somewhat early in Q3. This GDPNow estimate is supported in terms of level by the strong growth in private investment (+9.4% q/q in Q2) estimated by the Atlanta Fed against a backdrop of marked growth in manufacturing investment. At the same time, the upward revision of the estimate of growth in private consumption is notable (from 1.2 to 2.4% q/q in Q2).

Stéphane Colliac (article completed on 19 July 2023)

United States: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | Carry-over | GDPNow | Forecast | | Annual forecasts (y/y) | | | | |
|---------|---------|------------|---------|----------|---------|------------------------|---------|-----------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| -0.1 | 0.8 | 0.6 | 0.5 | 1.3 | 0.6 | 0.4 | -0.1 | 2.1 | 1.5 | -0.1 |

Source: Refinitiv, BNP Paribas

Combatting inflation remains difficult

The UK economy contracted in May (-0.1% m/m) according to the ONS, after growth of 0.2% m/m in April. The services sector stagnated, while industrial production and construction fell by 0.6% and 0.2% m/m respectively. According to the June PMI survey, activity increased in the services sector, but decreased in the manufacturing sector. While the extra bank holiday for King Charles III's coronation probably contributed to the downturn in activity in May, the UK economy remains in a more extended slowdown phase. The economy stagnated indeed on average over 3 months in May.

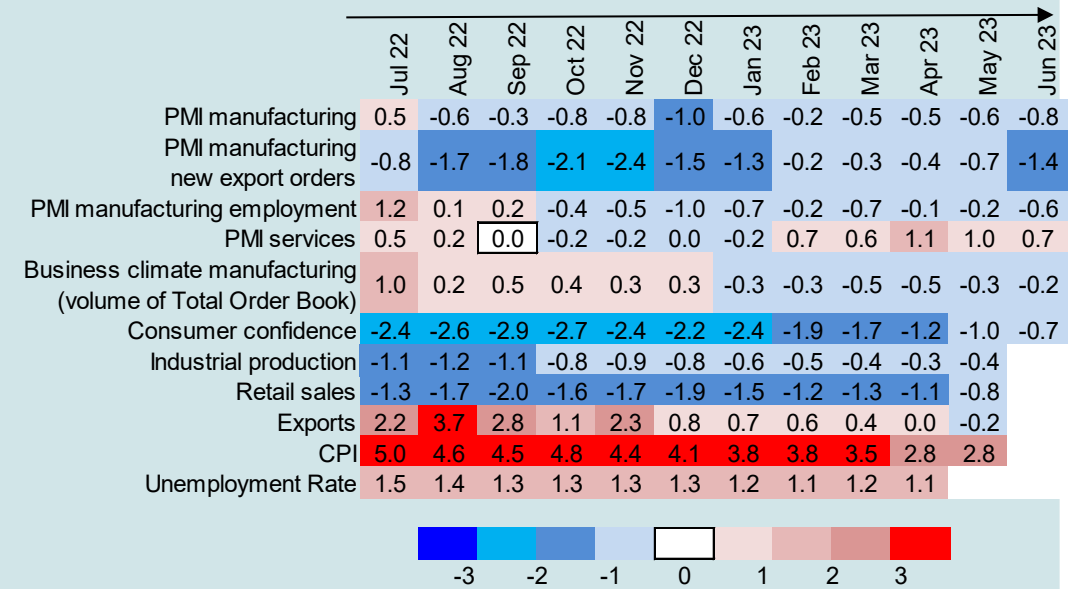
Inflation, after stabilising in May, slowed in June, from 8.7% to 7.9%, while its core measure fell from 7.1% to 6.9%. Although this report contains positive news such as the deceleration in prices for food products (17.3% y/y), hotels and catering (9.5% y/y) and household goods (6.5% y/y), it will not completely reassure the Bank of England (BoE). Inflationary pressures remain significant, even increasing in certain sectors, particularly in communications (9.5% y/y), health services (8.2% y/y) and culture and leisure (6.7% y/y). In annualised 3m/3m variation, the core index reached a new record of 11.6%, driven by services (+12.7%). We therefore expect the BoE's monetary tightening to continue in its August meeting, with a 50bps hike in its key rate.

As far as it was concerned, the labour market report for July was mixed. On the one hand, wage growth, stable at 7.3% y/y in May, was worrying due to its strength as well as its increasingly widespread nature, strengthening the wage-price spiral. The government's final proposal for wage increases in the public sector, (5 to 7% depending on the sector), should contribute to high wage growth in the country. Remuneration in the public sector was up 5.7% year-on-year in May. On the other hand, preliminary employment data shows a slowdown in the labour market which should play a medium-term role in reducing wage growth. The provisional estimate for June indicates a net loss of 9,000 jobs, while the unemployment rate exceeded the 4% threshold for the first time since January 2022. Finally, the number of vacancies fell by 85,000 (-7.6% 3m/3m) over the period from March to May.

Economic activity in the United Kingdom is expected to remain sluggish until the end of 2024 and to go through a period of technical recession in the first half of 2024 according to our forecasts. For 2023, we expect growth of 0.4%. The persistence of inflation should push the BoE to raise its key rate to 5.75% over the third quarter, which will weigh on investment.

Guillaume Derrien and Louis Morillon (intern) (article completed on 19 July 2023).

United Kingdom: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value.
Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | | | Carry-over | Forecast | | Annual forecasts (y/y) | | |
|---------|---------|---------|---------|------------|----------|---------|------------------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 0.1 | -0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 4.1 | 0.4 | 0 |

Source: Refinitiv, BNP Paribas



Salaries finally increase

The Japanese economy continued its post-pandemic recovery in May and June, although this remains fragile. According to the final estimate for May, industrial production contracted by 2.2% m/m but increased by 4.2% year-on-year. At the same time, activity in the tertiary sector grew by 1.2% m/m and 1.8% y/y. The latest PMI survey also indicates that economic activity expanded in June (composite index in expansion at 52). Nevertheless, a distinction must be made between the manufacturing sector index, which fell back into the contraction zone (49.8), and the services index, which continued to grow (54), although at a slower pace than in May.

Consumer confidence improved again in June thanks to better job prospects and wage growth. Nevertheless, household consumer spending fell by 1.1% m/m in May compared to the previous month, bringing the year-on-year decline to 4%. The deterioration is particularly marked in transport and communication services (-11.2% y/y) and in household goods (-9.2% y/y).

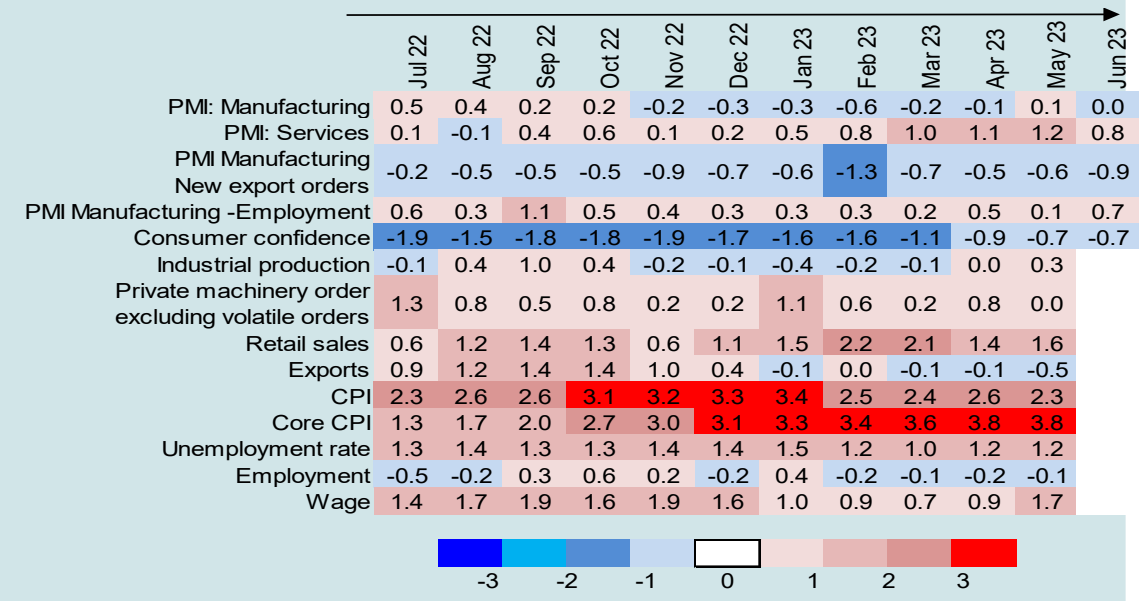
Inflation continued to rise in May and now seems to drive wages in its wake. Core inflation, excluding fresh food and energy, rose 4.3% y/y. Some components, such as household capital goods (+9.6% y/y) and clothing (+3.9% y/y) reached levels not seen since the mid-70s. Service inflation (+1.7% y/y) is approaching the target of 2%. However, the Bank of Japan (BoJ) will expect inflation to remain around the 2% target for a long time before restricting its monetary policy, in particular by raising the intervention ceiling on 10-year sovereign rates.

Wage and productivity growth will play an important role in the BoJ's decision, as Kazuo Ueda recalled at the Sintra Forum at the end of June. Wages increased by 2.5% y/y in May (including bonuses) according to the Ministry of Labour's preliminary estimate. However, productivity is not yet entirely positive, at +0.32% y/y in services, and -0.5% y/y in the manufacturing sector. The central bank will therefore closely monitor changes in productivity in order to calibrate its future decisions.

Economic growth will remain relatively sustained in 2023 (+1.5% y/y) and 2024 (+1.0% y/y). The Japanese economy will be impacted by inflation and the global economic slowdown, but it should benefit from catch-up effects linked to its late post-pandemic reopening and the weakness of the yen, which will allow Japanese exporting companies to boost their profits repatriated from abroad.

Guillaume Derrien and Louis Morillon (intern) (article completed on 18 July 2023)

Japan: economic indicators monthly changes



The indicators are all transformed into "z-scores", i.e. deviations from the long-term average value (expressed in standard deviation), the average of which is zero (except for the PMI/ISM indices where the average is 50, the threshold between the expansion zone and the contraction zone of the activity). Positive (negative) values indicate the number of standard deviations above (below) the mean value. Reading note: the red colour indicates dynamic activity, high inflation and low unemployment, the blue colour indicates slower activity, low inflation and high unemployment.

GDP growth

| Actual | | | | Carry-over | Forecast | | Annual forecasts (y/y) | | |
|---------|---------|---------|---------|------------|----------|---------|------------------------|------|------|
| Q2 2022 | Q3 2022 | Q4 2022 | Q1 2023 | Q4 2022 | Q2 2023 | Q3 2023 | 2022 (observed) | 2023 | 2024 |
| 1.4 | -0.4 | 0.1 | 0.7 | 0.9 | 0.5 | 0.3 | 1.0 | 1.5 | 1 |

Source: Refinitiv, BNP Paribas



BNP PARIBAS ECONOMIC RESEARCH

| | | |
|--|-------------------|--|
| William De Vijlder Chief Economist | +33 1 55 77 47 31 | william.devijlder@bnpparibas.com |
| OECD ECONOMIES AND STATISTICS | | |
| Hélène Baudchon Deputy chief economist, Head - United States | +33 1 58 16 03 63 | helene.baudchon@bnpparibas.com |
| Stéphane Colliac France, Germany | +33 1 42 98 43 86 | stephane.colliac@bnpparibas.com |
| Guillaume Derrien Eurozone, Southern Europe, Japan, United Kingdom - Global trade | +33 1 55 77 71 89 | guillaume.a.derrien@bnpparibas.com |
| Veary Bou, Tarik Rharrab Statistics | | |
| ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENCH NETWORK | | |
| Jean-Luc Proutat Head | +33 1 58 16 73 32 | jean-luc.proutat@bnpparibas.com |
| BANKING ECONOMICS | | |
| Laurent Quignon Head | +33 1 42 98 56 54 | laurent.quignon@bnpparibas.com |
| Céline Choulet | +33 1 43 16 95 54 | celine.choulet@bnpparibas.com |
| Thomas Humblot | +33 1 40 14 30 77 | thomas.humblot@bnpparibas.com |
| Marianne Mueller | +33 1 40 14 48 11 | marianne.mueller@bnpparibas.com |
| EMERGING ECONOMIES AND COUNTRY RISK | | |
| François Faure Head - Argentina, Turkey - Methodology, Modelling | +33 1 42 98 79 82 | francois.faure@bnpparibas.com |
| Christine Peltier Deputy Head - Greater China, Vietnam - Methodology | +33 1 42 98 56 27 | christine.peltier@bnpparibas.com |
| Stéphane Alby Africa (French-speaking countries) | +33 1 42 98 02 04 | stephane.alby@bnpparibas.com |
| Pascal Devaux Middle East, Balkan countries | +33 1 43 16 95 51 | pascal.devaux@bnpparibas.com |
| Hélène Drouot South Korea, Philippines, Thailand, Andean countries | +33 1 42 98 33 00 | helene.drouot@bnpparibas.com |
| Salim Hamad Latin America | +33 1 42 98 74 26 | salim.hamad@bnpparibas.com |
| Cynthia Kalasopatan Antoine Ukraine, Central European countries | +33 1 53 31 59 32 | cynthia.kalasopatan.antoine@bnpparibas.com |
| Johanna Melka India, South Asia, Russia, Kazakhstan | +33 1 58 16 05 84 | johanna.melka@bnpparibas.com |
| Lucas Plé Africa (Portuguese & English-speaking countries) | +33 1 40 14 50 18 | lucas.ple@bnpparibas.com |
| CONTACT MEDIA | | |
| Mickaelle Fils Marie-Luce | +33 1 42 98 48 59 | mickaelle.filsmarie-luce@bnpparibas.com |

The information and opinions contained in this report have been obtained from, or are based on, public sources believed to be reliable, but no representation or warranty, express or implied, is made that such information is accurate, complete or up to date and it should not be relied upon as such. This report does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute investment advice, nor financial research or analysis. Information and opinions contained in the report are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient; they are subject to change without notice and not intended to provide the sole basis of any evaluation of the instruments discussed herein. Any reference to past performance should not be taken as an indication of future performance. To the fullest extent permitted by law, no BNP Paribas group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this report. All estimates and opinions included in this report are made as of the date of this report. Unless otherwise indicated in this report there is no intention to update this report. BNP Paribas SA and its affiliates (collectively "BNP Paribas") may make a market in, or may, as principal or agent, buy or sell securities of any issuer or person mentioned in this report or derivatives thereon. BNP Paribas may have a financial interest in any issuer or person mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon. Prices, yields and other similar information included in this report are included for information purposes. Numerous factors will affect market pricing and there is no certainty that transactions could be executed at these prices. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this report. BNP Paribas may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any person referred to in this report. BNP Paribas may be a party to an agreement with any person relating to the production of this report. BNP Paribas, may to the extent permitted by law, have acted upon or used the information contained herein, or the research or analysis on which it was based, before its publication. BNP Paribas may receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this report. Any person mentioned in this report may have been provided with sections of this report prior to its publication in order to verify its factual accuracy.

BNP Paribas is incorporated in France with limited liability. Registered Office 16 Boulevard des Italiens, 75009 Paris. This report was produced by a BNP Paribas group company. This report is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNP Paribas. By accepting this document you agree to be bound by the foregoing limitations.

Certain countries within the European Economic Area:

This report has been approved for publication in the United Kingdom by BNP Paribas London Branch. BNP Paribas London Branch is authorised and supervised by the Autorité de Contrôle Prudentiel and authorised and subject to limited regulation by the Financial Services Authority. Details of the extent of our authorisation and regulation by the Financial Services Authority are available from us on request.

This report has been approved for publication in France by BNP Paribas SA. BNP Paribas SA is incorporated in France with limited liability and is authorised by the Autorité de Contrôle Prudentiel (ACP) and regulated by the Autorité des Marchés Financiers (AMF). Its head office is 16, boulevard des Italiens 75009 Paris, France.

This report is being distributed in Germany either by BNP Paribas London Branch or by BNP Paribas Niederlassung Frankfurt am Main, a branch of BNP Paribas S.A. whose head office is in Paris, France. BNP Paribas S.A. - Niederlassung Frankfurt am Main, Europa Allee 12, 60327 Frankfurt is authorised and supervised by the Autorité de Contrôle Prudentiel and it is authorised and subject to limited regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

United States: This report is being distributed to US persons by BNP Paribas Securities Corp., or by a subsidiary or affiliate of BNP Paribas that is not registered as a US broker-dealer. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for the content of a report prepared by another non-U.S. affiliate only when distributed to U.S. persons by BNP Paribas Securities Corp.

Japan: This report is being distributed in Japan by BNP Paribas Securities (Japan) Limited or by a subsidiary or affiliate of BNP Paribas not registered as a financial instruments firm in Japan, to certain financial institutions defined by article 17-3, item 1 of the Financial Instruments and Exchange Law Enforcement Order. BNP Paribas Securities (Japan) Limited is a financial instruments firm registered according to the Financial Instruments and Exchange Law of Japan and a member of the Japan Securities Dealers Association and the Financial Futures Association of Japan. BNP Paribas Securities (Japan) Limited accepts responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan.

Hong Kong: This report is being distributed in Hong Kong by BNP Paribas Hong Kong Branch, a branch of BNP Paribas whose head office is in Paris, France. BNP Paribas Hong Kong Branch is registered as a Licensed Bank under the Banking Ordinance and regulated by the Hong Kong Monetary Authority. BNP Paribas Hong Kong Branch is also a Registered Institution regulated by the Securities and Futures Commission for the conduct of Regulated Activity Types 1, 4 and 6 under the Securities and Futures Ordinance.

Some or all the information reported in this document may already have been published on <https://globalmarkets.bnpparibas.com>

© BNP Paribas (2015). All rights reserved.



BNP PARIBAS

The bank for a changing world

ECONOMIC RESEARCH | ECOPULSE | 11