Global Markets Roundup

National Bank of Greece | Economic Research Division | September 19, 2023

NATIONAL BANK OF GREECE

The Federal Reserve is expected to hold interest rates at the current 5.25% - 5.50% range on Wednesday

- The Federal Reserve, on Wednesday, is expected to hold the Federal Funds Rate unchanged at 5.25%-5.50%, in order to assess the effects on (future) output and inflation of the insofar monetary policy tightening (short-term rates up by +525 bps since March 2022, balance sheet reduction).
- Economic projections by the Fed in June were conditioned on the FFR ending 2023 at the range of 5.5% - 5.75%, implying one more +25 bps hike from current levels. The median estimate ("dot") in September is also expected to show one additional hike for 2023. Investors appear roughly split on whether such a path will be followed or the FFR will end 2023 at the current levels.
- A slightly hawkish bias in the post-meeting statement is likely to remain, given upside risks for inflation due to the recent rise in oil prices (see Markets) and significantly stronger-than-previously assumed economic activity. Indeed, we expect the Federal Reserve to revise upwards its real GDP projections for Q4:2023 to at least +2.0% yoy from +1.0% yoy in June.
- Fed's projections for short-term inflation, appear broadly on track so far. In the event, based on actual and projected data based on FRBC Inflation Nowcasting model, headline PCE inflation is expected to average +3.4% yoy in Q3:2023 (core: +4.0% yoy). In June, the median assumption of the participants in the Federal Open Market Committee for end-2023 PCE inflation was +3.2% yoy (headline) & +3.9% yoy (core), respectively.
- The ECB, on Thursday, stayed the course (+450 bps since July 2022), increasing policy interest rates by +25 bps (MRO: 4.5%, DFR: 4.0%). However, the ECB stated that "policy rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to target (2%)". As a result, for the near future, the ECB will stand pat regarding interest rates.
- The new guidance was driven by stagnant economic activity, decelerating inflation and the forceful transmission of monetary tightening to financing conditions, which in the current hiking cycle is faster than previous ones. Note that credit dynamics have weakened significantly, with bank loans to households decelerating to +1.3% yoy in July, the lowest annual growth rate since November 2015. Furthermore, the annualized rate of quarterly change has been negative (-0.8%) for the first time since the euro area banking-cum-sovereign crisis.
- Euro area short-term real GDP projections were revised lower, with ECB expecting growth of +0.5% qoq saar, on average, from Q3:2023 to Q1:2024 (down from +1.2% qoq saar in June's projections). The economy is expected to return to trend-like growth in the course of 2024 due to the anticipated recovery in real disposable incomes. For 2024, the downward revision by -0.5 pps to +1.0% is mainly due to carry-over effects (see graph below).
- The ECB expects that (core) inflation will continue to decline gradually towards 2% in 2025 (see graph below), with risks remaining to the upside. Notably, market-based longer-term expectations have increased, with five-year, five-year forward (5Y/5Y) inflation-linked swap interest rates reaching +2.6% in September, the highest level since 2012. Continued increases in oil add upward (inflationary) pressures on rates.

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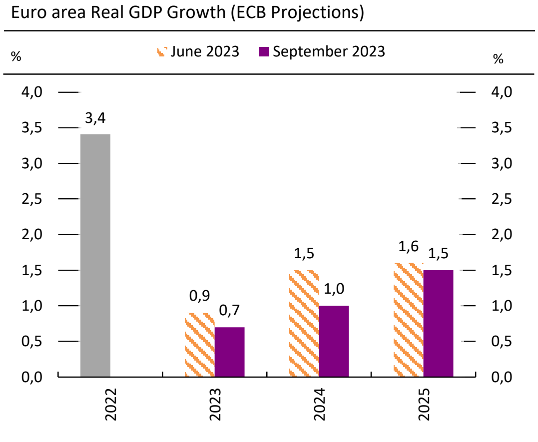
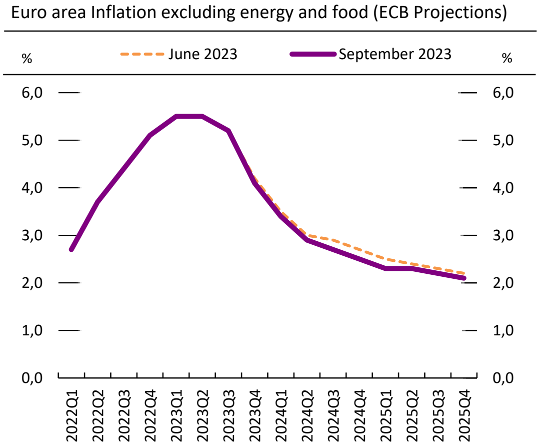


Source: NBG Research



Source: NBG Research

See page 11 for disclosures and analyst certification

US core inflation decelerated further in August

- **Headline US CPI inflation accelerated in August, by +0.5 pps to +3.7% yoy (peak of +9.1% in June 2022, the highest since November 1981), albeit that development was roughly expected (consensus for +3.6% yoy) and solely due to Energy prices** (7% weight). In the event, the annual growth of Energy prices came out at -3.6% yoy from -12.5% yoy in July, both due to base effects (-3.9% mom in seasonally adjusted "sa" terms in August 2022) and a strong +5.6% mom sa in August 2023 (in turn due to gasoline prices rising by +10.6% mom). Note that WTI oil prices have increased by c.+20% in the past two months, due to, *inter alia*, lower supply.
- At the same time, food prices (13% weight) were up by a "norm-like" +0.2% on a monthly basis for a 2nd consecutive month. As a result, the annual pace of growth decelerated to +4.3% compared with +4.9% in July and a peak of +11.4% in August 2022 (the highest since May 1979), with significant (negative) base effects also at play (+0.8% mom sa in August 2022).
- Importantly, core CPI (80% weight) posted a substantial deceleration in August, with the annual pace of growth at +4.3% (4.35% on a 2-decimal basis) from +4.7% in July, versus consensus for +4.3% (peak of +6.6% yoy in September 2022, the highest since August 1982). The deceleration though, was in a big part due to negative base effects (+0.6% mom sa in August 2022), while the monthly growth was +0.3% mom, compared with +0.2% mom in July (20-year average of +0.2% mom).
- Meanwhile, the relatively stickier and predominantly determined by domestic economic developments, shelter prices (which constitute c. ⅓ of the headline CPI and c. 40% of the core index), were up by +0.3% mom (sa | 20-year average of +0.2%), below a +0.4% mom in July and a 12-month average of +0.6% mom. Nevertheless, the deceleration was mainly due to a -3.0% mom for the lodging away from home component. Indeed, the two major shelter components maintained a robust impetus, with the index for the rent of primary residence up by +0.5% mom from +0.4% mom in July (the annual growth was +7.8% from +8.0%) and the owners' equivalent rent of residences (i.e. the implicit rent that owner occupants would have to pay if they were renting their homes), up by +0.4% mom following a +0.5% mom in July (the annual growth came out at +7.3% from +7.7%).
- Looking forward, positive base effects for Energy (the respective index was down by -1.7% mom in September 2022) and the upward move in international energy prices are expected to offset a further deceleration in the annual growth of food and core prices. In that context, the Federal Reserve Bank of Cleveland's Inflation Nowcasting model points to the annual growth of the headline CPI remaining steady at +3.7% in September (monthly expected gains of +0.4%). At the same time, annual growth of +4.2% is expected for the core, with monthly gains of +0.4%.

The ECB's anticipated path for real GDP was meaningfully revised down, while CPI forecasts revisions were mixed

- **The quarterly ECB staff's estimates point to a lower (compared with June's projections) trajectory for economic activity, particularly in the short term**. In the event, the estimate for real GDP growth in FY:2023, was revised down by -0.2 pps to +0.7%, for FY:2024 by -0.5 pps to +1.0% and for FY:2025 by -0.1 pp to +1.5%. That development was mainly due to the current momentum being meaningfully weaker than previously expected for this period (the quarterly profile points to stagnant GDP in Q3:2023, +0.1% qoq in Q4:2023 and +0.3% qoq in Q1:2024, versus +0.3% qoq, +0.4% qoq and +0.4% qoq, respectively, in June's projections) as well as tighter financial conditions.
- The projection for the unemployment rate was unchanged for 2023 at 6.5% (on average). Looking forward, the weaker economic (real GDP) outlook and its lagged effect on labor market conditions, prompted a notable upward revision for 2024 (by +0.3 pps to 6.7%) and 2025 (by +0.4 pps to 6.7%), albeit the unemployment rate is expected to remain low by historical standards (2011-2019 average of 10.2%).
- **Inflation projections were revised up for the short term in the baseline scenario, mostly due to higher than previously assumed energy prices.** In the event, oil prices are assumed to average €75.9/barrel in 2023 instead of €72.2/barrel in June's projections, €75.0/barrel in 2024 instead of €66.6/barrel and €71.5/barrel in 2025 instead of €64.6/barrel, higher by circa +9%, on average, for the period 2023-2025 compared with the same period in June's projections. Meanwhile, assumptions for natural gas prices were little changed, to an average of €43/MWh in 2023, €54/MWh in 2024 and €47/MWh in 2025.
- In all, headline inflation projections were revised up by +0.2 pps in both 2023 and 2024, to +5.6% yoy and +3.2% yoy, respectively (on average). For 2025 though, they were modestly revised down, by -0.1 pp to +2.1% yoy (the ECB expects inflation to reach the target of 2% in Q3:2025), in view of, *inter alia*, tighter financial conditions and a softer GDP outlook, leading to somewhat less intense core inflation pressures. Indeed, on core CPI inflation, estimates came out at +5.1% yoy in 2023 (unchanged versus June's projections), +2.9% yoy in 2024 (from +3.0% yoy in the previous estimates) and +2.2% yoy in 2025 (instead of +2.3% yoy).

China: Economic activity was overall stronger than expected in August

- **Economic activity posted signs of improvement in August.** In the event, the annual growth of industrial production was +4.5% from +3.7% in July, meaningfully above consensus estimates for +3.9%. In addition, retail sales (in value terms) accelerated substantially, to +4.6% yoy from +2.5%, significantly beating consensus for +3.0%. On the other hand, the respective pace for fixed asset investment decelerated somewhat, by -0.2 pps to +3.2%, versus expectations for +3.3%. Regarding the latter, investment in the manufacturing segment came out at +5.9% yoy from +5.7% yoy previously. Nevertheless, the deceleration for infrastructure investment growth continues (+6.4% yoy from +6.8% yoy in July), as the boost from policy support frontloading in the start of the year, fades. Furthermore, real estate development increasingly struggles (-8.8% yoy in August from -8.5% yoy in July). The latest readings came alongside overall credit annual growth, as measured by Total Social Financing, posting signs of stabilization, at +9.0% in August, compared with a record (since 2003) low of +8.9% in July (+9.6% yoy on average in H1:2023).

Equities

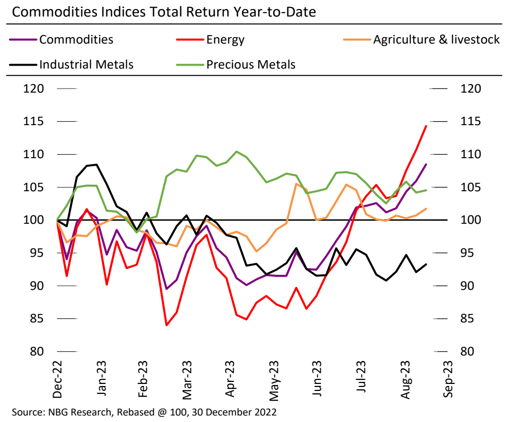
- **Global equity markets were mixed in the past week.** US investors weighed the upward trend of government bond yields against better-than-expected economic data (retail sales) and the successful Arm Holdings Plc's initial public offering (IPO), raising $4.9 bn, the largest IPO since the electric-vehicle maker Rivian Automotive Inc.'s $13.7 bn offering in October 2021. In the event, Arm's IPO price was set at $51 per share, at top end of the initial range of $47 - $51, indicating a total valuation of $54.5bn. Arm debuted trading on Nasdaq on Thursday rising by +24.7% on its first day, nevertheless it recorded losses on Friday and Monday due to profit taking (-8.8% cumulatively). Arm's successful IPO could serve as a catalyst for further IPOs, including the online grocery-delivery Instacart, the marketing automation platform provider Klaviyo and the footwear maker Birkenstock that have also filed to go public. Notably, Instacart rose its IPO price range after the strong performance of Arm Holdings' IPO to $28 - $30 per share from $26 - $28 earlier. The Nasdaq ended the week down by -0.4% wow (+31 ytd), while the S&P500 declined by -0.2% wow (+16% ytd), with Automobiles & Components' sector overperforming (+9.1% wow). Notably on Friday, the United Auto Workers (UAW) union decided to call for a strike against the "Big Three" Detroit automakers (General Motors, Ford and Stellantis), after failing to reach a deal by Thursday's midnight deadline, the first time in the union's 88-year history that it struck all three companies simultaneously. Nevertheless, the decision is, at first, limited at only one plant per firm, involving only 12.7k workers out of 146k UAW members, while negotiations are ongoing. Market reaction was muted on Friday, but pressures emerged on Monday (Ford: -2.1%, GM: -1.8%, Stellantis: -0.7%), following the UAW announcement that the strike will expand if there is no "serious progress" by Friday.

Fixed Income

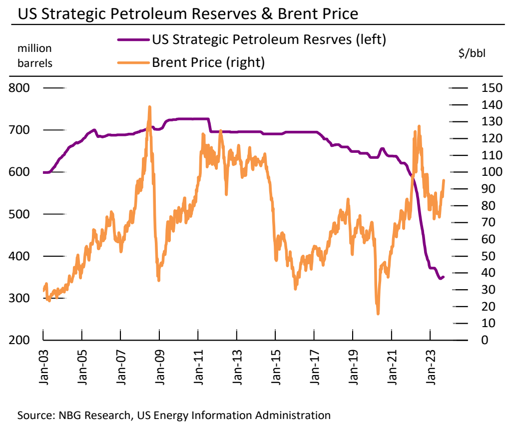
- **Government bond yields rose in the past week**, with the 10-year Bund yield increasing by +7 bps wow to 2.67% and exhibiting increased volatility (Thursday: -5 bps | Friday: +6 bps). The 2-year yield rose by +14 bps wow to 3.20%, recording its largest weekly increase since mid-June. Periphery spreads over the 10-year Bund widened slightly in Italy (+5 bps to 178 bps), Spain (+3 bps to 107 bps) and Greece (+6 bps to 141 bps), with the ECB standing pat regarding large scale asset purchases. Notably, the Moody's rating agency upgraded the Hellenic Republic's credit rating from Ba3 to Ba1 with stable outlook, only one notch below the investment grade status. The US 10-year yield increased by +7 bps wow to 4.33%, re-approaching its highest level since November 2007, while the 2-year yield rose by +6 bps wow to 5.03%. Investors' attention turns to the forthcoming Federal Reserve meeting on Wednesday. In addition, top of mind for investors is the progress toward resolving the possibility of a government shutdown as the US Congress must pass several appropriation bills before the September 30th deadline. **Finally, corporate bond spreads narrowed in the HY spectrum in the past week.** Indeed, USD HY bond spreads were down by -6 bps to 379 bps, while their EUR counterparts declined by -21 bps to 415 bps. In the investment grade spectrum, USD IG bonds were broadly stable at 122 bps and EUR IG bonds declined by 7 bps to 145 bps.

FX and Commodities

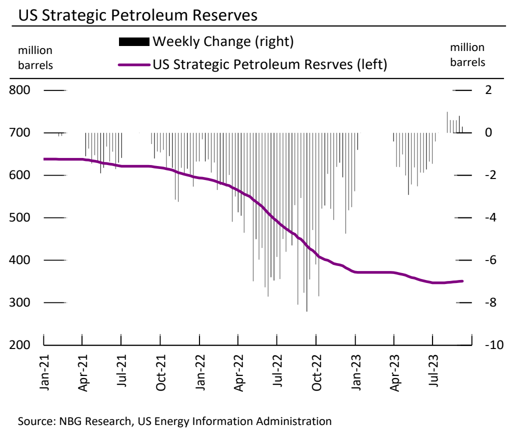
- **In foreign exchange markets, the US Dollar ended the week up by +0.5% wow against the euro to $1.07,** recording its highest level since end-May, following gains in 8 out of the 9 past weeks. **In commodities, Brent oil prices increased by +3.6% to $94/barrel in the past week (+1.2% on Monday),** approaching their highest level since November 2022, due to expectations for a widening supply deficit for the rest of 2023 stemming from extended oil production cuts by Saudi Arabia and Russia. In addition, the US Energy Department has stopped refiling their Strategic Petroleum Reserves (+3.8 million barrels to 351 million barrels since early August), following the significant decline of circa -240 million barrels since early 2022 in order to reduce the price-impact after Russia's invasion of Ukraine, due to elevated oil prices (see graphs).



Graph 1.



Graph 2.



Graph 3.

Quote of the week: "With today's decision, we have made sufficient contributions, under current assessment, to returning inflation to target in a timely manner...But we can't say that now we are at that peak", **President of the ECB, Christine Lagarde, September 14th 2023.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	September 15th	3-month	6-month	12-month
Germany	2,67	2,60	2,70	2,70
US	4,33	4,10	4,20	4,20
UK	4,35	4,27	4,11	3,85
Japan	0,70	0,68	0,71	0,75

Official Rate (%)	September 15th	3-month	6-month	12-month
Euro area	4,00	4,00	4,00	4,00
US	5,50	5,75	5,75	5,50
UK	5,25	5,55	5,60	5,50
Japan	-0,10	-0,10	-0,10	-0,10

Currency	September 15th	3-month	6-month	12-month
EUR/USD	1,07	1,08	1,09	1,10
EUR/GBP	0,86	0,86	0,87	0,87
EUR/JPY	158	156	154	153

	September 15th	3-month	6-month	12-month
USD/JPY	148	144	142	139
GBP/USD	1,24	1,25	1,25	1,26

Forecasts at end of period

Economic Forecasts

United States	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22a	2022a	Q1:23a	Q2:23a	Q3:23f	Q4:23f	2023f
Real GDP Growth (YoY) (1)	5,9	3,7	1,8	1,9	0,9	2,1	1,8	2,5	2,5	2,1	2,2
Real GDP Growth (QoQ saar) (2)	-	-1,6	-0,6	3,2	2,6	-	2,0	2,1	3,5	1,0	-
Private Consumption	8,3	1,3	2,0	2,3	1,0	2,7	4,2	1,7	3,8	1,4	2,5
Government Consumption	0,6	-2,3	-1,6	3,7	3,8	-0,6	5,0	3,3	0,7	1,0	3,1
Investment	7,4	4,8	-5,0	-3,5	-3,8	-0,2	-0,4	3,9	8,7	1,6	0,2
Residential	10,7	-3,1	-17,8	-27,1	-25,1	-10,6	-4,0	-3,6	7,0	3,0	-10,9
Non-residential	6,4	7,9	0,1	6,2	4,0	3,9	0,6	6,1	0,9	1,3	3,0
Inventories Contribution	0,2	0,3	-2,1	-1,4	2,0	0,7	-2,6	-0,1	0,4	-0,3	-0,6
Net Exports Contribution	-1,7	-3,8	1,2	3,3	0,6	-0,6	0,6	-0,1	-0,1	-0,1	0,7
Exports	6,1	-4,6	13,8	14,6	-3,7	7,1	7,8	-10,6	3,0	1,6	2,0
Imports	14,1	18,4	2,2	-7,3	-5,5	8,1	2,0	-7,0	2,6	1,8	-2,3
Inflation (3)	4,7	8,0	8,7	8,3	7,1	8,0	5,8	4,0	3,5	3,7	4,3

Euro Area	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22a	2022a	Q1:23a	Q2:23a	Q3:23f	Q4:23f	2023f
Real GDP Growth (YoY)	5,6	5,4	4,2	2,3	1,7	3,4	1,1	0,5	0,6	0,9	0,8
Real GDP Growth (QoQ saar)	-	2,6	3,3	1,3	-0,2	-	0,3	0,5	1,3	1,3	-
Private Consumption	4,1	0,0	4,7	3,6	-2,8	4,3	0,1	-0,3	1,3	1,4	0,6
Government Consumption	4,1	1,5	-1,1	-0,1	2,1	1,4	-2,4	-3,3	0,8	1,8	0,1
Investment	3,6	-2,3	3,5	3,5	-0,8	2,9	1,3	1,4	1,9	1,9	0,3
Inventories Contribution	0,3	-0,4	0,7	1,0	-1,1	0,4	-2,1	1,8	-0,4	-0,1	0,1
Net Exports Contribution	1,4	3,2	-0,4	-2,3	2,1	-0,1	2,6	-1,0	0,5	-0,1	0,3
Exports	11,0	6,4	6,8	5,0	-1,4	7,2	0,1	2,8	4,1	2,5	3,3
Imports	8,7	0,2	8,2	10,5	-5,6	8,1	-5,1	5,2	3,5	3,0	2,9
Inflation	2,6	6,1	8,0	9,3	10,0	8,4	8,0	6,2	4,8	3,6	5,6

a: Actual, f: Forecasts, 1. Seasonally adjusted YoY growth rate, 2. Seasonally adjusted annualized QoQ growth rate, 3. Year-to-year average % change

6-12-Month View & Key Factors for Global Markets

Equity Markets

US
- \+ Households' balance sheets are healthy (low debt, still elevated excess savings)
- \+ Sentiment (e.g. AAII) and positioning indicators are low, despite the recent rally
- \- Peaking profit margins
- \- Recession risks remain considerable
- \- P/Es (Valuations) above long-term means

Neutral/Negative

Euro Area
- \+ Higher equity risk premium (lower P/E ratio) relative to benchmark market (US) despite the recent rally of +27% since October 2022 lows
- \+ Fiscal policy will remain supportive in 2023 (plus RRF)
- \+ China's covid policy pivot could accelerate an export-led recovery
- \- Geopolitical uncertainty (Ukraine-Russia, natural gas) could re-intensify

Neutral/Positive

Japan
- \+ Higher equity risk premium (lower P/E ratio) relative to benchmark market (US)
- \+ China's covid policy pivot could accelerate an export-led recovery
- \+ JPY appreciation from ¥150 to ¥135, if continues, could hurt exporters
- \- Signs of policy fatigue regarding structural reforms and fiscal discipline
- \- Yield-Curve Control twists, let alone a sustained shift in ultra-loose monetary policy, could hurt market benchmarks (but support Banks)

Neutral

UK
- \+ Significant exposure to commodities
- \+ Undemanding valuations in relative terms relative to other regions
- \- Elevated domestic policy uncertainty
- \- The BOE is expected to continue increasing interest rates aggressively as inflation remains very high and labor market extremely tight

Neutral

Government Bonds

US
- \+ Valuations appear somewhat rich (18.2x), with term-premium @ -0.5% (1% for 2000-2015)
- \+ Fiscal deficits to remain sizeable in following years
- \+ Underlying inflation pressures remain acute
- \+ FED: passive (lower rollover) Quantitative Tightening
- \+ Global search for yield by non-US investors (e.g. Japan, repatriation from EM Economies) could reverse
- \- Safe-haven demand bid to support prices assuming geopolitical risks re-intensify
- \- The FED is likely close to be done with rates

Slightly higher yields

Euro Area
- \+ Valuations (13.1x) are close to historical averages
- \+ ECB to halt the reinvestments under the APP as of July 2023
- \+ ECB to continue with interest rate hikes in 2023 as core inflation pressures remain strong
- \- Fragile economic growth outlook due to the war in Ukraine
- \- ECB QE "stock" effect, with government bond holdings of €4.2 trillion (32% of GDP)

Slightly higher yields

Japan
- \+ Sizeable fiscal deficits
- \+ The range of Yield-Targeting of 10-Year JGB at around 0% could widen further (current: +/- 50 bps)
- \- Safe-haven demand
- \- Monetary stance remains extremely dovish, despite the unexpected shift in YCC range in December 2022
- \- QE "stock" effect, with government bond holdings of ¥581 trillion (104% of GDP)

Slightly Higher yields

UK
- \+ Inflation expectations could drift higher due to supply disruptions (persistent post Brexit, temporary due to China)
- \+ The BOE is expected to continue increasing interest rates aggressively as inflation remains very high and labor market extremely tight
- \+ BOE: active (sales) Quantitative Tightening
- \- Slowing economic growth post-Brexit

Slightly Higher yields

Foreign Exchange

US
- \+ USD interest rate differential vs peers remain significant
- \+ Weak global economic growth
- \+ Safe-haven demand status
- \- Global political uncertainty to decline
- \- The FED is close to be done, which reduces potential USD upside

Broadly Flat USD against G10 FX

Euro Area
- \+ ECB to continue with interest rate hikes in 2023 as core inflation pressures remain strong
- \+ Lower geopolitical uncertainty (Ukraine-Russia, natural gas) is positive for EUR
- \- Global growth risks remain to the downside

Range-bound with upside risks against the USD

Japan
- \+ Safe haven demand
- \+ More balanced economic growth recovery (long- term)
- \+ Higher core Inflation rates could accelerate the shift of monetary policy (less accommodative)

Stronger JPY

UK
- \+ Valuations appear undemanding with REER below its 15-year average
- \- Sizeable Current account deficit

Broadly stable GBP

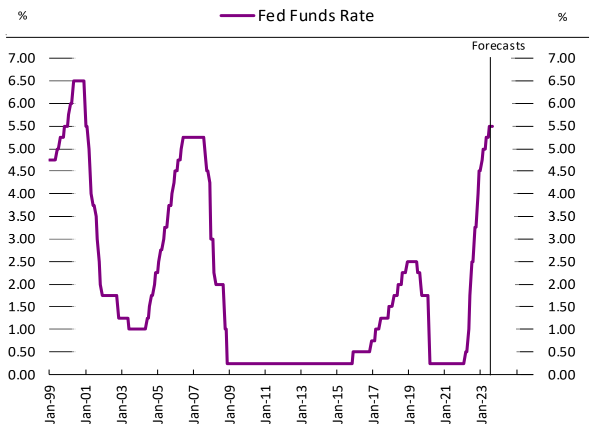
Economic Calendar

In the US, the Federal Reserve convenes on Wednesday and is expected to maintain its Federal Funds Rate (FFR) stable at 5.50%. The press conference though and the quarterly FOMC projections, will gather investors' attention vis-a-vis a better assessment of monetary policy prospects. Meanwhile, August's housing data (existing home sales, housing starts & building permits) will gather investors' attention.

In the euro area, attention turns to PMI (22/09) and consumer confidence (21/09) surveys for September, as they will provide valuable insight regarding the current economic momentum.

In the UK, the BoE meets on September 21st and is expected to increase its Bank Rate by 25 bps to 5.50%. On Wednesday, attention turns to inflation data for August. UK CPI (e: 7.1% yoy from 6.8% yoy in July).

US Federal Funds Rate



Source: NBG Research

Economic News Calendar for the period: September 12 - September 25, 2023

Tuesday 12

		S		A	P
UK					
ILO Unemployment Rate	July	4.3%		4.3%	4.2%
GERMANY					
ZEW survey current situation	September	-75.0	-	-79.4	-71.3
ZEW survey expectations	September	-15.0	+	-11.4	-12.3

Wednesday 13

		S		A	P
US					
CPI (YoY)	August	3.6%		3.7%	3.2%
Core CPI (YoY)	August	4.3%		4.3%	4.7%
EURO AREA					
Industrial Production (sa, MoM)	July	-0.7%	-	-1.1%	0.4%
Industrial Production (wda, YoY)	July	-0.3%	-	-2.2%	-1.1%
UK					
GDP (MoM)	July	-0.2%	-	-0.5%	0.5%
Industrial Production (MoM)	July	-0.6%	-	-0.7%	1.8%
Industrial Production (YoY)	July	0.5%	-	0.4%	0.7%

Thursday 14

		S		A	P
US					
Initial Jobless Claims (k)	September 9	225	+	220	217
Continuing Claims (k)	September 2	1695	+	1688	1684
Retail sales (MoM)	August	0.2%	+	0.6%	0.5%
Retail sales ex-autos (MoM)	August	0.4%	+	0.6%	0.7%
EURO AREA					
ECB announces its deposit facility rate	September 14	3.75%	+	4.00%	3.75%
ECB announces its intervention rate	September 14	4.25%	+	4.50%	4.25%

Friday 15

		S		A	P
US					
Empire Manufacturing	September	-10.0	+	1.90	-19.0
Industrial Production (MoM)	August	0.1%	+	0.4%	0.7%
University of Michigan consumer confidence	September	69.1	-	67.7	69.5
EURO AREA					
Trade Balance SA (€ bn)	July	..		2.9	8.6
CHINA					
Industrial production (YoY)	August	3.9%	+	4.5%	3.7%
Retail sales (YoY)	August	3.0%	+	4.6%	2.5%

Monday 18

		S		A	P
US					
NAHB housing market confidence index	September	..		45.0	50.0
Net Long-term TIC Flows ($ bn)	July	..		8.8	186.0

Tuesday 19

		S		A	P
UK					
Building permits (k)	August	1440		..	1443
Housing starts (k)	August	1440		..	1452
WORLD					
OECD Economic Outlook					

Wednesday 20

		S		A	P
US					
Fed announces its intervention rate	September 20	5.50%		..	5.50%
UK					
CPI (YoY)	August	7.1%		..	6.8%
CPI Core (YoY)	August	6.8%		..	6.9%
JAPAN					
Imports YoY	August	-19.4%		..	-13.6%
Exports YoY	August	-1.7%		..	-0.3%

Thursday 21

		S		A	P
US					
Philadelphia Fed Business Outlook	September	-1.0		..	12.0
Existing home sales (mn)	August	4.10		..	4.07
Initial Jobless Claims (k)	September 16	225		..	220
Continuing Claims (k)	September 9	1695		..	1688
EURO AREA					
Consumer Confidence Indicator	September	-16.5		..	-16.0
UK					
BoE announces its intervention rate	September 21	5.50%		..	5.25%

Friday 22

		S		A	P
US					
S&P Global US Manufacturing PMI	September	47.9		..	47.9
EURO AREA					
HCOB Eurozone Manufacturing PMI	September	44.0		..	43.5
HCOB Eurozone Composite PMI	September	46.3		..	46.7
HCOB Eurozone Services PMI	September	47.5		..	47.9
UK					
S&P Global / CIPS UK PMI Manufacturing SA	September	43.0		..	43.0
S&P Global / CIPS UK Services PMI	September	49.0		..	49.5
Retail sales Ex Auto MoM	August	0.6%		..	-1.4%

		S		A	P
JAPAN					
Jibun Bank PMI manufacturing	September	..		..	49.6
CPI (YoY)	August	..		..	3.3%
Core CPI (YoY) - ex. Fresh Food	August	3.0%		..	3,1%
Core CPI (YoY) - ex. Fresh Food and Energy	August	..		..	4.3%
Bank of Japan announces its intervention rate	September 22	-0.10%		..	-0.10%

Monday 25

		S		A	P
GERMANY					
IFO- Business Climate Indicator	September	..		..	85.7
IFO- Current Assesment	September	..		..	89.0
IFO-Expectations	September	..		..	82.6

Source: NBG Research
S: Consensus Analysts Survey, A: Actual Outcome, P: Previous Outcome

NATIONAL BANK OF GREECE

Equity Markets (in local currency)

Developed Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
US	S&P 500	4450	-0.2	15.9	14.1	-0.7	MSCI Emerging Markets	60138	0.8	4.6	2.9	-16.8
Japan	NIKKEI 225	33533	2.8	28.5	20.3	9.9	MSCI Asia	920	0.9	5.1	3.5	-17.0
UK	MSCI UK	2204	3.2	2.8	5.3	12.0	China	61	-0.4	-6.3	-5.2	-33.3
Euro area	EuroStoxx	454	1.3	10.8	16.0	-2.2	Korea	803	2.1	19.7	12.2	-15.6
Germany	DAX 40	15894	1.0	14.1	22.7	1.8	MSCI Latin America	90818	1.5	2.9	1.6	-8.4
France	CAC 40	7379	1.9	14.0	19.8	12.1	Brazil	303843	3.1	2.9	0.6	-12.5
Italy	MSCI Italy	917	2.5	21.3	29.1	13.7	Mexico	47025	-2.3	4.4	7.4	-2.8
Spain	IBEX-35	9550	2.0	16.0	18.1	10.6	MSCI Europe	3497	-0.8	24.2	49.8	-51.6
Hong Kong	Hang Seng	18183	-0.1	-8.1	-3.9	-27.4	Russia	3153	0.3	46.3	28.9	-22.5
Greece	ASE	1259	-0.1	35.4	50.0	39.2	Turkey	7761589	-5.5	44.1	117.4	382.3

World Market Sectors and Styles (MSCI Indices*)

in US Dollar terms	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Investment Styles	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	259.6	0.9	5.5	13.7	61.5	Growth	4240.3	-0.3	25.0	19.9	-10.0
Materials	320.6	1.8	3.1	12.3	-8.7	Value	3206.3	1.2	3.3	8.4	-1.9
Industrials	331.2	0.2	10.7	18.8	-4.6	Large Cap	1870.6	0.4	15.3	15.7	-3.3
Consumer Discretionary	373.8	2.0	28.4	12.6	-10.9	Small Cap	488.1	0.2	5.1	5.4	-16.7
Consumer Staples	268.1	0.3	-0.6	4.3	-3.8	US Growth	2853.1	-0.4	20.8	12.4	-9.3
Healthcare	344.2	0.3	-0.3	6.7	-3.4	US Value	1585.8	0.2	10.5	14.7	7.8
Financials	136.3	2.3	4.1	8.7	-6.8	US Large Cap	4450.3	-0.2	15.9	14.1	-0.7
IT	524.9	-2.1	33.4	28.4	-2.2	US Small Cap	1186.4	0.1	2.5	2.9	-11.0
Telecoms	89.7	0.8	34.6	23.1	-21.8	US Banks	300.9	3.0	-8.3	-9.9	-26.0
Utilities	146.7	2.4	-4.0	-6.3	-6.7	EA Banks	110.8	3.3	15.6	25.9	14.8
Real Estate	191.8	0.2	-2.4	-7.9	-25.3	Greek Banks	983.2	-1.0	53.5	77.2	74.6

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	4.33	4.26	3.88	3.46	2.26
Germany	2.67	2.60	2.53	1.71	0.52
Japan	0.70	0.64	0.42	0.25	0.17
UK	4.35	4.43	3.66	3.13	1.61
Greece	4.08	3.95	4.59	4.21	4.91
Ireland	3.08	3.00	3.06	2.31	1.12
Italy	4.45	4.33	4.64	3.98	2.18
Spain	3.73	3.64	3.61	2.86	1.61
Portugal	3.38	3.31	3.57	2.77	2.20
EM	4.92	4.92	5.04	4.90	4.66

US Mortgage Market	Current	Last week	Year Start	One Year Back	10-year average
30-Year FRM[1] (%)	7.27	7.21	6.42	6.01	4.35
vs 30Yr Treasury (bps)	282.4	285.2	240.1	241.8	154.1

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	-70	-71	-54	-41	79
US Treasuries 10Y/5Y	-13	-14	-13	-21	39
Bunds 10Y/2Y	-53	-46	-16	24	65
Bunds 10Y/5Y	-1.4	-0.3	-0.4	12	46

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US IG	122	123	138	145	131
US High yield	379	385	481	477	445
Euro area IG	145	152	167	193	121
Euro area High Yield	415	436	498	540	401
EM	256	257	295	323	318
EUR Senior Financial	175	185	204	234	N/A
EUR Subordinated Financial	295	303	311	347	N/A
EUR AT1	738	782	718	854	N/A

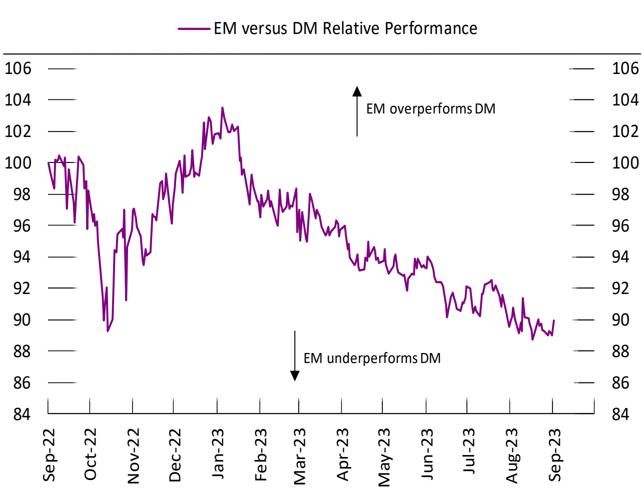
Foreign Exchange & Commodities

Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1.07	-0.5	-2.2	6.7	-0.1
EUR/CHF	0.96	0.1	-0.2	-0.4	-3.1
EUR/GBP	0.86	0.3	0.6	-1.1	-3.0
EUR/JPY	157.71	-0.3	-0.8	10.0	12.0
EUR/NOK	11.49	0.5	-0.2	13.2	9.2
EUR/SEK	11.92	0.2	0.5	11.3	7.2
EUR/AUD	1.66	-1.2	-1.9	11.4	5.3
EUR/CAD	1.44	-1.2	-2.1	9.3	-0.2
USD-based cross rates					
USD/CAD	1.35	-0.8	0.1	2.4	-0.2
USD/AUD	1.55	-0.7	0.3	4.3	5.3
USD/JPY	147.86	0.1	1.4	3.1	12.1

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	404	0.4	1.5	-15.7	-14.2
Energy	305	2.4	11.2	-1.9	5.9
West Texas Oil ($/bbl)	91	3.7	14.3	6.7	13.1
Crude brent Oil ($/bbl)	94	3.6	12.6	3.4	9.3
HH Natural Gas ($/mmbtu)	2.6	4.5	3.7	-69.3	-24.9
TTF Natural Gas (EUR/mwh)	36	5.7	-3.4	-83.0	-52.2
Industrial Metals	414	1.4	3.2	-1.2	-8.1
Precious Metals	2531	0.2	1.1	16.5	5.6
Gold ($)	1924	0.2	1.7	15.6	5.4
Silver ($)	23	0.3	2.7	20.1	-4.0
Baltic Dry Index	1381	16.4	12.0	-14.3	-8.8
Baltic Dirty Tanker Index	740	3.8	-8.2	-49.5	-60.5

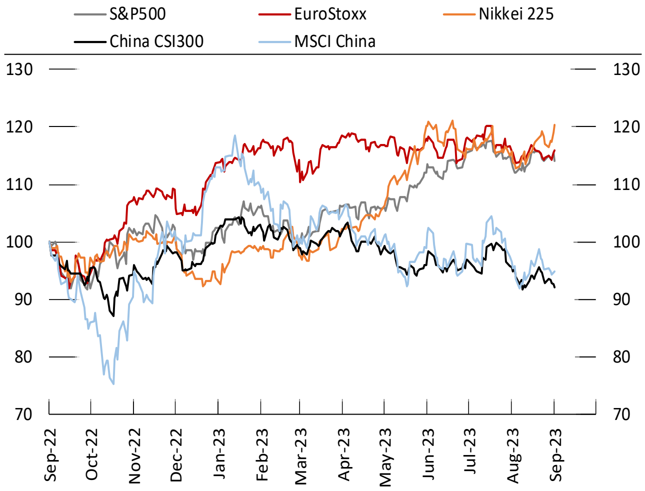
Source: NBG Research, Data as of September 15th, *: Unless otherwise noted, [1] Fixed-rate Mortgage

EM vs DM Performance in $



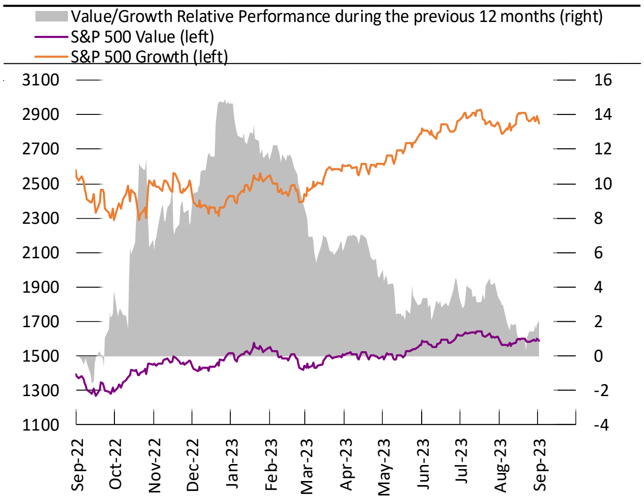
Data as of September 15th – Rebased @ 100

Equity Market Performance



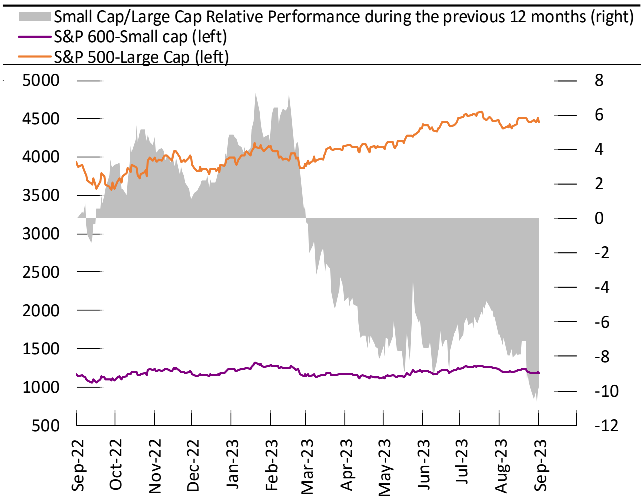
Data as of September 15th – Rebased @ 100

S&P 500 Value & Growth Index



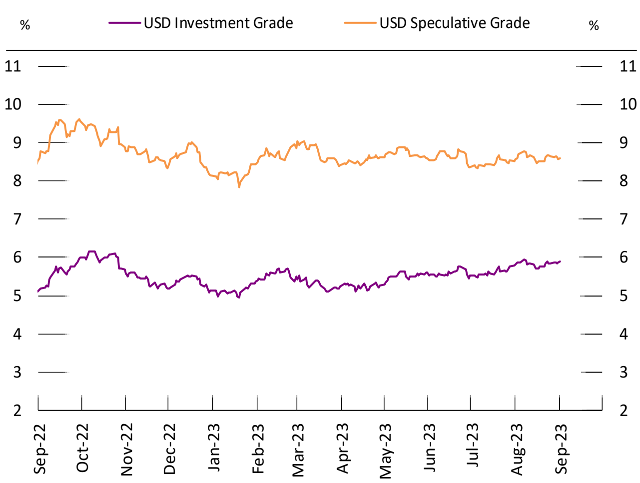
Data as of September 15th

S&P 500 & S&P 600 Index



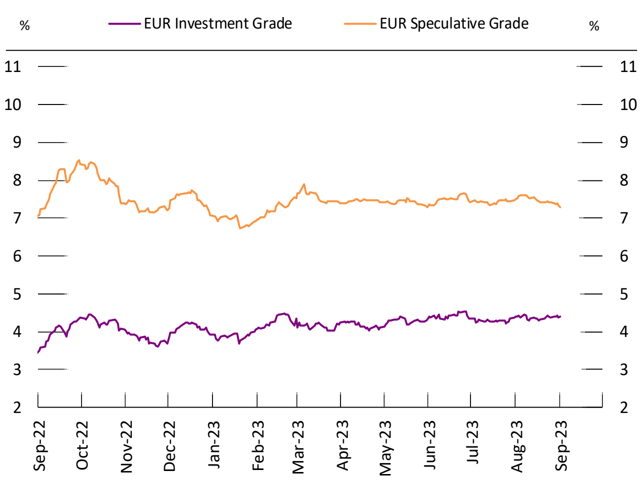
Data as of September 15th

USD Corporate Bond Yields



Data as of September 15th

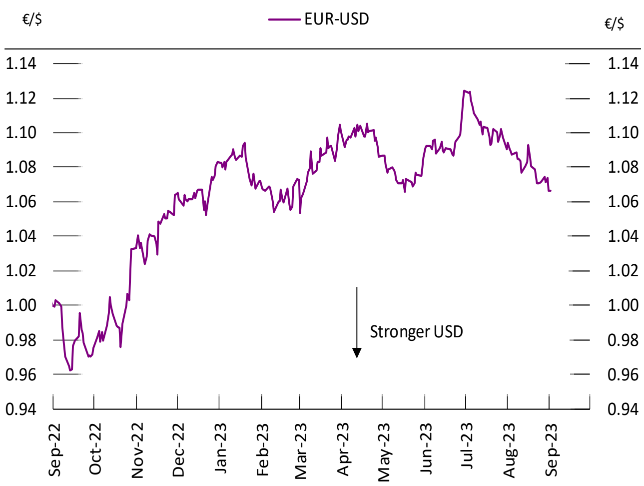
EUR Corporate Bond Yields



Data as of September 15th

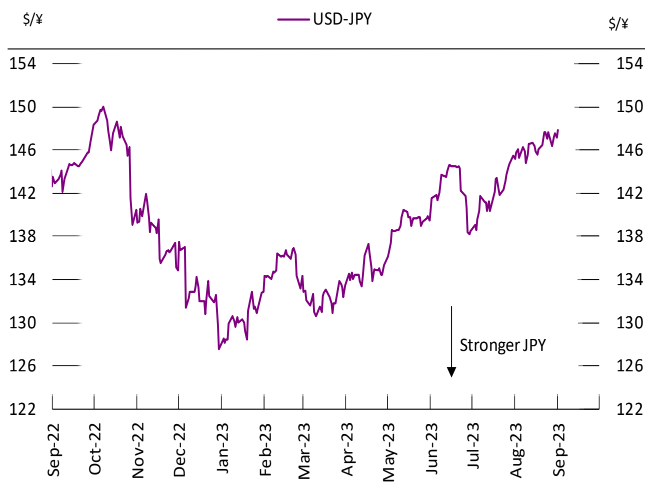
NATIONAL BANK OF GREECE

EUR/USD



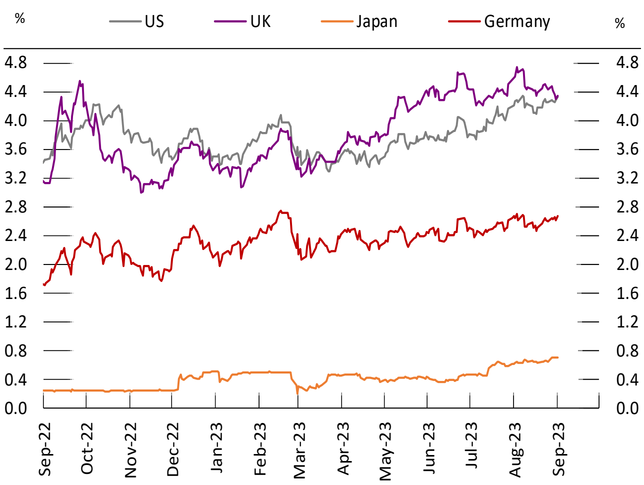
Data as of September 15th

JPY/USD



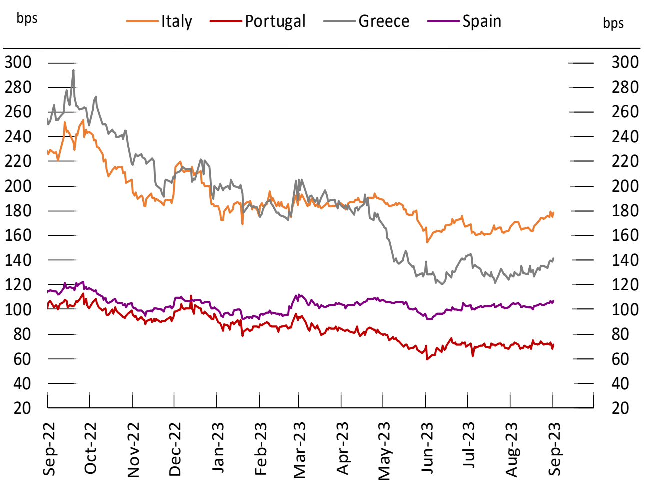
Data as of September 15th

10- Year Government Bond Yields



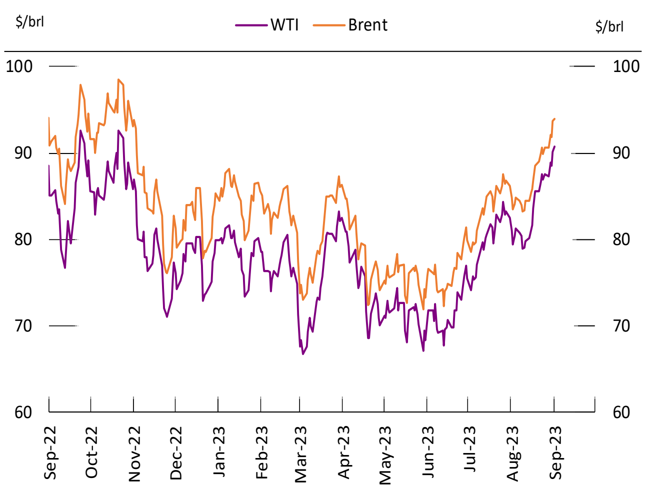
Data as of September 15th

10- Year Government Bond Spreads



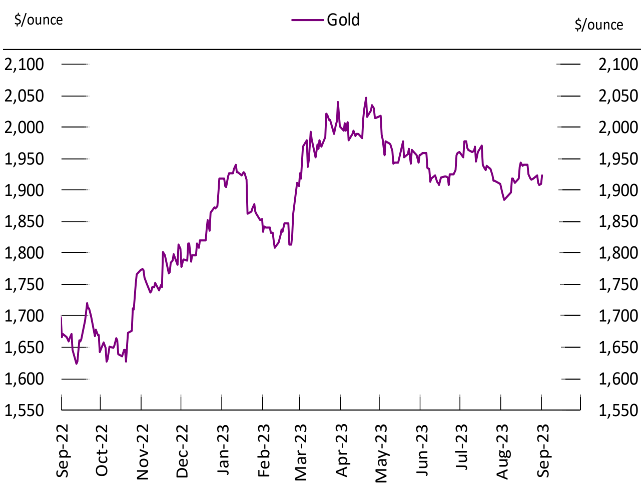
Data as of September 15th

West Texas Intermediate and Brent ($/brl)



Data as of September 15th

Gold ($/ounce)



Data as of September 15th

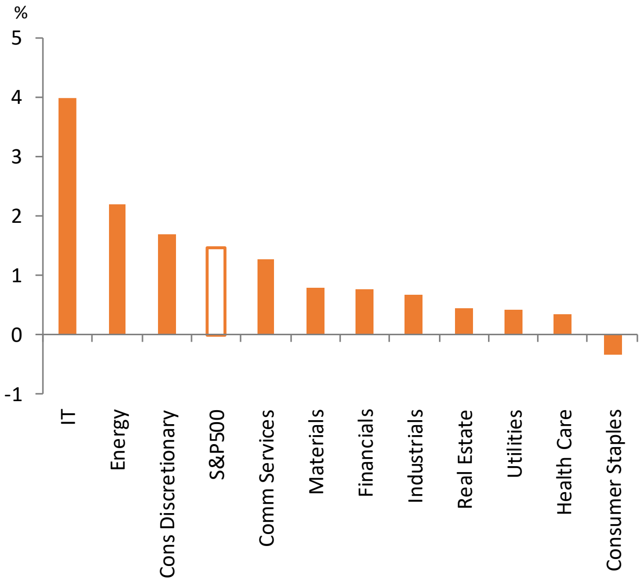
US Sectors Valuation

	Price ($)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	15/9/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	20Yr Avg	2022	2023	Current	20Yr Avg
S&P500	4450	-0.2	15.9	4.7	2.0	1.7	1.5	18.4	20.2	18.7	15.8	3.9	4.1	4.1	2.9
Energy	702	0.1	4.4	154.4	-28.1	3.4	3.2	8.1	12.4	12.1	15.1	2.3	2.3	2.3	2.0
Materials	513	-0.1	4.7	5.4	-21.0	2.2	2.1	14.6	18.4	17.6	15.2	2.9	2.8	2.8	2.8
Financials															
Diversified Financials	1025	0.6	7.1	-9.4	3.1	1.3	1.3	19.0	19.1	17.4	16.0	2.7	2.5	2.5	2.3
Banks	301	3.0	-8.3	-21.3	10.2	3.0	3.6	11.2	8.7	8.9	11.8	1.2	1.0	1.0	1.2
Insurance	611	2.1	2.7	-13.1	20.1	1.7	1.8	17.2	14.6	12.6	11.1	2.2	2.1	2.1	1.4
Real Estate	230	0.6	-1.2	11.8	0.7	3.8	3.9	17.4	16.5	16.0	18.6	2.6	2.7	2.7	2.7
Industrials															
Capital Goods	923	-1.1	5.7	12.8	19.4	1.6	1.7	22.8	19.7	18.0	16.1	5.0	4.7	4.7	3.6
Transportation	944	0.7	4.2	123.7	5.8	1.9	2.2	16.0	15.1	N/A	15.0	5.5	4.5	4.5	3.7
Commercial Services	551	0.0	13.4	16.4	10.2	1.5	1.5	27.8	28.9	26.6	21.7	8.1	8.3	8.3	4.8
Consumer Discretionary															
Retailing	3634	0.1	32.0	-43.9	60.3	0.8	0.7	43.6	34.3	30.4	23.0	10.9	11.0	11.0	8.1
Consumer Services	1506	-0.1	18.5	N/A	217.3	1.1	1.2	69.6	23.9	N/A	27.2	464.2	221.5	N/A	19.2
Consumer Durables	364	-2.3	-1.6	3.7	-6.9	1.7	1.7	13.0	13.3	12.5	16.1	3.2	2.8	2.8	3.2
Automobiles and parts	149	9.1	90.4	28.6	-3.2	0.3	0.3	24.2	31.3	N/A	11.3	4.7	5.2	5.2	2.3
IT															
Technology	3264	-1.7	29.7	5.0	0.2	0.9	0.8	21.8	25.2	23.7	16.1	15.8	16.2	16.2	5.8
Software & Services	3737	-2.4	31.4	10.8	10.6	1.0	0.8	26.0	29.7	27.3	18.5	8.8	9.4	9.4	6.2
Semiconductors	2742	-2.7	65.2	-5.8	-2.2	1.4	1.0	20.3	28.4	23.5	18.1	5.1	6.5	6.5	3.8
Communication Services	230	0.6	44.1	-20.6	25.8	1.0	0.8	18.2	19.2	17.1	17.5	2.9	3.5	3.5	2.8
Media	941	0.3	55.3	-23.0	31.5	0.3	0.2	21.1	22.5	19.6	21.4	3.3	4.2	4.2	3.2
Consumer Staples															
Food & Staples Retailing	643	0.1	3.6	-3.5	-1.4	1.5	1.6	21.9	22.6	21.4	17.2	5.3	5.0	5.0	3.7
Food Beverage & Tobacco	820	0.8	-5.0	5.9	3.2	3.1	3.3	18.7	17.9	17.1	17.0	5.2	4.8	4.8	4.7
Household Goods	826	-0.1	-4.4	-3.4	6.8	2.5	2.4	25.2	24.3	22.9	19.7	9.6	8.6	8.6	6.1
Health Care															
Pharmaceuticals	1266	-0.2	-2.3	5.5	-24.4	2.0	2.0	14.1	19.7	17.8	14.5	5.3	5.3	5.3	4.1
Healthcare Equipment	1768	0.3	-4.3	4.3	3.5	1.2	1.3	18.7	18.2	17.0	15.8	3.8	3.6	3.6	3.1
Utilities	327	2.7	-8.7	1.2	6.2	3.2	3.4	18.5	17.4	16.4	15.4	1.9	1.9	1.9	1.8

Blue box indicates a value more than +2standard devation from average, light blue a value more than +1standard devation from average. Orange box indicates a value less than -2standard devation from average, light orange a value less than -1standard devation from average

1-month revisions to 12-month Forward EPS

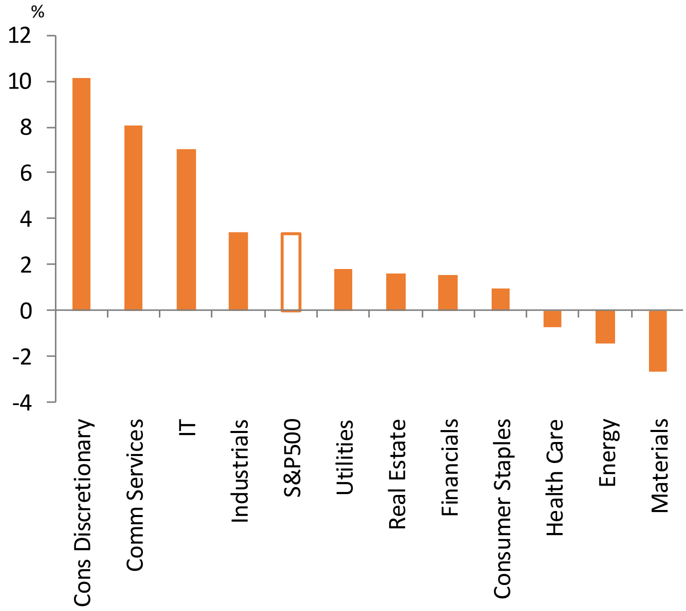
Earnings Revisions indicate 1-month change in 12-month Forward EPS



Data as of September 15th
12-month forward EPS are 29% of 2023 EPS and 71% of 2024 EPS

3-month revisions to 12-month Forward EPS

Earnings Revisions indicate 3-month change in 12-month Forward EPS



Data as of September 15th
12-month forward EPS are 29% of 2023 EPS and 71% of 2024 EPS

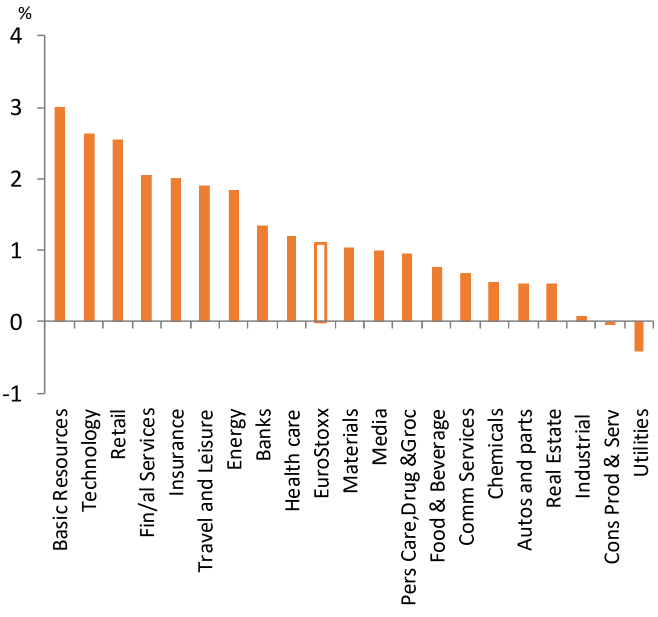
Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	15/9/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	20Yr Avg	2022	2023	Current	20Yr Avg
EuroStoxx	454	1.3	10.8	21.7	3.3	3.1	3.4	13.3	12.8	12.3	13.2	1.8	1.7	1.7	1.6
Energy	361	3.3	3.9	121.8	-31.9	5.6	4.9	5.2	7.9	7.8	11.1	1.3	1.3	1.3	1.5
Materials	987	1.9	7.0	13.4	-41.5	3.8	3.3	8.9	15.0	13.7	13.4	1.4	1.3	1.3	1.6
Basic Resources	212	3.1	-5.2	-11.2	-49.0	2.9	3.1	5.0	8.6	8.6	10.4	0.8	0.6	0.6	0.9
Chemicals	1466	1.7	9.5	28.3	-37.2	4.0	3.4	11.2	18.0	15.9	14.3	1.7	1.7	1.7	2.1
Financials															
Banks	111	3.3	15.6	18.4	29.2	5.3	7.6	8.6	6.2	6.0	9.8	0.8	0.7	0.7	0.9
Insurance	345	4.4	12.4	-17.4	41.2	5.2	5.2	13.3	9.8	9.1	9.4	1.5	1.4	1.4	1.0
Financial Services	509	1.3	4.5	31.5	14.7	3.1	3.4	11.3	9.6	10.2	15.4	1.3	1.1	1.1	1.3
Real Estate	128	2.5	-2.9	2.1	-4.3	5.5	4.7	11.6	10.7	10.8	16.2	0.6	0.7	0.7	1.0
Industrials															
Industrial Goods & Services	1035	-0.2	7.5	18.6	15.2	2.2	2.6	19.5	16.2	15.1	15.3	2.8	2.5	2.5	2.3
Construction & Materials	557	1.8	20.6	3.1	3.0	3.4	3.5	12.6	12.7	11.9	13.6	1.7	1.6	1.6	1.6
Consumer Discretionary															
Retail	655	2.3	27.8	2.5	18.4	3.7	4.0	23.1	21.6	20.1	22.5	4.7	5.2	5.2	5.5
Automobiles and parts	590	2.7	16.6	9.6	-0.5	4.9	5.2	5.9	5.8	6.0	8.4	0.9	0.8	0.8	1.1
Travel and Leisure	230	3.2	25.6	N/A	57.9	1.0	1.4	19.1	13.0	N/A	N/A	2.7	2.4	2.4	2.0
Consumer Products & Services	495	1.8	15.9	2.3	15.1	1.4	1.6	33.4	29.4	26.7	21.3	6.8	6.2	6.2	3.7
Media	296	1.9	13.8	21.4	14.4	2.2	2.5	22.5	20.1	18.8	15.5	3.0	3.2	3.2	2.0
Technology	833	-2.7	16.7	-3.7	26.9	1.0	1.1	28.3	22.6	20.2	21.2	4.0	3.8	3.8	3.5
Consumer Staples															
Food, Beverage & Tobacco	158	-0.6	-4.1	11.7	-4.8	1.8	2.3	19.6	18.7	17.0	17.8	2.2	1.8	1.8	2.6
Personal Care, Drug & Grocery	184	1.1	10.2	6.8	0.6	2.4	2.5	16.0	16.1	14.8	16.2	2.3	2.2	2.2	2.6
Health care	840	1.5	8.0	7.2	-4.0	2.4	2.3	15.9	17.4	16.0	15.0	2.0	2.0	2.0	2.1
Communication Services	285	1.8	8.8	28.0	-3.4	3.9	4.3	14.7	14.8	13.7	13.6	1.5	1.4	1.4	1.9
Utilities	372	1.7	6.5	23.0	5.6	5.2	5.2	12.0	11.8	12.2	13.2	1.8	1.6	1.6	1.5

Blue box indicates a value more than +2standard devation from average, light blue a value more than +1standard devation from average. Orange box indicates a value less than -2standard devation from average, light orange a value less than -1standard devation from average

1-month revisions to 12-month Forward EPS

Earnings Revisions indicate 1-month change in 12-month Forward EPS

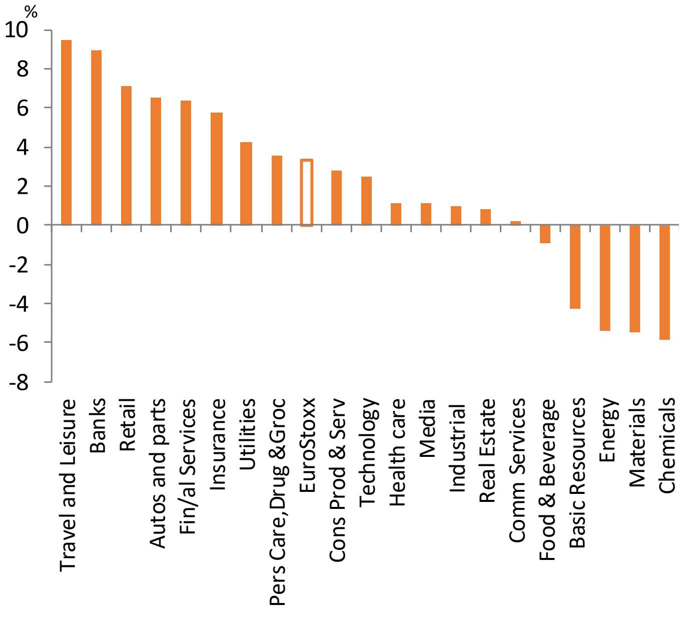


Data as of September 15th

12-month forward EPS are 29% of 2023 EPS and 71% of 2024 EPS

3-month revisions to 12-month Forward EPS

Earnings Revisions indicate 3-month change in 12-month Forward EPS



Data as of September 15th

12-month forward EPS are 29% of 2023 EPS and 71% of 2024 EPS

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