

European growth remains weak by historical standards, amid signs of resilience

- Risk assets have been broadly flat in the past week, as the positive impact of decelerating US inflation (see graph below) was offset by weaker-than-expected activity data in China (investment, production) and the ongoing impasse vis-à-vis the US debt ceiling extension.
- The S&P500 fell by -0.3% in the past week, remaining in a tight range since October 2022 (3900-4100), while euro area equities also declined slightly by -0.3% wow. In Japan, the Nikkei225 climbed to a twenty-month high, due to, *inter alia*, better-than-expected corporate earnings' results, as well as the ongoing accommodative monetary policy by the Bank of Japan. Japanese equities have been an underwhelming long-term investment (see graph page 3).
- Inflation has been on a downward trend, from very high levels, due to sharp monetary policy tightening. US CPI slowed further in April to 4.9% year-over-year from a peak of 9.1% in June 2022 and euro area CPI increased by 7.0% in April year-over-year from a peak of 10.6% in October 2022.
- Year-to-date, the MSCI ACWI index has increased by +8% and the Bloomberg Aggregate Bond index has edged higher by +3%. As a result, the classic 60/40 portfolio has recorded gains of +6%, following losses of -18% in 2022 -- one of the worst drawdowns on record. Asset performance has been resilient as, so far, the global economy has held up well.
- Indeed, the European Commission (EC) revised upwards its euro area growth forecasts for 2023 for the second time in a row, as lower-than-expected energy prices have contained the adverse economic consequences of the war in Ukraine. European natural gas prices have fallen sharply, with the "spot" Dutch TTF down by -58% year-to-date (€32/MWh). In a similar vein, Brent oil prices in euro terms have declined by -13% year-to-date (€69/barrel). All told, real GDP growth is expected at +1.1% in 2023 (up by 0.2 pps compared with three months ago) from +3.5% in 2022.
- Due to stronger economic activity, euro area CPI inflation is expected to reach 5.8%, on average, in 2023 (from 5.6% expected three months ago), before decelerating to 2.8% (from 2.5% expected three months ago) in 2024.
- In a similar vein, Bank of England's projections for real GDP growth were meaningfully revised up, on the back of: i) less malign assumptions for 2023 global real GDP growth to +2.75% from +2.25%; ii) an alleviation of energy prices, as the direct contribution to Q4.2023 CPI inflation of fuels, lubricants, gas and electricity prices, is assumed at -1% from zero previously; and iii) modest UK fiscal support.
- In all, UK real GDP growth is now foreseen at +0.4% in 2023, +0.7% in 2024 and +0.8% in 2025 (instead of -0.6%, -0.3% & +0.4%, respectively, three months ago). In addition, the Bank of England revised up its CPI estimates across the projection horizon by circa 1 pp (+5.1% yoy in Q4:2023, +2.3% yoy in Q4:2024 and +1.0% yoy in Q4:2025).
- As a result, the Bank of England increased its policy interest rate in the past week by +25 bps to 4.5%, as expected. Market pricing, according to overnight index swaps, points to additional hikes of circa 50 basis points in the next 3 months and to no cuts thereafter, until at least by the end of 2023.

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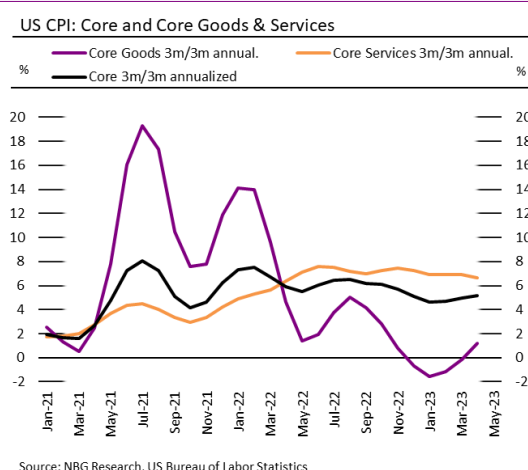
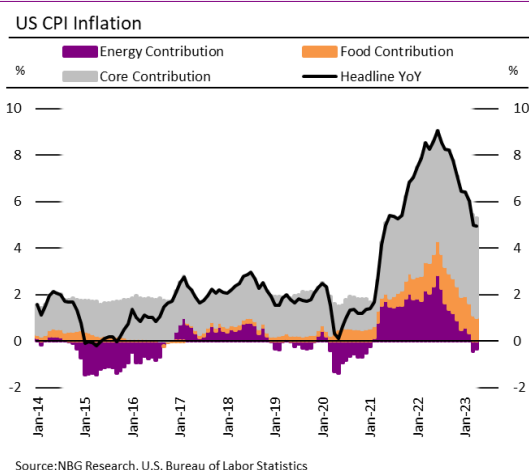
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Charts of the week



US headline CPI inflation came out slightly below expectations in April

- **Headline CPI inflation decelerated for a 10th consecutive month in April.** Specifically, the annual pace of growth came out at +4.9% from +5.0% in March (peak of +9.1% in June 2022), versus consensus estimates for a stable performance. The energy index increased by +0.6% mom (seasonally adjusted | "sa") and as a result (combined with base effects | Energy prices had decreased by -1.0% mom sa in April 2022), the annual growth came out at -5.1% from -6.4% in March.
- At the same time, food prices were roughly unchanged on a monthly basis for a 2nd consecutive month in April, with that stabilization (average monthly pace since June 2021: +0.7% mom versus a 20-year average of +0.2% mom) coming in view also of a partial easing in recent months for international prices of food. Indeed, the Food Price Index from the Food and Agriculture Organization of the United Nations stood in April at levels -5.6% below the respective ones in November 2022 (although the downward correction posted signs of fatigue in April, at +0.6% mom). In all, the annual pace of growth for food prices decelerated to +7.7% compared with +8.5% in March (also due to base effects | +0.8% mom sa in April 2022) and a peak of +11.4% in August, the highest since May 1979.
- Core CPI gains remained strong, up by +0.4% mom (sa) for a 2nd consecutive month in April, largely in line with consensus estimates (20-year average of +0.2% mom). Core CPI's annual pace of growth decelerated slightly, by -0.1 pp to +5.5% in April, broadly in line with expectations (peak of +6.6% yoy in September 2022).
- Importantly, the momentum for the relatively less volatile and predominantly determined by domestic economic developments, shelter prices (which constitute c. 1/3 of the headline CPI and c. 40% of the core index), maintains resilience, up by +0.4% mom (sa | 20-year average of +0.2%). That monthly pace lags the respective one in March (+0.6%) and, more so, a +0.7% mom on average in the prior ten months (triple its 20-year average). Nevertheless, the aforementioned deceleration in April came solely on the back of a single item, namely lodging away from home (-3.0% mom).
- On the other hand, both the two major shelter components, posted strong impetus. In the event, the index for the rent of primary residence was up by +0.6% mom in April from +0.5% mom in March (the annual growth was roughly stable at +8.8% yoy, the highest since August 1981) 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), by +0.5% mom matching March's outcome (the annual growth accelerated by 0.1 pp to +8.1% yoy, a record high, i.e. since 1984).
- Note that the deceleration of the US housing market (the annual growth of the S&P CoreLogic Case-Shiller 20-City home price index has eased to +0.4% in February from a peak of +21.3% in April 2022), has weighed on prices of new rent leases (a stabilization has taken place after peaking in August 2022 according to independent private sources). However, the CPI rent index covers both new leases and existing ones and the latter respond with a substantial lag to market conditions for new leases.
- Looking forward, the Federal Reserve Bank of Cleveland's Inflation Nowcasting model points to +4.1% in May for the annual growth of the headline CPI with strong (negative) base effects at play (monthly expected gains of +0.2% in May 2023). At the same time, annual growth of +5.3% is suggested for the core (with monthly expected gains of +0.5%).

US banks reported a broad based tightening of lending standards and weakening demand in Q1:23

- **The Fed's Senior Loan Officer Opinion Survey (SLOOS) for Q1:23, suggests that the appetite from banks to extend new credit, continued to weaken significantly.** Indeed, regarding corporations, a large net percentage of respondents reported for a 4th consecutive quarter a tightening of lending standards for commercial and industrial (C&I) loans (46% of banks for large and middle corporations | 47% for small firms), following an also significant tightening in the previous three quarters (on average, net percentages of 36% & 33%, respectively). According to the respondents, that development was again mainly due to a less favorable or more uncertain economic outlook, a reduced tolerance for risk and the worsening of industry-specific problems, while a deterioration of the current or expected liquidity positions also entered the fore.
- Meanwhile, a sharp tightening in standards for a 4th consecutive quarter was also cited across the categories of commercial real estate (CRE) loans, i.e.: i) non-farm non-residential (net respondents' percentage of 67% from 51% on average in the previous three quarters); ii) multifamily residential loans (65% from 42%) and; iii) construction and land development lending (74% from 58%). According to the Federal Reserve, such tightening was more widely reported by mid-sized banks (compared to the largest ones or other banks). Regarding households, credit standards tightened across the categories of residential real estate loans and consumer loans (credit cards, auto loans and other consumer loans).
- **On the demand side, a substantial weakening was reported anew across the board.** Regarding C&I loans, a net share of 56% of banks reported softer demand from large and middle corporations in Q1:23 and 53% from small firms, the largest such shares since the Global Financial Crisis in 2009. The most widely cited factors for demand reduction were decreased needs to finance capital investment as well as inventory, mergers or acquisitions and accounts receivable.
- Regarding residential real estate loans, a renewed sharp drop in demand was cited, albeit high frequency actual data were mixed. In the event, mortgage applications (excluding those for refinancing, thus taking into account solely applications regarding new purchases of homes, for comparability consistency with the SLOOS questionnaire) modestly increased by +2.5% on average in Q1:23, compared with the Q4:22 average, according to the Mortgage Bankers Association. Nevertheless, mortgage loan applications for new purchases remain c. -45% below a peak in late-January 2022, mainly in view of higher mortgage interest rates. Indeed, the 30-year fixed mortgage rate stood at 6.35% for the week ending May 11th. Although a stabilization has taken place compared with a peak of 7.08% in mid-November 2022, rates are still far above a trough of 2.77% in early-August 2021.
- Finally, significant net shares of banks reported weaker demand across consumer loans in Q1:23. Nevertheless, it should be noted that actual data have shown resilience in recent months. In the event, according to weekly data for consumer lending from commercial banks, the amount outstanding of the respective loans was up by +2.0% in end-Q1:23 versus end-Q4:22 and with a gentle upward trend continuing early in Q2:23. The amount outstanding of total consumer lending was up by +1.4% in March 2023 versus December 2022.

Equities

- Global equity markets moved slightly lower (MSCI ACWI: -0.5%) in the past week.** In the US, the S&P500 ended the week down by -0.3%, as investors weigh the latest inflation data and the ongoing negotiations regarding the federal debt ceiling. Regarding the S&P500 Q1:23 earning period, it proved to be better-than-feared. Specifically, with 462 companies having reported results so far, **revenue** growth stands at +4% yoy, versus expectations of +1.9% at the beginning of the season. Circa 75% of the companies have exceeded estimates, well above the 10-year average of 63%. Nevertheless, the 4% yoy revenue growth rate is the lowest since Q4:20. In terms of **margins**, the estimated net profit margin for the S&P500 for Q1:23 is 11.5%, versus expectations of 11.2% at the beginning of the season, up by 20 basis points compared to Q4:22, but 80 basis points lower compared to one year ago. In terms of **earnings per share**, EPS growth hovers at -2.5% yoy versus expectations of -6.7% at the beginning of the season, with circa 78% of the companies having reported EPS above estimates (10-year average of 73%), recording the 2nd consecutive quarter with a year-over-year decline in earnings.

Ten out of the eleven sectors have reported higher EPS growth rate compared with expectations (March 31st). Consumer Discretionary (to 54% from 34% | supported by AMZN, Ford and GM), IT (to -11% from -15% | supported by MSFT, AAPL and INTC) and Health Care (to -16% from -20% | supported by PFE, MRNA and JNJ) sectors contributed to the above outcome. In the current week, earnings results of major retailers (Walmart, Target Corp.) will gather investors' attention. In Japan, the Nikkei225 rose by 0.8% wov and by a further +1.5% cumulatively on Monday-Tuesday, posting a 20-month high, due to, *inter alia*, better-than-expected corporate earnings and the Bank of Japan's supportive monetary policy. On the other side of the Atlantic, the EuroStoxx declined by -0.3% wov with the Real Estate sector underperforming (-3.8% wov). In Greece, the ASE Index ended the week up by 1% wov, led by Banks (+2.3%). In Turkey, the ISE100 Index rose by +9% wov ahead of the country's presidential elections on May 14th. Nevertheless, the trend reversed on Monday (-6.1%), as no candidate achieved the required 50% and a runoff election will be held on May 28th. On Tuesday, the index was recording a +0.5% gain (14:30 pm London time).

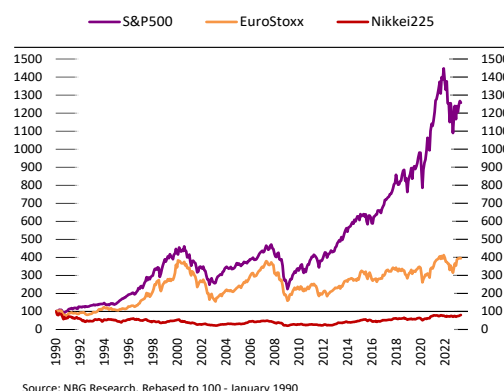
Fixed Income

- Government bond yields were mixed in the past week.** Specifically, the 10-year US Treasury yield ended the week up by 2 bps to 3.46% and its 2-year peer by 7 bps to 3.98%, following, *inter alia*, an increase in May's University of Michigan consumers' inflation expectations to an annual inflation of +3.2% over the next 5 to 10 years, the highest level since 2011, from 3% in April. In Germany, the 10-year yield was broadly stable at 2.28%, while periphery bond yield spreads posted modest changes in the previous week (Italy: -2 bps to 188 bps, Spain: -2 bps to 106 bps, Greece: broadly stable at 175 bps). **Corporate bond spreads were little changed in the past week.** Indeed, USD HY bond spreads ended the week broadly stable at 476 bps and their EUR counterparts narrowed by -4 bps wov to 484 bps. In the investment grade spectrum, USD and EUR IG bond spreads were broadly stable at 148 bps and 167 bps, respectively.

FX and Commodities

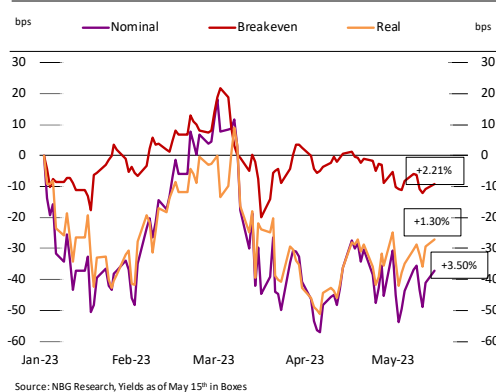
- In foreign exchange markets, the US dollar appreciated** by +1.3% wov against the euro in the past week to \$1.086 and by +1.2% against the British pound to USD/GDP 0.80, supported, *inter alia*, by hawkish FOMC-member comments. **In commodities, oil prices fell in the past week**, due to the decline of China's crude oil imports by 16.2% mom in April and the larger-than-expected build-up of US crude oil inventories (+3 million barrels for the week ending May 5th to 463 million barrels). Overall, Brent prices declined by -1.5% to \$74.2/barrel (-14% ytd), while WTI fell by -1.8% to \$70/barrel (-13% ytd).

Equity Markets Price Performance in Local Currency



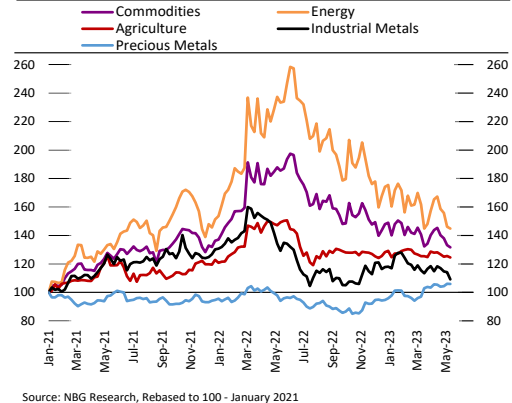
Graph 1.

US Treasury 10-Year Yield Decomposition: Change Year-to-Date



Graph 2.

Commodities Indices Price Performance



Graph 3.

Quote of the week: "We are determined to tame inflation, to bring it back to our 2% medium-term target in a timely manner, and we have made a sizeable adjustment already. But we still have more ground to cover.", **ECB President, C. Lagarde, May 8th 2023.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	May 12th	3-month	6-month	12-month	Official Rate (%)	May 12th	3-month	6-month	12-month
Germany	2,28	2,60	2,70	2,80	Euro area	3,25	3,50	3,50	3,50
US	3,46	4,00	4,10	4,10	US	5,25	5,25	5,25	5,25
UK	3,77	3,74	3,64	3,40	UK	4,50	4,60	4,60	4,40
Japan	0,37	0,60	0,68	0,74	Japan	-0,10	-0,10	-0,10	-0,10

Currency	May 12th	3-month	6-month	12-month	May 12th	3-month	6-month	12-month	
EUR/USD	1,09	1,08	1,09	1,10	USD/JPY	135	133	129	127
EUR/GBP	0,87	0,89	0,89	0,91	GBP/USD	1,24	1,22	1,22	1,21
EUR/JPY	147	143	140	139					

Forecasts at end of period

Economic Forecasts

United States	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22a	2022a	Q1:23a	Q2:23f	Q3:23f	Q4:23f	2023f
Real GDP Growth (YoY) (1)	5,9	3,7	1,8	1,9	0,9	2,1	1,6	2,2	1,5	0,9	1,6
Real GDP Growth (QoQ saar) (2)	-	-1,6	-0,6	3,2	2,6	-	1,1	0,8	0,7	0,0	-
Private Consumption	8,3	1,3	2,0	2,3	1,0	2,7	3,7	1,2	1,1	0,6	2,0
Government Consumption	0,6	-2,3	-1,6	3,7	3,8	-0,6	4,7	0,5	0,1	0,6	1,8
Investment	7,4	4,8	-5,0	-3,5	-3,8	-0,2	-0,4	1,6	1,9	1,3	0,7
Residential	10,7	-3,1	-17,8	-27,1	-25,1	-10,6	-4,2	-3,6	-3,1	-3,1	-12,7
Non-residential	6,4	7,9	0,1	6,2	4,0	3,9	0,7	2,6	2,8	2,1	2,9
Inventories Contribution	0,2	0,3	-2,1	-1,4	2,0	0,7	-2,7	-0,3	-0,5	-0,8	-0,5
Net Exports Contribution	-1,7	-3,8	1,2	3,3	0,6	-0,6	0,1	-0,1	0,1	0,1	0,6
Exports	6,1	-4,6	13,8	14,6	-3,7	7,1	4,8	2,8	2,0	0,1	4,0
Imports	14,1	18,4	2,2	-7,3	-5,5	8,1	2,9	2,2	0,9	-0,5	-0,7
Inflation (3)	4,7	8,0	8,7	8,3	7,1	8,0	5,8	4,2	3,8	4,0	4,5

Euro Area	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22a	2022a	Q1:23a	Q2:23f	Q3:23f	Q4:23f	2023f
Real GDP Growth (YoY)	5,3	5,5	4,4	2,5	1,8	3,5	1,3	0,6	0,6	0,9	0,9
Real GDP Growth (QoQ saar)	-	2,4	3,7	1,5	-0,2	-	0,3	0,9	1,3	1,3	-
Private Consumption	3,7	0,4	4,3	3,7	-3,4	4,3	0,3	1,5	1,3	1,4	0,6
Government Consumption	4,3	0,6	0,2	-0,3	3,3	1,4	-0,6	-1,9	0,8	1,8	0,1
Investment	3,9	-2,8	3,7	16,9	-13,5	3,8	0,9	1,8	1,9	1,9	0,3
Inventories Contribution	0,2	-1,3	0,6	0,8	0,4	0,3	0,0	-0,3	-0,4	-0,1	0,1
Net Exports Contribution	1,3	4,0	-0,1	-4,4	3,8	-0,1	0,1	0,4	0,5	-0,1	0,3
Exports	10,5	5,5	7,2	6,9	-0,1	7,1	2,2	3,9	4,1	2,5	3,3
Imports	8,3	-2,5	8,0	17,9	-7,4	8,0	2,1	3,5	3,5	3,0	2,9
Inflation	2,6	6,1	8,0	9,3	10,0	8,4	8,0	6,4	4,9	3,6	5,7

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

	US	Euro Area	Japan	UK
Equity Markets	<ul style="list-style-type: none"> + Households' balance sheets are healthy (low debt, still elevated excess savings) + Sentiment (e.g. AAI) and positioning indicators are low, despite the recent rally - Peaking profit margins - Recession risks remain considerable - P/E's (Valuations) above long-term means <p>● Neutral/Negative</p>	<ul style="list-style-type: none"> + 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 <p>● Neutral/Positive</p>	<ul style="list-style-type: none"> + 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) <p>● Neutral</p>	<ul style="list-style-type: none"> + 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 <p>● Neutral</p>
Government Bonds	<ul style="list-style-type: none"> + 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 <p>▲ Slightly higher yields</p>	<ul style="list-style-type: none"> + 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) <p>▲ Slightly higher yields</p>	<ul style="list-style-type: none"> + 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) <p>▲ Slightly Higher yields</p>	<ul style="list-style-type: none"> + 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 <p>▲ Slightly Higher yields</p>
Foreign Exchange	<ul style="list-style-type: none"> + 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 <p>● Broadly Flat USD against G10 FX</p>	<ul style="list-style-type: none"> + 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 <p>● Range-bound with upside risks against the USD</p>	<ul style="list-style-type: none"> + Safe haven demand + More balanced economic growth recovery (long-term) + Higher core Inflation rates could accelerate the shift of monetary policy (less accommodative) <p>▲ Stronger JPY</p>	<ul style="list-style-type: none"> + Valuations appear undemanding with REER below its 15-year average - Sizeable Current account deficit <p>● Broadly stable GBP</p>

Economic Calendar

In the US, economic activity indicators for April will gather investors' attention. Specifically, retail sales for April are expected to increase by +0.8% mom (from -0.6% mom in March), whereas industrial production is expected to remain stable on a monthly basis (+0.4% mom in March).

In Japan, the first estimate of Q1:23 GDP is released on Wednesday. Consensus expect GDP growth of +0.4% qoq (+1.3% yoy), compared with 0% qoq in Q4:22 (+0.4% yoy). On Friday, attention turns to inflation data for April. CPI is expected at 3.4% yoy from 3.2% yoy in the previous month.

Japan GDP Growth and Consensus Forecasts



Source: NBG Research

Economic News Calendar for the period: May 9 - May 22, 2023

Tuesday 9					Wednesday 10					Thursday 11					
CHINA					US					US					
Imports (YoY)	April	-7.9%	-7.9%	-1.4%	CPI (YoY)	April	5.0%	4.9%	5.0%	Initial Jobless Claims (k)	May 6	245	-	264	242
Exports (YoY)	April	8.0%	+ 8.5%	14.8%	Core CPI (YoY)	April	5.5%	5.5%	5.6%	Continuing Claims (k)	April 29	1820	+ 1813	1801	
					JAPAN					UK					
					Coincident Index	March	..	98.7	98.6	BoE announces its intervention rate	May 11	4.50%	4.50%	4.25%	
					Leading Index	March	..	97.5	98.0	CHINA					
										CPI (YoY)	April	0.4%	0.1%	0.7%	
										JAPAN					
										Eco Watchers Current Survey	April	52.8	+ 54.6	53.3	
										Eco Watchers Outlook Survey	April	52.6	+ 55.7	54.1	
Friday 12					Monday 15										
US					US										
University of Michigan consumer confidence	May	63.0	-	57.7	63.5	Empire Manufacturing	May	-3.5	-	-31.8	10.8				
UK					EURO AREA										
GDP (QoQ)	Q1:23	0.1%	0.1%	0.1%	Net Long-term TIC Flows (\$ bn)	March	..	133.3	56.6	Industrial Production (sa, MoM)	March	-2.5%	-	-4.1%	1.5%
GDP (YoY)	Q1:23	0.0%	+ 0.2%	0.6%	Industrial Production (wda, YoY)	March	0.9%	-	-1.4%	2.0%					
GDP (MoM)	March	0.0%	-	-0.3%	0.0%										
Industrial Production (MoM)	March	0.0%	+ 0.7%	-0.1%											
Industrial Production (YoY)	March	-2.9%	+ -2.0%	-2.7%											
Tuesday 16					Wednesday 17										
US					CHINA					US					
Retail sales (MoM)	April	0.8%	..	-0.6%	Industrial Production (wda, YoY)	April	10.9%	..	3.9%	Building permits (k)	April	1425	..	1430	
Retail sales ex-autos (MoM)	April	0.4%	..	-0.4%	Retail sales (YoY)	April	21.0%	..	10.6%	Housing starts (k)	April	1400	..	1420	
Industrial Production (MoM)	April	0.0%	..	0.4%						JAPAN					
NAHB housing market confidence index	May	45	..	45						GDP (QoQ)	Q1:23	0.4%	..	0.0%	
EURO AREA										GDP (YoY)	Q1:23	1.3%	..	0.4%	
GDP (QoQ)	Q1:23	0.1%	..	0.1%											
GDP (YoY)	Q1:23	1.3%	..	1.3%											
Employment (QoQ)	Q1:23	0.3%	..	0.3%											
Employment (YoY)	Q1:23	0.4%	..	1.5%											
Trade Balance SA (€ bn)	March	-5.7	..	-0.1											
UK															
ILO Unemployment Rate	March	3.8%	..	3.8%											
GERMANY															
ZEW survey current situation	May	-37.5	..	-32.5											
ZEW survey expectations	May	-5.5	..	4.1											
Thursday 18					Friday 19					Monday 22					
US					JAPAN					EURO AREA					
Philadelphia Fed Business Outlook	May	-19.0	..	-31.3	CPI (YoY)	April	3.4%	..	3.2%	Consumer Confidence Indicator	May	-16.8	..	-17.5	
Existing home sales (mn)	April	4.30	..	4.44	Core CPI (YoY) - ex. Fresh Food	April	3.1%						
Continuing Claims (k)	May 6	1833	..	1813	Core CPI (YoY) - ex. Fresh Food and Energy	April	3.8%						
Initial Jobless Claims (k)	May 13	254	..	264											
JAPAN															
Imports YoY	April	-1.4%	..	7.3%											
Exports YoY	April	5.1%	..	4.3%											

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

Equity Markets (in local currency)

Developed Markets						Emerging Markets						
	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)		
US	S&P 500	4124	-0.3	7.4	4.9	1.5	MSCI Emerging Markets	58698	-0.5	2.1	0.2	-20.0
Japan	NIKKEI 225	29388	0.8	12.6	14.1	4.4	MSCI Asia	894	-0.9	2.2	1.2	-21.5
UK	FTSE 100	7755	-0.3	4.1	7.2	10.7	China	63	-2.2	-1.8	1.2	-39.3
Euro area	EuroStoxx	457	-0.3	11.6	13.2	4.4	Korea	758	-1.0	13.0	-2.1	-22.6
Germany	DAX 40	15914	-0.3	14.3	15.8	5.0	MSCI Latin America	88803	1.7	0.6	-2.2	-12.3
France	CAC 40	7415	-0.2	14.5	19.5	18.1	Brazil	282220	3.1	-4.4	-7.9	-23.9
Italy	FTSE/MIB	27347	0.0	15.4	16.0	11.8	Mexico	50922	-0.1	13.1	10.2	14.2
Spain	IBEX-35	9234	0.9	12.2	12.6	2.5	MSCI Europe	3003	3.8	6.7	29.7	-53.4
Hong Kong	Hang Seng	19627	-2.1	-0.8	1.3	-30.5	Russia	2565	1.1	19.1	11.6	-29.8
Greece	ASE	1123	1.0	20.8	32.6	25.5	Turkey	5068660	11.8	-5.9	91.0	230.7

World Market Sectors and Styles (MSCI Indices*)

in US Dollar terms						Investment Styles					
	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	
Energy	228.4	-2.0	-7.2	1.2	38.3	Growth	3969.8	0.3	17.1	13.1	-1.9
Materials	317.3	-2.2	2.1	-1.1	-13.1	Value	3088.1	-1.2	-0.5	0.1	-4.0
Industrials	318.1	-0.6	6.3	11.8	-4.6	Large Cap	1766.2	-0.4	8.8	7.2	-0.6
Consumer Discretionary	338.8	0.3	16.4	8.5	-12.6	Small Cap	475.1	-1.0	2.3	2.5	-14.6
Consumer Staples	285.7	-0.9	5.9	4.6	5.3	US Growth	2614.9	0.2	10.8	4.4	-1.7
Healthcare	348.0	-0.9	0.8	7.1	7.5	US Value	1488.8	-0.9	3.8	4.9	3.3
Financials	127.0	-1.1	-3.0	0.8	-10.9	US Large Cap	2254.8	-0.3	7.1	4.6	-1.1
IT	477.0	-0.2	21.3	14.5	7.7	US Small Cap	1740.8	-1.1	-1.2	0.1	-18.5
Telecoms	81.7	3.1	22.6	2.3	-20.5	US Banks	273.0	-2.6	-16.8	-17.3	-33.7
Utilities	156.4	-0.4	2.4	0.6	1.5	EA Banks	103.2	0.9	7.7	22.7	7.2
Real Estate	195.7	-1.5	-0.4	-11.1	-16.0	Greek Banks	853.2	2.3	33.2	56.1	45.0

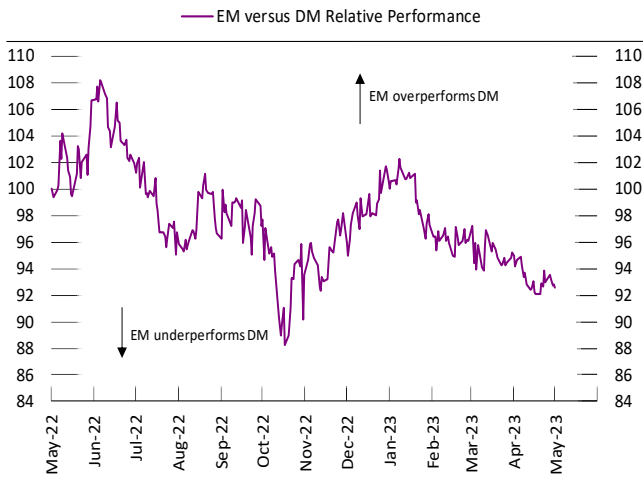
Bond Markets (%)

10-Year Government Bond Yields						Government Bond Yield Spreads (in bps)					
	Current	Last week	Year Start	One Year Back	10-year average	Current	Last week	Year Start	One Year Back	10-year average	
US	3.46	3.44	3.88	2.82	2.21	US Treasuries 10Y/2Y	-52	-47	-54	31	89
Germany	2.28	2.29	2.57	0.84	0.49	US Treasuries 10Y/5Y	1	3	-13	4	44
Japan	0.37	0.42	0.42	0.24	0.18	Bunds 10Y/2Y	-32	-28	-19	79	72
UK	3.77	3.77	3.66	1.70	1.54	Bunds 10Y/5Y	5	6	-1	33	49
Greece	4.02	4.04	4.62	3.36	5.13	Corporate Bond Spreads (in bps)					
Ireland	2.72	2.74	3.06	1.52	1.15	US IG	148	148	138	148	132
Italy	4.16	4.19	4.64	2.74	2.19	US High yield	476	477	481	477	447
Spain	3.33	3.37	3.61	1.90	1.65	Euro area IG	167	166	167	168	121
Portugal	3.08	3.13	3.57	1.96	2.31	Euro area High Yield	484	488	498	510	404
EM	4.83	4.86	5.04	4.90	4.67	EM	306	308	295	332	321
US Mortgage Market						EUR Senior Financial	213	216	204	196	N/A
30-Year FRM¹ (%)	6.48	6.50	6.42	5.53	4.26	EUR Subordinated Financial	338	343	311	306	N/A
vs 30Yr Treasury (bps)	267.8	271.6	240.1	253.0	147.2	EUR AT1	937	937	718	712	N/A

Foreign Exchange & Commodities

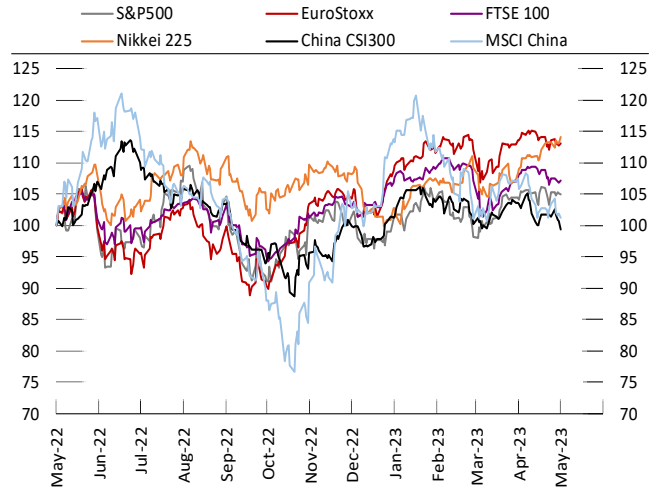
Foreign Exchange						Commodities					
	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	
Euro-based cross rates						Agricultural	438	-1.7	-4.0	-24.3	-6.8
EUR/USD	1.09	-1.3	-1.0	4.3	1.8	Energy	238	-0.9	-14.4	-36.0	-17.5
EUR/CHF	0.97	-0.8	-1.1	-6.3	-1.3	West Texas Oil (\$/bbl)	70	-1.8	-15.9	-34.0	-12.7
EUR/GBP	0.87	-0.2	-1.1	2.3	-1.8	Crude Brent Oil (\$/bbl)	74	-1.5	-15.1	-31.0	-13.7
EUR/JPY	146.98	-1.0	0.4	10.2	4.4	HH Natural Gas (\$/mmbtu)	2.3	22.5	2.1	-68.7	-35.6
EUR/NOK	11.62	-0.2	1.2	13.4	10.5	TTF Natural Gas (EUR/mwh)	33	-10.4	-23.6	-69.3	-57.1
EUR/SEK	11.27	0.6	-0.7	7.2	1.4	Industrial Metals	417	-4.3	-5.9	-15.0	-7.6
EUR/AUD	1.63	0.0	-0.5	7.8	3.8	Precious Metals	2648	-0.2	0.1	11.8	10.5
EUR/CAD	1.47	-0.6	-0.5	8.4	1.6	Gold (\$)	2011	-0.3	-0.2	10.4	10.2
USD-based cross rates						Silver (\$)	24	-6.8	-6.3	15.6	-0.2
USD/CAD	1.35	0.7	0.6	3.9	-0.1	Baltic Dry Index	1558	0.0	6.5	-50.0	2.8
USD/AUD	1.50	1.4	0.6	3.4	1.9	Baltic Dirty Tanker Index	1252	16.8	-1.9	9.8	-33.2
USD/JPY	135.31	0.3	1.5	5.6	2.5						

EM vs DM Performance in \$



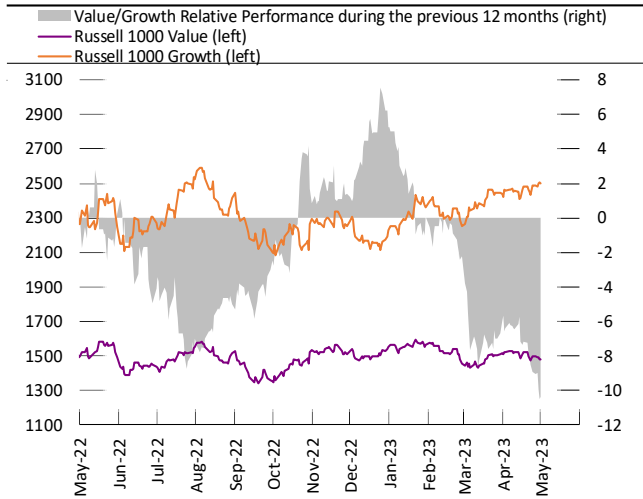
Data as of May 12th – Rebased @ 100

Equity Market Performance



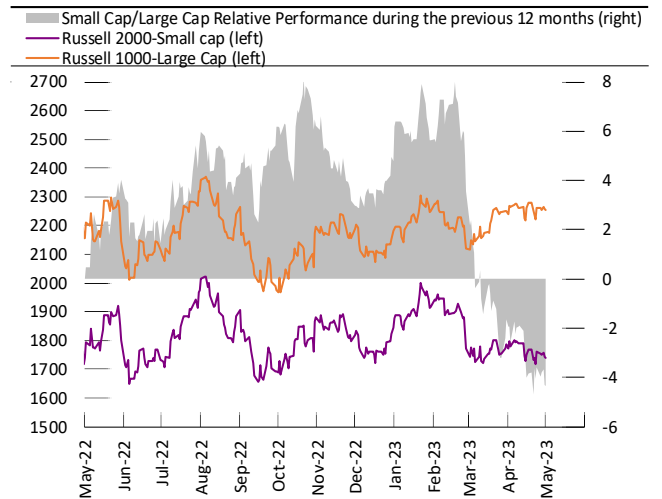
Data as of May 12th – Rebased @ 100

Russell 1000 Value & Growth Index



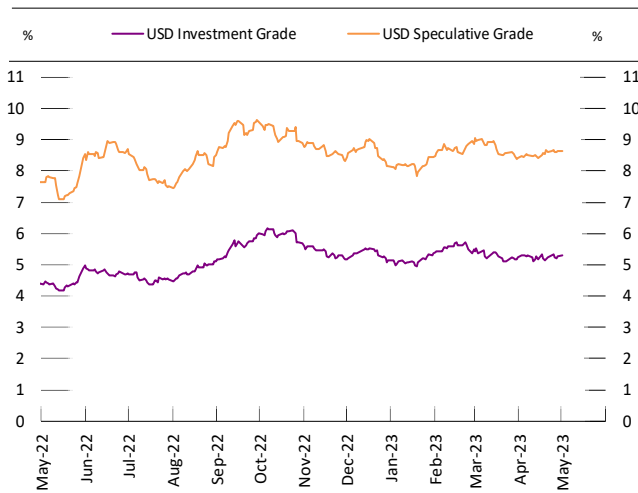
Data as of May 12th

Russell 2000 & Russell 1000 Index



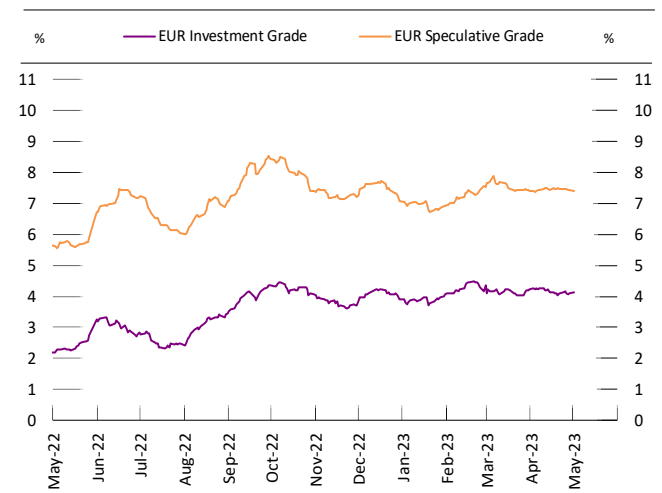
Data as of May 12th

USD Corporate Bond Yields



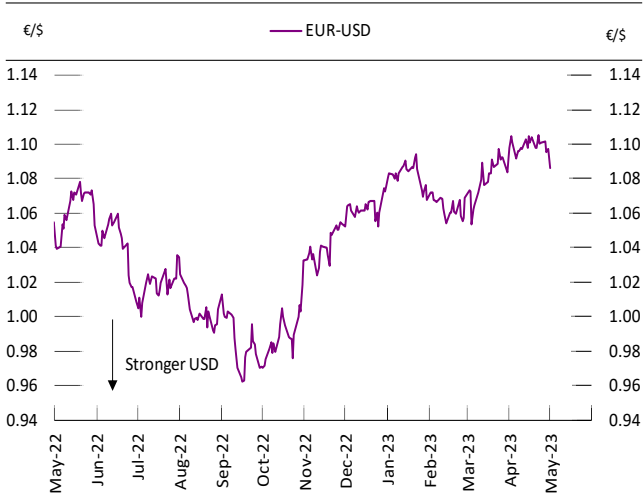
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EUR Corporate Bond Yields



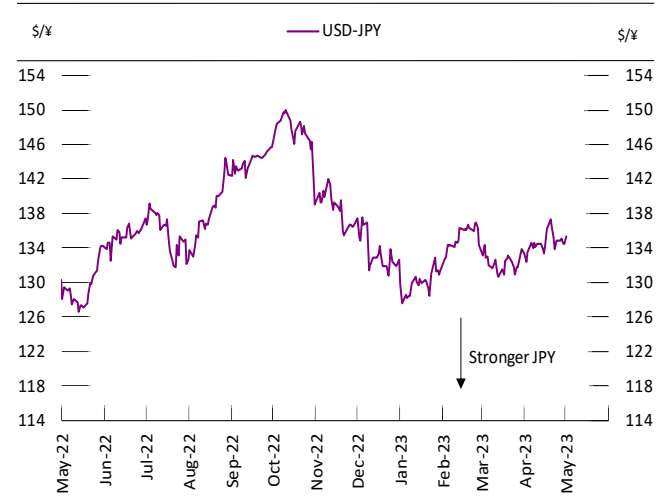
Data as of May 12th

EUR/USD



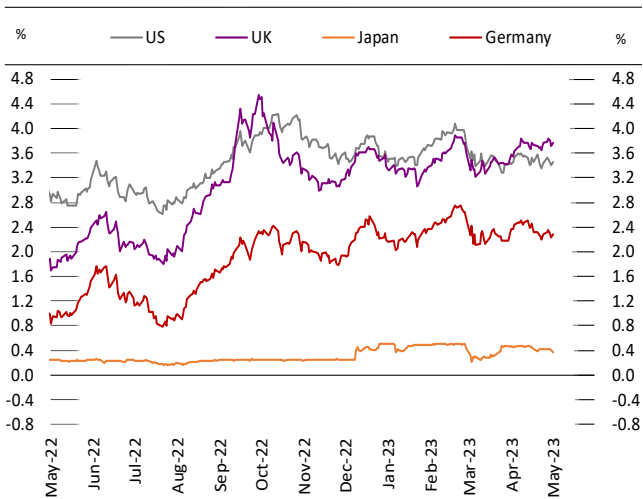
Data as of May 12th

JPY/USD



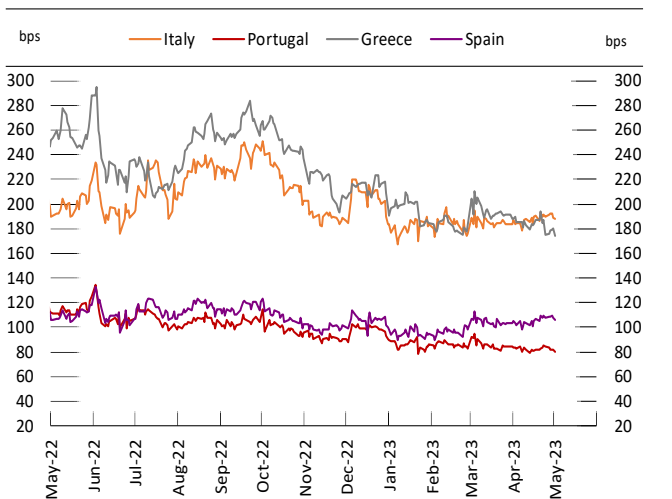
Data as of May 12th

10- Year Government Bond Yields



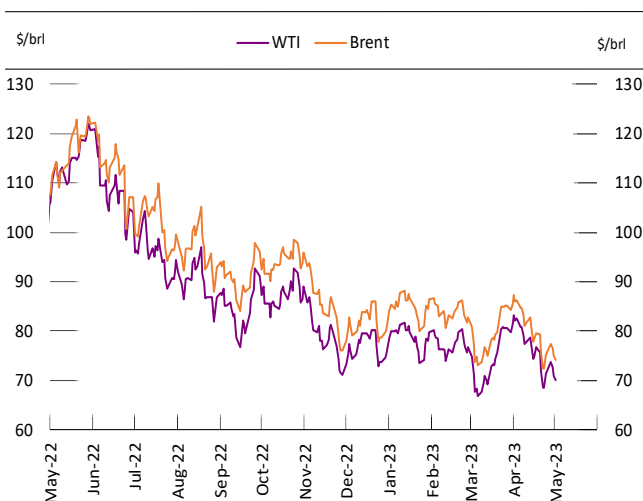
Data as of May 12th

10- Year Government Bond Spreads



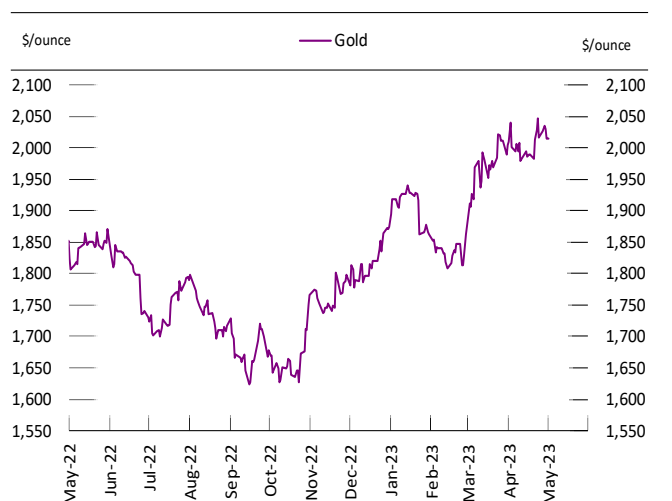
Data as of May 12th

West Texas Intermediate and Brent (\$/bbl)



Data as of May 12th

Gold (\$/ounce)



Data as of May 12th

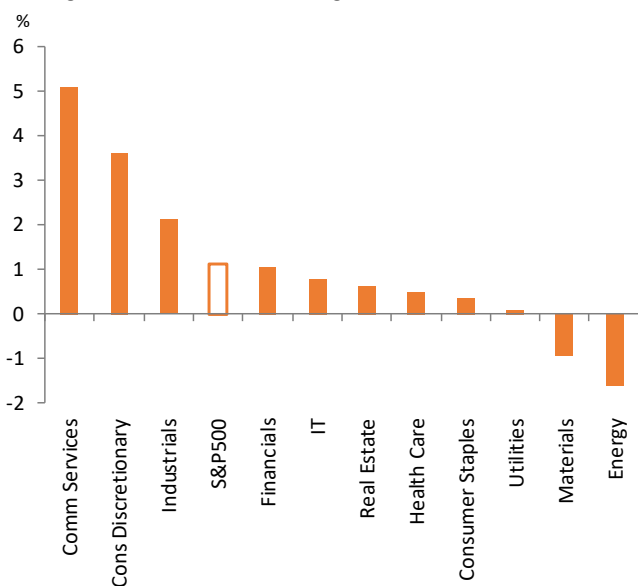
US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	12/5/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	20Yr Avg	2022	2023	Current	20Yr Avg
S&P500	4124	-0.3	7.4	4.8	1.6	1.7	1.7	18.4	18.8	18.1	15.7	3.9	3.8	3.8	2.9
Energy	604	-2.2	-10.2	154.4	-23.5	3.4	3.5	8.1	10.0	10.1	15.2	2.3	2.0	2.0	2.0
Materials	492	-2.0	0.4	5.4	-16.9	2.2	2.1	14.6	16.8	16.5	15.2	2.9	2.6	2.6	2.8
Financials															
Diversified Financials	938	-1.3	-2.0	-9.4	4.1	1.3	1.4	19.0	17.3	16.5	16.0	2.7	2.3	2.3	2.3
Banks	273	-2.6	-16.8	-21.3	9.2	3.0	4.0	11.2	7.9	7.9	11.8	1.2	0.9	0.9	1.3
Insurance	575	0.1	-3.5	-13.1	25.0	1.7	2.0	17.2	13.2	12.5	11.1	2.2	1.9	1.9	1.4
Real Estate	233	-1.0	0.1	12.4	-0.2	3.8	3.9	18.1	17.6	17.2	18.9	2.6	2.9	2.9	2.7
Industrials															
Capital Goods	865	-1.3	-1.0	12.8	16.3	1.6	1.8	22.8	19.0	18.1	16.1	5.0	4.4	4.4	3.6
Transportation	909	-1.9	0.3	123.7	9.3	1.9	2.2	16.0	14.1	N/A	15.1	5.5	4.4	4.4	3.7
Commercial Services	509	0.4	4.7	15.5	8.1	1.4	1.5	28.6	28.0	26.8	22.0	7.7	7.3	7.3	4.7
Consumer Discretionary															
Retailing	3107	2.3	12.8	-43.4	45.4	0.8	0.8	43.0	31.9	29.6	22.7	10.7	9.6	9.6	7.8
Consumer Services	1478	-0.5	16.3	N/A	191.9	1.1	1.2	69.6	25.5	N/A	27.1	456.7	210.6	N/A	16.0
Consumer Durables	400	-2.6	8.1	3.7	-14.3	1.7	1.6	13.0	15.9	15.3	16.1	3.2	3.1	3.1	3.2
Automobiles and parts	99	-1.4	26.0	28.6	-10.0	0.3	0.5	24.2	22.3	N/A	11.1	4.7	3.4	3.4	2.3
IT															
Technology	3155	-0.4	25.4	5.0	-0.2	0.9	0.8	21.8	24.5	23.6	16.0	15.8	15.6	15.6	5.5
Software & Services	3356	0.0	18.0	10.9	9.0	1.0	0.9	25.8	26.8	25.6	18.3	8.7	8.3	8.3	6.1
Semiconductors	2151	-0.7	29.6	-5.7	-17.7	1.4	1.3	20.2	26.4	24.4	18.3	5.1	5.4	5.4	3.8
Communication Services	202	4.3	26.9	-20.4	20.4	1.0	0.8	18.1	17.6	16.6	17.6	2.9	3.1	3.1	2.8
Media	807	5.0	33.1	-22.8	25.1	0.3	0.3	20.9	20.1	18.8	21.5	3.3	3.6	3.6	3.2
Consumer Staples															
Food & Staples Retailing	661	0.5	6.6	-3.5	3.2	1.5	1.5	21.9	22.2	21.5	17.3	5.3	4.9	4.9	3.7
Food Beverage & Tobacco	884	-0.3	2.5	5.9	2.4	3.1	3.1	18.7	19.5	19.0	16.9	5.2	5.2	5.2	4.7
Household Goods	883	-0.1	2.2	-3.4	3.4	2.5	2.4	25.2	26.8	25.8	19.6	9.6	10.1	10.1	6.1
Health Care															
Pharmaceuticals	1234	-1.6	-4.7	5.5	-16.7	2.0	2.0	14.1	17.4	16.9	14.6	5.3	5.0	5.0	4.1
Healthcare Equipment	1839	-0.5	-0.5	4.3	3.5	1.2	1.2	18.7	18.9	18.3	15.8	3.8	3.8	3.8	3.1
Utilities	349	-0.3	-2.5	1.2	5.9	3.2	3.2	18.5	18.6	18.1	15.4	1.9	2.0	2.0	1.7

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

1-month revisions to 12-month Forward EPS

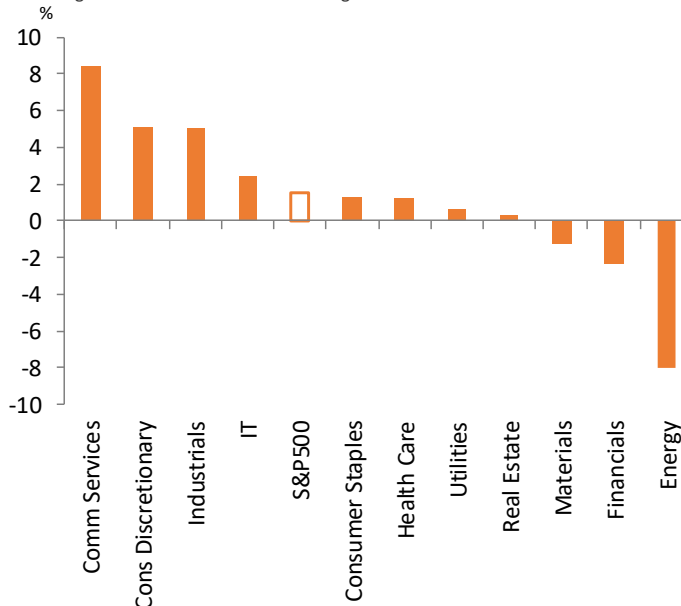
Earnings Revisions indicate 1-month change in 12-month Forward EPS



Data as of May 12th
12-month forward EPS are 63% of 2023 EPS and 37% 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 May 12th
12-month forward EPS are 63% of 2023 EPS and 37% of 2024 EPS

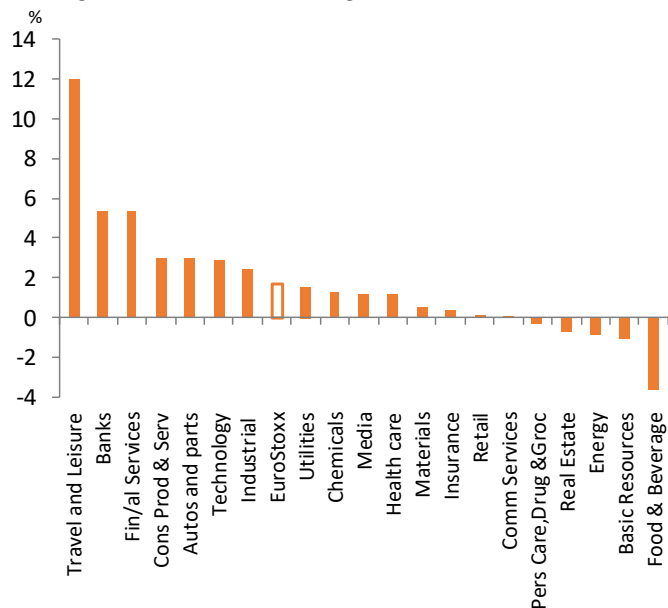
Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	12/5/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	20Yr Avg	2022	2023	Current	20Yr Avg
EuroStoxx	457	-0.3	11.6	21.7	0.4	3.1	3.3	13.3	13.3	12.9	13.2	1.8	1.7	1.7	1.6
Energy	333	-1.0	-4.1	121.8	-23.5	5.6	5.4	5.2	6.5	6.7	11.2	1.3	1.1	1.1	1.5
Materials	985	-0.8	6.8	13.5	-34.3	3.8	3.5	8.9	13.3	12.9	13.4	1.4	1.3	1.3	1.6
Basic Resources	207	-2.4	-7.4	-11.2	-47.0	2.9	3.3	5.0	8.1	8.0	10.6	0.8	0.6	0.6	0.9
Chemicals	1469	-0.5	9.7	28.7	-27.3	4.0	3.5	11.1	15.6	14.9	14.2	1.7	1.7	1.7	2.1
Financials															
Banks	103	0.9	7.7	18.4	15.6	5.3	7.4	8.6	6.5	6.3	9.9	0.8	0.6	0.6	1.0
Insurance	317	-2.1	3.1	-17.3	40.2	5.2	5.7	13.3	9.1	8.8	9.5	1.5	1.4	1.4	1.0
Financial Services	519	-1.0	6.6	31.5	-0.7	3.1	3.3	11.3	11.4	11.2	15.6	1.3	1.3	1.3	1.3
Real Estate	115	-3.8	-12.3	4.8	-4.0	5.7	7.0	11.3	9.4	9.4	16.3	0.6	0.5	0.5	1.0
Industrials															
Industrial Goods & Services	1085	0.0	12.7	18.8	14.2	2.2	2.5	19.4	17.2	16.5	15.3	2.8	2.5	2.5	2.3
Construction & Materials	543	0.6	17.5	3.1	-2.3	3.4	3.5	12.6	13.0	12.6	13.5	1.7	1.6	1.6	1.6
Consumer Discretionary															
Retail	611	-0.6	19.2	2.5	9.4	3.7	4.0	23.1	21.8	21.1	22.5	4.7	4.8	4.8	5.5
Automobiles and parts	578	-0.8	14.2	9.3	-10.8	4.9	4.9	5.9	6.4	6.3	8.5	0.9	0.9	0.9	1.1
Travel and Leisure	236	2.3	28.7	N/A	38.8	1.0	1.3	19.1	15.2	N/A	N/A	2.7	2.4	2.4	2.0
Consumer Products & Services	542	-0.3	27.0	1.8	15.1	1.4	1.4	33.6	32.4	30.7	21.1	6.8	6.7	6.7	3.6
Media	273	-0.3	4.8	21.4	16.1	2.2	2.7	22.5	18.2	17.6	15.5	3.0	2.8	2.8	2.0
Technology	842	0.5	17.9	-3.5	28.3	1.0	1.1	28.1	22.4	21.1	21.3	3.9	3.7	3.7	3.5
Consumer Staples															
Food, Beverage & Tobacco	183	-1.6	11.0	11.7	1.2	1.8	2.0	19.6	20.4	19.5	17.7	2.2	2.0	2.0	2.6
Personal Care, Drug & Grocery	190	-0.1	13.9	6.6	1.4	2.4	2.3	16.1	16.6	16.0	16.2	2.3	2.3	2.3	2.6
Health care	839	-1.6	7.8	7.2	-1.3	2.4	2.4	15.9	16.9	16.2	15.0	2.0	2.0	2.0	2.1
Communication Services	298	-0.3	13.7	28.0	-1.5	3.9	4.1	14.7	15.1	14.5	13.7	1.5	1.5	1.5	1.9
Utilities	387	0.2	10.8	23.0	-3.5	5.2	4.7	12.0	13.4	13.3	13.2	1.8	1.7	1.7	1.5

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

1-month revisions to 12-month Forward EPS

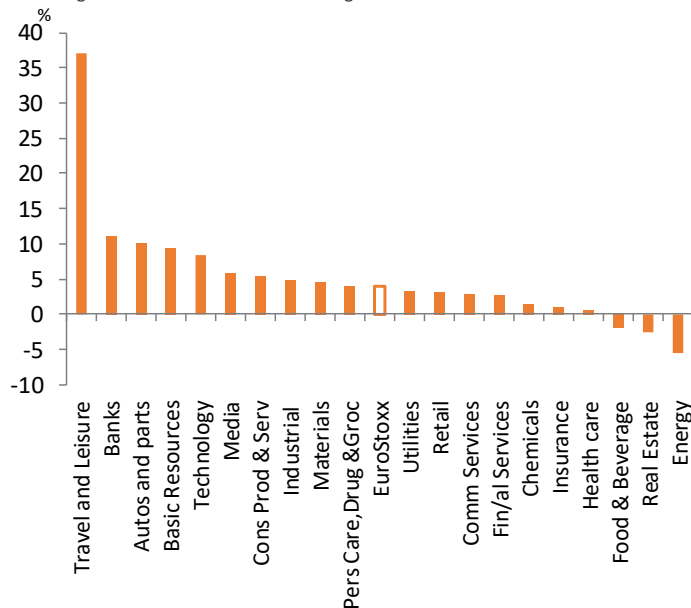
Earnings Revisions indicate 1-month change in 12-month Forward EPS



Data as of May 12th
12-month forward EPS are 63% of 2023 EPS and 37% 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 May 12th
12-month forward EPS are 63% of 2023 EPS and 37% of 2024 EPS

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