Global Markets Roundup



National Bank of Greece | Economic Research Division | February 21, 2023

US equities are flat month-to-date (+6% in January), as investors price in more interest rate hikes by the Federal Reserve

- The latest set of macro data has led investors to revise up further their expectations for the federal funds terminal rate at a range of 5.25% 5.5% (from 4.75% 5% in late January). Hawkish FOMC members emphasized the likelihood of increasing rates for longer than previously anticipated.
- In a similar vein, market pricing for ECB policy rates moved up by circa +10 bps in the past week and now points to further hikes of +125 bps by mid-2023. According to the ECB, there is a strong commitment for an additional interest rate hike of 50 basis points in March 2023, and then it will evaluate the subsequent path of monetary policy.
- The upward repricing of the path of monetary policy interest rates sent core government bond yields higher by circa +10 bps wow in the 2 to 10-year tenors in both the US and Germany (10-year: 3.83% and 2.45%). So far this month, nominal 10-Year UST yields are up by +31 bps, with real rates leading the increase (+19 bps to +1.46%, +12 bps for breakeven rates to 2.37%).
- US equities, following the strongest gain in January since 2019 (+6.2%), paused for breath in February. On the other hand, euro area equities continue to advance (+2.7% in February and +12% ytd), albeit from lower valuation layers, as downside risks related to energy supply have diminished.
- Indeed, natural gas storage levels in the European Union currently stand at levels 46% above their 2015 -2020 average for the same period (64% of storage capacity). As a result, European natural gas prices have fallen sharply, with the "spot" Dutch TTF below the 50 mark (€48/MWh) for the first time since early-September 2021.
- Sectoral composition has supported euro area equities as well. EuroStoxx Banks (+22% ytd), which benefit from the higher interest rate environment, alongside a less malign macroeconomic outlook, represent c. 10% of the headline index's market capitalization. The respective share for S&P500 Banks (+9% ytd) stands at c. 4%. Recall that relative sectoral weights (i.e. Technology, Banks) explain a large portion of the significant US equity overperformance in the aftermath of the Global Financial Crisis (see graph page 3).
- At the same time S&P500 valuations appear relatively stretched. The 12-month forward Price-to-Earnings ratio (P/E) stands at 18.5x (as of February 16th) versus an average of 16.4x since 1999 (at the 80th percentile in that period), whereas the respective ratio for the EuroStoxx stands at 12.7x versus an average of 13.9x since 1999 (at the 37th percentile in that period).
- A more benign recent path for earnings expectations, in turn aided by the dissipation of sharply negative economic risks, has been a key factor for the relative gains of euro area equities. Indeed, 12-month forward Earnings-Per-Share estimates have fallen by -6% since a peak in July 2022 for the S&P500 to \$225, whereas rising by +4% in the same period for the EuroStoxx to €36.
- Regarding euro area growth, PMIs for February improved further. The composite index increased by 2.0 pts to 52.3, its highest level since May 2022, overshooting consensus expectations, with the services activity (53.0) and the manufacturing output (50.4) in expansionary territory.

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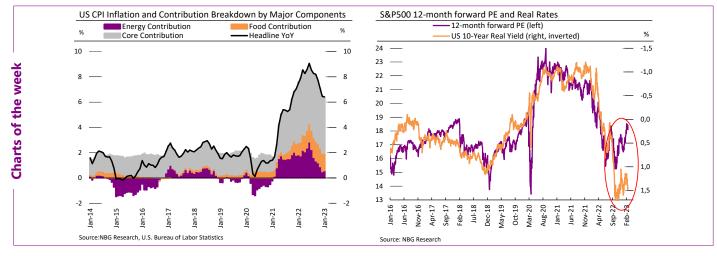
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Table of Contents

Overview_p1 Economics & Markets_p2,3 Forecasts & Outlook_p4 Event Calendar_p5 Markets Monitor_p6 ChartRoom_p7,8 Market Valuation_p9,10





US CPI inflation decelerated only slightly in January

- · Headline inflation remained elevated in January, albeit decelerating for a seventh consecutive month. Specifically, the annual pace of growth came out at 6.4% compared with 6.5% in December (and a peak of 9.1% in June 2022). On a monthly basis, the index increased by +0.5% in January (seasonally adjusted | "sa"), as expected, from an upward revised (by +0.2 pps) +0.1% mom in the previous month. The momentum was resilient across the board. In the event, the energy index rose by +2.0% mom (sa) following a -3.1% mom in December and the annual growth accelerated to 8.7% from 7.3% previously. At the same time, food prices increased by +0.5% mom (sa) from +0.4% mom in December (average monthly pace since June 2021: +0.8% mom versus a 20-year average of +0.2% mom). Still, base effects led to a modest deceleration in the annual pace of growth, at 10.1% from 10.4% in December (peak of 11.4% in August, the highest since May 1979).
- Core CPI increased by +0.4% mom (sa) for a 2nd consecutive month (December's reading was revised up by 0.1 pp | average of +0.5% mom in the past 16 months), in line with consensus estimates (20year average of +0.2% mom). Core CPI's annual pace of growth decelerated by 0.1 pp to 5.6% in January, modestly above consensus estimates for 5.5% (peak of 6.6% yoy in September 2022). A strong momentum is maintained for the relatively less volatile and predominantly determined by domestic economic developments, shelter prices (+0.7% mom from +0.8% mom in December | +0.7% mom on average in the past nine months, triple its 20-year average), which constitute c. 1/3 of the headline CPI and c. 40% of the core index, evident in both major components. The index for the rent of primary residence was up by +0.7% mom in January (8.6% yoy, the highest since September 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), also increased by +0.7% mom (7.8% yoy, a record high).
- At first sight, that development may appear at odds with the cooling down of the US housing market in recent months. However, it should be noted that the slowdown has started to weigh on prices of new rent leases (after peaking in August 2022 according to independent private sources). The CPI rent index though, covers both new leases and existing ones. The latter respond with a substantial lag to market conditions for new leases and most likely, there remains a substantial catching-up to take place. The silver lining is that, barring an unwarranted renewed spike in prices of new rent leases, the CPI rent index should stabilize after the catching up concludes.
- On the other hand, the downward correction for used cars & trucks, the prices of which had spiked in recent years as the market for new ones faced sharp supply chain disruptions, continues. Prices fell by -1.9% mom (sa) in January and by -11.6% compared with a peak a year before (-8.8% yoy in December), when they stood at +55.0% above pre-pandemic levels. Recall that CPI excluding food, shelter, energy and used cars & trucks, stood at +5.4% yoy in January versus a peak of +6.7% yoy in September.
- Looking forward, the Federal Reserve Bank of Cleveland's Inflation Nowcasting model points to 6.2% yoy for the headline CPI in January and to 5.5% yoy for the core index.

US retail sales entered 2023 on a very strong note

 Nominal retail sales rose by +3.0% mom seasonally adjusted (+6.4% yoy) in January. The outcome followed a -1.1% mom

- decline in December (+5.9% yoy) and significantly overshot consensus estimates for +1.8% mom. 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 up by +1.7% mom (+4.4% yoy) from -0.7% mom in December (+6.5% yoy), versus consensus estimates for +0.8% mom. Recall that the relatively strong January performance was probably supported by the annual Cost-Of-Living Adjustment to Social Security and Supplemental Social Security Income benefits (+8.7% as of January 2023 in nominal terms).
- The University of Michigan's index of consumer sentiment improved for a 3rd consecutive month in February, albeit remaining subdued. The preliminary reading came out at 66.4 from 64.9 in January, above consensus for 65.0, albeit still well below a long-term (since 2001) average of 82.9. The improvement in February was due to a relatively more benign assessment of current economic conditions (+4.2 pts to 72.6), whereas the expectations component was little changed (-0.4 pts to 62.3). Recall that consumers maintain particularly elevated uncertainty regarding the short-term outlook for inflation. In the event, respondents' 1-year ahead inflation expectations have exhibited high volatility recently, increasing to +4.2% in the February survey after having eased to +3.9% in January from +4.4% in December and +4.9% in November. Meanwhile, its 5-year ahead counterpart was insignificantly changed at +2.9%, remaining in a tight range of 2.9% - 3.1% for 18 of the past 19 months.

Japanese real GDP rose by less than expected in Q4:22

Japanese GDP increased by +0.6% gog saar in Q4:22 (+0.6% yoy) according to the preliminary estimate, following a -1.0% qoq saar (+1.5% yoy) contraction in Q3:22 and versus consensus estimates for +2.0% qoq saar. The message regarding the economic outlook from the performance of expenditure components, was a mixed bag. In the event, private consumption showed resilience, up by +2.0% gog saar (+1.1 pp contribution to the headline figure), after being unchanged on a quarterly basis in Q3:22. Government **consumption** was also up, +1.3% qoq saar (+0.1 pp contribution | +0.3% qoq saar in Q3:22). Net exports added significantly further to the headline GDP growth, +1.4 pps, as imports (of both goods & services) decreased by -1.6% qoq saar, whereas exports rose by +5.7% qoq saar. Nevertheless, the decline in imports should be viewed as a partial correction following a sharp +24.0% gog saar in Q3:22, a development predominantly on the back of an extraordinary concurrence of advertising payments abroad from Japanese companies (which had driven imports of services to a +106.7% gog saar). **Inventories** posed a meaningful drag (-1.6 pps), a development though which could act as a tailwind for GDP growth in Q1:23. Residential investment decreased by -0.5% qoq saar (neutral to headline GDP growth | -1.7% gog saar in Q3:22), while business investment fell by -2.1% qoq saar in Q4:22 (+6.3% in the previous quarter), subtracting -0.3 pps from the headline outcome. Finally, public investment was down by -2.1% gog saar (-0.1 pp | +2.6% gog saar in Q3:22). Looking forward, business confidence among small businesses, according to the Cabinet Office's Economy Watchers survey, overall improved entering 2023. Specifically, the current conditions index was insignificantly changed at 48.5 (average of 44.6), while the forward-looking indicator (outlook for 2-3 months ahead) was up by 2.5 pts to 49.3 (average of 46.3 since 2001).



Equities

• Global equity markets were broadly flat in the past week, as investors weighed better-than-expected economic data and expectations for more aggressive monetary policy tightening (MSCI ACWI: -0.3% wow | +7 ytd). In the US, the S&P500 declined by -0.3% wow, with the upward trend early in the week reversing, following stronger-than-expected producer price index data and hawkish comments from Federal Reserve officials.

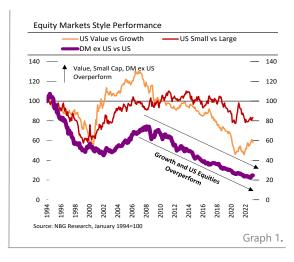
On the other side of the Atlantic, the EuroStoxx rose by +1.9% wow. Regarding sectors, Banks increased by +3.2% wow, with Commerzbank overperforming (+12% wow), with the bulk of the increase occurring on Thursday (+11.6%), following the significantly better-than-expected results for Q4:2022 (EPS: €0.41 vs estimates for €0.31), with its trading volume surpassing the 23.3 million shares on the same day compared to a prior 30-day average of 6.1 million shares. In Greece, the ASE Index ended the week up by 3.2% wow, while entering the current week on a positive note (+1.9% on Monday), surpassing the milestone of 1100 points (1123) for the first time since September 2014. Notably, the index recorded its 9th consecutive week with gains, for the first time since January 2005 (see graph 2).

Fixed Income

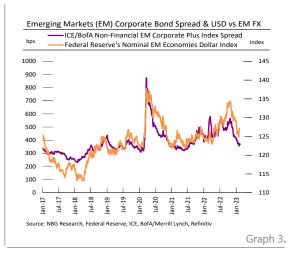
· Government bond yields in the US rose, amid higher-than-expected data (CPI, PPI, retail sales) and hawkish comments from Federal Reserve's officials (Bullard, Mester). Overall, the 10-year yield increased by +10 bps to +3.83% and the 2-year yield by +11 bps to +4.66%. German 10-year yields rose by +10 bps to 2.45%, their highest level since late-December, re-approaching eleven year highs (2.53%), while periphery bond yield spreads were little changed, remaining well bid (Spain: +1 bp to 95 bps, Italy: broadly stable at 184 bps, Greece: -2 bps to 181 bps). Corporate bond spreads widened in the HY **spectrum.** Indeed, USD HY bond spreads increased by 14 bps wow to 438 bps and their EUR counterparts by +3 bps wow to 412 bps. Regarding Emerging Markets, corporate bonds spreads of the non-financial sector denominated in hard currency widened by +10 bps. Nevertheless, spreads have narrowed significantly (-188 bps) since their late-October highs, due to the depreciation of the US dollar, during the same period, against the currencies of EM economies (-5%). The yield-to-maturity currently stands at 7.8%, compared to 9.8% on October 24th, remaining above its 20-year average of 6.4%. A weaker USD supports, ceteris paribus, EM corporates, as a significant part of their debt is issued in USD, thus the cost for the refinancing of the USD-denominated debt is lower in periods of USD stress.

FX and Commodities

• The Japanese yen depreciated by -2.3% wow against the US dollar to ¥134.3 in the past week and by -4.6% since February 2nd, as 10-Year nominal yield differentials (US-JP) have widened by +43 bps during the same period. In commodities, oil prices declined in the past week, as the US inventories build put some downward pressure on oil prices (WTI: -4.2% wow to \$76.3/barrel). Specifically, US oil inventories rose by 16.3 million barrels to 471 million barrels for the week ending February 10th, recording their 8th consecutive weekly increase, with the 8-week moving sum reaching 53 million barrels, the highest level since May 2020. Inventory building more-than-offset slightly upwardly revised estimates for oil demand in 2023 by the International Energy Association and the OPEC to 101.9 million barrels per day on average, 200k and 100k barrels per day higher compared to their previous month's estimates, respectively. Finally, European natural gas prices declined significantly (TTF: -9.1% wow to €49/MWh, its lowest level since August 2021), due to, inter alia, relatively mild temperatures so far this winter in Europe that have led to a reduction in heating demand.







Quote of the week: "We are still far away from claiming victory on inflation. A broad disinflation process has not even started in the euro area.", Member of the Executive Board of the European Central Bank, Isabel Schnabel, February 15th 2023.



10-Yr Gov. Bond Yield (%)	February 17th	3-month	6-month	12-month	Official Rate (%)	February 17th	3-month	6-month	12-month
Germany	2,45	2,15	2,25	2,25	Euro area	2,50	3,00	3,25	3,25
US	3,83	4,00	4,10	4,10	US	4,75	5,00	5,00	5,00
UK	3,51	3,63	3,58	3,43	UK	4,00	4,20	4,25	4,20
Japan	0,50	0,47	0,72	0,72	Japan	-0,10	-0,10	-0,10	-0,10
Currency	February 17th	3-month	6-month	12-month		February 17th	3-month	6-month	12-month
EUR/USD	1,07	1,05	1,08	1,10	USD/JPY	134	134	133	131
EUR/GBP	0,89	0,89	0,90	0,91	GBP/USD	1,20	1,18	1,20	1,21
EUR/JPY	144	141	144	144					

Economic Forecasts											
United States	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22a	2022a
Real GDP Growth (YoY) (1)	-2.8	1.2	12.5	5.0	5.7	5.9	3.7	1.8	1.9	1.0	2.1
Real GDP Growth (QoQ saar) (2)	-	6.3	7.0	2.7	7.0	-	-1.6	-0.6	3.2	2.9	-
Private Consumption	-3.0	10.8	12.1	3.0	3.1	8.3	1.3	2.0	2.3	2.1	2.8
Government Consumption	2.6	6.5	-3.0	-0.2	-1.0	0.6	-2.3	-1.6	3.7	3.7	-0.6
Investment	-2.3	9.7	5.8	-1.1	0.6	7.4	4.8	-5.0	-3.5	-6.7	-0.3
Residential	7.2	11.6	-4.9	-5.8	-1.1	10.7	-3.1	-17.8	-27.1	-26.7	-10.7
Non-residential	-4.9	8.9	9.9	0.6	1.1	6.4	7.9	0.1	6.2	0.7	3.6
Inventories Contribution	-0.7	-3.0	-1.3	2.0	5.1	0.2	0.3	-2.1	-1.4	1.8	0.7
Net Exports Contribution	-0.2	-1.3	-0.8	-1.3	-0.6	-1.7	-3.8	1.2	3.3	0.7	-0.6
Exports	-13.2	0.4	4.9	-1.1	23.5	6.1	-4.6	13.8	14.6	-1.3	7.2
Imports	-9.0	7.6	7.9	6.6	18.6	14.1	18.4	2.2	-7.3	-4.6	8.1
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	Q4:22a	2022a
Real GDP Growth (YoY)	-6.3	-0.8	14.2	3.9	4.8	5.3	5.5	4.2	2.3	1.9	3.5
Real GDP Growth (QoQ saar)	-	-0.2	8.2	9.3	2.2	-	2.5	3.2	1.3	0.4	-
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

	US	Euro Area	Japan	UK
equity Markets	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, with EPS consensus expectations (\$228 for EPS) only slightly lower compared with end Q3 (-3%)	 Higher equity risk premium (lower P/E ratio) relative to benchmark market (US) despite the recent rally of +20% 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 	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 ¥130, 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)	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 remainery high and labor market extremely tight
	Neutral/Negative	Neutral/Positive	Neutral	Neutral
Government bonds	Valuations appear somewhat rich despite the 237bps increase in 2022, 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	Valuations still appear excessive compared with long-term fundamentals ECB to start unwinding its government and corporate bond holdings (APP) in March 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)	 The range of Yield-Targeting of 10-Year JGB at around 0% could widen further (current: +/- 50 bps) 	Inflation expectations could drift higher dusupply disruptions (persistent post Brexit, temporary due to China) The BOE is expected to continue increasing interest rates aggressively as inflation remavery high and labor market extremely tight BOE: active (sales) Quantitative Tightening Slowing economic growth post-Brexit
	▲ Slightly higher yields	▲ Slightly higher yields	Slightly Higher yields	▲ Slightly Higher yields
roreign Exchange	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	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	Safe haven demand More balanced economic growth recovery (long-term) Higher core Inflation rates could accelerate the shift of monetary policy (less accommodative)	 Valuations appear undernanding with REER below its 15-year average Sizeable Current account deficit
5	Broadly Flat USD against G10 FX	Range-bound (around 1.05) with upside risks against the USD	▲ Stronger JPY	Broadly stable GBP



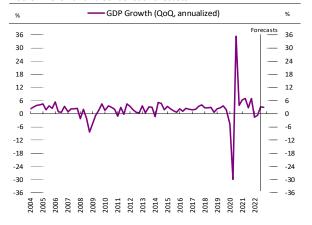
Economic Calendar

In the US, the minutes of the latest Fed meeting are released on Wednesday. On Thursday, the second estimate of GDP for Q4:22, will be closely monitored. GDP growth is expected to be unchanged compared with the previous estimate at +2.9% qoq saar. On Friday, January's personal income and consumption and PCE data (the Fed's preferred measure for gauging inflation developments) for January will gather investors' attention.

In Japan, attention turns to inflation data for January. CPI is expected at +4.2% yoy in January from +4.0% in the previous month.

In Germany, the final estimate of Q4:22 GDP on Friday will be closely watched. GDP is expected to remain unchanged compared with the previous estimate (-0.2% qoq | +1.1% yoy wda).

US GDP Growth and Consensus Forecasts



Source: NBG Research

Economic News Calendar for the period: February 14 - February 27, 2022

Concept Conc	rsday 16			
Core CRI ((vr) January 5.5% 5		S	Α	P
Material Production (MoM) January 0.5% 0.0% -1.0% Subject 1.0% Subject 1.	al Jobless Claims (k) February 11		+ 194	195
D. Unemployment Rate December 3.7% 3.7% 3.7% 3.7% Nat Long-term TLC Flows (\$ ba) December 15.8 17.15 17.5 17.1	tinuing Claims (k) February 4		- 1696	1680
NAME Document Pebruary 37 42 35 Pebruary 37 47 37 47 37 47 37 37	ding permits (k) January		- 1339	1337
Compage Comp	sing starts (k) January	1358	- 1309	1371
Continuence and continuence	adelphia Fed Business February	-7.4	24.3	-8.9
APAN COPP (QCQ)	look	7	24.5	0.5
Company Comp	AN			
Core CP (1976) January 6.2% + 5.8% 6.3% February 1.14 Industrial Production (sa, MoM) December -0.0%1.18 1.44 Industrial Production (sa, MoM) December -0.0%1.18 1.45 Industrial Production (sa, MoM) December -0.0%1.17 1.45 Industrial Production (sa, MoM) December -0.0%	orts YoY January		+ 3.5%	11.5%
Friday 17	orts YoY January	18.4%	- 17.8%	20.7%
Truesday 21 US S A P Betala sales Ex Auto MoM January 0.0% + 0.4% -1.4% Consumer Confidence Indicator February 21 US S A P Betala sales Ex Auto MoM January 47.1 - 46.9 Every 47.5 - 47.0 UK S A P SSP Global US Manufacturing PMI January 47.1 - 46.9 Every 47.5 - 47.0 UK S A P SSP Global US Manufacturing PMI January 47.5 - 47.0 UK SSP Global US Manufacturing PMI SSP Global U				
Industrial Production (e.g. MoM) December -0.8% -1.1% 1.4% December -0.7% -1.7% 2.8%				
Industrial Production (wda, YoY) December -0.7%1.7% 2.8%				
Friday 17				
Tuesday 21				
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S				
PMI	dnesday 22 1C Minutes February 1	S	A	P
Existing home sales (mn)				
UK S&P Global/CIPS UK PMI Manufacturing SA S&P Global/CIPS UK Services PMI February 49.2 48.7 EURO AREA S&P Global Eurozone Manufacturing PMI S&P Global Eurozone Services PMI SAP Global Eurozone Composite Pebruary 51.0 50.8 S&P Global Eurozone Composite PMI SAPAN PMI manufacturing PFebruary 50.6 50.3 JAPAN PMI manufacturing February 47.4 48.9 Friday 24 US S A P US S A P US S A P US Continuing Claims (k) February 11 1700 1696 PCE (YO') PCE Core (YO') Personal spending (MoM) January 1.0% 0.2% JAPAN CPI (YO') - ex. Fresh Food January 4.2% 4.0% JAPAN CPI (YO') - ex. Fresh Food January 4.2% 4.0% JAPAN CPI (YO') - ex. Fresh Food January 4.2% 4.0% JAPAN CPI (YO') - ex. Fresh Food January 3.0% GERMANY GEP (QOQ) Q4:22 -0.2%0.2%	Business Climate Indicator February	91.2		90.2
S&P Global/CIPS UK Services PMI February 49.2 48.7 EURO AREA S&P Global Eurozone February 49.3 48.8 S&P Global Eurozone Services PMI February 51.0 50.8 S&P Global Eurozone Composite PMI February 50.6 50.3 JAPAN PMI manufacturing February 47.4 48.9 Thursday 23 Friday 24 S A P US S A P US S A P US GDP (QoQ, annualized) Q4:22 2.9% 2.9% Personal income (MoM) January 1.0. 0.0.2% Durabli Initial Jobless Claims (k) February 11 1700 1696 PCE (ro'V) January 620 5.0% Furshirance February 1,3% -0.2% LURO January 5.0% Furshirance FURO Busines Core CPI (ro'Y)	Current Assesment February Expectations February	95.0 88.4		94.1 86.4
EURO AREA S&P Global Eurozone February 49.3 48.8 Manufacturing PMI S&P Global Eurozone Services PMI S&P Global Eurozone Composite PMI February 51.0 50.8 PMI February 50.6 50.3 JAPAN PMI manufacturing February 47.4 48.9 Friday 24 S GDP (QoQ, annualized) Initial Jobless Claims (k) February 11 1700 1696 Continuing Claims (k) February 11 1700 1696 Continuing Claims (k) February 11 1700 1696 Core (PI) (YoY) Personal spending (MoM) January				
S&P Global Eurozone Manufacturing PMI February 49.3 48.8 S&P Global Eurozone Services Phuny 51.0 50.8 PMI S&P Global Eurozone Composite PMI February 50.6 50.3 PMI Manufacturing February 47.4 48.9 February BMI manufacturing SMI S A P Wersonal income (MoM) January 1.0% 0.2% Durable Initial Jobbes Claims (k) February 18 200 194 New home sales (k) January 6.20 616 Durable Initial Jobbes Claims (k) February 11 1700 1696 PCE (vor) January 1.3% 4.4% Pediation February BMI MAPAN 4.4% Pediation MAPAN .				
S&P Global Eurozone Manufacturing PMI February 49.3 48.8 S&P Global Eurozone Services Phuny 51.0 50.8 PMI S&P Global Eurozone Composite PMI February 50.6 50.3 PMI Manufacturing February 47.4 48.9 February BMI manufacturing SMI S A P Wersonal income (MoM) January 1.0% 0.2% Durable Initial Jobbes Claims (k) February 18 200 194 New home sales (k) January 6.20 616 Durable Initial Jobbes Claims (k) February 11 1700 1696 PCE (vor) January 1.3% 4.4% Pediation February BMI MAPAN 4.4% Pediation MAPAN .				
Manufacturing PMI				
Saze Global Eurozone Cervices February 51.0 50.8 February 50.6 50.3 Saze Global Eurozone Composite February 50.6 48.9 February 50.6 48.9 February 50.6 50.8 50.8 Feb				
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PMI SAP Global Eurozone Composite Pebruary 50.6 50.3 pMI Individual Pebruary 50.6 50.3 pMI manufacturing February 47.4 48.9 Friday 24 48.9 Friday 24 5 A P US S S S S S S S S S S S S S S S S S				
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PMI manufacturing February 47.4 48.9				
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Personal income (MoM) January 1.0% 0.2% Durabli Initial Jobless Claims (k) February 18 200 194 New home sales (k) January 620 616 Durabli Continuing Claims (k) February 11 1700 1696 PCE (YoY) January 4.3% 4.4% Pendin Personal spending (MoM) January 1.3% -0.2% Durabli Continuing Claims (k) Personal spending (MoM) January 4.2% 4.0% Pendin Personal spending (MoM) January 4.2% 4.0% Pendin Personal Spending (MoM) January 4.2% 4.0% Pendin Pe		S	Α	Р
Initial Jobless Claims (k) February 18 200 194 New home sales (k) January 620 616 Durabli transpt	able goods orders (MoM) January	-2.1%		5,6%
Continuing Claims (k) February 11 1700 1696 PCE (YoY) January 5.0% transpt February 11 1700 1696 PCE Core (YoY) January 4.3% 4.4% Pediation January 1.3% -0.2% February JAPAN JAPAN CPI (YoY) Ex. Fresh Food January 4.2% 4.0% Econor Core CPI (YoY) - ex. Fresh Food January 4.2% 4.0% Econor Cert CPI (YoY) - ex. Fresh Food January 3.0% January GERMANY GDP (QoQ) Q4:22 -0.2% -0.2% Core CPI (YoY) CORE (POQO) CORE	able goods orders ex			
PCE Core (YoV) January 4,3% 4,4% Pendin Personal spending (MoM) January 1,3%0,2% EURO / JAPAM CPI (YoY) - ex. Fresh Food January 4,2% 4,0% M3 mo Core CPI (YoY) - ex. Fresh Food January 4,2% 4,0% Econor Core CPI (YoY) - ex. Fresh Food January 3,0% and Energy GERMANY GDP (QoQ) Q4:22 -0,2%0,2%	sportation (MoM) January			-0.2%
Personal spending (MoM)	ding home sales (MoM) January	0.0%		2.5%
JAPAN C	O AREA	2.370		
CPI (YoY) January 4.2% 4.0% M3 mo Core CPI (YoY) - ex. Fresh Food January 4.2% 4.0% Econor Core CPI (YoY) - ex. Fresh Food January 4.2% 3.0% and Energy GERMANY GDP (QoQ) Q4:22 -0.2%0.2%	ness Climate Indicator February			0.69
Core CPI (YoY) - ex. Fresh Food January 4.2% 4.0% Econor Core CPI (YoY) - ex. Fresh Food January 3.0% and Energy GERMANY GDP (QoQ) Q4:22 -0.2%0.2%	money supply (YoY) January	4.2%		4.1%
Core CPI (YoY) - ex. Fresh Food January 3.0% and Energy GERMANY GDP (QoQ) Q4:22 -0.2%0.2%	nomic Confidence February	97.8		99.9
and Energy GERMANY GDP (QoQ) Q4:22 -0.2%0.2%				
GERMANY GDP (QoQ) Q4:22 -0.2%0.2%				
GDP (QoQ) Q4:22 -0.2%0.2%				

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



Developed N	larkota	Current	1-week	Year-to-Date	1-Year	2-year	Emerging Markets	Current	1-week	Year-to-Date	1-Year	2-year
Developed iv	iarkets	Level	change (%)	change (%)	change (%)	change (%)	Emerging Markets	Level	change (%)	change (%)	change (%)	change (%)
US	S&P 500	4079	-0.3	6.2	-6.9	3.8	MSCI Emerging Markets	60203	-0.9	4.7	-14.6	-25.2
Japan	NIKKEI 225	27513	-0.6	5.4	1.0	-9.2	MSCI Asia	923	-1.3	5.4	-13.3	-28.3
UK	FTSE 100	8004	1.5	7.4	6.2	19.3	China	69	-2.1	6.2	-18.1	-46.7
Canada	S&P/TSX	20515	-0.5	5.8	-3.1	11.6	Korea	747	-0.8	11.4	-12.7	-25.3
Hong Kong	Hang Seng	20720	-2.2	4.7	-16.4	-33.3	MSCI Latin America	90678	1.3	2.7	-7.2	-10.8
Euro area	EuroStoxx	460	1.9	12.1	0.8	11.2	Brazil	293321	1.1	-0.7	-12.2	-22.4
Germany	DAX 40	15482	1.1	11.2	1.4	11.3	Mexico	50130	2.7	11.3	2.8	20.8
France	CAC 40	7348	3.1	13.5	5.8	27.4	MSCI Europe	2959	4.1	5.1	-55.5	-51.8
Italy	FTSE/MIB	27751	1.8	17.1	4.1	19.7	Russia	2169	-4.1	0.7	-38.2	-36.9
Spain	IBEX-35	9333	2.4	13.4	7.6	14.9	Turkey	5206580	13.4	-3.3	129.7	217.4

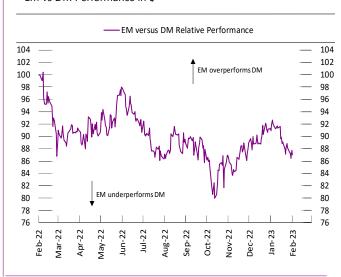
in US Dollar terms	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	242.2	-5.3	-1.6	16.5	62.6	Energy	255.2	-5.0	-1.5	20.8	70.9
Materials	329.9	-0.4	6.1	-6.6	-0.3	Materials	327.9	0.1	6.2	-2.1	7.3
Industrials	319.4	0.5	6.7	-1.7	2.2	Industrials	330.9	1.0	7.0	2.7	9.7
Consumer Discretionary	336.0	1.6	15.4	-15.6	-15.2	Consumer Discretionary	334.0	1.9	15.6	-13.4	-11.2
Consumer Staples	270.9	1.0	0.4	-5.2	5.1	Consumer Staples	278.7	1.3	0.6	-1.9	10.8
Healthcare	339.8	-0.3	-1.5	0.7	6.0	Healthcare	341.1	-0.1	-1.4	2.8	9.8
Financials	141.2	-0.3	7.9	-7.1	9.4	Financials	145.5	0.1	7.9	-4.0	15.2
IT	442.9	-0.4	12.6	-11.3	-5.6	IT	433.8	-0.3	12.6	-10.4	-3.8
Telecoms	74.7	0.6	12.0	-21.0	-26.9	Telecoms	79.5	8.0	12.1	-19.6	-24.9
Utilities	151.2	0.8	-1.0	-2.1	0.8	Utilities	158.3	1.0	-1.0	0.5	5.3

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	3.83	3.74	3.88	1.97	2.17	US Treasuries 10Y/2Y	-83	-81	-58	44	93
Germany	2.45	2.36	2.53	0.23	0.47	US Treasuries 10Y/5Y	-20	-20	-13	12	47
Japan	0.50	0.50	0.42	0.21	0.19	Bunds 10Y/2Y	-42	-39	-16	66	76
UK	3.51	3.38	3.66	1.45	1.50	Bunds 10Y/5Y	-7	-3	0	24	52
Greece	4.27	4.19	4.59	2.61	5.29						
Ireland	2.90	2.83	3.06	0.80	1.21	Corporate Bond Spreads (in	C	Lastal.	V C++	One Year	10-year
Italy	4.29	4.20	4.64	1.84	2.19	bps)	Current	Last week	Year Start	Back	average
Spain	3.41	3.31	3.61	1.18	1.68	EM Inv. Grade (IG)	150	144	167	154	190
Portugal	3.33	3.22	3.57	1.09	2.38	EM High yield	593	577	640	663	624
						US IG	126	123	138	118	132
US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average	US High yield	438	424	481	374	447
30-Year FRM ¹ (%)	6.39	6.18	6.42	4.05	4.20	Euro area IG	142	141	167	125	120
vs 30Yr Treasury (bps)	246.6	232.3	240.0	171.8	142.5	Euro area High Yield	412	409	498	399	404

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											
EUR/USD	1.07	-0.1	-1.6	-6.2	-0.1	Agricultural	470	-0.8	1.7	-2.5	0.0
EUR/CHF	0.99	0.3	0.0	-5.4	0.2	Energy	264	-4.2	-6.2	-12.0	-8.3
EUR/GBP	0.89	0.5	1.7	6.5	0.2	West Texas Oil (\$/bbl)	76	-4.2	-4.0	-16.8	-4.9
EUR/JPY	143.25	2.2	3.0	9.6	1.7	Crude brent Oil (\$/bbl)	83	-3.9	-2.3	-10.7	-3.4
EUR/NOK	11.00	1.7	3.2	8.5	4.7	HH Natural Gas (\$/mmbtu)	2.3	-4.0	-28.9	-50.2	-35.4
EUR/SEK	11.18	0.3	0.7	5.3	0.6	TTF Natural Gas (EUR/mwh)	49	-9.1	-20.5	-34.5	-35.7
EUR/AUD	1.56	0.9	0.7	-1.5	-1.1	Industrial Metals	456	-0.9	-6.8	-15.6	1.0
EUR/CAD	1.44	0.9	-0.9	-0.3	-0.5	Precious Metals	2402	-1.3	-4.2	-3.3	0.3
USD-based cross rates						Gold (\$)	1841	-1.3	-3.3	-3.0	0.9
USD/CAD	1.35	1.0	0.7	6.3	-0.4	Silver (\$)	22	-2.3	-7.6	-8.8	-9.3
USD/AUD	1.46	1.0	2.3	5.0	-1.1	Baltic Dry Index	538	-10.6	-38.4	-71.5	-64.5
USD/JPY	134.34	2.3	4.6	16.8	1.8	Baltic Dirty Tanker Index	1261	4.6	-11.3	81.7	-32.7







Data as of February 17^{th} – Rebased @ 100

Equity Market Performance - G4



Data as of February 17th – Rebased @ 100

Equity Market Performance – Euro Area G4



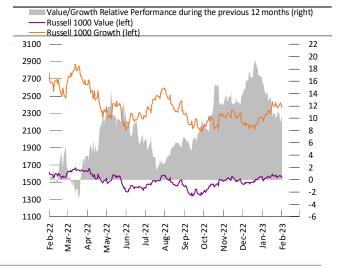
Data as of February 17th – Rebased @ 100

Equity Market Performance – Emerging Markets



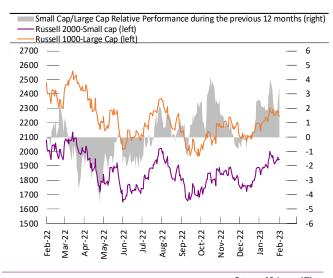
Data as of February 17th – Rebased @ 100

Russell 1000 Value & Growth Index



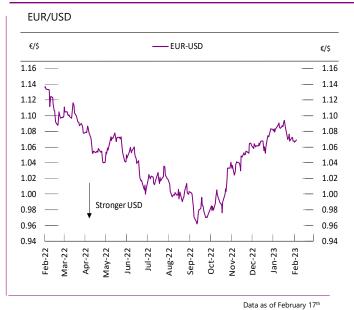
Data as of February 17th

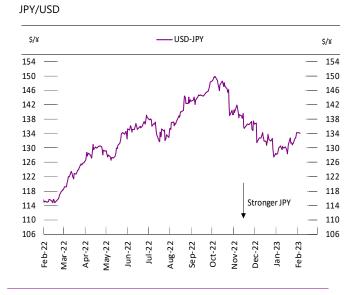
Russell 2000 & Russell 1000 Index



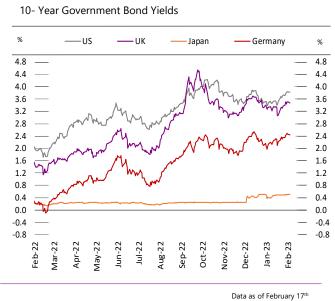
Data as of February 17th

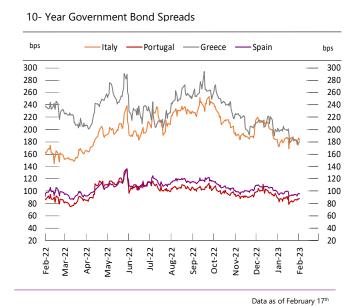


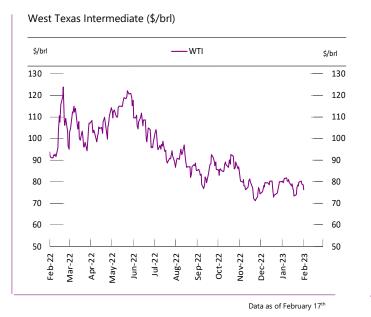




Data as of February 17th







Gold (\$/ounce) \$/ounce ——Gold \$/ounce 2,100 2,100 2,050 2,050 2.000 2,000 1.950 1.950 1,900 1,900 1,850 1,850 1,800 1,800 1.750 1.750 1,700 1,700 1,650 1,650 1,600 1,600 1,550 1,550 Apr-22 Jan-23 Mar-22 Jun-22 Jul-22 Aug-22 Oct-22 Dec-22 Feb-23 Feb-22 Sep-22 Nov-22 May-22

Data as of February 17th



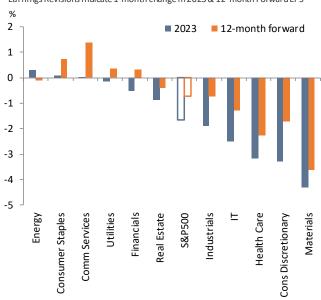
US Sectors Valuation

		Price (\$)		EPS Gro	wth (%)	Dividend	Yield (%)		P/	E Ratio		P/BV Ratio			
	17/2/23	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
S&P500	4079	-0.3	6.2	5.2	2.3	1.6	1.7	18.8	18.4	18.1	17.4	4.0	3.7	3.7	3.1
Energy	644	-6.9	-4.2	155.1	-17.4	3.4	3.3	8.2	9.9	10.0	19.5	2.3	2.1	2.1	1.8
Materials	512	-1.0	4.6	5.8	-16.1	2.2	2.1	14.5	17.3	17.1	16.2	2.9	2.7	2.7	2.7
Financials															
Diversified Financials	1015	-0.5	6.1	-15.5	7.3	1.6	1.7	17.4	16.2	16.0	15.1	2.1	2.0	1.9	1.7
Banks	357	0.1	8.8	-19.0	12.2	2.9	3.1	11.3	10.1	10.0	11.5	1.2	1.1	1.1	1.1
Insurance	605	-0.6	1.7	-13.0	28.8	1.7	1.9	17.4	13.5	13.3	12.0	2.2	2.0	2.0	1.3
Real Estate	249	-1.3	7.1	10.6	1.1	3.5	3.5	18.1	17.9	17.7	18.7	2.8	3.1	3.1	3.3
Industrials															
Capital Goods	916	1.3	4.9	13.0	14.1	1.6	1.7	23.2	20.4	20.0	17.6	5.1	4.6	4.6	4.1
Transportation	956	-1.2	5.4	124.2	8.1	1.9	2.1	16.1	14.9	N/A	14.1	5.5	4.7	4.6	4.2
Commercial Services	495	1.0	1.9	10.6	4.5	1.1	1.2	28.8	27.5	27.1	24.0	6.2	5.6	5.5	4.4
Consumer Discretionary															
Retailing	3003	0.5	9.0	-42.4	46.6	0.8	0.9	41.9	28.6	27.9	28.0	10.7	9.1	8.9	9.5
Consumer Services	1421	1.7	11.9	N/A	170.6	1.1	1.2	70.7	26.1	N/A	36.2	357.9	236.1	N/A	16.4
Consumer Durables	398	0.6	7.4	3.6	-20.3	1.6	1.7	13.5	17.0	16.7	17.0	3.4	3.1	3.0	3.4
Automobiles and parts	122	5.3	55.9	28.8	-8.7	0.3	0.4	24.8	27.2	N/A	16.4	4.8	4.3	4.2	2.9
IT															
Technology	2910	1.5	15.7	5.0	0.9	0.9	0.9	22.6	22.4	22.1	16.1	16.4	14.1	13.8	7.4
Software & Services	3048	-1.8	7.2	10.0	9.6	0.9	1.0	26.2	23.9	23.5	22.1	8.5	7.2	7.0	6.4
Semiconductors	1989	0.0	19.8	-5.9	-14.1	1.4	1.5	20.1	23.4	22.8	15.8	5.1	5.0	4.9	3.9
Communication Services	180	0.2	13.1	-18.3	12.2	1.0	0.9	18.2	16.3	15.9	18.9	3.0	2.7	2.7	3.2
Media	697	0.0	14.9	-20.2	15.6	0.3	0.3	21.0	18.2	17.8	22.4	3.4	3.1	3.0	3.7
Consumer Staples															
Food & Staples Retailing	657	1.4	5.9	1.8	5.4	1.5	1.6	23.0	21.8	21.6	18.8	5.3	5.0	5.0	3.7
Food Beverage & Tobacco	844	0.6	-2.2	5.6	3.1	3.1	3.2	19.4	18.8	18.6	18.6	5.4	5.1	5.1	5.1
Household Goods	818	1.1	-5.4	-3.3	4.2	2.4	2.6	25.7	24.7	24.3	21.9	9.8	9.5	9.4	7.1
Health Care															
Pharmaceuticals	1240	-0.9	-4.3	5.6	-15.7	1.9	2.0	14.6	17.3	17.1	15.5	5.5	4.9	4.9	4.5
Healthcare Equipment	1823	0.3	-1.4	4.4	3.5	1.1	1.2	19.2	18.6	18.3	17.2	3.9	3.6	3.6	3.1
Utilities	347	0.9	-3.2	0.8	8.0	3.0	3.2	19.6	18.2	18.0	17.3	2.0	2.0	2.0	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.

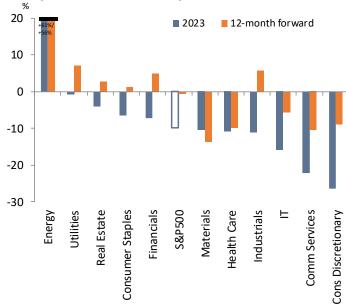
1-month revisions to 2023 & 12-month Forward EPS

 ${\sf Earnings\,Revisions\,indicate\,1-month\,change\,in\,2023\,\&\,12-month\,Forward\,EPS}$



12-month revisions to 2023 & 12-month Forward EPS

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



Data as of February 17^{th} 12-month forward EPS are 87% of 2023 EPS and 13% of 2024 EPS

Data as of February 17th

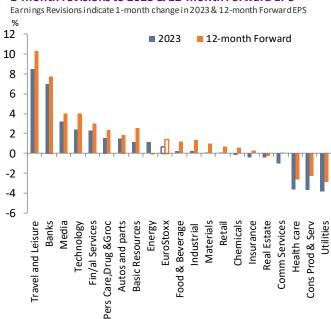


Euro Area Sectors Valuation

		Price (€)		EPS Gro	wth (%)	Dividend	Yield (%)	P/E Ratio				P/BV Ratio			
	17/2/23	% Weekly Chang	e %YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
EuroStoxx	460	1.9	12.1	15.4	3.1	3.0	3.1	14.2	13.8	13.6	14.8	1.8	1.7	1.7	1.5
Energy	353	-1.7	1.7	123.2	-19.6	5.5	5.0	5.2	6.5	6.6	12.8	1.3	1.1	1.1	1.2
Materials	977	0.7	5.9	6.8	-28.1	3.0	2.9	11.5	16.0	15.8	15.8	1.7	1.7	1.6	1.7
Basic Resources	240	1.2	7.2	-11.5	-51.5	3.0	3.0	5.0	10.2	10.0	9.7	0.7	0.7	0.7	0.8
Chemicals	1416	0.6	5.7	17.7	-17.2	3.0	2.8	14.5	17.5	17.3	16.9	2.2	2.2	2.1	2.2
Financials															
Banks	117	3.2	21.6	17.8	7.4	5.4	6.1	8.5	7.9	7.8	10.2	0.8	0.7	0.7	0.7
Insurance	327	0.1	6.3	-17.6	42.9	5.2	5.5	13.2	9.2	9.1	9.7	1.4	1.3	1.3	0.9
Financial Services	533	1.1	9.4	36.3	-3.1	2.9	3.0	11.7	12.1	11.9	16.1	1.3	1.2	1.2	1.3
Real Estate	148	-1.4	12.8	5.0	-1.3	5.6	5.9	11.6	11.8	11.7	16.9	0.6	0.7	0.7	1.0
Industrials															
Industrial Goods & Services	1094	3.3	13.7	21.2	11.9	2.2	2.4	19.7	17.6	17.3	17.5	2.8	2.6	2.6	2.7
Construction & Materials	537	3.0	16.1	-2.9	-0.7	3.4	3.5	13.3	13.4	13.2	14.8	1.7	1.6	1.6	1.5
Consumer Discretionary															
Retail	595	3.0	16.1	3.3	7.8	3.8	4.1	23.1	21.4	21.2	25.9	4.7	4.5	4.4	5.5
Automobiles and parts	607	2.9	20.0	9.5	-17.3	4.8	4.5	6.0	7.2	7.2	8.0	1.0	0.9	0.9	1.0
Travel and Leisure	214	6.2	16.9	N/A	29.6	0.9	1.1	23.3	18.0	N/A	N/A	2.3	2.1	2.1	2.2
Consumer Products & Services	503	2.8	17.8	1.7	13.8	1.4	1.5	34.6	30.4	29.9	25.2	7.0	6.2		4.3
Media	285	1.8	9.4	19.6	14.4	2.2	2.4	22.4	19.6	19.4	18.8	3.0	2.9	2.8	2.2
Technology	849	0.1	18.8	-5.2	26.0	1.0	1.1	29.5	23.4	22.8	22.0	4.0	3.8	3.7	3.7
Consumer Staples															
Food, Beverage & Tobacco	172	3.6	4.6	11.4	7.9	1.8	2.1	20.0	18.6	18.3	20.2	2.1	2.0	2.0	2.6
Personal Care, Drug & Grocery	181	6.1	8.3	6.1	3.3	2.4	2.5	16.1	15.6	15.4	17.6	2.4	2.2	2.2	2.3
Health care	821	0.6	5.6	8.8	0.5	2.3	2.4	16.1	16.0	15.8	16.8	2.1	2.0	1.9	2.3
Communication Services	294	4.0	12.5	23.9	1.9	3.8	4.0	15.7	15.4	15.2	15.5	1.6	1.5	1.5	1.7
Utilities	359	1.4	2.8	-39.9	71.5	4.5	4.7	22.5	13.1	12.9	14.2	1.6	1.6	1.6	1.3

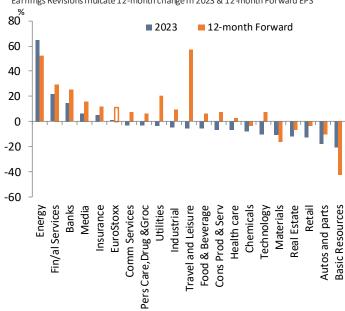
Blue box indicates a value more than +2standard devation from average, light blue a value more than +1standard devation from average. Orange box indicates a value less than -2standard devation from average, light orange a value less than -1standard devation from average

1-month revisions to 2023 & 12-month Forward EPS



12-month revisions to 2023 & 12-month Forward EPS

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



Data as of February 17th 12-month forward EPS are 87% of 2023 EPS and 13% of 2024 EPS

Data as of February 17th

12-month forward EPS are 87% of 2023 EPS and 13% of 2024 EPS

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



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