

The UniCredit Macro & Markets Weekly



Macro Research
Strategy Research

No. 342
7 December 2023

“Central banks face overly aggressive rate-cut expectations”

This week, in the US, October JOLTS job openings fell more than expected, while the ISM services index pointed to a slight acceleration in activity in November. In Germany, both factory orders and industrial production contracted more than expected in October and Italy's services PMI for November pointed to ongoing weakness. Stocks and government bonds extended their rally, while curves flattened as markets priced in steep rate cuts in the coming quarters. Credit spreads moved sideways this week as spread tightening lost steam after the rally of the last two weeks. In FX, EUR-USD slipped back below 1.08, while CEE currencies were supported by declining core market yields.

- **Macro:** We expect the Fed (on Wednesday), the ECB (on Thursday) and the BoE (on Thursday) to remain on hold. On the data front, the key highlights are US CPI inflation (on Tuesday), likely pointing to a mild monthly reacceleration, and eurozone PMIs (on Friday), probably indicating prolonged economic weakness.
- **FI:** Upcoming data releases and central-bank meetings pose asymmetric risks to government bonds following the recent rally and might lead to headwinds for momentum. Neither the Fed nor the ECB might sound bold enough to turn bond markets around.
- **FX:** G10 central bank rhetoric will likely keep FX majors mostly rangebound. US CPI data and eurozone PMIs will probably leave EUR-USD mostly stuck in the 1.07-1.09 trading band. The HUF may enjoy a short-term rally on an EU-funds announcement. Firming rate-cut expectations could lift EUR-CZK.
- **Equities:** The important macro impulses over the coming days will serve as a litmus test as to whether current stock-market levels are sustainable. We see increasing signs that the stock market is overheating.
- **Credit:** Issuance of sustainability-linked bonds recovered modestly in 2023 after a deep drop in 2022. Investors and issuers continue to develop the product in response to criticism that targets have not been ambitious enough.

Markets at a glance

	Current	Total return (%)					
Equities	Price	1M	3M	6M	12M	YTD	QTD
MSCI World (USD)	3,021	4.8	3.0	6.4	16.3	18.5	6.2
MSCI EM (USD)	975	1.6	0.6	-0.4	4.7	4.7	2.6
S&P 500	4,549	4.1	2.6	7.5	17.6	20.3	6.4
Nasdaq Composite	14,147	3.8	3.1	8.4	30.2	36.3	7.2
Euro STOXX 50	4,473	7.9	6.4	4.9	18.1	21.9	7.5
DAX	16,621	9.7	5.7	4.1	16.5	19.4	8.0
MSCI Italy	78.2	7.1	9.0	14.7	31.5	34.2	8.4

Rates (government bonds)	Yield (%)	1M	3M	6M	12M	YTD	QTD
1-3Y US	4.61	0.9	1.8	2.1	3.3	3.4	1.7
7-10Y US	4.16	3.7	2.2	-0.4	-1.6	1.3	4.3
1-3Y Germany	2.60	0.9	1.4	1.8	1.2	2.2	1.5
7-10Y Germany	2.21	3.7	3.9	3.2	-0.5	5.4	5.3
1-3Y Italy	3.20	1.2	1.9	2.4	2.3	3.6	2.1
7-10Y Italy	3.96	4.5	4.4	4.4	2.3	9.8	7.0

Credit	OAS (bp)	1M	3M	6M	12M	YTD	QTD
iBoxx Non-Financials (EUR)	81	3.0	3.8	4.0	2.9	6.4	4.2
<i>iBoxx Non-Financials Sen (EUR)</i>	75	3.0	3.8	3.9	2.6	6.3	4.2
<i>iBoxx Non-Financials Sub (EUR)</i>	249	3.2	4.2	5.2	8.0	8.5	4.4
iBoxx Financials (EUR)	120	2.8	3.6	4.9	4.3	6.8	3.8
<i>iBoxx Financials Sen (EUR)</i>	107	2.7	3.5	4.8	4.0	6.7	3.7
<i>iBoxx Financials Sub (EUR)</i>	200	3.1	4.2	5.5	5.4	7.7	4.3
iBoxx High Yield NFI (EUR)	325	2.8	3.5	5.3	9.8	10.9	3.6
EM hard currency* (USD)	306	4.6	3.5	3.9	5.6	6.2	5.2

	Current	Price change (%)					
Commodities	Price	1M	3M	6M	12M	YTD	QTD
Oil (Brent, USD bbl)	74.8	-8.4	-16.8	-2.8	-3.1	-13.0	-21.5
Gold (USD oz)	2,031.8	3.4	5.9	4.6	13.9	11.4	9.9
Bloomberg Commodity Index	97.7	-5.1	-7.8	-2.9	-11.7	-13.4	-6.8

Exchange rates	Price	1M	3M	6M	12M	YTD	QTD
EUR-USD	1.08	0.9	0.7	0.8	2.4	0.7	1.9
EUR-GBP	0.86	1.6	0.2	0.4	0.4	3.3	1.2
EUR-CHF	0.94	2.2	1.5	3.3	5.0	5.0	2.7
EUR-JPY	156.80	2.5	0.4	-4.4	-8.5	-10.5	0.7
EUR-NOK	11.80	1.5	-2.8	0.2	-10.8	-11.0	-4.1
EUR-SEK	11.26	3.8	5.9	3.6	-3.2	-0.9	2.6
<i>EUR TWI</i>	97.20	1.0	3.0	2.1	0.2	0.4	0.0
EUR-PLN	4.33	3.0	6.8	3.6	8.2	8.1	6.8
EUR-HUF	380.75	-0.6	1.7	-3.2	7.9	5.0	2.3
EUR-CZK	24.31	1.3	0.3	-2.8	-0.1	-0.6	0.5
EUR-RON	4.97	0.0	-0.1	-0.2	-1.0	-0.5	0.1
EUR-TRY	31.23	-2.5	-7.9	-19.9	-37.2	-36.0	-7.1
EUR-RUB	99.80	-1.4	5.6	-12.3	-34.1	-20.6	3.5

Returns are shown in domestic currency *Bloomberg Index
Prices on 7 December 2023, 9:30

Source: S&P Global, Bloomberg, UniCredit Research

Major data releases and economic events of the week ahead

Date	Time	Country	Indicator/Event	Period	UniCredit estimates	Consensus (Bloomberg)	Previous
09 - 15 Dec 2023	(CET)						
Sat, 09 Dec	02:30	CH	Consumer Price Index, CPI (% yoy)	Nov		-0.2	-0.2
Mon, 11 Dec	08:00	NO	Consumer Price Index, CPI (% yoy)	Nov	4.2		4.0
	08:00	NO	Core CPI (% yoy)	Nov	6.4		6.0
	09:00	CZ	Consumer Price Index, CPI (% yoy)	Nov	7.1		8.5
Tue, 12 Dec	08:00	UK	Average Earnings (% yoy, 3M moving average)	Oct	7.8		7.9
	08:00	UK	Av. weekly earnings, ex bonuses (3M, % yoy)	Oct	7.5		7.7
	11:00	GE	ZEW Survey – Current Situation (index)	Dec	-76.0		-79.8
	11:00	GE	ZEW Survey – Expectations (index)	Dec	5.0		9.8
	14:30	US	Consumer Price Index, CPI (% yoy)	Nov	3.1	3.1	3.2
	14:30	US	Core CPI (% yoy)	Nov	4.0	4.0	4.0
	14:30	US	Consumer Price Index, CPI (% mom)	Nov	0.1	0.1	0.0
	14:30	US	Core CPI (% mom)	Nov	0.3	0.3	0.2
	20:00	US	Federal Budget (USD, bn)	Nov			-66.6
Wed, 13 Dec	08:00	UK	Monthly GDP (% mom)	Oct	-0.1		0.2
	08:00	UK	Index of services (% mom)	Oct	-0.1		0.2
	08:00	UK	Industrial Production (% mom)	Oct	0.0		0.0
	08:00	UK	Manufacturing Production (% mom)	Oct	0.0		0.1
	08:00	UK	Construction Output (% mom)	Oct	-0.2		0.4
	08:00	UK	Trade Balance (GBP bn)	Oct			-1574
	11:00	EMU	Industrial Production (% mom)	Oct	-0.3		-1.1
	20:00	US	Federal Funds Target Rate (upper bound, %)	Dec	5.50	5.50	5.50
Thu, 14 Dec	01:00	UK	House Prices (RICS, balance)	Nov			-63
	08:00	SW	Core CPI (% yoy)	Nov	5.2		6.1
	08:00	SW	Consumer Price Index, CPI (% yoy)	Nov	3.0		4.2
	09:30	SZ	SNB announces Depo Rate (%)	Dec	1.75		1.75
	10:00	NO	Norges Bank announces policy rate (%)	Dec	4.50		4.25
	13:00	UK	Bank of England announces Repo Rate (%)	Dec	5.25		5.25
	14:15	EMU	ECB announces Depo Rate (%)	Dec	4.00		4.00
	14:15	EMU	ECB announces Refi Rate (%)	Dec	4.50		4.50
	14:30	US	Retail Sales (% mom)	Nov	-0.1	-0.1	-0.1
	16:00	US	Business Inventories (% mom)	Oct		0.0	0.4
Fri, 15 Dec	01:00	UK	Consumer Confidence (GFK, index)	Dec	-26		-24
	01:30	JP	Manufacturing PMI (index)	Dec			48.3
	09:15	FR	Composite PMI (index)	Dec	44.8		44.5
	09:15	FR	Manufacturing PMI (index)	Dec	43.2		42.9
	09:15	FR	Services PMI (index)	Dec	45.5		45.3
	09:30	GE	Composite PMI (index)	Dec	48.5		47.8
	09:30	GE	Manufacturing PMI (index)	Dec	43.5		42.6
	09:30	GE	Services PMI (index)	Dec	50.1		49.6
	10:00	EMU	Composite PMI (index)	Dec	48.0		47.6
	10:00	EMU	Manufacturing PMI (index)	Dec	44.4		44.2
	10:00	EMU	Services PMI (index)	Dec	49.0		48.7
	10:30	UK	Manufacturing PMI (index)	Dec	47.5		47.2
	10:30	UK	Services PMI (index)	Dec	49.5		50.9
	11:30	RU	Bank of Russia announces policy rate (%)	Dec	15.50		15.00
	15:15	US	Capacity Utilization (%)	Nov		79.1	78.9
	15:15	US	Industrial Production (% mom)	Nov	0.3	0.2	-0.6
	22:00	US	Net Long-term Capital Inflows (TIC, USD, bn)	Oct			-1.7

Source: Bloomberg, UniCredit Research

Macro overview

Fed preview: too soon to discuss cuts

Daniel Vernazza, PhD,
Chief International Economist
(UniCredit Bank, London)
+44 207 826-7805
daniel.vernazza@unicredit.eu

On hold

Lower inflation and a less-tight labor market

A slightly lower dot for 2024

We expect cuts to start in June

- We expect the FOMC to keep rates steady on 13 December, amid good progress on disinflation and a less-tight labor market.
- With core inflation above target and financial conditions having loosened, the updated “dot plot” will likely shift down only slightly for 2024, with no change for 2025 onwards.

The FOMC is likely to leave the target range for the federal funds rate unchanged at 5.25-5.50% at its last regular meeting of the year on 12-13 December. This would be the third consecutive meeting it has kept rates on hold. Many Fed officials, including relatively hawkish ones such as Fed Governor Christopher Waller, have indicated that policy is in a “good place” and that the committee can afford to “proceed carefully”. Quantitative tightening is likely to be maintained at the current pace.

Recent macro data has shown that inflation is continuing to ease, the labor market is becoming more balanced, and economic activity is slowing from the rapid clip of 3Q. Core PCE inflation – the Fed’s preferred measure of inflation – fell to 3.5% yoy in October from 3.7% in the prior month. This is the lowest reading since April 2021, and lower than the median FOMC projection of 3.7% yoy for 4Q23. Moreover, the three-month annualized rate was just 2.4% in October. This moderation was broad-based, with core goods, shelter, and non-housing core services inflation easing. Meanwhile, the labor market has continued to soften. Nonfarm payrolls rose 150k in October, a four-month low, although this number was partly dragged down by the United Auto Workers strike that has since ended. Job openings fell sharply in October and the unemployment rate rose to 3.9%. While layoffs remain low, the rise in continuing claims indicates that hiring from the jobless pool has slowed. Accordingly, wage growth has slowed. Monthly data on personal spending and factory orders points to a slowdown in 4Q23, and the Beige Book indicated further slowing ahead. The committee will receive November payrolls and November CPI before making their decision.

The updated *Summary of Economic Projections (SEP)* will likely lower headline and core PCE inflation projections for this year by 0.2-0.3pp and next year slightly by 0.1pp. The committee will have to raise its forecast of GDP growth for this year from 2.1% to as high as 2.7%, but it could lower the projection for 2024 slightly as the outlook seems to be deteriorating. The unemployment rate forecast could be nudged up as, at 3.9% in October, it was 0.1pp above the FOMC’s end-of-year forecast. Lower inflation forecasts will likely shift the “dot plot” down slightly. The median dot for 2023 will have to come down to 5.375% from 5.625%, assuming the Fed does not hike next week. The median dot for end-2024 will likely shift down 25bp to 4.875%, while the 2025, 2026 and longer-run dots are likely to be unchanged (at 3.9%, 2.9% and 2.5%, respectively). This is because, while core inflation is moving down towards 2%, it is not there yet, and financial conditions have eased significantly since the 1 November meeting (and not only due to lower policy-rate expectations). The post-meeting statement is likely to keep the door open to further rate hikes, maintaining the line that begins, “In determining the extent of additional policy firming...”. However, it seems likely that the FOMC is done with rate hikes, which could be hinted at in the statement, perhaps adding a line that the risks (of doing too much versus too little) are more balanced.

In the press conference, Fed Chair Jerome Powell is likely to be asked about recent market pricing of earlier and faster Fed rate cuts. He is likely to say that markets have a different view than the FOMC regarding how quickly inflation will fall but, given high outlook uncertainty, he is unlikely to firmly push back against market expectations. We do not expect the first rate cut until June 2024 as the Fed will likely want to see a six-month string of core inflation prints averaging 0.2% mom, a period of below-potential growth and some further labor market softening before cutting rates. We expect one 25bp rate cut per meeting from June through December 2024. The Fed is currently reducing the size of its balance sheet by allowing its asset holdings to mature up to monthly caps of USD 60bn for Treasuries and USD 35bn for mortgage-backed securities. We have penciled in the start of QT tapering in September 2024.

ECB preview: taking stock

Marco Valli,
Head of Macro Research,
Chief European Economist
+39 02 8862-0537
marco.valli@unicredit.eu

- Next week, the ECB will very likely leave all its interest rates unchanged. The updated forecasts will probably show weaker growth and lower inflation than in September.
- While the Governing Council (GC) is likely to regard the current market pricing of rate cuts as overdone, we do not expect a strong pushback. We also think that the PEPP reinvestment strategy will remain unchanged for now.

Next week, the ECB will likely leave its policy setting unchanged and take stock of recent data, which point to ongoing weakness in economic activity and intensifying downward pressure on underlying inflation. The quarterly macroeconomic forecasts will provide the GC with an important input in this regard.

Weaker growth and lower inflation

We think that the new projections will show downward revisions in both the near-term trajectory for GDP growth and the inflation path, although we suspect that any such changes will be relatively small. Importantly, however, lower inflation forecasts will probably mainly reflect a weaker projection for core prices, signaling that the restrictive monetary stance might have started to weigh more strongly on underlying price pressure. Newly published numbers for 2026 will probably show activity growing at or slightly above potential (in the 1.5% area) and inflation settling in line with the 2% goal.

To push back or not to push back?

After the recent, very aggressive, repricing of rate-cut expectations, ECB President Lagarde will be facing a tricky balancing act. On the one hand, it is highly likely that most, if not all, of the GC regards the current market pricing as exaggerated. On the other hand, the November inflation data, especially the further steep decline in core inflation, seems to have caused a reassessment on the part of the hawks, who now appear more open-minded about a possible reversal of the course of policy in 2024. In an interview published on Tuesday (and likely agreed upon with Ms. Lagarde), after de facto ruling out another rate increase, ECB board member Isabel Schnabel went as far as saying that “we should be careful in making statements about something that is going to happen in six months’ time”. That’s a significant shift from earlier comments by Ms. Lagarde, who, as late as 27 November, had said that the ECB will not start cutting rates for at least “the next couple of quarters”. This makes it unlikely that Ms. Lagarde will want to lean strongly against the current market pricing. However, we do expect she will try to clarify the ECB’s reaction function, particularly the fact that wages/compensation data for 1Q24 will play a crucial role in shaping the GC’s view of risks to price stability. As these data will only be published in late spring, they do not seem consistent with rate cuts starting before June.

No change on the PEPP, for now

PEPP language will be watched closely. We do not expect any changes to the current strategy of full reinvestments for now, although a change of guidance has become more likely sometime next year after Ms. Lagarde recently indicated that the GC might discuss the topic “in the not-too-distant future”. The key issue for the ECB would be that of reconciling a further tightening of balance-sheet policies with an overall stance that is already sufficiently restrictive (too restrictive, in our view). There is no obvious way out of inconsistency here. However, it is increasingly clear that much lower bond yields and fading rating concerns for Italy open a window of opportunity that several GC members will hardly want to miss. We remain highly skeptical that benefits of early PEPP disinvestments outweigh risks and hope that any such decision will only come after heavy issuance in 1Q24 is behind us.

Major events and data releases of the week

SNB preview (14 December)

- At its quarterly meeting on Thursday, we expect the SNB to remain on hold at 1.75% for the second consecutive meeting after hikes of 250bp in total from June 2022 to June 2023.
- While SNB policymakers will probably sound less concerned about the inflation outlook than three or six months ago, they are not likely to give the all-clear and already start signaling rate cuts. Since early summer 2023, both headline inflation and the core rate have remained below 2% yoy. At 1.4% in November, the core rate even hit its lowest level in more than 1½ years. However, the road to disinflation will probably become bumpy due to hikes in administered prices at the start of 2024. As a result, headline inflation rates are likely to temporarily increase to up to 2% before decreasing again to 1-1½% in the remainder of 2024.
- We therefore expect the SNB to remain in wait-and-see mode at the December meeting and for the greater part of 2024. The key reason is that the depo rate is still rather low at 1.75%, in contrast to 4.0% in the eurozone, and that policymakers will probably want to see inflation rates remain persistently below 2% after the temporary surge at the start of 2024. We continue to expect the SNB to start cutting rates by 25bp in 4Q24, followed by two additional rate cuts of 25bp each in 1Q25 and 2Q25.

BoE preview (14 December)

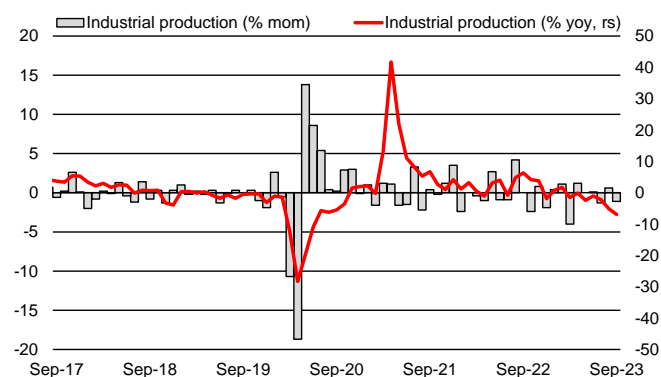
- The Bank of England's Monetary Policy Committee (MPC) will announce its policy decision on 14 December and simultaneously publish the MPC minutes. We expect the MPC to vote 6-3 to maintain the bank rate at 5.25%, in what would be a repeat of the November vote. External MPC members Megan Greene, Jonathan Haskel, and Catherine Mann will likely repeat their preference to raise the bank rate by 25bp. Financial market expectations see zero probability of a hike.
- The macro data since the 2 November *Monetary Policy Report* favors no change to policy. CPI inflation fell to a two-year low of 4.6% yoy in October, 0.2pp below the MPC forecast, from 6.7% in the prior month. The drop was largely driven by electricity and gas prices, but food inflation also continued to ease, and core inflation fell 0.4pp to 5.7% yoy. Services inflation, which the MPC pays close attention to, fell to 6.6% from 6.9% yoy, below the MPC's forecast, which was for it to remain unchanged. The labor market continued to soften, judging by lower vacancies. But uncertainty surrounding the true health of the labor market remains high due to the ONS' suspension of the results of the Labor Force Survey due to low response. Private-sector regular pay growth (also watched closely by the MPC) eased to 7.8% 3M yoy in September, from 8.1% in August. The three-month annualized rate slowed by more, to 5.8%. The economy stagnated in 3Q23, in line with MPC expectations, and the composite PMI remains weak, though it did rise to 50.7 in November from 48.7 in October.
- With pay growth well in excess of the 3-3.5% that could reasonably be deemed consistent with meeting the inflation target, and services inflation still running at three times the 2% target, the MPC will not entertain talk of rate cuts. In November, the MPC updated its rate guidance to prepare markets for an extended pause. It stated, "The MPC's latest projections indicated that monetary policy was likely to need to be restrictive for an extended period of time". In the MPC's November *Report*, and assuming the bank rate followed the market-implied path back then (which declined gradually from the current 5.25% to 5.1% in 4Q24 and 4.5% in 4Q25), its mean projection for CPI inflation was 2.2% in two years' time and 1.9% in three years' time. The alternative inflation projection based on a constant bank rate of 5.25% saw inflation back to 2% in two years' time and to 1.6% in three years' time. Financial markets have moved a lot since then, with a first cut by June 2024 fully priced in, 75bp of cuts by end-2024, and 140bp of cuts by end-2025. The MPC is highly unlikely to rubber stamp this, but it is also unlikely to push back firmly against market expectations, given the high uncertainty surrounding the outlook. We still expect rate cuts to start in 3Q24, slightly later than cuts by the Fed and the ECB, reflecting the higher stickiness of wage growth and services inflation in the UK. But with the economy likely to enter a recession in the coming quarters, and inflation clearly moving down towards 2% next year, we expect quite rapid cuts once they start, with one 25bp cut per meeting through next year.

Norges Bank preview (14 December)

- On Thursday next week, we expect the Norges Bank's board to decide on another and final policy rate hike of 25bp to 4.50% and be done with monetary policy tightening. The next move will likely be a cut, to be delivered in June 2024.
- Although no size was provided, a December hike was already indicated in November. The Norges Bank stated then that, depending on macro data, an upward move was possible in December. Although the growth outlook for Norway is weak and the oil price has decelerated, we think that the board's decision will be based mainly on still-high inflation data.
- Inflation has decelerated but is still elevated: overall consumer price inflation is now 4%. Excluding energy prices, which have fallen, inflation has been oscillating at around 6% since July 2023. Prices for many goods and services have accelerated at a fast pace. The oil price has weakened by 13% in NOK terms since the November meeting, unemployment has remained low but is expected to edge up somewhat ahead, and economic activity is expected to fall in 1Q24 from stagnation in 2H23.

Eurozone

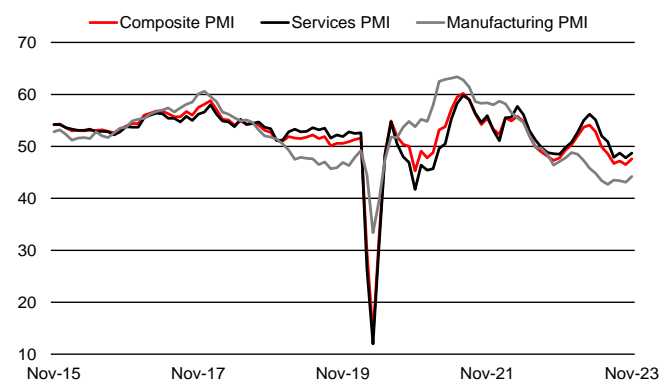
October industrial production likely further declined



Wed, 13 Dec, 11:00 CET		UniCredit	Consensus	Last
Industrial Production (% mom)	Oct	-0.3	n/a	-1.1

- Industrial production is likely to have further declined, by 0.3% in October, following a 1.1% mom decline in September.
- The industrial sector remains under pressure due to weak global demand for goods and fading support from order backlogs.
- The latest surveys of industrial activity indicate that contraction in demand may have bottomed out, while the ability of firms to use inventories of finished goods to fill new orders appears to have declined.

PMIs set to remain stuck in contraction territory

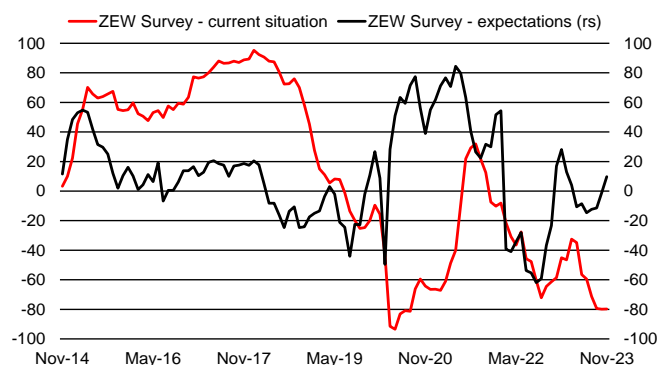


Fri, 15 Dec, 10:00 CET		UniCredit	Consensus	Last
Manufacturing PMI, index	Dec	44.4	n/a	44.2
Services PMI, index	Dec	49.0	n/a	48.7
Composite PMI, index	Dec	48.0	n/a	47.6

- We expect the composite PMI to increase to 48 in December. At face value, the index points to slight GDP contraction/stagnation in 4Q.
- The increase in the composite index is likely to reflect a mild improvement in both manufacturing and services. In particular, manufacturing indices, which are at much lower levels than those of services, are likely to confirm signs of the bottoming out observed last month.
- Hiring and price trends will be closely monitored as they provided conflicting evidence to the ECB's narrative last month. On the one hand, the modest decline in employment flagged by the composite PMI indicator for the first time since January 2021 supported the central bank's expectations that the transmission of monetary policy is taking steam out of the labor market (and consequently wage inflation). On the other hand, stalled progress on selling-price disinflation frustrated expectations of an accelerating decline in corporate pricing power in an environment of weak demand.

Germany

ZEW growth expectations likely to decline

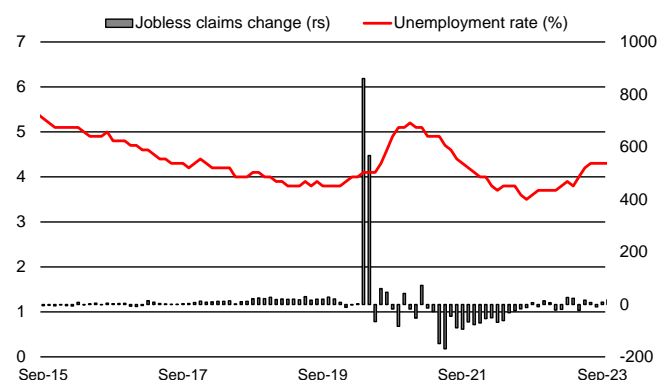


Tue, 12 Dec, 11:00 CET		UniCredit	Consensus	Last
ZEW survey – current situation	Dec	-76.0	n/a	-79.8
ZEW survey – expectations	Dec	5.0	n/a	9.8

- We expect ZEW growth expectations to decline to a level of about 5 after 9.8 in November. This would be the first decrease after four consecutive increases.
- The major trigger is concern about a too-restrictive fiscal policy stance after the recent ruling of the German Constitutional Court on off-balance-sheet budgets.
- However, the recent DAX rally is likely to prevent an even sharper decline, as institutional investors also participate in the survey.

UK

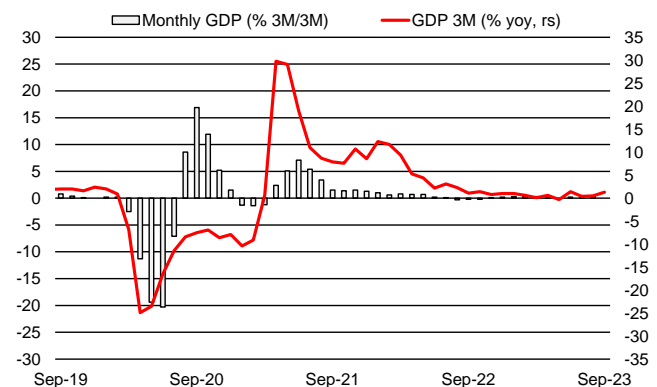
The labor market likely continued to soften



Tue, 12 Dec, 08:00 CET		UniCredit	Consensus	Last
Avg. weekly earnings, 3M, % yoy	Oct	7.8	n/a	7.9
Earnings ex. bonus, 3M, % yoy	Oct	7.5	n/a	7.7

- The ONS has announced that the Labour Force Survey estimates of employment and unemployment will not resume until the January publication. Instead, the ONS will publish experimental estimates based on payrolls and the claimant count, which tend to be revised a lot and, hence, should be interpreted with caution.
- The ONS will, however, publish wages and vacancies data, as usual. Average weekly earnings growth excluding bonuses likely fell to 7.5% 3M yoy in October, from 7.7% in September. The three-month annualized rate of private-sector regular pay growth fell to 5.8% in September, down from 10.5% in June. Vacancies likely continued to fall.

Monthly GDP likely fell slightly at the start of 4Q



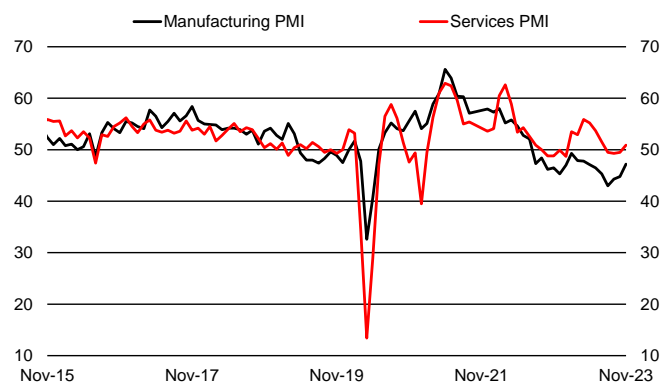
Wed, 13 Dec, 08:00 CET		UniCredit	Consensus	Last
Monthly GDP, % mom	Oct	-0.1	n/a	0.2

- Monthly GDP probably contracted 0.1% mom in October after a rise of 0.2% mom in September. Underlying economic activity likely slowed, with the composite PMI in contractionary territory at 48.7 in October, although it subsequently recovered to 50.7 in November on a pick-up in services output.
- Public-sector industrial strike action was little changed in October compared to September. However, it eased notably in November, with strikes by NHS doctors ending after they reached a pay deal with the government, which would have boosted output in November.
- We still expect the UK to enter a mild recession next year.

Source: Bloomberg, UniCredit Research

UK (continued)

Services PMI likely to fall back

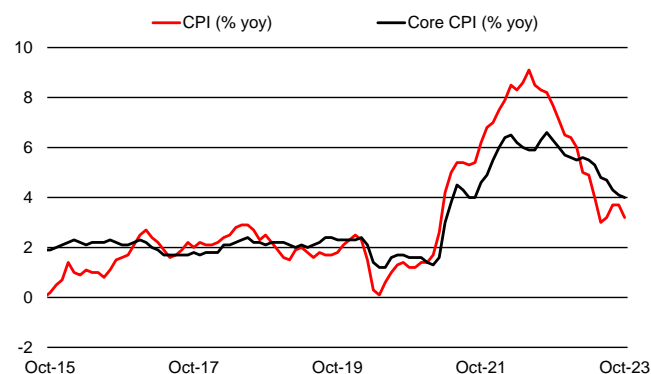


Fri, 15 Dec, 10:30 CET		UniCredit	Consensus	Last
Manufacturing PMI	Dec	47.5	n/a	47.2
Services PMI	Dec	49.5	n/a	50.9

- The services PMI is likely to fall back to 49.5 in December, after surprisingly rising to 50.9 in November. While lower inflation is supporting real incomes, tight credit conditions, a softer labor market, tighter fiscal policy, and exhausted savings buffers are likely to drive cuts in discretionary spending.
- The manufacturing PMI will probably edge up to 47.5 in December. The sector continues to face significant headwinds from high interest rates and weak global growth, but the pace of decline seems to be easing.

US

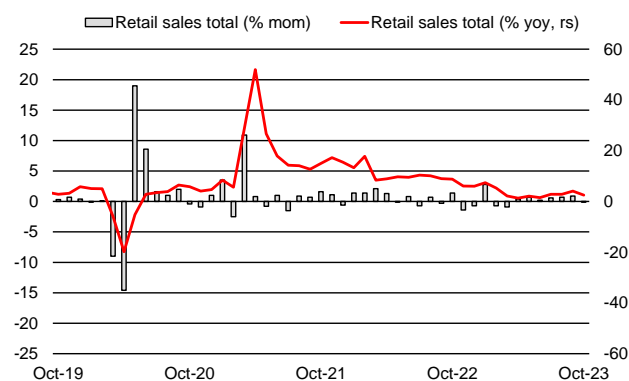
CPI inflation likely reaccelerated in monthly terms



Tue, 12 Dec, 14:30 CET		UniCredit	Consensus	Last
CPI, % yoy	Nov	3.1	3.1	3.2
Core CPI, % yoy	Nov	4.0	4.0	4.0
CPI, % mom	Nov	0.1	0.1	0.0
Core CPI, % mom	Nov	0.3	0.3	0.2

- We expect headline CPI inflation of only 0.1% mom in November, which would take the yoy rate down slightly to 3.1%. The weak reading is driven by a large fall in gasoline prices of about 6% mom in seasonally adjusted terms, while food price inflation probably eased slightly.
- Core inflation, instead, will likely rise at 0.3% mom from 0.2% (flat at 4.0% yoy), with downside risks. The large fall in hotel prices in October was probably not repeated in the following month. We expect core services, including housing prices, to remain the main driver of core inflation, while core goods prices are likely to continue contracting slightly.

Retail sales to continue contracting



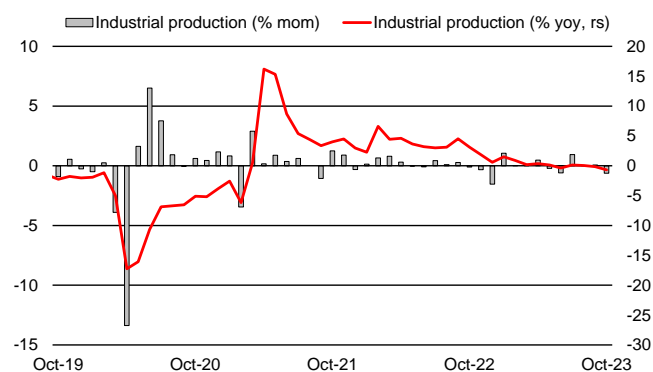
Thu, 14 Dec, 14:30 CET		UniCredit	Consensus	Last
Retail sales, % mom	Nov	-0.1	-0.1	-0.1

- We expect nominal retail sales to have contracted slightly again in November by 0.1% mom.
- The main drivers of the contraction will have been a drop in unit auto sales as well as falling gasoline prices.
- We expect consumer spending weakness to continue in the coming months, as labor market tightness is likely to continue to ease, while higher borrowing costs, the resumption of student loan repayments, and reduced savings buffers will act as a drag on the purchasing power of American households.

Source: Bloomberg, UniCredit Research

US (continued)

Industrial production likely partially rebounded



Fri, 15 Dec, 15:15 CET	UniCredit	Consensus	Last
Industrial production, % mom	Nov	0.3	0.2
			-0.6

- Industrial production likely partially rebounded in November, rising 0.3% mom after a 0.6% contraction in the prior month.
- The main reason is the United Auto Workers' strike, which triggered a 10% fall in motor vehicle production in October. The strike ended on 30 October, so output likely rebounded in November. But the underlying health of the manufacturing sector remains weak, with the ISM manufacturing index unchanged at 46.7 in November.

Source: Bloomberg, UniCredit Research

Tullia Bucco, Economist (UniCredit Bank, Milan)
Dr. Loredana Federico, Chief Italian Economist (UniCredit Bank, Milan)
Dr. Andreas Rees, Chief German Economist (UniCredit Bank, Frankfurt)
Chiara Silvestre, Economist (UniCredit Bank, Milan)
Marco Valli, Global Head of Research (UniCredit Bank, Milan)
Daniel Vernazza, PhD, Chief International Economist (UniCredit Bank, London)
Edoardo Campanella, International and Energy Economist (UniCredit Bank, Milan)

FI Strategy

Asymmetric risks to bond yields

Elia Lattuga,
Deputy Head of Strategy Research,
Cross Asset Strategist
(UniCredit Bank, Milan)
+39 02 8862-0851
elia.lattuga@unicredit.eu

- Demand for government bonds remains solid, pushing short and long-term bond yields lower across curves, with broad spillover to the fixed-income universe.
- Upcoming data releases and central-bank meetings pose asymmetric risks to government bonds following the recent rally and might lead to headwinds for momentum. Neither the Fed nor the ECB might be bold enough to turn bond markets around.

The past few trading sessions brought little sign of a slowdown in the positive momentum for global bonds. The UST curve shifted lower, taking the 10Y yield 80bp below its peak in mid-October and the 2Y about 60bp lower. We think yields are moving in the right direction, but the pace of decline raises the risk of a sell-off in the short term. Indeed, the recent drop for the 10Y UST yield ranges within the most extreme 3% moves recorded since the early 1960s (e.g. over a seven-week period) or the most extreme 1% if we exclude the sharp gyrations during the 1980s. Post-pandemic, similar declines in yields were recorded in March/April 2023 and in June/July and October/December 2022, and followed by sharp sell-offs (Chart 1). For two of the events, the rise in yields became a lasting upward correction of over 150bp.

The role of declining inflation compensation...

While both real yields and breakeven dropped, the contribution of the latter was more sizable than in March-April 2023 and June-August 2022. About 35% of the drop was due to a decline in the 10Y breakeven, fueled by the deceleration in US CPI. A similar adjustment happened in late 2022, but disinflation was in its early stages back then and the CPI yoy rate was much higher (i.e. 6.5-8%). The pace of disinflation is set to slow over the coming months and while the upcoming inflation print will point to some gradual easing in price dynamics, given the level of inflation and breakevens (trading in the 2.15% area at the 10Y tenor), there appears to be limited room for additional inflation-compensation-driven drop in 10Y yields. Real yield levels remain close to their highest prints in fifteen years, hence they might have more room to drop. We project lower real yields over the medium term but, given the uncertain post-pandemic equilibrium level for US rates, a sizable reassessment might take time.

... and of fed fund expectations

Similar to late-2022, the recent drop in 10Y UST yields was related to a change in views regarding Fed expectations. The spread between Dec-25 and Dec-23 fed funds future contracts has been dropping as markets reined in excessively hawkish expectations and then moved to project steeper rate cuts over the next two years. The adjustment in Fed expectations was pronounced in relative terms compared to post-pandemic UST rallies.

CHART 1: ONGOING AND PAST 10Y UST RALLIES

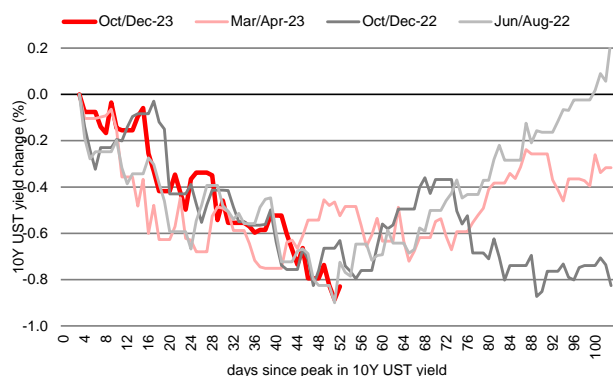
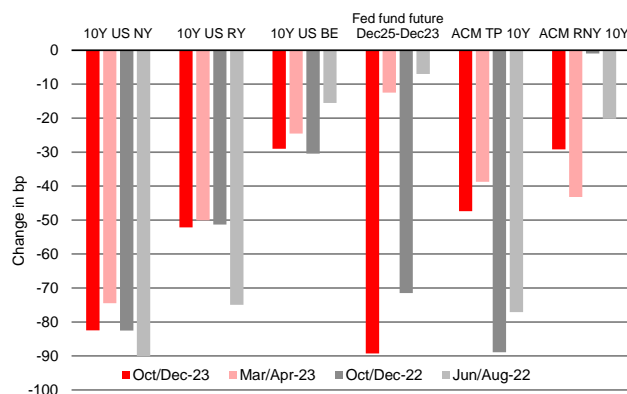


CHART 2: BREAKING DOWN THE MOVE IN 10Y UST YIELDS



Source: Bloomberg, UniCredit Research

In this respect, while no action is expected from the Fed or the ECB at their December meeting, any significant change in rhetoric or in their forecasts could pose repricing risks, given that forwards anticipate nearly 125bp in rate cuts from the Fed and 150bp from the ECB by December 2024. That said, recent comments by ECB and Fed speakers suggest that their pushback against market expectations will unlikely be bold enough for a U-turn in yields.

Technical factors at play

Chart 2 also suggests that a drop in the term premium contributed to a significant extent to the move, but not as much as during the 2022 rallies, which might be the result of the ongoing structural reassessment of the term premium level. In fact, just a few weeks ago, market rhetoric was squarely focused on the large US borrowing needs, the impact of quantitative tightening as well as the resilience of the US economy. While markets are rightly focused on the next steps by the Fed, such headwinds might reappear once supply picks up and add to the term premium. Limited supply, not unusual for this time of year, as well as seasonal factors might have also contributed to the rally. November tends to be a positive month for long-dated USTs. Over the past ten years, 10Y UST yields have dropped by nearly 10bp on average in November, while the 2-10Y flattened and the 30Y mirrored the move in the 10Y.

The decline in yields has had far-reaching consequences, contributing to fueling the tightening in credit spreads, with US HY spreads dropping by over 100bp, and sustaining the equity recovery, as reflected by the 10% rebound in the S&P 500 index. This was largely felt across global markets, contributing to pushing EGB yields lower. EGBs also felt the pressure from slowing eurozone inflation, the still-weak growth picture and, recently, comments acknowledging positive developments in inflation and de facto writing off the possibility of further rate hikes by ECB speakers.

EGBs: core-periphery and PEPP reinvestments

Core-periphery spreads across the EGB market benefited from the bond-positive environment, but recent comments by ECB President Lagarde, echoed by Isabel Schnabel on the ECB discussing reinvestments under the PEPP in the “not-too-distant future”, poured cold water on the tightening. Questions on this topic are likely to be asked during the next ECB meeting Q&A and we think Ms. Lagarde will reiterate the above message. Given recent comments, the probability that PEPP reinvestments will continue in full in 2024 has declined. As noted in the *Macro overview* section, we are highly skeptical that benefits of an early run-off outweigh risks. Disinflation is a boon to bond investors but positive bond-market sentiment in the context of limited supply pressure as we head towards year-end should not be misinterpreted by investors being relaxed about supply prospects for 2024. The rate dynamics of the past six months suggest that market sentiment can change abruptly, while the growth and inflation outlook for the eurozone does not warrant additional tightening.

CHART 3: NOVEMBER POSITIVE FOR USTs

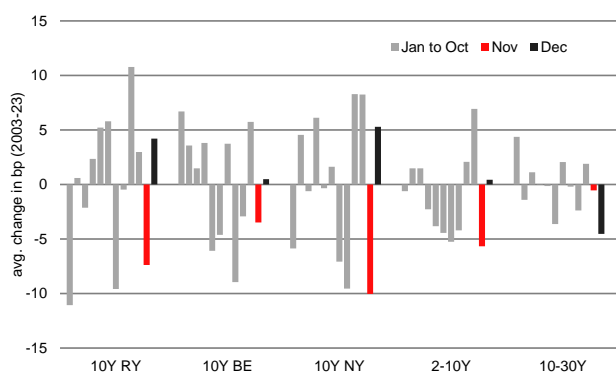
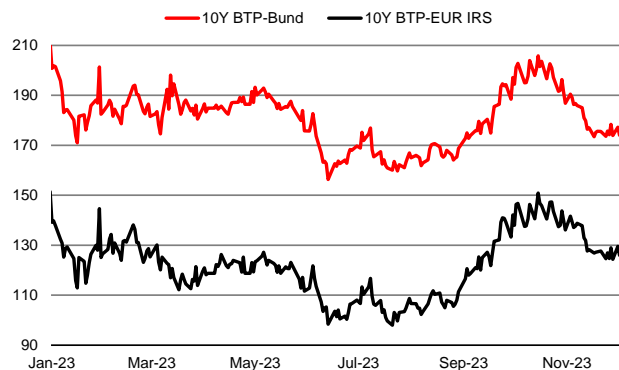


CHART 4: LITTLE IMPACT FROM PEPP DISCUSSION



Source: Bloomberg, UniCredit Research

FX Strategy

Central bank rhetoric to keep FX majors mostly rangebound

Roberto Mialich,
FX Strategist – Global
(UniCredit Bank, Milan)
+392 88 62-0658
roberto.mialich@unicredit.eu

Eszter Gárgyán, CFA,
FX Strategist – CEE
(UniCredit Bank, Munich)
eszter.gargyan@unicredit.de

The US dollar regained ground across the board, but is still down from its recent peaks

Major G10 central banks to be tested by very aggressive rate-cut expectations; a final rate hike in Norway is unlikely to offer the krone much of a lift

FX majors will probably remain stuck within their most recent trading ranges

■ The weekly agenda is really busy, but G10 central bank rhetoric is likely to leave FX majors mostly rangebound. Steady-to-slightly-weaker US CPI data and a moderate increase in eurozone PMIs will probably keep EUR-USD in the 1.07-1.09 trading band.

■ The HUF could enjoy a short-term rally if the EU summit confirms access to EU funds, but medium-term prospects remain bearish. Softening November CPI data may reinforce CZK rate-cut expectations and lift EUR-CZK, although the CNB may still postpone rate cuts.

The slide in eurozone CPI inflation and dovish remarks by different ECB members drove EUR-USD back below 1.08. This helped the US unit regain ground across the board, but the greenback is still far from its recent peaks. The dollar index (DXY) remains barely above 104 (see Chart 1), while US long-term yields are still low. Investors are convinced that the next policy moves in the US and the eurozone will be rate cuts and this prospect cannot offer EUR-USD much support. As shown in Chart 2, market expectations are now implying a start to the easing cycle by the Fed and the ECB in March/April, a scenario we think is very aggressive.

This is the market picture that prevails ahead of the very intense economic agenda scheduled for the coming days. Five major G10 central banks will hold their final meetings of 2023. The Fed, the ECB, the BoE and the SNB are expected to leave rates unchanged. Progress on the inflation front will be broadly acknowledged. At the same time, however, central bankers are likely to stress that inflation has not yet been defeated and that they have to remain vigilant, although the pushback against recent market moves is unlikely to be strong. This will probably be the message from Fed Chair Powell as well as ECB President Lagarde, BoE Governor Bailey and SNB Governor Jordan. New growth and inflation forecasts and projections released by each central bank will likely be closely monitored as well. In contrast, Norges Bank is widely expected to hike the deposit rate by 25bp to 4.50%, which, in our view, is likely to be the last increase in the current tightening cycle. For this reason, we do not see such a hike sparking a strong NOK rally back towards 11.70 against the EUR.

The scenario described above does not indicate significant directionality for the other FX majors either. Each central bank meeting might spark some swings in FX markets on the day, but we do not expect exchange rates to deviate strongly from their recent trading ranges. This is also likely to be the case for EUR-USD after its drop from the peak of 1.1017 touched only on 29 November.

CHART 1: THE USD RECOVERED FROM LOWS DESPITE LONG-TERM YIELDS IN THE US HAVING DECLINED FURTHER

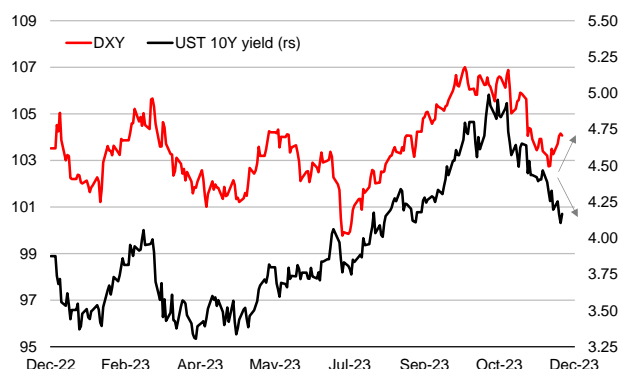
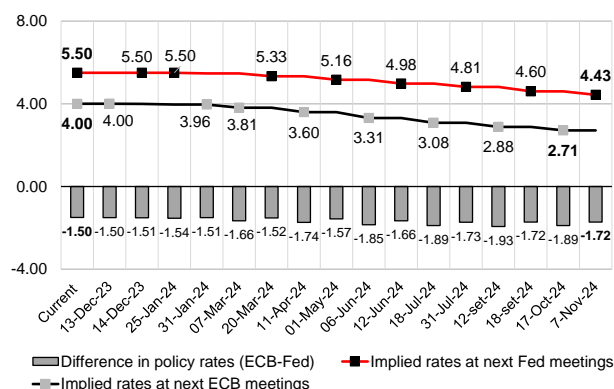


CHART 2: FORWARDS ARE NOW IMPLYING RATE CUTS BY THE FED AND THE ECB AS EARLY AS MARCH/APRIL NEXT YEAR



Source: Bloomberg, UniCredit Research

EUR-USD is set to remain stuck in the 1.07-1.09 trading band amid soft data releases in both the US and the eurozone

The economic data agenda is also busy. We expect steady-to-slightly-weaker in yearly terms US CPI inflation on 12 December to be mildly USD negative. Still, we doubt that EUR-USD will recover much ground, even if US retail sales on 14 December show further weakness. A small decline in the German ZEW survey (on 12 December) and a moderate rise in preliminary PMI surveys for the entire eurozone for December, but remaining below 50 (on 15 December), would not initiate a euro rally either, in our view. On balance, we expect EUR-USD to remain mostly stuck in the 1.07-1.09 band.

Data at home are unlikely to lift the JPY or the GBP further

Elsewhere, we would not expect a steady BoJ Tankan survey for 4Q23 to instigate more JPY strength against the USD beyond 146. Weak monthly GDP, mixed UK PMI surveys and soft labor data in the UK will probably leave GBP-USD still struggling between 1.25 and 1.26.

A steady PBoC is likely to leave USD-CNY close to 7.15

The PBoC will likely leave the 1Y medium-term lending facilities unchanged at 2.50% on 15 December amid talk that the reserve requirement ratio (RRR) might be cut further. Monetary policy in China needs to remain quite accommodative to provide ample liquidity and help the economy. The USD-CNY drop below 7.15 has hitherto largely been driven by the fall of the greenback. Still, we remain prudent about more CNY strength at present as Beijing needs a competitive currency, primarily to counteract the decline in Chinese exports.

EU funds-related headlines expected from the EU summit next week could provide short-term boost to HUF

The ongoing decline in core market yields provided support for CEE currencies, despite the rebound in the USD. Externally-driven FX volatility may pick up next week given potential hawkish surprises from the Fed and the ECB, which could create hurdles for further gains in CEE FX. The HUF may be an outlier as markets await an announcement about partially unlocking Hungary's access to EU funds as the European Council meets next week. The good news may be already priced in, yet Hungary's veto threat against starting EU accession talks with Ukraine and the recently submitted sovereignty bill are adding uncertainty to the potential outcome. We stick to our view that any HUF rally on positive headlines may be a good opportunity to sell the currency, considering fiscal risks, the FX liquidity needs of an upcoming airport transaction and government efforts to lower effective interest rates by broadening the scope of the deposit cap and slashing interest rates on the most attractive retail bonds.

Czech CPI data may provide another dovish factor, firming rate-cut expectations

On the economic agenda in CEE, the Czech November CPI release will be the last key input ahead of the CNB's 21 December rate-setting meeting. Although core inflation momentum shows the most remarkable slowdown in Czechia, the CNB is sticking to a cautious approach, which keeps the odds for a 25bp cut in December even. A soft surprise in November CPI could strengthen rate-cut expectations and put EUR-CZK back on a rising path, especially if Fed and ECB officials surprise markets on the hawkish side.

CHART 3: DECLINING CORE MARKET YIELDS CREATED A SUPPORTIVE ENVIRONMENT FOR CEE CURRENCIES

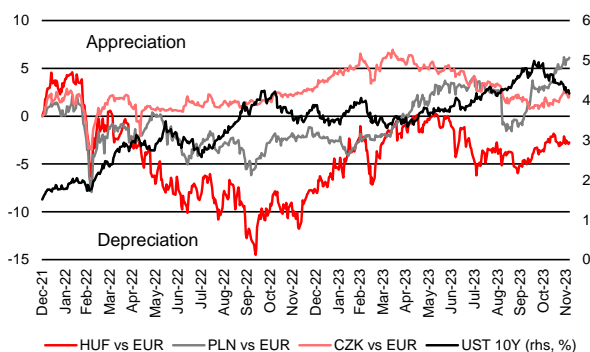
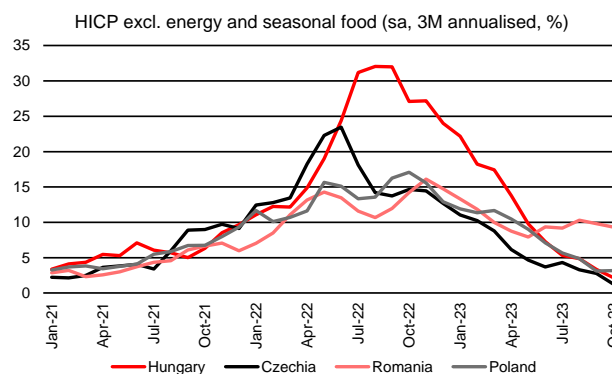


CHART 4: NOVEMBER CZECH CPI MAY REINFORCE ARGUMENTS A START RATE CUTS AS CORE PRICES SLOW



Source: Bloomberg, Eurostat, Macrobond, UniCredit Research

Equity Strategy

Increasing signs that the stock market is overheating

Christian Stocker, CEFA,
Lead Equity Strategist (UniCredit
Bank, Munich)
+49 89 378 18603
christian.stocker@unicredit.de

- The US labor market report tomorrow, next week's US CPI data and central-bank meetings will serve as a litmus test as to whether current stock-market levels are sustainable.
- We think stock markets priced in too much positive developments expected for 2024 too soon. A consolidation is highly likely.

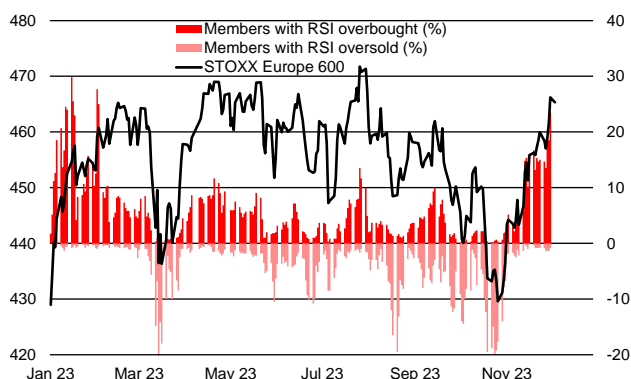
**Upcoming data and central
bank meetings to act as a
litmus test for equities**

At the end of October, stock markets started an extraordinarily strong rally, which was broadly based on a goldilocks scenario of continuing disinflation leading to central banks cutting interest rates and a soft landing of the US economy. Although this is our forecast and therefore, we do not exclude this scenario for next year, a large part of the supporting factors for higher stock-market prices are likely already priced in. Even if disinflation remains on track, the next few months will likely be dominated by uncertainty regarding how strongly past monetary tightening will bite, to what extent the US economy is cooling down and by when the European economy will stabilize. We see risks that economic surprises are skewed to the downside. Although "don't fight the tape"¹ seems to be the motto during the last stretch of the year, we are increasingly cautious and expect the rally to come to an end. New and significant potential is unlikely to emerge again until next year when the overall outlook becomes clearer. A first litmus test for equities is this Friday's US labor market report. If signs of a cooling US labor market emerge or next week's US CPI data and central bank meetings do not result in further significant stock-market gains, investors will likely see this as an indication that the positive news has been largely priced in.

CHART 1: DIFFERENCE BETWEEN CURRENT AND 3M VIX SUGGESTS STOCK MARKETS COULD BECOME MORE SHAKY



CHART 2: A QUARTER OF STOXX EUROPE 600 MEMBERS ARE OVERBOUGHT BASED ON THEIR 14-DAY RELATIVE STRENGTH



Source: Bloomberg, UniCredit Research

**Extremely low implied
volatilities suggest caution**

The current extremely low implied volatilities, last seen in early 2020, suggest that investor confidence in the goldilocks scenario mentioned above is very strong. This is also reflected by the so-called "everything rally" with a high positive correlation between bond and stock markets. Even cryptocurrencies, the sort of speculative, uber-risky assets that struggled when yields were rising, have posted big gains. With December typically being a good month for stocks, it seems no one wants to be short or bet that things will turn shaky. However, the difference between the current VIX and the 3M VIX future has started to increase again from low levels, as Chart 1 shows. In the past, this was often accompanied by a consolidation on stock markets. The probability of the latter happening is further supported by the fact that the proportion of overbought stocks is already very high, as depicted in Chart 2.

¹ "Tape" refers to the ticker tape on Wall Street, which shows real-time stock prices. This advice essentially suggest investors follow the crowd; buy when everyone else is buying and sell when everyone else is selling.

Is bad news for the economy good news for equities?

At the end of November, surprisingly strong US GDP data as well as stabilizing PMIs in Europe provided additional reasons to embrace the “stock-positive” narrative. Nevertheless, while economic surprises are showing improvement in Europe, they are still negative, while the US equivalent is on a downward trend. This will likely continue. We expect a material slowdown in US growth in 2024 and forecast a broadly flat trajectory for quarterly GDP growth next year, reflecting the lagged effects of tighter financial and credit conditions, less-supportive fiscal policy, and reduced buffers from savings and labor-market tightness. Against this background, the extent of the recent stock-market recovery or at least an expected continuation of the rally is being questioned. The closely watched bull-bear spread of the American Association of Individual Investors survey recently showed the most-bullish stance since July, nearing levels not seen since April 2021. Chart 3 shows that the US stock market has not achieved a sustained increase in an environment of falling economic surprises. In combination with technical indicators showing overbought stock-market levels, a consolidation or at least a longer sideways movement has to be expected.

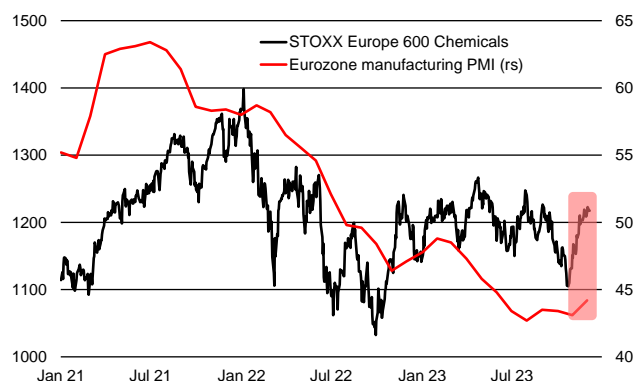
Chemicals already pricing in easing pressure for earnings

Next Friday, we will gain new insights from the December eurozone PMIs as to whether the economy continues to stabilize at low levels. The chemicals sector is a very early cyclical bellwether, as chemicals are needed for almost every type of production. Therefore, another slight increase in the eurozone manufacturing PMI, albeit at low levels, could further support chemicals. However, the latest rally, which pushed the sector up by more than 10%, has little to do with the fundamentals of those companies. Earnings in the sector have dropped by a third this year, a lot of companies have missed estimates during the latest earnings season, and this even after a steady stream of profit warnings. Against this background, the current situation is contradictory. Latest PMI readings indicate a stabilization but still-contracting business activity, highlighting demand-side challenges for chemical companies. Also, high energy prices and borrowing costs pose a burden. This all points to continuing stress. The question, however, is whether these challenges are already largely reflected in expected earnings. We think this is the case and have an overweight recommendation for European Chemicals. However, for the outperformance to continue, we need signs from fundamentals that the pressure on earnings is abating, particularly after the recent strong increase in the stock prices of Chemicals.

**CHART 3: FADING ECONOMIC SURPRISES IN THE US RAISE
QUESTIONS ABOUT THE SUSTAINABILITY OF THE RALLY**



**CHART 4: CHEMICALS ALREADY PRICE IN A STABILIZATION
OF ECONOMIC GROWTH**



Source: Bloomberg, UniCredit Research

ESG Credit Strategy

SLB supply and design impacted by investor criticism

Jonathan Schroer, CFA,
Credit Strategist – ESG
(UniCredit Bank, Munich)
+49 89 378-13212
jonathan.schroer@unicredit.de

SLBs are a valuable tool for transitional finance, but their structure has attracted criticism

After surging in 2021, SLB supply has declined sharply

- Sustainability-linked bonds (SLBs) experienced a surge of issuance in 2021 but supply only partially recovered in 2023 after a steep drop in 2022. Lower high-yield issuance and controversies concerning product design have impacted supply and demand trends.
- An ongoing dialogue between issuers and investors appears to have resulted this year in stricter standards, including increased penalties, for missed targets. A more-selective investor approach appears to be driving these changes.

The SLB market has shown volatile trends after the surge in issuance in 2021. Since then, a number of factors have cooled enthusiasm toward the product. SLBs have attracted controversy in regard to how relevant they are for ESG investors, who want to see their funds allocated to companies that are actively involved in making the transition to alternative energy sources and lower CO2 emissions. SLBs are often issued by companies that do not have a sufficient quantity of investments ready to make from the proceeds of a bond. An SLB allows companies to invest proceeds gradually over many years, with progress measured by key performance indicators (KPIs). In contrast to use-of-proceeds bonds (i.e. green, social, sustainable bonds), SLBs do not need to explicitly document how or when the funds will be invested, but companies need to demonstrate progress achieving the KPIs. This gives SLBs potential to be a valuable transitional finance tool for companies making a multi-year transition in their business models. SLBs have been attractive to a broader range of industries than use-of-proceeds bonds. However, this structure of monitoring the transition through KPIs has also been a lightning rod for criticism as investors question whether the targets embedded in the KPIs are strict enough and whether the penalties for failing to achieve these targets are high enough to have a material impact.

We think an increasingly critical approach from investors has been one factor that has weighed on SLB issuance in 2022-23 (Chart 1). Another factor has been a decline in high-yield issuance in that period since high-yield companies have been more active issuing SLBs than use-of-proceeds bonds, with SLBs accounting for around 67% of total ESG high-yield issuance (IG: 27%). The rapid increase in interest rates in 2022-23 has weighed on high-yield issuance, which has had a negative knock-on effect for SLB issuance. EUR-denominated SLB issuance improved slightly in 2023 with an increase of 7% yoy through 11M23. One factor that has boosted supply in the EUR-denominated market has been the return of high-yield issuers in 2023, especially in the BB category, after a significant drop-off in 2022 (Chart 2).

CHART 1: ISSUANCE VOLUME TRENDS (IN EUR)

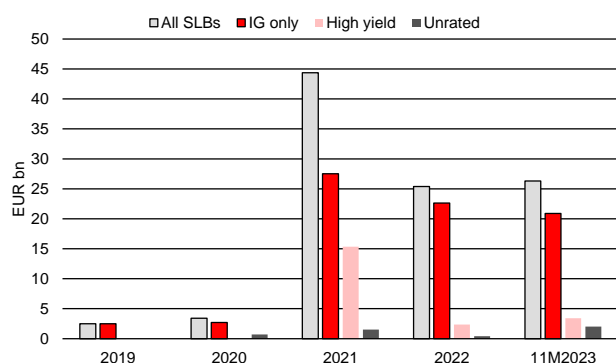
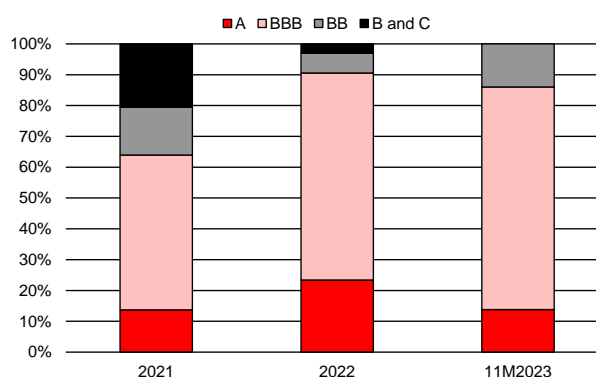


CHART 2: RATING TRENDS OF NEW SLB SUPPLY (IN EUR)



Source: Bloomberg, UniCredit Research

Investors are increasingly questioning whether SLB targets are ambitious enough

Although it is impossible to quantify the impact, we think that some of the criticism that SLBs have received has burdened new issuance. The growth spurt in 2021, when the product established itself as a major category in the ESG bond market, also led to a backlash as investors and analysts criticized many of the new bonds for having weak targets. The point of an SLB is to measure an issuer's progress toward achieving certain sustainable targets; however, some bonds appear destined to document success in achieving their targets without major changes in corporate policy. There has even been some commentary that no company wants to be among the first to fail. If success reaching the KPIs is too easy, it raises the question of whether the targets have been set ambitiously enough. Although a review of individual KPIs does show numerous cases in which meeting targets is likely without major changes to the status quo, we think it is too early to state that the majority of SLBs lacks ambition. Since the KPI trigger dates are usually set well in the future – given the transitional nature of the product – few of the triggers have yet been reached. A real test will come in 2024 when EUR 11bn in bonds with 2023 trigger dates will be evaluated (Chart 3). Already there is increased speculation that a number of these bonds are on track to miss their targets. A major test will come in 2026 when 2025 KPIs of a large volume of bonds (EUR 42bn) will be evaluated as a natural marker on the way to 2030 sustainability goals.

Increasingly selective investor behavior appears to have resulted in tougher standards in 2023

Another criticism of SLBs is whether the penalties in the event of failure are high enough to have a material impact. There are many models for how penalties are incurred. Some involve a single penalty upon maturity, others have a coupon step-up that remains in force until the target is reached, while others have multiple triggers for multiple KPIs. On average, we calculate most of these maximum penalties if all KPIs are breached in a range of 0.5% to 1.5% of the bond's face value (Chart 4). While there was some loosening of standards in 2022, average penalties increased in 2023. We think that this is largely attributable to greater investor awareness of weaknesses in the first wave of SLBs. As investors and issuers work together to develop the product further, we expect penalties and KPIs to evolve. We have also noticed that Scope 3 emissions are now included in KPI structures more often than they were in 2021, which also indicates tougher standards. We expect this dialogue to evolve, similar to how covenant structures evolve in the high-yield market. As with high-yield covenants, KPIs and penalties are likely to become stricter as investors become more selective. In periods of high investor demand, standards tend to slacken. We think that the tougher standards for SLBs in 2023 is the result of the more-selective investor behavior, especially in 2H23, and discussed in our recently published [2024-25 Macro & Markets Strategy Outlook](#). One question that remains is whether ESG investors will want to be holders of bonds that fail to meet their KPIs, despite the higher compensation they would offer. Whether investors would seek to offload such bonds in advance and whether another class of investor would seek upside in such a scenario will be something to watch in the next stage of SLBs' development.

CHART 3: KPI TRIGGER DATES

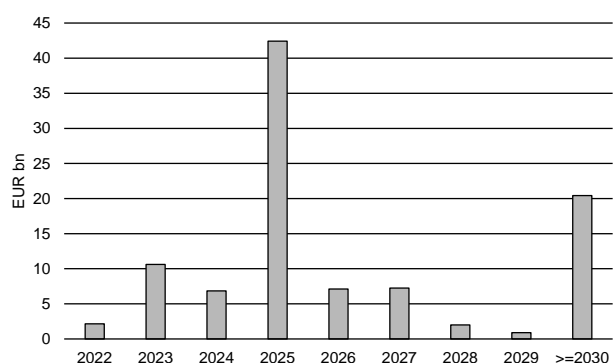
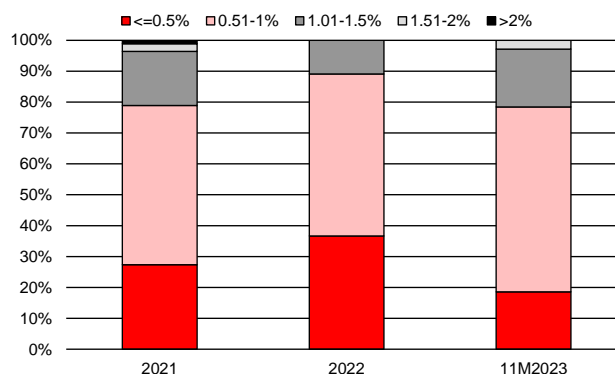


CHART 4: MAXIMUM LIFETIME PENALTIES



Source: Bloomberg, UniCredit Research

UniCredit economic forecasts

	Real GDP (% yoy)			Consumer prices (% yoy)			Budget balance (% of GDP)		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
Industrialized countries									
US	2.4	1.0	1.0	4.1	2.6	1.8	-8.2	-7.4	-7.4
Euro Area	0.5	0.5	1.2	5.5	2.5	1.8	-3.6	-3.2	-2.9
Germany	-0.4*	0.4*	1.3*	6.0	2.7	1.7	-2.5	-2.0	-2.0
France	0.9	1.0	1.1	5.0	2.8	1.7	-4.9	-4.4	-3.9
Italy	0.7	0.6	1.1	5.7	2.2	1.8	-5.4	-4.4	-3.8
Spain	2.6	1.4	1.5	3.8	3.1	2.0	-4.2	-3.9	-3.0
Austria	-0.5	0.3	1.5	7.8	3.6	2.3	-2.8	-2.5	-2.5
Greece	2.4	1.4	1.7	4.0	2.9	1.6	-1.9	-1.6	-1.0
Portugal	2.3	0.9	1.4	5.0	3.0	1.7	-0.4	-0.5	-0.1
UK	0.5	-0.3	0.8	7.4	3.1	1.9	-5.4	-4.5	-3.5
Switzerland	0.7	1.2	1.6	2.1	1.2	1.0	-0.4	0.0	0.3
Sweden	-0.5	0.3	1.6	6.0	2.6	1.9	-0.4	-0.6	0.2
Norway **	1.3	0.6	1.0	5.3	2.7	2.0	15.1	14.4	13.1
Japan	1.8	0.8	1.0	3.2	2.0	1.3	-5.5	-4.5	-3.5
Developing countries									
Central & Eastern Europe									
Russia	2.5	1.3	1.3	7.3	4.1	4.0	-2.6	-3.4	-1.6
Poland	0.3	3.5	3.4	7.0	4.4	4.0	-5.2	-4.4	-3.6
Czechia	-0.4	1.5	2.5	7.1	3.7	2.8	-3.9	-2.8	-3.0
Hungary	-0.7	3.3	3.8	6.2	6.4	5.8	-5.8	-4.8	-3.7
Turkey	4.2	3.0	3.9	65.0	43.0	24.0	-5.0	-4.8	-4.1
Emerging Asia									
China	5.2	4.5	4.3	0.7	1.4	1.6	-7.1	-6.9	-6.8

Real GDP (% qoq sa)	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25
US (non-annualized)	1.3	0.3	0.1	-0.1	-0.1	0.2	0.3	0.4	0.4	0.4
Euro Area	-0.1	-0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Germany	-0.1	-0.2	0.1	0.3	0.3	0.3	0.4	0.4	0.4	0.4
France	-0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Italy	0.1	0.0	0.1	0.3	0.3	0.2	0.3	0.3	0.3	0.3
Spain	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Austria	-0.5	0.0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4
UK	0.0	0.0	-0.1	-0.2	-0.2	0.2	0.3	0.3	0.3	0.3
Switzerland	0.3	0.1	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Sweden	0.0	-0.3	0.2	0.3	0.3	0.3	0.3	0.5	0.5	0.5
Norway (mainland)	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Russia (%yoy)	4.3	4.4	3.3	2.1	0.4	-0.5	0.1	0.9	1.8	2.6
Poland (%yoy)	0.7	2.2	5.5	4.0	2.8	2.0	3.7	3.3	3.0	3.5
Czechia	-0.5	0.2	0.6	0.7	0.6	0.6	0.7	0.5	0.6	0.6
Hungary (%yoy)	-0.4	0.9	2.0	3.9	5.3	1.9	5.2	3.8	3.5	2.9
Turkey (%yoy)	5.9	3.0	4.4	1.6	2.5	3.5	2.9	3.8	4.2	4.5

Consumer prices (% yoy)***	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25
US	3.5	3.2	3.0	2.9	2.4	2.2	1.9	1.7	1.7	1.8
Core rate (ex food & energy)	4.4	3.8	3.2	2.6	2.5	2.4	2.2	2.1	2.0	2.1
Euro Area	5.0	2.9	2.8	2.7	2.2	2.2	1.9	1.7	1.7	1.7
Core rate (ex food & energy)	5.1	3.9	3.2	2.7	2.4	2.5	2.2	2.1	2.0	1.9
Germany	5.6	3.7	3.3	2.6	2.5	2.7	2.1	1.8	1.5	1.4
France	4.7	4.2	3.3	3.0	2.8	2.3	1.8	1.7	1.7	1.7
Italy	5.6	1.4	2.0	2.2	2.4	2.3	2.0	1.9	1.7	1.7
Spain	2.7	4.7	4.2	3.7	2.7	2.0	2.4	2.1	1.8	1.8
Austria	6.8	5.3	4.7	3.9	3.3	2.6	2.3	2.3	2.4	2.2
UK	6.7	4.5	4.3	2.7	2.9	2.6	2.0	1.8	1.7	1.9
Switzerland	1.6	1.6	1.2	1.0	1.2	1.5	1.2	1.2	0.9	0.6
Sweden	5.0	3.6	2.9	2.8	2.4	2.3	2.1	1.8	1.8	1.8
Norway	4.5	3.9	3.0	2.9	2.5	2.4	2.0	1.9	1.9	2.0
Russia, eop	6.0	7.3	7.3	6.8	5.0	4.1	3.9	3.8	3.9	4.0
Poland, eop	8.2	7.0	4.2	4.0	5.4	4.4	3.5	3.8	4.0	4.0
Czechia, eop	6.9	7.1	3.3	3.6	3.4	3.7	3.0	3.1	3.0	2.8
Hungary, eop	12.2	6.2	6.0	7.1	5.5	6.4	5.1	6.0	5.8	5.8
Turkey, eop	61.5	65.0	64.7	71.0	45.4	43.0	36.8	31.0	27.0	24.0

*Non-wda figures. Adjusted for working days: -0.2% (2023), 0.4% (2024) and 1.4% (2025)

Source: UniCredit Research

**Mainland economy figures. Overall GDP: 1.4% (2023), 0.7% (2024), 1.2% (2025)

***CEE CPI figures are end-of-period.

UniCredit FI forecasts

INTEREST RATE AND YIELD FORECASTS (%)

	Current	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25
EMU									
Refi rate	4.50	4.50	4.25	4.00	3.75	3.50	3.25	3.00	2.75
Depo rate	4.00	4.00	3.75	3.50	3.25	3.00	2.75	2.50	2.25
3M Euribor	3.95	3.95	3.70	3.45	3.20	2.95	2.70	2.45	2.20
Euribor future		3.60	3.16	2.79	2.54	2.37	2.27	2.22	2.17
2Y Schatz	2.60	2.85	2.60	2.40	2.20	2.05	1.90	1.80	1.70
fwd		2.29	2.08	1.93	1.83	1.81	1.80	1.78	1.78
5Y Obl	2.16	2.60	2.45	2.30	2.20	2.10	2.05	2.00	1.95
10Y Bund	2.21	2.65	2.55	2.45	2.40	2.35	2.30	2.30	2.30
fwd		2.21	2.19	2.18	2.19	2.21	2.23	2.25	2.28
30Y Bund	2.41	2.80	2.80	2.80	2.80	2.85	2.85	2.85	2.90
2/10	-39	-20	-5	5	20	30	40	50	60
2/5/10	-49	-30	-25	-25	-20	-20	-10	-10	-10
10/30	19	15	25	35	40	50	55	55	60
2Y EUR swap	3.09	3.30	3.05	2.85	2.60	2.45	2.30	2.20	2.10
5Y EUR swap	2.69	3.05	2.90	2.75	2.60	2.50	2.45	2.40	2.35
10Y EUR swap	2.71	3.10	3.00	2.90	2.80	2.75	2.70	2.65	2.65
10Y BTP	3.97	4.55	4.35	4.15	4.05	3.95	3.85	3.85	3.80
US									
Fed fund	5.50	5.50	5.25	4.75	4.25	4.00	3.75	3.50	3.25
3M OIS SOFR*	5.38	5.25	4.93	4.39	4.04	3.81	3.55	3.30	3.04
fwd		5.16	4.84	4.54	4.01	3.74	3.66	3.53	3.40
2Y UST	4.61	4.90	4.60	4.30	4.00	3.80	3.60	3.40	3.20
fwd		4.35	4.18	4.06	3.96	3.92	3.89	3.84	3.82
5Y UST	4.15	4.55	4.35	4.15	3.95	3.80	3.65	3.55	3.45
10Y UST	4.16	4.55	4.40	4.25	4.15	4.00	3.90	3.85	3.80
fwd		4.14	4.12	4.12	4.12	4.14	4.15	4.17	4.19
30Y UST	4.26	4.70	4.60	4.50	4.40	4.30	4.25	4.20	4.20
2/10	-45	-35	-20	-5	15	20	30	45	60
2/5/10	-47	-35	-30	-25	-25	-20	-20	-15	-10
10/30	11	15	20	25	25	30	35	35	40
2Y USD swap	4.42	4.85	4.55	4.25	3.95	3.75	3.55	3.35	3.15
10Y USD swap	3.82	4.35	4.20	4.05	3.95	3.80	3.70	3.65	3.60
UK									
Key rate	5.25	5.25	5.25	5.00	4.50	4.00	3.50	3.00	2.75
Spreads									
10Y UST-Bund	194	190	185	180	175	165	160	155	150
10Y BTP-Bund	175	190	180	170	165	160	155	155	150
10Y EUR swap-Bund	50	45	45	45	40	40	40	35	35
10Y USD swap-UST	-34	-20	-20	-20	-20	-20	-20	-20	-20

Source: Bloomberg, UniCredit Research

UniCredit FX forecasts

EUR	Current	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	3M	6M	12M
G10												
EUR-USD	1.08	1.10	1.11	1.12	1.13	1.13	1.14	1.14	1.15	1.10	1.11	1.13
EUR-CHF	0.94	0.97	0.98	0.99	1.00	1.00	1.01	1.01	1.02	0.97	0.98	1.00
EUR-GBP	0.86	0.87	0.88	0.88	0.88	0.89	0.91	0.93	0.95	0.87	0.88	0.88
EUR-JPY	156	163	162	162	162	160	160	158	158	163	162	162
EUR-NOK	11.80	11.65	11.60	11.60	11.55	11.55	11.50	11.50	11.45	11.65	11.60	11.55
EUR-SEK	11.26	11.35	11.30	11.30	11.25	11.25	11.20	11.20	11.15	11.35	11.30	11.25
EUR-AUD	1.64	1.67	1.66	1.65	1.64	1.61	1.61	1.58	1.60	1.67	1.66	1.64
EUR-NZD	1.76	1.80	1.79	1.78	1.77	1.74	1.73	1.70	1.69	1.80	1.79	1.77
EUR-CAD	1.47	1.50	1.50	1.50	1.50	1.49	1.49	1.48	1.47	1.50	1.50	1.50
EUR TWI	97.2	97.6	98.1	98.5	100.1	100.0	101.0	101.0	101.9	97.6	98.1	100.1
CEEMEA & CHINA												
EUR-PLN	4.33	4.25	4.27	4.30	4.40	4.42	4.47	4.48	4.50	4.25	4.27	4.40
EUR-HUF	381	385	388	392	398	404	402	406	410	385	388	398
EUR-CZK	24.34	25.00	25.20	25.10	25.00	25.00	25.00	25.00	25.00	25.00	25.20	25.00
EUR-TRY	31.24	35.42	40.52	41.10	44.64	46.90	49.02	49.59	52.90	35.42	40.52	44.64
EUR-RUB	99.86	103	107	112	119	127	130	131	133	103	107	119
EUR-CNY	7.71	7.88	7.91	7.95	7.97	7.91	7.98	7.92	7.94	7.88	7.91	7.97

USD	Current	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	3M	6M	12M
G10												
EUR-USD	1.08	1.10	1.11	1.12	1.13	1.13	1.14	1.14	1.15	1.10	1.11	1.13
USD-CHF	0.87	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.89	0.88	0.88	0.88
GBP-USD	1.26	1.26	1.26	1.27	1.28	1.27	1.25	1.23	1.21	1.26	1.26	1.28
USD-JPY	145	148	146	145	143	142	140	139	137	148	7	143
USD-NOK	10.95	10.59	10.45	10.36	10.22	10.22	10.09	10.09	9.96	10.59	10.45	10.22
USD-SEK	10.45	10.32	10.18	10.09	9.96	9.96	9.82	9.82	9.70	10.32	10.18	9.96
AUD-USD	0.66	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.72	0.66	0.67	0.69
NZD-USD	0.61	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.61	0.62	0.64
USD-CAD	1.36	1.36	1.35	1.34	1.33	1.32	1.31	1.30	1.28	1.36	1.35	1.33
USTW\$	90.8	97.1	96.3	95.6	94.7	94.5	93.9	93.7	93.0	97.1	96.3	94.7
DXY	103.9	103.1	102.2	101.4	100.4	100.3	99.7	99.7	99.0	103.1	102.2	100.4
CEEMEA & CHINA												
USD-PLN	4.02	3.86	3.85	3.84	3.89	3.91	3.92	3.93	3.91	3.86	3.85	3.89
USD-HUF	354	350	350	350	352	358	353	356	357	350	350	352
USD-CZK	22.60	22.70	22.70	22.40	22.10	22.10	21.90	21.90	21.70	22.70	22.70	22.10
USD-TRY	28.94	32.20	36.50	36.70	39.50	41.50	43.00	43.50	46.00	32.20	36.50	39.50
USD-RUB	92.65	94.00	96.00	100.00	105.00	112.50	114.00	115.00	116.00	94.00	96.00	105.00
USD-CNY	7.15	7.16	7.13	7.10	7.05	7.00	7.00	6.95	6.90	7.16	7.13	7.05

Forecasts are end of period.

Source: Bloomberg, UniCredit Research

UniCredit risky assets forecasts

COMMODITY, EQUITY AND CREDIT FORECASTS

	Current	Mid-2024	End-2024
Oil			
Brent. USD/bbl.	74.8	90	85
Equities			
Euro STOXX 50	4477	4450	4700
STOXX Europe 600	469	470	500
DAX	16622	16300	17300
MSCI Italy	78.2	78	82
S&P 500	4549	4700	5000
Nasdaq 100	15788	16500	18000
Credit			
iBoxx Non-Financials Senior	75	80	70
iBoxx Banks Senior	99	100	95
iBoxx High Yield NFI	325	400	370

Source: Bloomberg, S&P Global, UniCredit Research

EQUITY SECTOR ALLOCATION WESTERN EUROPE

STOXX Europe 600 Sector	Portfolio weight over/underweight – (% points)	Portfolio position (%)	Strength of over/underweight in % of sector weight
Automobiles & Parts	0	2.6	0
Banks	0	9.3	0
Basic Resources	0.5	2.9	21
Chemicals	0.5	3.2	19
Construction & Materials	-0.5	3.5	-12
Consumer Products & Services	1	7.9	14
Energy	-1.5	3.4	-30
Financial Services	0	3.9	0
Food, Beverage & Tobacco	0	6.3	0
Health Care	0	15.9	0
Industrial Goods & Services	1	14.8	7
Insurance	0.5	6.2	9
Media	0	1.6	0
Personal Care, Drug & Grocery Stores	0.5	2.8	21
Real Estate	-0.5	0.9	-35
Retail	0.5	1.4	54
Technology	1	7.9	15
Telecommunications	-1	1.8	-36
Travel & Leisure	-0.5	0.8	-40
Utilities	-1.5	2.7	-35

Source: STOXX Ltd., UniCredit Research

Related research

SUNDAY WRAP

» Sunday Wrap - 3 December 2023

FI STRATEGY

» Weekly Supply Preview - The curtain comes down on EGB issuance - 4 December 2023

CREDIT, CROSS ASSET AND EQUITY STRATEGY

» Cross Asset Allocation - Improved return prospects - 04 December 2023

» Credit Perspectives - Credit Outlook 2024 - Non-Financials - 05 December 2023

» ESG Perspectives - ESG Outlook 2024: modest supply growth despite sustained headwinds - 06 December 2023

Legal Notices

Glossary

A comprehensive glossary for many of the terms used in the report is available on our website: <https://www.unicreditresearch.eu/index.php?id=glossary>

Disclaimer

Our recommendations are based on information obtained from or are based upon public information sources that we consider to be reliable, but for the completeness and accuracy of which we assume no liability. All information, estimates, opinions, projections and forecasts included in this report represent the independent judgment of the analysts as of the date of the issue unless stated otherwise. We reserve the right to modify the views expressed herein at any time without notice. Moreover, we reserve the right not to update this information or to discontinue it altogether without notice. This report may contain links to websites of third parties, the content of which is not controlled by UniCredit Bank. No liability is assumed for the content of these third-party websites.

This report is for information purposes only and (i) does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for any financial, money market or investment instrument or any security, (ii) is neither intended as such an offer for sale or subscription of or solicitation of an offer to buy or subscribe for any financial, money market or investment instrument or any security nor (iii) as marketing material within the meaning of applicable prospectus law. The investment possibilities discussed in this report may not be suitable for certain investors depending on their specific investment objectives and time horizon or in the context of their overall financial situation. The investments discussed may fluctuate in price or value. Investors may get back less than they invested. Fluctuations in exchange rates may have an adverse effect on the value of investments. Furthermore, past performance is not necessarily indicative of future results. In particular, the risks associated with an investment in the financial, money market or investment instrument or security under discussion are not explained in their entirety.

This information is given without any warranty on an "as is" basis and should not be regarded as a substitute for obtaining individual advice. Investors must make their own determination of the appropriateness of an investment in any instruments referred to herein based on the merits and risks involved, their own investment strategy and their legal, fiscal and financial position. As this document does not qualify as an investment recommendation or as a direct investment recommendation, neither this document nor any part of it shall form the basis of, or be relied on in connection with or act as an inducement to enter into, any contract or commitment whatsoever. Investors are urged to contact their bank's investment advisor for individual explanations and advice.

Neither UniCredit Bank AG, UniCredit Bank AG London Branch, UniCredit Bank AG Milan Branch, UniCredit Bank AG Vienna Branch, UniCredit Bank Austria AG, UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia, UniCredit Bank Czech Republic and Slovakia Branch, UniCredit Bank Romania, UniCredit Bank AG New York Branch nor any of their respective directors, officers or employees nor any other person accepts any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this document or its contents or otherwise arising in connection therewith.

This report is being distributed by electronic and ordinary mail to professional investors, who are expected to make their own investment decisions without undue reliance on this publication, and may not be redistributed, reproduced or published in whole or in part for any purpose.

This report was completed and first published on 7 December 2023 at 11:29.

Responsibility for the content of this publication lies with:

UniCredit Group and its subsidiaries are subject to regulation by the European Central Bank

a) UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), Arabellastraße 12, 81925 Munich, Germany, (also responsible for the distribution pursuant to §85 WpHG). Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.

b) UniCredit Bank AG London Branch (UniCredit Bank, London), Moor House, 120 London Wall, London EC2Y 5ET, United Kingdom. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and subject to limited regulation by the Financial Conduct Authority, 12 Endeavour Square, London E20 1JN, United Kingdom and Prudential Regulation Authority 20 Moorgate, London, EC2R 6DA, United Kingdom. Further details regarding our regulatory status are available on request.

c) UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), Piazza Gae Aulenti, 4 - Torre C, 20154 Milan, Italy, duly authorized by the Bank of Italy to provide investment services.

Regulatory authority: "Bank of Italy", Via Nazionale 91, 00184 Roma, Italy and Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.

d) UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria and subject to limited regulation by the "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany. Details about the extent of our regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht are available from us on request.

e) UniCredit Bank Austria AG (Bank Austria), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria

f) UniCredit Bulbank, Sveta Nedelya Sq. 7, BG-1000 Sofia, Bulgaria. Regulatory authority: Financial Supervision Commission (FSC), 16 Budapeshta str., 1000 Sofia, Bulgaria

g) Zagrebačka banka d.d., Trg bana Josipa Jelačića 10, HR-10000 Zagreb, Croatia. Regulatory authority: Croatian Agency for Supervision of Financial Services, Franje Račkoga 6, 10000 Zagreb, Croatia

h) UniCredit Bank Czech Republic and Slovakia, Želetavská 1525/1, 140 92 Praha 4, Czech Republic. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praha 1, Czech Republic

i) ZAO UniCredit Bank Russia (UniCredit Russia), Prechistenskaya nab. 9, RF-119034 Moscow, Russia. Regulatory authority: Federal Service on Financial Markets, 9 Leninsky prospekt, Moscow 119991, Russia

j) UniCredit Bank Czech Republic and Slovakia, Slovakia Branch, Šancova 1/A, SK-813 33 Bratislava, Slovakia. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praha 1, Czech Republic and subject to limited regulation by the National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia. Regulatory authority: National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia

k) UniCredit Bank Romania, Bucharest 1F Expozitiei Boulevard, 012101 Bucharest 1, Romania. Regulatory authority: National Bank of Romania, 25 Lipscani Street, 030031, 3rd District, Bucharest, Romania

l) UniCredit Bank AG New York Branch (UniCredit Bank, New York), 150 East 42nd Street, New York, NY 10017. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and New York State Department of Financial Services, One State Street, New York, NY 10004-1511

Further details regarding our regulatory status are available on request.

ANALYST DECLARATION

The analyst's remuneration has not been, and will not be, geared to the recommendations or views expressed in this report, neither directly nor indirectly.

All of the views expressed accurately reflect the analyst's views, which have not been influenced by considerations of UniCredit Bank's business or client relationships.

POTENTIAL CONFLICTS OF INTERESTS

You will find a list of keys for company specific regulatory disclosures on our website <https://www.unicreditresearch.eu/index.php?id=disclaimer>.

RECOMMENDATIONS, RATINGS AND EVALUATION METHODOLOGY

You will find the history of rating regarding recommendation changes as well as an overview of the breakdown in absolute and relative terms of our investment ratings, and a note on the evaluation basis for interest-bearing securities on our website <https://www.unicreditresearch.eu/index.php?id=disclaimer> and <https://www.unicreditresearch.eu/index.php?id=legalnotices>.

ADDITIONAL REQUIRED DISCLOSURES UNDER THE LAWS AND REGULATIONS OF JURISDICTIONS INDICATED

You will find a list of further additional required disclosures under the laws and regulations of the jurisdictions indicated on our website

<https://www.unicreditresearch.eu/index.php?id=disclaimer>.

E 20/1

UniCredit Research*

Macro & Strategy Research



Marco Valli
Global Head of Research,
Chief European Economist
+39 02 8862-0537
marco.valli@unicredit.eu



Dr. Ingo Heimig
Head of Research Operations
& Regulatory Controls
+49 89 378-13952
ingo.heimig@unicredit.de

Head of Macro Research

Heads of Strategy Research



Marco Valli
Global Head of Research,
Chief European Economist
+39 02 8862-0537
marco.valli@unicredit.eu



Dr. Luca Cazzulani
Head of Strategy Research
FI Strategist
+39 02 8862-0640
luca.cazzulani@unicredit.eu



Elia Lattuga
Cross Asset Strategist
Deputy Head of Strategy Research
+39 02 8862-0851
elia.lattuga@unicredit.eu

European Economics Research

Dr. Andreas Rees
Chief German Economist
+49 69 2717-2074
andreas.rees@unicredit.de

Dr. Loredana Federico
Chief Italian Economist
+39 02 8862-0534
loredana.maria.federico@unicredit.eu

Stefan Bruckbauer
Chief Austrian Economist
+43 50505-41951
stefan.bruckbauer@unicreditgroup.at

Tullia Bucco
Economist
+39 02 8862-0532
tullia.bucco@unicredit.eu

Walter Pudschedl
Economist
+43 50505-41957
walter.pudschedl@unicreditgroup.at

Chiara Silvestre
Economist
chiara.silvestre@unicredit.eu

International Economics Research

Daniel Vernazza, Ph.D.
Chief International Economist
+44 207 826-1805
daniel.vernazza@unicredit.eu

Edoardo Campanella
International and Energy Economist
+39 02 8862-0522
edoardo.campanella@unicredit.eu

Roberto Mialich
FX Strategist - Global
+39 02 8862-0658
roberto.mialich@unicredit.eu

Eszter Gárgyán, CFA
FX Strategist - CEE
eszter.gargyan@unicredit.de

FI Strategy Research

Michael Rottmann
Head
FI Strategist
+49 89 378-15121
michael.rottmann1@unicredit.de

Dr. Luca Cazzulani
Head of Strategy Research
FI Strategist
+39 02 8862-0640
luca.cazzulani@unicredit.eu

Francesco Maria Di Bella
FI Strategist
+39 02 8862-0850
francescomaria.dibella@unicredit.eu

Credit & Equity Sector Strategy Research

Christian Stocker, CEFA
Lead Equity Strategist
+49 89 378-18603
christian.stocker@unicredit.de

Dr. Stefan Kolek
Credit Strategist - Non-financials
+49 89 378-12495
stefan.kolek@unicredit.de

Dr. Michael Teig
Credit Strategist - Financials
+49 89 378-12429
michael.teig@unicredit.de

Jonathan Schroer, CFA
Credit Strategist - ESG
+49 89 378-13212
jonathan.schroer@unicredit.de

Cross Asset Strategy Research

Elia Lattuga
Cross Asset Strategist
Deputy Head of Strategy Research
+39 02 8862-0851
elia.lattuga@unicredit.eu

UniCredit Research, UniCredit Bank AG, Arabellastraße 12, D-81925 Munich, globalresearch@unicredit.de
Bloomberg: UCGR, Internet: www.unicreditresearch.eu

M/S 23/4

*UniCredit Research is the joint research department of UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), UniCredit Bank AG London Branch (UniCredit Bank, London), UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), UniCredit Bank Austria AG (Bank Austria), UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia (UniCredit Russia), UniCredit Bank Romania.