

## PMI business indicators add to evidence that the outlook for euro area has stopped deteriorating

- US economic announcements for December (retail sales, industrial production) came out weaker-than-expected, suggesting that momentum slowed by the end of the quarter, albeit overall Q4 real GDP growth (due on January 26<sup>th</sup>) is expected at an above trend rate of +2.5% qoq saar from +3.2% in Q3 (+1.9% yoy in Q3). Forward-looking business indicators suggest that growth could slow in Q1.2023, reflecting the lag of monetary policy tightening (+425 basis points yoy).
- Slowing activity momentum and decelerating US CPI keeps the FED on track to downshift its pace of tightening to 25 bps from 50 bps (current FFR range: 4.25% to 4.5%) at the upcoming meeting, due on February 1<sup>st</sup>, albeit it is a close call. The prospect of a step down in the pace of FED interest rate hikes has supported US equities and bonds YtD (+5% and +3%, respectively), with positive correlation between stock and bond returns at the highest level since 2000 (see graphs page 3).
- On the other side of the Atlantic, "hawkish" ECB members (Knot) pushed back against expectations for a similar downshift by the ECB in March (current DFR: 2.0%), with 10-Year Bund yields increasing by circa 14 basis points in the last two trading sessions (Friday, Monday) and Italian bond spreads widening by 11 bps. So far this month, Bund yields have fallen by 34 bps to 2.19% and BTP spreads have narrowed by 32 bps to 182 bps.
- Euro area equities paused for breath in the past week. So far this month, the SXSE index has increased by +9% on the back of significantly lower natural gas prices and relaxation of covid restrictions in China. Banks have led the increase (+10%) as the profitability outlook remains favorable due to higher rates. Deteriorating asset quality and higher funding costs concerns remain, for now, on the sidelines as macroeconomic prospects stabilize (see graph page 3).
- Indeed, the preliminary euro area composite output PMI index for January rose marginally above the expansion/contraction threshold of 50 for the first time in seven months (50.2 from 49.3 in December and a low of 47.3 in October 2022).
- On Wednesday, the Bank of Japan stood pat (Yield Curve Control, Negative Interest Rate Policy), with the JPY depreciating slightly. Policy board members expect the CPI excluding fresh food, the BOJ's preferred measure of inflation, to decelerate towards 2% next year from 4% currently. According to BOJ, the effects of a pass-through of cost increases to CPI led by a rise in import prices due to, *inter alia*, the significant depreciation of the JPY on a year-over-year basis by -9% (trade weighted index) are expected to wane.
- Financial markets have begun to price a gradual shift from its ultra-accommodate monetary policy, following the unexpected adjustment of the upper range for its 10-Year JGB yield target of 0% to +0.5% from +0.25% in December 2022. As a result, interest rate differentials have narrowed by 100 bps to 250 bps in the past two months, supporting the JPY against the USD (see graph below).
- With risks to consumer prices remaining to the upside, an aggressive acceleration of Japanese government bond purchases in the past three months (\$150 billion) in order to defend its yield curve upper cap (see graph below) and a new BOJ Governor in April, a gradual policy shift is likely, probably leading to higher interest rates and a stronger JPY.

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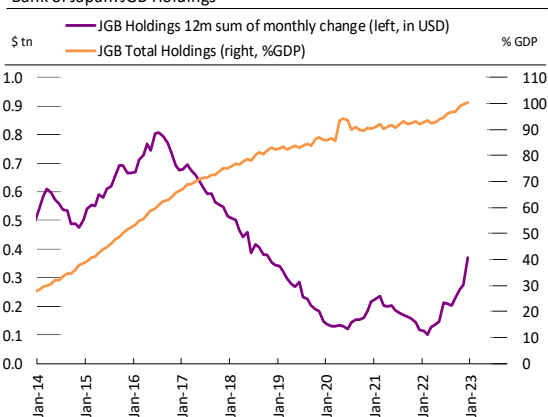
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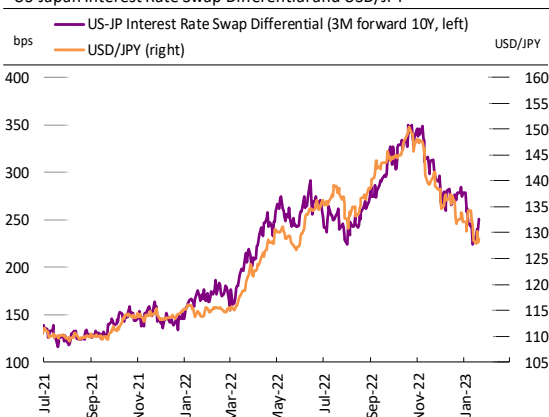
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Charts of the week

Bank of Japan: JGB Holdings



US-Japan Interest Rate Swap Differential and USD/JPY



### US retail sales softened in recent months

- **Nominal retail sales fell by -1.1% mom seasonally adjusted (+6.0% yoy) in December.** The outcome undershot consensus estimates for -0.8% mom, more so for the level of retail sales, given a downward revision for November's growth, by 0.4 pps to -1.0% mom (+6.0% yoy). Still, an elevated starting point and a strong start in Q4:22 (+1.1% mom in October), kept the quarterly growth in positive territory (+0.5% versus Q3:22 in annualized terms). Meanwhile, the so-called "control group", as it feeds into the calculation for GDP (i.e., excluding autos, gas, food services and building materials) was down by -0.7% mom (+6.7% yoy) from -0.2% mom in November (+5.5% yoy), versus consensus estimates for -0.3% mom. Overall, in Q4:22, the "control group" came out at +1.9% (annualized) compared with Q3:22 suggesting that private consumption supported GDP growth in the final quarter of the year (see below).
- **Looking forward, the University of Michigan's index of consumer sentiment improved for a 2<sup>nd</sup> consecutive month entering Q1:23, albeit remaining subdued.** In the event, the preliminary reading came out at 64.6 in January, from 59.7 in December and 56.8 in November (consensus: 60.5), with both the components regarding the assessment of current economic conditions (+9.2 pts to 68.6) and its expectations counterpart (+2.1 pts to 62.0), posting gains. Still, the latest outcome is well below a long-term (since 2001) average of 82.9. Improvements are related to a less bleak consumers' short-term outlook for inflation. In the event, respondents' 1-year ahead inflation expectations decreased to +4.0% from +4.4% in the December survey and +4.9% in November, while its 5-year ahead counterpart was insignificantly changed at +3.0%, remaining in a tight range of 2.9% - 3.1% for 17 of the past 18 months.

### US manufacturing output eased considerably for a 2<sup>nd</sup> consecutive month in December

- **US industrial production decreased by -0.7% mom in December, from -0.6% mom in November and below consensus estimates for -0.1% mom.** In addition, November's outcome was revised down by 0.3%. The annual pace of growth decelerated to +1.6% yoy, from +2.2% yoy. Overall in Q4:22, industrial production came out -1.7% below Q3:22 levels (in annualized terms). Importantly, manufacturing production (78% of total) declined by -1.3% mom in December (-0.5% yoy), from -1.1% mom (+0.7% yoy) in November, disappointing versus expectations for -0.3% mom. November's outcome turned out -0.5% weaker than previously reported. Overall, in Q4:22, manufacturing output was -2.5% (annualized) below Q3:22 levels.
- In all, the Atlanta Fed's GDPNowcast model points to +3.5% qoq saar (+1.1% yoy) for GDP in Q4:22, from +3.2% qoq saar (+1.9% yoy) in Q3:22, with positive contributions mainly from private consumption, a downward correction for imports and inventory accumulation.

### Chinese GDP held its ground in Q4:2022, surprising to the upside

- **Real GDP growth in Q4:22 came out at +2.9% yoy from +3.9% yoy in the previous quarter, significantly above consensus estimates for +1.8% yoy.** According to the National Bureau of Statistics (NBS) of China, GDP was stable on a quarterly basis (in seasonally adjusted terms) from +3.9% qoq in Q3:22 (consensus for -0.8% qoq). Overall, in FY:2022, GDP growth came out at +3.0% yoy from +8.4% yoy in 2021.
- The positive surprise came on the back of a better-than-expected performance for economic activity in December, a month during which the stringency of measures to stem the spread of Covid-19 was gradually loosened, albeit a surge in respective infections also took place. Specifically, the annual growth of retail sales (in nominal terms) was -1.8% from -5.9% in November, overshooting by a wide margin the consensus estimates for -8.6% yoy. At the same time, industrial production growth came out at +1.3% yoy from +2.2% yoy compared with expectations for +0.2% yoy. Finally, fixed assets investment growth was +5.1% yoy from +5.3% yoy in November, versus consensus for +5.0% yoy. Those readings came alongside overall credit annual growth, as measured by Total Social Financing (TSF), decelerating by 0.4 pps to +9.6% in December (12-month average of +10.4% yoy).

### Chinese house prices continue to decline, stepping up rigorous policy measures by the Government

- **House prices in 79% of the 70 medium and large-sized cities monitored by China's National Bureau of Statistics (NBS) posted a monthly decline in December (73% of cities in November).** Overall, the monthly growth was largely unchanged at -0.2% in December, remaining in negative territory for a 5<sup>th</sup> consecutive month (and 11 eleven consecutive months of either negative or roughly zero growth). As a result, the annual growth stood at -1.5% yoy (-1.6% yoy in November).
- **In a policy pivot,** China's authorities have signaled their intention to support the struggling sector, mainly by partly loosening their respective policy approach.
- On the supply side, regulators have suggested, via a plan which "aims to improve cash flows of quality property developers and guide their balance sheets to return to a safe range", that a relaxation is on the cards for the "three red lines" (financial guidelines introduced in August 2020) which the country's property developers are currently facing, namely: i) liabilities should not exceed 70% of assets (excluding advance proceeds from projects sold on contract); ii) net debt should not be greater than equity and; iii) cash reserves of at least 100% of short term debt. Developers which fail to satisfy one or more of these criteria, face varying limits on borrowing, with the exception, since December 2021, of borrowing to finance acquisitions and mergers. Note also that in past November, *inter alia*, authorities urged banks to extend repayment deadlines for loans used to build housing by a year.
- On the demand side, the establishment of a dynamic adjustment mechanism on mortgage rates for first-time homebuyers is underway. According to the People's Bank of China, for cities facing a fall in new home selling prices for three consecutive months (both in monthly and annual terms), the floor on mortgage lending rates may be lowered or abolished.

## Equities

- **Global equity markets were broadly unchanged in the past week (MSCI ACWI: -0.3%).** Emerging markets overperformed (MSCI EM: +0.6% wow), mostly due to Chinese equities (MSCI China: +1.6%), on the back of the relaxation of Covid policies. In Japan, the Nikkei225 also overperformed in the past week (+1.7%), in view of a weaker Japanese Yen (see below). In the US, the S&P 500 lost -0.7%, with attention having turned to the Q4:2022 earning period which has got off to a relatively subdued start. Indeed, with 56 companies having reported results so far, 67% have surpassed analyst estimates, versus an average "beat rate" of 77% in the past 5 years. So far, far reported earnings are +3.3% above estimates, below a 5-year average "beat rate" of +8.6%. In all, according to analysts' estimates, the annual earnings growth is expected to be -5% (-9% excluding the Energy sector), from +2.5% in the previous quarter (-5% excluding the Energy sector). Notably, the net profit margin for the S&P500 is estimated to narrow for a 6<sup>th</sup> consecutive quarter in Q4:22, to 11.4% from 11.9% in the previous quarter (and 12.4% in the same quarter a year ago), largely aligning with its 5-year average. On the other side of the Atlantic, the EuroStoxx fell by -0.5% wow, whereas in Greece, the ASE Index went up by 1.1% wow, led by Banks (+2.7%).

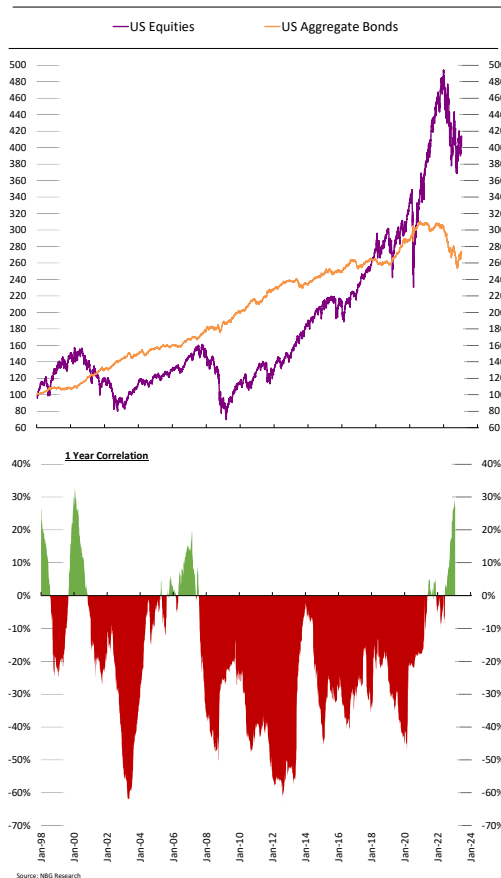
## Fixed Income

- **Government bond yields posted mixed and roughly measured changes in the past week** (US Treasury 10-year: -2 bps wow to 3.48% | Bund 10-year: +5 bps wow to 2.15%), A more meaningful movement occurred for Japanese government bond yields (10-year: -11 bps to 0.40%) after the Bank of Japan stood pat. Meanwhile, the Hellenic Republic, issued 10-year bond of €3.5 bn. Demand was strong (€21.9 bn | 6.2x oversubscription ratio) and the issue (which was the first for 2023 and covered c. half of the announced €7 bn medium and long-term debt issuance for the year) carried a coupon of 4.25% with a re-offer yield of 4.279%. Regarding the investor base, 78% of the transaction was allocated to international investors (mainly located in the UK, France and Iberia), while benefitting from a broad support-base (Fund Managers: 47% | Banks: 27% | Hedge Funds: 11%). **Corporate bond spreads were mixed.** Indeed, USD HY bond spreads increased by 14 bps to 435 bps and their EUR counterparts narrowed by 7 bps to 446 bps. In the investment grade spectrum measured declines took place (EUR -6 bps to 153 bps, USD -3 bps to 129 bps). Recall that new issuance took a substantial step down in 2022 in view of tighter monetary policies (alongside uncertainty for their prospects) and a cautious economic outlook (US High Yield: -77.0% yoy to \$112 bn | US IG: -16.4% yoy to \$1233 bn, according to the Securities Industry and Financial Markets Association).

## FX and Commodities

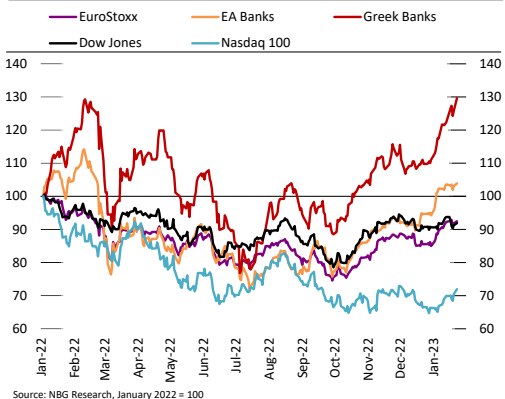
- **In foreign exchange markets, the Japanese yen depreciated from its 7-month high against the US dollar (-1.9% wow to ¥129.9), following the Bank of Japan's latest meeting.** Intraday, following the announcement, the yen fell by as much as 2.7% to ¥131.6, as some investors were expecting some further steps regarding the upper range for its 10-Year JGB yield target, after the unexpected adjustment in the December meeting (to +0.5% from +0.25%), nevertheless losses were minimized towards the end of the session (-0.2% against the USD). **In commodities, oil prices rose in the past week (WTI: +1.8% to \$81/barrel) as growing optimism over China's reopening more-than-offset uncertainty regarding demand outlook in the US.** Specifically, US inventories' building has put some downward pressure on oil prices (the 4-week moving sum of inventory increase reached 30 million barrels, the highest level since March 2021). The International Energy Association upwardly revised its estimates for 2023 demand to 101.7 million barrels per day on average (a record high) compared to estimates for supply of 101.1 million barrels per day on average. China is expected to be responsible for around half of the year-over-year oil demand increase for 2023 (+1.9 million barrels per day on average).

US Equities vs US Aggregate Bonds



Graph 1.

Equities Performance



Graph 2.

**Quote of the week:** "Expect us to raise rates by 0.5% in February and March and expect us to not be done by then and that more steps will follow in May and June", **Member of the Governing Council of the European Central Bank, Klaas Knot, January 22<sup>nd</sup> 2023**

## Interest Rates &amp; Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	January 20th	3-month	6-month	12-month	Official Rate (%)	January 20th	3-month	6-month	12-month
Germany	2.15	2.15	2.25	2.25	Euro area	2.00	3.00	3.25	3.25
US	3.48	4.00	4.10	4.10	US	4.50	5.00	5.00	5.00
UK	3.33	3.69	3.64	3.49	UK	3.50	4.25	4.45	4.40
Japan	0.40	0.47	0.47	0.48	Japan	-0.10	-0.10	-0.10	-0.10
Currency	January 20th	3-month	6-month	12-month		January 20th	3-month	6-month	12-month
EUR/USD	1.08	1.05	1.08	1.10	USD/JPY	130	138	135	133
EUR/GBP	0.88	0.89	0.90	0.91	GBP/USD	1.24	1.17	1.20	1.21
EUR/JPY	140	145	146	147					
Forecasts at end of period									

Forecasts at end of period

## Economic Forecasts

United States	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22f	2022f
Real GDP Growth (YoY) (1)	-2,8	1,2	12,5	5,0	5,7	5,9	3,7	1,8	1,9	1,2	2,1
Real GDP Growth (QoQ saar) (2)	-	6,3	7,0	2,7	7,0	-	-1,6	-0,6	3,2	3,7	-
Private Consumption	-3,0	10,8	12,1	3,0	3,1	8,3	1,3	2,0	2,3	3,5	2,9
Government Consumption	2,6	6,5	-3,0	-0,2	-1,0	0,6	-2,3	-1,6	3,7	1,0	-0,7
Investment	-2,3	9,7	5,8	-1,1	0,6	7,4	4,8	-5,0	-3,5	4,1	0,3
Residential	7,2	11,6	-4,9	-5,8	-1,1	10,7	-3,1	-17,8	-27,1	-24,0	-10,5
Non-residential	-4,9	8,9	9,9	0,6	1,1	6,4	7,9	0,1	6,2	6,7	4,0
Inventories Contribution	-0,7	-3,0	-1,3	2,0	5,1	0,2	0,3	-2,1	-1,4	0,8	0,7
Net Exports Contribution	-0,2	-1,3	-0,8	-1,3	-0,6	-1,7	-3,8	1,2	3,3	0,2	-0,7
Exports	-13,2	0,4	4,9	-1,1	23,5	6,1	-4,6	13,8	14,6	-0,4	7,3
Imports	-9,0	7,6	7,9	6,6	18,6	14,1	18,4	2,2	-7,3	-1,2	8,4
Inflation (3)	1,2	1,9	4,9	5,4	6,7	4,7	8,0	8,7	8,3	7,1	8,0
Euro Area	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22f	2022f
Real GDP Growth (YoY)	-6,3	-0,8	14,2	3,9	4,8	5,3	5,5	4,2	2,3	1,7	3,4
Real GDP Growth (QoQ saar)	-	-0,2	8,2	9,3	2,2	-	2,5	3,2	1,3	-0,2	-
Private Consumption	-7,8	-7,2	14,3	19,1	-0,5	3,7	-0,1	4,2	3,5	-1,0	4,1
Government Consumption	1,0	-1,3	8,9	1,8	1,4	4,3	0,2	-0,4	0,6	3,3	1,3
Investment	-6,5	-9,0	7,4	-3,2	14,3	3,7	-2,9	3,8	15,4	-12,6	3,5
Inventories Contribution	-0,3	2,4	-2,1	0,1	2,7	0,2	-1,2	0,9	0,7	-1,2	0,3
Net Exports Contribution	-0,5	3,6	-0,3	-0,1	-3,4	1,3	4,4	-0,5	-4,4	3,8	0,0
Exports	-9,2	4,4	10,4	7,7	10,9	10,4	5,9	7,0	7,2	-4,4	7,0
Imports	-8,7	-3,1	12,4	8,6	20,3	8,2	-2,9	8,9	18,2	-11,7	7,7
Inflation	0,3	1,0	1,8	2,9	4,7	2,6	6,1	8,0	9,3	10,0	8,4

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 &amp; Key Factors for Global Markets

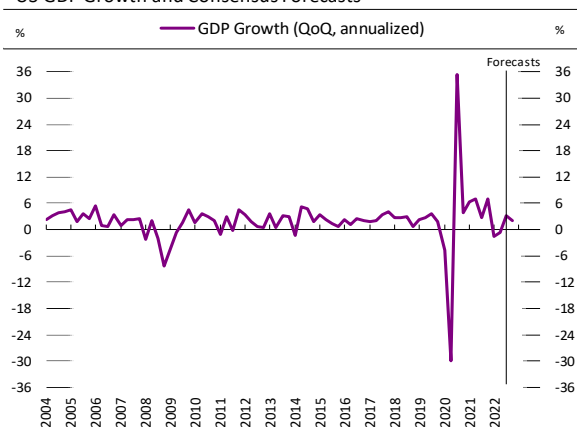
	US	Euro Area	Japan	UK
Equity Markets	<ul style="list-style-type: none"> <li>Households' balance sheets are healthy (low debt, still elevated excess savings)</li> <li>Sentiment (e.g. AAI) and positioning indicators are low, despite the recent rally</li> <li>Peaking profit margins</li> <li>Recession risks remain considerable</li> <li>P/Es (Valuations) above long-term means, with EPS consensus expectations (\$228 for EPS) only slightly lower compared with end Q3 (-3%)</li> </ul>	<ul style="list-style-type: none"> <li>Higher equity risk premium (lower P/E ratio) relative to benchmark market (US) despite the recent rally of +20% since October 2022 lows</li> <li>Fiscal policy will remain supportive in 2023 (plus RRF)</li> <li>China's covid policy pivot could accelerate an export-led recovery</li> <li>Geopolitical uncertainty (Ukraine-Russia, natural gas) could re-intensify</li> </ul>	<ul style="list-style-type: none"> <li>Higher equity risk premium (lower P/E ratio) relative to benchmark market (US)</li> <li>China's covid policy pivot could accelerate an export-led recovery</li> <li>JPY appreciation from ¥150 to ¥130, if continues, could hurt exporters</li> <li>Signs of policy fatigue regarding structural reforms and fiscal discipline</li> <li>Yield-Curve Control twists, let alone a sustained shift in ultra-loose monetary policy, could hurt market benchmarks (but support Banks)</li> </ul>	<ul style="list-style-type: none"> <li>Significant exposure to commodities</li> <li>Undemanding valuations in relative terms relative to other regions</li> <li>Elevated domestic policy uncertainty</li> <li>The BOE is expected to continue increasing interest rates aggressively as inflation remains very high and labor market extremely tight</li> </ul>
	● Neutral/Negative	● Neutral/Positive	● Neutral	● Neutral
Government Bonds	<ul style="list-style-type: none"> <li>Valuations appear somewhat rich despite the 237bps increase in 2022, with term-premium @ -0.5% (1% for 2000-2015)</li> <li>Fiscal deficits to remain sizeable in following years</li> <li>Underlying inflation pressures remain acute</li> <li>FED: passive (lower rollover) Quantitative Tightening</li> <li>Global search for yield by non-US investors (e.g. Japan, repatriation from EM Economies) could reverse</li> <li>Safe-haven demand bid to support prices assuming geopolitical risks re-intensify</li> <li>The FED is likely close to be done with rates</li> </ul>	<ul style="list-style-type: none"> <li>Valuations still appear excessive compared with long-term fundamentals</li> <li>ECB to start unwinding its government and corporate bond holdings (APP) in March 2023</li> <li>ECB to continue with interest rate hikes in 2023 as core inflation pressures remain strong</li> <li>Fragile economic growth outlook due to the war in Ukraine</li> <li>ECB QE "stock" effect, with government bond holdings of €4.2 trillion (32% of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Sizeable fiscal deficits</li> <li>The range of Yield-Targeting of 10-Year JGB at around 0% could widen further (current: +/- 50 bps)</li> <li>Safe-haven demand</li> <li>Monetary stance remains extremely dovish, despite the unexpected shift in YCC range in December 2022</li> <li>QE "stock" effect, with government bond holdings of ¥556 trillion (100% of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Inflation expectations could drift higher due to supply disruptions (persistent post Brexit, temporary due to China)</li> <li>The BOE is expected to continue increasing interest rates aggressively as inflation remains very high and labor market extremely tight</li> <li>BOE: active (sales) Quantitative Tightening</li> <li>Slowing economic growth post-Brexit</li> </ul>
	▲ Slightly higher yields	▲ Slightly higher yields	▲ Slightly Higher yields	▲ Slightly Higher yields
Foreign Exchange	<ul style="list-style-type: none"> <li>USD interest rate differential vs peers remain significant</li> <li>Weak global economic growth</li> <li>Safe-haven demand status</li> <li>Global political uncertainty to decline</li> <li>The FED is close to be done, which reduces potential USD upside</li> </ul>	<ul style="list-style-type: none"> <li>ECB to continue with interest rate hikes in 2023 as core inflation pressures remain strong</li> <li>Lower geopolitical uncertainty (Ukraine-Russia, natural gas) is positive for EUR</li> <li>Global growth risks remain to the downside</li> </ul>	<ul style="list-style-type: none"> <li>Safe haven demand</li> <li>More balanced economic growth recovery (long-term)</li> <li>Higher core Inflation rates could accelerate the shift of monetary policy (less accommodative)</li> </ul>	<ul style="list-style-type: none"> <li>Valuations appear undemanding with REER below its 15-year average</li> <li>Sizeable Current account deficit</li> </ul>
	● Broadly Flat USD against G10 FX	● Range-bound (around 1.05) with upside risks against the USD	▲ Stronger JPY	● Broadly stable GBP

## Economic Calendar

In the US, the main macro event next week is the advance estimate for GDP in Q4:22, which is released on Thursday. Consensus expects growth at +2.1% qoq saar versus +3.2% qoq saar in Q3:22. On Friday, September's personal income and consumption and PCE data (the Fed's preferred measure for gauging inflation developments) for September will gather investors' attention.

In Germany, on Wednesday attention turns to IFO surveys for January, as they will provide valuable insight regarding the current economic momentum.

US GDP Growth and Consensus Forecasts



Source: NBG Research

Economic News Calendar for the period: January 17 - January 30, 2022

Tuesday 17					Wednesday 18					Thursday 19				
<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>
Empire Manufacturing	January	-8.3	-32.9	-11.2	Retail Sales (MoM)	December	-0.8%	-1.1%	-1.0%	Initial Jobless Claims (k)	January 14	215	190	205
<b>UK</b>					Retail sales ex-autos (MoM)	December	-0.5%	-1.1%	-0.6%	Continuing Claims (k)	January 7	1643	1647	1630
ILO Unemployment Rate	November	3.7%	3.7%	3.7%	Industrial Production (MoM)	December	-0.1%	-0.7%	-0.6%	Building permits (k)	December	1370	1330	1351
<b>GERMANY</b>					Net Long-term TIC Flows (\$ bn)	November	..	171.5	67.8	Housing starts (k)	December	1358	1382	1401
ZEW survey current situation	January	-57.8	-58.6	-61.4	NAHB housing market	January	31	35	31	Philadelphia Fed Business	January	-11.0	-8.9	-13.7
ZEW survey expectations	January	-15.0	16.9	-23.3	confidence index					Outlook				
<b>CHINA</b>					<b>UK</b>					<b>JAPAN</b>				
GDP (sa, QoQ)	Q4:22	..	0.0%	3.9%	CPI (YoY)	December	10.6%	10.5%	10.7%	Exports YoY	December	9.5%	11.5%	20.0%
GDP (YoY)	Q4:22	1.8%	2.9%	3.9%	Core CPI (YoY)	December	6.3%	6.3%	6.3%	Imports YoY	December	22.6%	20.6%	30.3%
Retail sales (YoY)	December	-8.5%	-1.8%	-5.9%	<b>JAPAN</b>									
Industrial production (YoY)	December	0.3%	1.3%	2.2%	Bank of Japan announces its	January 18	-0.10%	-0.10%	-0.10%					
					intervention rate									
Friday 20					Monday 23									
<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>EURO AREA</b>		<b>S</b>	<b>A</b>	<b>P</b>					
Existing home sales (mn)	December	3.95	4.02	4.08	Consumer Confidence Indicator	January	-20.5	-20.9	-22.2					
<b>UK</b>														
Retail sales Ex Auto MoM	December	0.7%	-1.1%	-0.3%										
<b>JAPAN</b>														
CPI (YoY)	December	4.0%	4.0%	3.8%										
Core CPI (YoY) - ex. Fresh Food	December	4.0%	4.0%	3.7%										
Core CPI (YoY) - ex. Fresh Food and Energy	December	..	3.0%	2.8%										
Tuesday 24					Wednesday 25					Thursday 26				
<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>GERMANY</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>
S&P Global US Manufacturing	January	46.3	..	46.2	IFO- Business Climate Indicator	January	90.4	..	88.6	GDP (QoQ, annualized)	Q4:22	2.1%	..	3.2%
PMI					IFO-Expectations	January	85.7	..	83.2	Initial Jobless Claims (k)	January 21	205	..	190
<b>UK</b>					IFO- Current Assessment	January	95.2	..	94.4	Continuing Claims (k)	January 14	..	..	1647
S&P Global / CIPS UK PMI	January	46.5	..	45.3						Durable goods orders (MoM)	December	2.5%	..	-2.1%
Manufacturing SA										Durable goods orders ex				
S&P Global / CIPS UK Services	January	49.8	..	49.9						transportation (MoM)	December	-0.1%	..	0.1%
PMI										New home sales (k)	December	610	..	640
<b>EURO AREA</b>														
S&P Global Eurozone	January	48.5	..	47.8										
Manufacturing PMI														
S&P Global Eurozone Services	January	50.2	..	49.8										
PMI														
S&P Global Eurozone Composite	January	49.9	..	49.3										
PMI														
<b>JAPAN</b>														
PMI manufacturing	January	..	..	48.9										
Friday 27					Monday 30									
<b>US</b>		<b>S</b>	<b>A</b>	<b>P</b>	<b>UK</b>		<b>S</b>	<b>A</b>	<b>P</b>					
PCE Deflator (YoY)	December	5.0%	..	5.5%	Nationwide House Px NSA YoY	January	..	..	2.8%					
PCE Core Deflator (YoY)	December	4.4%	..	4.7%	<b>EURO AREA</b>									
Personal income (MoM)	December	0.3%	..	0.4%	Business Climate Indicator	January	..	..	0.5					
Personal spending (MoM)	December	..	..	0.1%	Economic confidence indicator	January	..	..	96.3					
Pending home sales (MoM)	December	-2.3%	..	-4.0%										
<b>EURO AREA</b>														
M3 money supply (YoY)	December	4.6%	..	4.8%										

Source: NBG Research

S: Consensus Analysts Survey, A: Actual Outcome, P: Previous Outcome

## 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	3973	-0.7	3.5	-11.4	3.1	MSCI Emerging Markets	61580	0.8	7.1	-13.5	-21.0	
Japan	NIKKEI 225	26554	1.7	1.8	-4.4	-6.9	MSCI Asia	946	0.9	8.0	-12.8	-23.6	
UK	FTSE 100	7771	-0.9	4.3	2.4	15.3	China	73	1.6	13.4	-14.7	-39.3	
Canada	S&P/TSX	20503	0.7	5.8	-2.6	13.8	Korea	730	0.5	8.9	-17.2	-27.5	
Hong Kong	Hang Seng	22045	1.4	11.4	-11.7	-26.4	MSCI Latin America	92407	0.7	4.7	-3.1	-9.0	
Euro area	EuroStoxx	443	-0.5	8.0	-6.9	8.8	Brazil	300618	0.9	1.8	-6.6	-20.3	
Germany	DAX 40	15034	-0.4	8.0	-5.5	8.0	Mexico	50350	0.8	11.8	2.7	21.4	
France	CAC 40	6996	-0.4	8.1	-2.8	24.3	MSCI Europe	2938	2.9	4.4	-56.0	-53.1	
Italy	FTSE/MIB	25776	0.0	8.7	-6.5	13.8	Russia	2167	-1.5	0.6	-38.4	-37.5	
Spain	IBEX-35	8918	0.4	8.4	1.2	8.7	Turkey	5458002	10.6	1.3	143.3	213.4	

## World Market Sectors (MSCI Indices)

in US Dollar terms		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	in local currency		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy		254.7	0.4	3.5	28.2	74.8	Energy		266.6	0.3	2.9	32.6	82.6
Materials		338.1	0.1	8.8	-6.2	1.7	Materials		332.6	0.1	7.7	-2.4	8.6
Industrials		310.1	-1.6	3.7	-8.0	0.1	Industrials		318.4	-1.4	3.0	-4.5	6.9
Consumer Discretionary		316.5	-0.3	8.7	-22.9	-18.8	Consumer Discretionary		312.5	-0.1	8.1	-21.3	-15.3
Consumer Staples		270.0	-1.8	0.1	-6.0	4.7	Consumer Staples		275.4	-1.9	-0.6	-3.3	9.7
Healthcare		345.2	-0.7	0.0	0.3	6.3	Healthcare		344.7	-0.7	-0.4	2.0	9.7
Financials		138.2	-1.1	5.5	-9.2	11.0	Financials		141.3	-1.1	4.8	-6.5	16.2
IT		417.8	0.6	6.2	-18.9	-7.6	IT		408.2	0.6	6.0	-18.2	-6.0
Telecoms		73.4	2.4	10.1	-27.7	-23.6	Telecoms		77.7	2.5	9.7	-26.7	-21.6
Utilities		153.2	-2.1	0.3	-4.3	-1.2	Utilities		159.4	-2.1	-0.3	-2.3	2.8

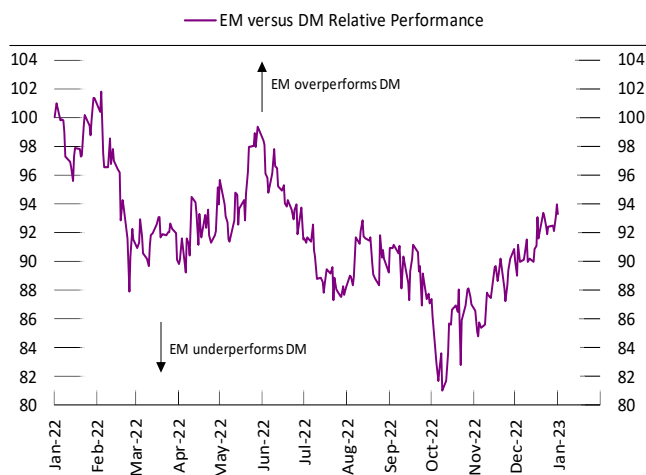
## Bond Markets (%)

10-Year Government Bond Yields		Current	Last week	Year Start	One Year Back	10-year average	Government Bond Yield Spreads (in bps)		Current	Last week	Year Start	One Year Back	10-year average
US		3.48	3.51	3.88	1.83	2.16	US Treasuries 10Y/2Y		-72	-76	-60	76	95
Germany		2.15	2.09	2.53	-0.03	0.46	US Treasuries 10Y/5Y		-8	-11	-13	22	48
Japan		0.40	0.51	0.42	0.13	0.19	Bunds 10Y/2Y		-42	-45	-16	56	78
UK		3.33	3.31	3.66	1.23	1.49	Bunds 10Y/5Y		-4	-6	0	32	53
Greece		4.13	4.09	4.59	1.68	5.34	Corporate Bond Spreads (in bps)		Current	Last week	Year Start	One Year Back	10-year average
Ireland		2.56	2.56	3.06	0.34	1.25							
Italy		3.94	3.93	4.64	1.30	2.19	EM Inv. Grade (IG)		159	166	167	143	190
Spain		3.11	3.11	3.61	0.66	1.70	EM High yield		578	599	640	647	624
Portugal		3.03	3.05	3.57	0.58	2.40	US IG		129	132	138	100	133
US Mortgage Market (1. Fixed-rate Mortgage)		Current	Last week	Year Start	One Year Back	10-year average	US High yield		435	421	481	310	447
30-Year FRM <sup>1</sup> (%)		6.23	6.42	6.42	3.64	4.18	Euro area IG		153	159	167	100	120
vs 30Yr Treasury (bps)		254.1	275.6	241.8	147.6	141.2	Euro area High Yield		446	453	498	334	405

## Foreign Exchange & Commodities

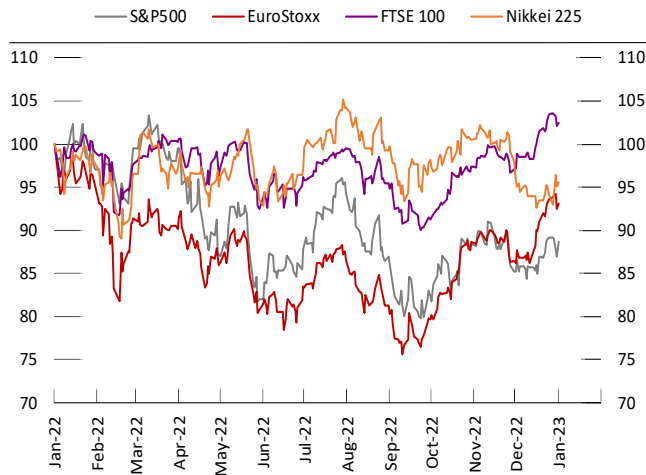
Foreign Exchange		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Commodities		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates							Agricultural		461	0.0	-0.6	-0.3	-2.1
EUR/USD		1.08	0.0	2.0	-4.6	1.5	Energy		290	2.7	3.1	2.2	0.5
EUR/CHF		1.00	-0.6	1.4	-3.9	1.0	West Texas Oil (\$/bbl)		81	1.8	3.9	-6.4	1.3
EUR/GBP		0.88	-1.2	-0.1	5.4	-1.3	Crude Brent Oil (\$/bbl)		88	2.8	6.6	-0.8	2.0
EUR/JPY		140.72	1.9	0.4	8.8	-0.1	HH Natural Gas (\$/mmbtu)		3.2	-7.5	-48.2	-28.7	-9.8
EUR/NOK		10.72	0.2	2.6	7.9	1.9	TTF Natural Gas (EUR/mwh)		67	3.2	-31.6	-11.0	-12.3
EUR/SEK		11.16	-0.9	1.1	8.0	0.4	Industrial Metals		488	1.5	8.1	-8.3	8.2
EUR/AUD		1.56	0.2	-1.4	-0.1	-1.0	Precious Metals		2535	0.1	5.8	4.5	5.8
EUR/CAD		1.45	0.2	0.6	2.9	0.5	Gold (\$)		1927	0.3	6.2	4.8	5.6
USD-based cross rates							Silver (\$)		24	-1.2	-0.2	-2.1	0.0
USD/CAD		1.34	0.2	-1.4	7.8	-0.9	Baltic Dry Index		763	-19.3	-55.7	-48.2	-49.6
USD/AUD		1.44	0.2	-3.4	4.6	-2.4	Baltic Dirty Tanker Index		1415	-2.1	-26.3	104.8	-24.5
USD/JPY		129.93	1.9	-1.6	14.0	-1.5							

## EM vs DM Performance in \$



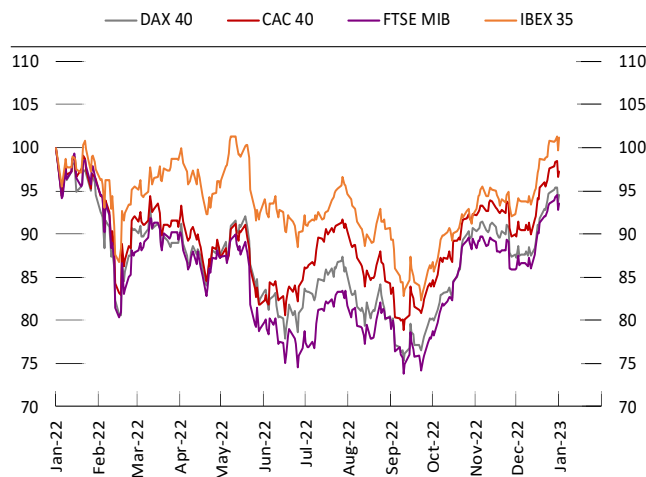
Data as of January 20<sup>th</sup> – Rebased @ 100

## Equity Market Performance - G4



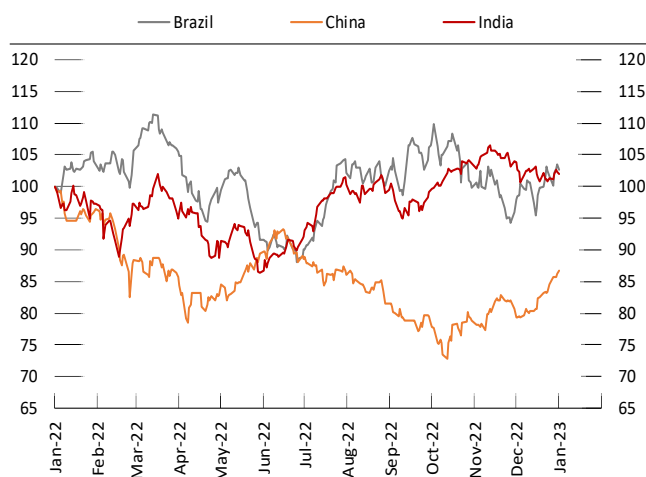
Data as of January 20<sup>th</sup> – Rebased @ 100

## Equity Market Performance – Euro Area G4



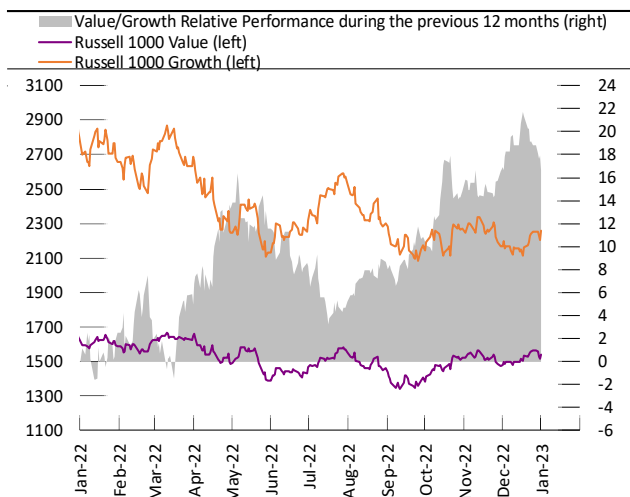
Data as of January 20<sup>th</sup> – Rebased @ 100

## Equity Market Performance – Emerging Markets



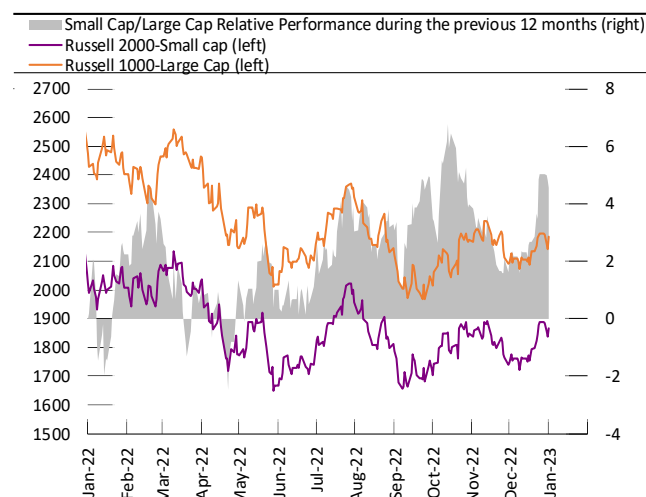
Data as of January 20<sup>th</sup> – Rebased @ 100

## Russell 1000 Value & Growth Index



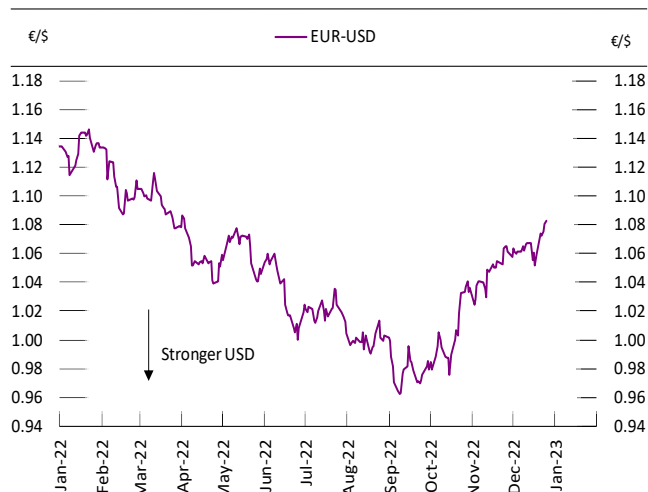
Data as of January 20<sup>th</sup>

## Russell 2000 & Russell 1000 Index



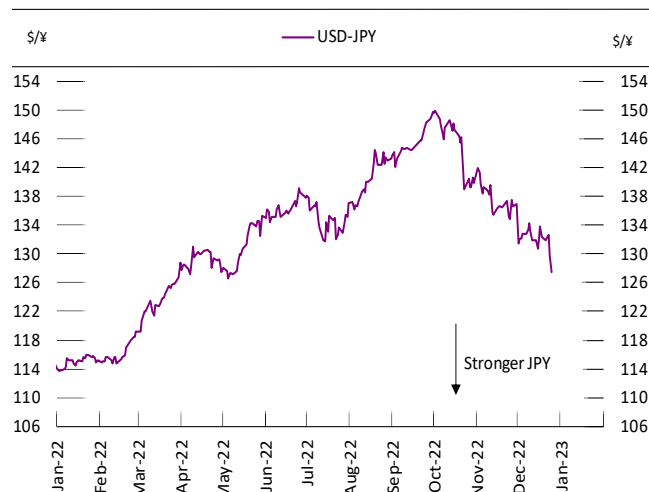
Data as of January 20<sup>th</sup>

### EUR/USD



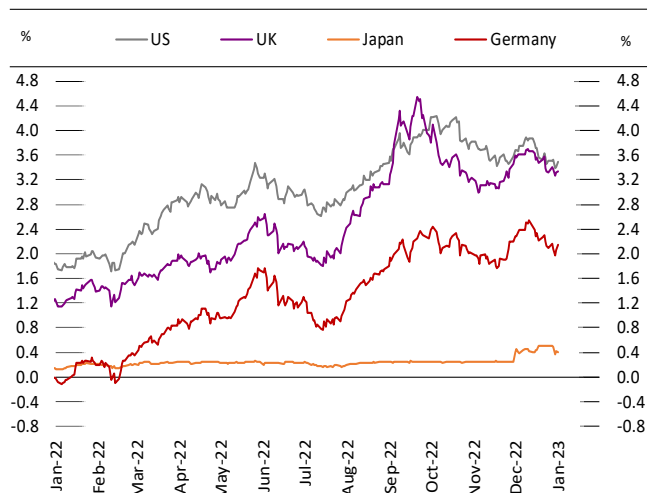
Data as of January 20<sup>th</sup>

### JPY/USD



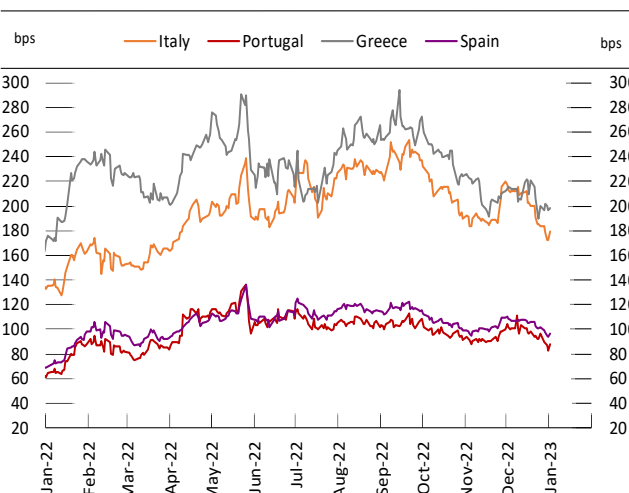
Data as of January 20<sup>th</sup>

### 10- Year Government Bond Yields



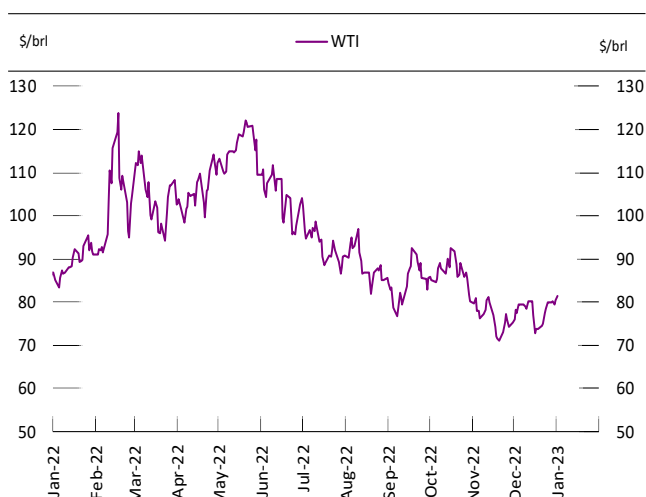
Data as of January 20<sup>th</sup>

### 10- Year Government Bond Spreads



Data as of January 20<sup>th</sup>

### West Texas Intermediate (\$/bbl)



Data as of January 20<sup>th</sup>

### Gold (\$/ounce)



Data as of January 20<sup>th</sup>

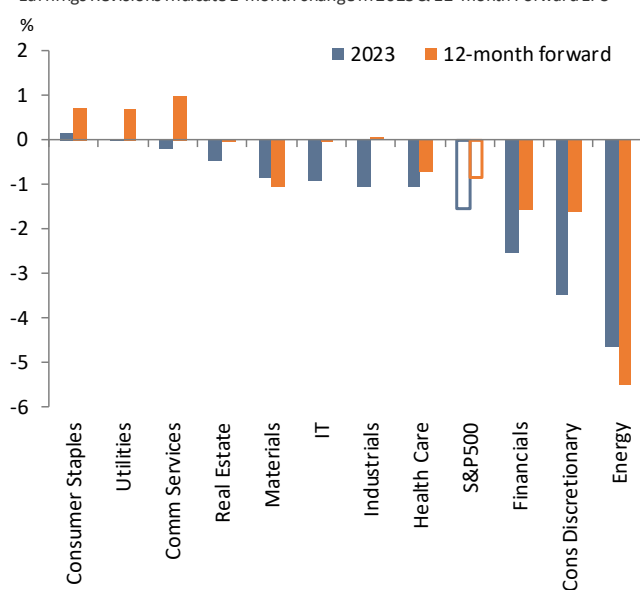
## US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/1/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
<b>S&amp;P500</b>	3973	-0.7	3.5	5.4	4.0	1.6	1.7	18.2	17.6	17.5	17.4	3.9	3.6	3.6	3.1
<b>Energy</b>	695	0.7	3.4	155.7	-17.3	3.0	3.0	8.8	10.6	10.7	19.5	2.5	2.3	2.3	1.8
<b>Materials</b>	522	-1.2	6.6	5.2	-11.9	2.0	2.0	14.8	16.8	16.8	16.1	3.0	2.8	2.8	2.7
<b>Financials</b>															
Diversified Financials	993	-1.7	3.8	-15.2	7.9	1.6	1.7	17.0	15.7	15.6	15.0	2.0	1.9	1.9	1.7
Banks	342	-2.5	4.1	-18.4	11.7	3.0	3.3	10.8	9.6	9.6	11.5	1.2	1.1	1.1	1.1
Insurance	600	-2.4	0.7	-15.2	32.2	1.7	2.0	17.6	13.3	13.2	12.0	2.2	2.0	2.0	1.3
<b>Real Estate</b>	247	-0.8	6.2	10.4	2.3	3.6	3.5	17.9	17.5	17.5	18.7	3.1	3.0	3.0	3.3
<b>Industrials</b>															
Capital Goods	869	-4.3	-0.4	14.0	15.4	1.7	1.8	21.9	19.0	18.8	17.5	5.0	4.5	4.5	4.1
Transportation	954	-1.2	5.3	122.6	11.2	1.9	2.1	16.2	14.6	N/A	14.1	5.5	4.7	4.6	4.2
Commercial Services	487	-1.4	0.3	10.5	5.8	1.1	1.2	28.3	26.8	26.6	23.9	6.0	5.4	5.4	4.3
<b>Consumer Discretionary</b>															
Retailing	2949	-2.1	7.1	-40.6	47.1	0.8	0.9	39.9	27.1	26.8	27.9	10.7	9.0	8.9	9.4
Consumer Services	1377	0.1	8.4	N/A	162.9	1.1	1.2	67.3	25.6	N/A	36.1	315.2	179.7	N/A	14.8
Consumer Durables	400	-1.6	8.1	2.5	-17.9	1.7	1.7	13.8	16.8	16.7	17.0	3.3	3.1	3.0	3.4
Automobiles and parts	85	5.8	8.0	29.6	-0.8	0.4	0.5	17.1	17.2	N/A	16.3	3.3	2.9	2.9	2.9
<b>IT</b>															
Technology	2649	1.3	5.3	5.5	2.3	1.0	1.0	20.4	20.0	19.9	16.0	15.1	13.3	13.2	7.3
Software & Services	2951	0.5	3.8	10.0	10.6	1.0	1.0	25.4	22.9	22.8	22.0	7.9	6.8	6.7	6.4
Semiconductors	1831	0.3	10.3	-5.4	-6.9	1.5	1.6	18.5	19.8	19.7	15.7	4.7	4.5	4.5	3.9
Communication Services	177	3.0	11.1	-16.7	10.1	1.0	1.0	17.6	16.0	15.8	18.9	2.8	2.6	2.6	3.2
Media	683	4.2	12.7	-17.8	10.7	0.3	0.3	20.0	18.1	17.9	22.4	3.3	3.0	3.0	3.7
<b>Consumer Staples</b>															
Food & Staples Retailing	630	-2.2	1.7	1.5	5.7	1.6	1.6	22.1	20.9	20.8	18.8	5.1	4.8	4.8	3.7
Food Beverage & Tobacco	828	-2.7	-4.0	5.0	2.6	3.1	3.3	19.1	18.7	18.6	18.6	5.3	5.0	5.0	5.1
Household Goods	836	-3.8	-3.2	-3.3	5.0	2.4	2.5	26.3	25.0	24.9	21.8	9.9	9.6	9.6	7.1
<b>Health Care</b>															
Pharmaceuticals	1279	-1.6	-1.2	4.2	-10.1	1.9	2.0	15.2	17.0	16.9	15.5	5.6	5.0	5.0	4.4
Healthcare Equipment	1813	-0.5	-1.9	3.5	4.5	1.2	1.2	19.3	18.5	18.3	17.1	4.0	3.6	3.6	3.1
<b>Utilities</b>	352	-2.9	-1.8	1.4	7.3	3.0	3.2	19.8	18.4	18.4	17.2	2.1	2.0	2.0	1.8

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 2023 &amp; 12-month Forward EPS

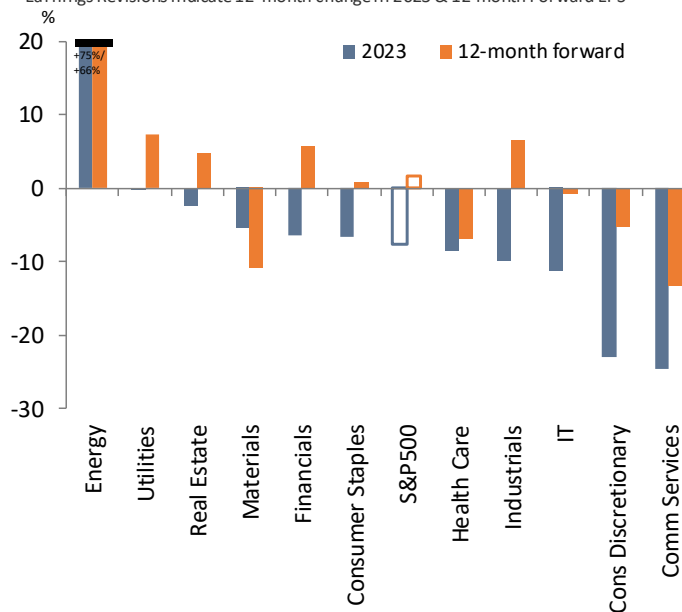
Earnings Revisions indicate 1-month change in 2023 &amp; 12-month Forward EPS

Data as of January 20<sup>th</sup>

12-month forward EPS are 94% of 2023 EPS and 6% of 2024 EPS

## 12-month revisions to 2023 &amp; 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2023 &amp; 12-month Forward EPS

Data as of January 20<sup>th</sup>

12-month forward EPS are 94% of 2023 EPS and 6% of 2024 EPS

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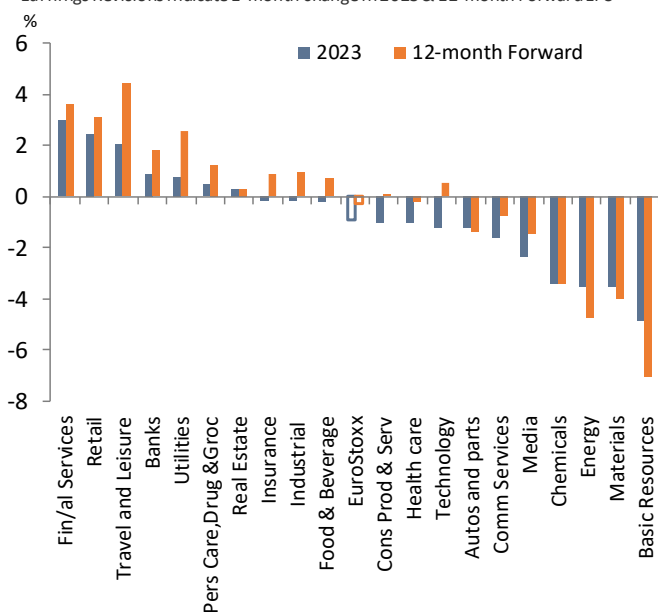
## Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/1/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
EuroStoxx	443	-0.5	8.0	15.8	2.2	3.1	3.2	13.6	13.3	13.3	14.7	1.7	1.6	1.6	1.5
Energy	355	-0.7	2.3	123.2	-19.2	5.3	4.9	5.3	6.5	6.6	12.7	1.3	1.1	1.1	1.2
Materials	970	-0.1	5.1	7.7	-28.6	3.0	2.9	11.3	15.9	15.8	15.8	1.7	1.6	1.6	1.7
Basic Resources	235	-0.8	5.1	-11.1	-52.4	2.8	3.0	4.8	10.2	10.1	9.7	0.7	0.7	0.7	0.8
Chemicals	1408	0.0	5.2	18.9	-17.6	3.1	2.9	14.3	17.4	17.3	16.9	2.2	2.1	2.1	2.2
Financials															
Banks	105	-0.5	9.4	13.8	3.8	5.9	6.2	7.9	7.6	7.6	10.2	0.7	0.6	0.6	0.7
Insurance	329	1.5	7.1	-5.4	24.8	5.1	5.5	11.6	9.3	9.2	9.7	1.4	1.3	1.3	0.9
Financial Services	509	-0.6	4.6	33.4	-3.2	2.9	3.1	11.4	11.8	11.7	16.1	1.2	1.2	1.2	1.3
Real Estate	147	-2.5	12.2	5.4	0.0	5.7	6.0	11.5	11.5	11.5	16.9	0.6	0.6	0.6	1.0
Industrials															
Industrial Goods & Services	1047	0.4	8.8	21.5	11.2	2.2	2.5	18.8	16.9	16.8	17.5	2.7	2.5	2.4	2.7
Construction & Materials	510	0.3	10.4	-4.1	-0.6	3.5	3.7	12.8	12.9	12.8	14.8	1.7	1.6	1.6	1.5
Consumer Discretionary															
Retail	580	-0.6	13.3	3.8	7.1	3.9	4.1	22.4	20.9	20.8	25.9	4.5	4.3	4.3	5.5
Automobiles and parts	547	-1.6	8.0	8.1	-17.4	5.3	4.9	5.4	6.6	6.6	8.0	0.9	0.8	0.8	1.0
Travel and Leisure	209	2.7	13.7	N/A	22.2	0.9	1.1	23.3	19.1	N/A	N/A	2.3	2.1	2.1	2.2
Consumer Products & Services	484	-0.4	13.5	4.8	14.7	1.4	1.6	32.4	28.2	28.0	25.1	6.7	5.9	5.9	4.2
Media	272	1.3	4.4	17.2	13.1	2.3	2.4	21.8	19.3	19.2	18.7	3.0	2.9	2.8	2.2
Technology	814	-1.5	14.0	-4.9	22.8	1.0	1.1	28.2	23.0	22.7	22.0	3.9	3.5	3.5	3.7
Consumer Staples															
Food, Beverage & Tobacco	169	-0.5	2.5	11.0	8.1	1.8	2.1	19.7	18.2	18.1	20.2	2.1	2.0	2.0	2.6
Personal Care, Drug & Grocery	175	-0.5	4.9	1.5	6.5	2.5	2.6	16.3	15.3	15.2	17.6	2.3	2.2	2.2	2.3
Health care	813	-1.6	4.5	8.8	4.3	2.3	2.4	16.0	15.3	15.2	16.7	2.1	1.9	1.9	2.3
Communication Services	280	-0.5	6.8	21.8	4.7	3.9	4.2	15.2	14.5	14.4	15.5	1.5	1.4	1.4	1.7
Utilities	358	-1.6	2.4	-39.5	77.0	4.5	4.7	22.2	12.6	12.5	14.2	1.6	1.6	1.6	1.3

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 2023 &amp; 12-month Forward EPS

Earnings Revisions indicate 1-month change in 2023 & 12-month Forward EPS

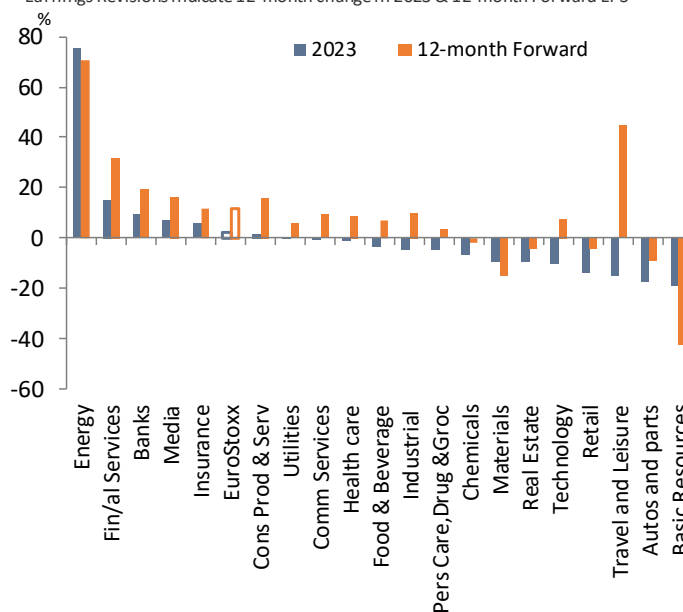


Data as of January 20<sup>th</sup>

12-month forward EPS are 94% of 2023 EPS and 6% of 2024 EPS

## 12-month revisions to 2023 &amp; 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2023 & 12-month Forward EPS



Data as of January 20<sup>th</sup>

12-month forward EPS are 94% of 2023 EPS and 6% of 2024 EPS

National Bank of Greece | Economic Research Division | Global Markets Analysis

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