

Global equity markets paused for breath following their +9% trough-to-peak rally

- Global equity markets paused for breath in the past week, with the S&P500 down by 0.7% and the EuroStoxx up by 0.8% w/w, following +7.3% and +8.3% gains trough-to-peak. Core government bond yields were mixed, with the UST 2-Year/10-Year yield curve spread hovering to its lowest level since 1982 (circa -70 basis points) and suggesting that economic growth is set to slow in the next twelve months.
- The US Dollar moved sideways, initially continuing to slide (-4.5% since its peak on 3rd November in NEER terms) on speculation for a less hawkish Fed on the back of signs that US inflation could have passed its peak. The minutes of the November 2nd FOMC meeting will probably offer insights regarding the pace of hikes and the terminal interest rate. Nevertheless, strong economic data, with the Atlanta FED GDPNow model pointing to growth of +4.2% qoq saar in Q4 and renewed hawkish Fed officials' commentary arrested the US dollar decline. In all, the DXY Index rose by 0.6% in the past week and posted further gains on Monday (+0.8%).
- Oil prices decreased on weakening demand expectations, fueled, *inter alia*, by a relatively unfavorable pandemic situation in China. Brent prices declined by -8.7% w/w to \$87.6/barrel and the WTI fell by -10% w/w to \$80/barrel).
- On the other hand, European natural gas prices rose on account of Freeport LNG, an important US exporter of LNG, pushing back by a month to mid-December its estimate for the partial resumption of operations in its Texas facility. The Dutch TTF December 2022 contract increased by +18% w/w to €116/MWh and the December 2023 by +13.5% w/w to €123/MWh.
- In the United Kingdom, according to the Autumn Statement, major shifts were confirmed (reversals compared with former P/M Truss's Growth Plan accumulate to circa £123 bn by fiscal year 2027/28). Still, significant net supportive measures are included for the short-term, of £42 bn (1.7% of GDP) for fiscal year 2022/23 (April 2022 to March 2023), the bulk of which regard energy bills relief for households and businesses (see graph below).
- Significant supportive measures are also planned for fiscal year 2023/24, with, *inter alia*, more modest energy bills relief and taxes on windfall profits in the energy sector, more than offsetting the introduction of public transfers particularly towards most vulnerable recipients. Further ahead, a sizable fiscal consolidation is envisaged for the period 2024/2025 to 2027/2028, gradually reaching £55 bn (2.2% of GDP) by fiscal year 2027/28 according to HM Treasury (£30 bn in reduced spending and £25 bn due to higher taxes).
- In all, Office for Budget Responsibility (OBR) estimates that public sector's net borrowing as a % of GDP will reach -7.1% in 2022/23 (from -6.4% in fiscal year 2021/22), -6.4% in 2023/24, -3.7% in 2024/25 and -2.8% by 2027/28. The general government gross debt is anticipated to peak at 111% of GDP in fiscal year 2026/27.
- On economic activity, the OBR envisages a recession lasting "just over a year", with real GDP contracting by -2.1% from peak to trough (real GDP growth of -1.4% in 2023).

Ilias Tsirigotakis^{AC}
Head of Global
Markets Research
210-3341517
tsirigotakis.ilias@nbg.gr

Panagiotis Bakalis
210-3341545
mpakalis.pan@nbg.gr

Vasiliki Karagianni
210-3341548
karagianni.vasiliki@nbg.gr

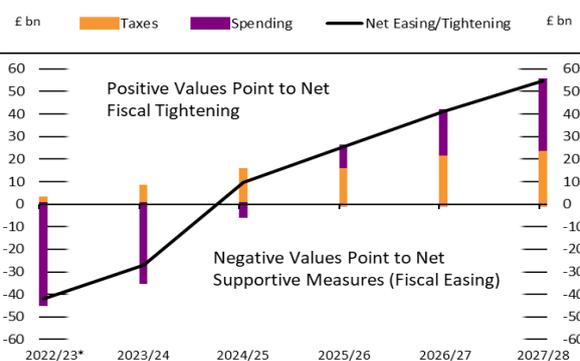
Leonidas Patsios
210-3341553
Patsios.Leonidas@nbg.gr

Table of Contents

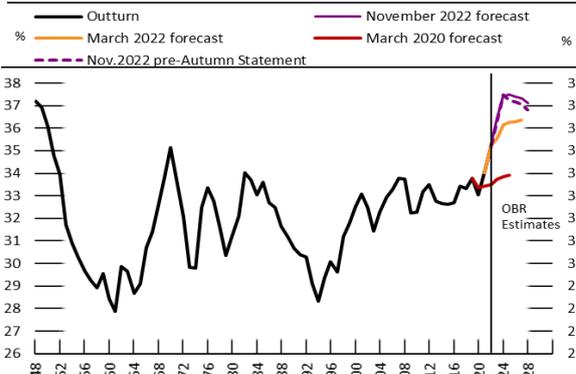
- Overview_p1
- Economics & Markets_p2,3
- Forecasts & Outlook_p4
- Event Calendar_p5
- Markets Monitor_p6
- ChartRoom_p7,8
- Market Valuation_p9,10

Charts of the week

UK Policy Measures in Autumn Statement: Net Easing/Tightening



UK: Taxes as % of GDP



US retail sales were stronger than expected in October

- **Nominal retail sales rose substantially in October, by 1.3% mom after being roughly unchanged on a monthly basis (seasonally adjusted) in September, versus consensus estimates for +1.0% mom.** The annual pace of growth was +8.3% in October from +8.6% in the previous month. 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 +0.7% mom (+6.5% yoy). That outcome meaningfully overshot consensus estimates for +0.3% mom, with the overperformance of expectations for the level of the “control group” being even more profound, given an upward revision for September, by 0.2 pps to +0.6% mom (+7.2% yoy).

US manufacturing output was broadly stable in October

- **US industrial production slightly decreased by 0.1% mom in October, from +0.1% mom in September and below consensus estimates for +0.2% mom.** The undershot of expectations was more profound for the level of output, given that September’s outcome was revised down by 0.4%. The annual pace of growth decelerated to +1.5% yoy, from +2.2% yoy. Importantly, manufacturing production (78% of total) increased by +0.1% mom in October (+2.4% yoy), from +0.2% mom (+4.0% yoy) in September, compared with consensus estimates for +0.2% mom. The underperformance versus expectations was more profound for the level of output, given that September’s outcome turned out 0.7% weaker than previously reported (downward revisions occurred for July’s, August’s and September’s readings).
- In all, the Atlanta Fed’s GDPNowcast model points to +4.2% qoq saar (+1.1% yoy) for GDP in Q4:22, from +2.6% qoq saar (+1.8% yoy) in Q3:22.

Euro area industrial production ended Q3:2022 on a surprisingly positive note

- **Euro area industrial production increased by 0.9% mom (+4.9% yoy) in September, above consensus estimates for +0.3% mom.** The overperformance of expectations for the level of output was even more profound, given a meaningful upward revision for August, by 0.5 pps to +2.0% mom (+2.8% yoy). It should also be noted though that both outcomes were distorted to the upside by erratic data for Ireland (+11.9% in September, following a +19.6% mom in August). Overall, the recent rise came despite the sector facing continued headwinds, *inter alia*, from particularly elevated energy prices. In the event, recall that industrial output in Germany increased by +0.8% mom (+3.6% yoy) in September from -0.7% mom (+2.2% yoy) in August, although the energy-intensive segments (e.g. manufacture of chemicals, basic metals, coke and refined petroleum products) continued to significantly under-perform (-0.9% mom from -3.0% mom | -10.3% since February 2022 versus -2.0% for overall industrial output), according to the German Federal Statistical Office (Destatis).

UK CPI inflation exceeded expectations in October

- **CPI growth accelerated by 1.0 pp to 11.1% yoy in October, the highest since October 1981.** The latest outcome compares with consensus estimates for 10.7% yoy and respective ones from the Bank of England (November) for 10.9% yoy. Sharp pressures were broad based. In the event, the annual growth of the energy component came out at 59.0% from 49.6% in September, with the monthly pace of growth at +14.6% as fiscal measures to limit price increases offset only partially the effects from the reset (higher) of the energy price cap from Great Britain’s energy regulator (from now on, a reset will take place on a quarterly basis instead of every 6 months previously, to better reflect the quickly changing cost of supplying energy). Furthermore, prices of food, alcoholic beverages & tobacco rose by 13.2% yoy from 11.8% yoy, a record (since 1989) high and with the momentum remaining sharp (+1.4% mom | all figures in not-seasonally adjusted terms). Finally, core CPI (i.e. excluding the two aforementioned components) was roughly stable at 6.5% yoy, the highest since March 1992, above consensus estimates for 6.4% (+0.7% mom from +0.6% mom in September and versus consensus for +0.6% mom).

Japanese real GDP unexpectedly declined in Q3, albeit distorted to the downside from a likely transitory factor

- **Japanese GDP fell by -1.2% qoq saar in Q3:22 (+1.8% yoy) according to the preliminary estimate, following a +4.6% qoq saar (+1.7% yoy) in Q2:22 and versus consensus estimates for +1.1% qoq saar.** Nevertheless, the weakness was predominantly due to an extraordinary concurrence of advertising payments abroad from Japanese companies, which drove services imports sharply higher (+88.2% qoq saar). **As a result, net exports subtracted 2.6 pps from the headline GDP growth**, with imports (of both goods & services) increasing by +22.6% qoq saar, outpacing exports (+7.9% qoq saar). **Inventories** also posed a drag (-0.3 pps) and **residential investment** decreased by -1.7% qoq saar (-7.4% qoq saar in Q2:22), with a negative contribution of 0.1 pp to the headline outcome. On the other hand, **private consumption** rose by +1.1% qoq saar (+0.6 pps contribution to the headline figure), following a +5.1% qoq saar in Q2:22. **Business investment** increased by +6.3% qoq saar in Q3:22 (+9.9% in the previous quarter), adding 1.0 pp to overall GDP growth. **Public investment** was up by +4.9% qoq saar (+0.2 pps | +4.2% qoq saar in Q2:22), while **government consumption** was largely unchanged on a quarterly basis (+3.4% qoq saar in Q2:22).

China: Economic activity entered Q4:22 on a weak note

- **Economic activity disappointed in October.** The annual growth of retail sales (in nominal terms) came out at -0.5% yoy from +2.5% yoy in September, meaningfully below expectations for +1.0%. A deteriorated pandemic situation during the month weighed, as suggested, *inter alia*, by covid-sensitive categories (e.g. catering sales: -8.1% yoy from -1.7% yoy). In addition, industrial production growth decelerated to +5.0% from +6.3% yoy in September, versus consensus estimates for +5.2% yoy. Finally, fixed assets investment growth came out at +5.8% yoy in October, from +5.9% yoy in the previous month, versus consensus for a stable reading. The latest readings came alongside overall credit’s annual growth, as measured by Total Social Financing (TSF), decelerating by 0.3 pps to +10.3% in October.

Equities

• **Global equity markets were mixed in the past week.** Overall, the MSCI ACWI ended the week down by 0.4% wow (-18% ytd). The S&P500 declined by 0.7% wow (-16% ytd), reversing the strongly positive momentum of the previous week (5.9% wow | the 4th largest weekly increase in 2022), as investors' expectations for a dovish pivot in Fed's monetary policy faded following the hawkish comments by the Bank's officials (Bullard, Daly, Williams). Sector-wise, Consumer Discretionary underperformed (-3.1% wow | -32% ytd), with Target Corp. declining by 13% on Wednesday, after reporting Q3:22 result with EPS missing estimates by nearly 30% (\$1.54 vs \$2.16) on weaker margin performance. On the other side of the Atlantic, the EuroStoxx rose by 0.8% wow (-12% yoy), with Banks overperforming (+2.7% wow | -7% ytd).

Fixed Income

• **Government bond yields were mixed in the past week.** Specifically, the US Treasury 10-year yield ended the week broadly stable at 3.81%, while its 2-year peer rose by 12 bps to 4.55%, with their negative spread (-74 bps) being the largest since 1982. In the United Kingdom, the yield of the 10-year Gilt decreased by 12 bps wow to 3.23%, while its 2-year peer was broadly stable at 3.14%, with the downward trend reversing intra-week (+6bps and +12 bps cumulatively on Thursday and Friday, respectively) after the new estimates by the Office for Budget Responsibility (OBR). In Germany, the 10-year yield fell by 14 bps wow to 2.01%, while periphery government bond yields modestly narrowed (Italy: -14 bps to 190 bps, Spain: -5 bps to 99 bps, Greece: -9 bps to 224 bps).

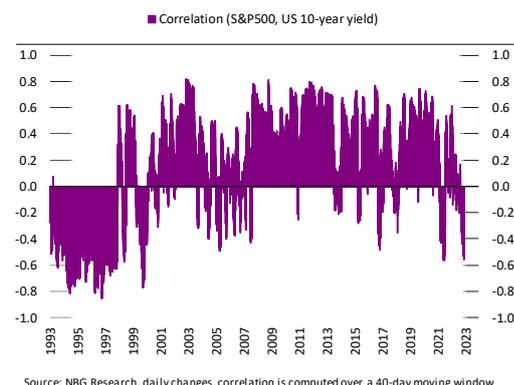
• **Corporate bond spreads were mixed in the past week.** Specifically, US high yield spreads were down by 16 bps to 465 bps, while their euro counterparts increased by 13 bps to 524 bps. In the Investment Grade spectrum, US spreads decreased by 13 bps to 145 bps and Euro area spreads declined by 5 bps to 187 bps. Notably, nominal yields of both categories have declined from their multi-year highs recorded in mid-October, with US HY yields declining by 74 bps to 8.9% from a 2.5-year high of 9.6%, while their euro counterparts have decreased by 107 bps to 7.4% from a 10-year high of 8.5% (see Graph 3).

During the past week, Air France-KLM raised €305 mn by issuing subordinated undated unsecured bonds convertible into shares, bearing interest of 6.5% until November 2025 and then a rate equal to 1,300 bps above the applicable 3 year-Mid-Swap Rate in Euro. The net proceeds will be fully allocated to the repayment of the perpetual bonds held by the French State, issued in April 2021. In Greece, the book building process for the issuance of Senior Preferred Bonds have been successfully completed by the National Bank of Greece (with a maturity of 5 years, callable after 4 years | coupon of 7.25%) and Piraeus Bank (with a maturity of 4 years, callable after 3 years | coupon of 8.25%), with the banks raising €500 mn and €350 mn, respectively. The issuances are part of the Banks' strategy to increase their minimum requirements for own funds and eligible liabilities (MREL).

FX and Commodities

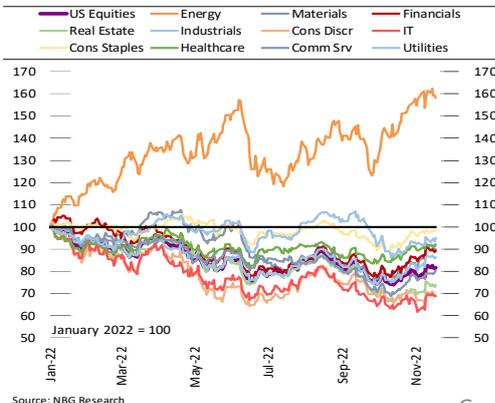
• **In foreign exchange markets, the Japanese yen depreciated in the past week,** due to, inter alia, the BOJ Governor Kuroda comments in favor of maintaining ultra-loose policy and negative rates, despite the acceleration of inflation (CPI excluding fresh food rose to 3.6% its highest level since 1982). Overall, the yen declined by 0.6% wow against the US dollar to ¥139.89 and by 0.9% against the euro to ¥144.94. **In commodities, oil prices declined in the past week,** with WTI down by 10% wow at \$80.1/barrel (+7% ytd), while the Brent fell by -8.7% wow to \$87.6/barrel (+13% ytd) due to increased demand concerns amid increased new daily COVID-19 cases in China that recorded a 7-month high on Thursday.

Stocks - Bonds Correlation



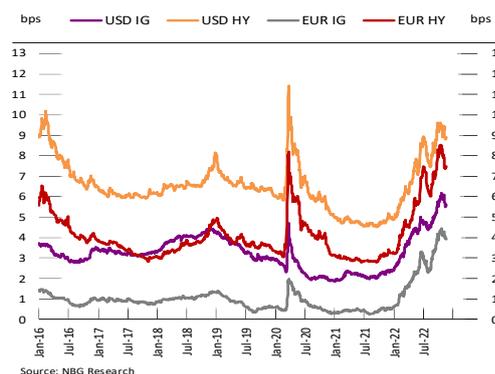
Graph 1.

US Sectors Price Performance Year-to-Date



Graph 2.

Corporate Bond Yields



Graph 3.

Quote of the week: "We expect to raise rates further – and withdrawing accommodation may not be enough. Ultimately, we will raise rates to levels that bring inflation back down to our medium-term target in a timely manner ... how far we need to go, and how fast, will be determined by the inflation outlook.", **ECB President, C. Lagarde, November 18th 2022.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	November 18th	3-month	6-month	12-month	Official Rate (%)	November 18th	3-month	6-month	12-month
Germany	2.01	2.15	2.25	2.25	Euro area	1.50	2.00	2.50	2.50
US	3.81	4.00	4.10	4.10	US	4.00	4.50	5.00	5.00
UK	3.23	4.08	3.93	3.67	UK	3.00	3.60	4.25	4.35
Japan	0.24	0.23	0.27	0.33	Japan	-0.10	-0.10	-0.10	-0.10

Currency	November 18th	3-month	6-month	12-month	November 18th	3-month	6-month	12-month	
EUR/USD	1.04	1.02	1.05	1.10	USD/JPY	140	149	141	136
EUR/GBP	0.87	0.88	0.87	0.89	GBP/USD	1.19	1.16	1.20	1.23
EUR/JPY	145	152	148	150					

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	1,8	0,3	1,7
Real GDP Growth (QoQ saar) (2)	-	6,3	7,0	2,7	7,0	-	-1,6	-0,6	2,6	2,6	-
Private Consumption	-3,0	10,8	12,1	3,0	3,1	8,3	1,3	2,0	1,4	2,2	2,3
Government Consumption	2,6	6,5	-3,0	-0,2	-1,0	0,6	-2,3	-1,6	2,4	0,9	-0,9
Investment	-2,3	9,7	5,8	-1,1	0,6	7,4	4,8	-5,0	-4,9	3,1	2,6
Residential	7,2	11,6	-4,9	-5,8	-1,1	10,7	-3,1	-17,8	-26,4	1,1	-3,4
Non-residential	-4,9	8,9	9,9	0,6	1,1	6,4	7,9	0,1	3,7	3,5	4,5
Inventories Contribution	-0,7	-3,0	-1,3	2,0	5,1	0,2	0,3	-2,1	-1,0	-0,3	0,6
Net Exports Contribution	-0,2	-1,3	-0,8	-1,3	-0,6	-1,7	-3,8	1,2	3,2	0,6	-1,1
Exports	-13,2	0,4	4,9	-1,1	23,5	6,1	-4,6	13,8	14,4	2,4	5,0
Imports	-9,0	7,6	7,9	6,6	18,6	14,1	18,4	2,2	-6,9	-1,7	9,1
Inflation (3)	1,2	1,9	4,9	5,4	6,7	4,7	8,0	8,7	8,3	8,1	8,3

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	4,3	2,1	0,8	3,0
Real GDP Growth (QoQ saar)	-	-0,3	8,2	9,3	2,1	-	2,4	3,3	0,7	-2,3	-
Private Consumption	-7,8	-7,5	13,9	20,2	-0,8	3,7	-0,3	4,2	0,1	-0,6	3,9
Government Consumption	1,0	-0,2	8,7	-0,7	2,7	4,3	0,9	2,4	1,2	1,0	1,9
Investment	-6,5	-9,2	7,2	-2,9	14,3	3,7	-3,1	3,0	1,7	-1,1	2,8
Inventories Contribution	-0,3	2,6	-1,9	-0,1	2,6	0,2	-0,4	-0,5	-0,2	-0,2	0,2
Net Exports Contribution	-0,5	3,4	-0,3	0,2	-3,4	1,3	3,5	0,4	-0,7	-1,8	-0,3
Exports	-9,2	3,7	10,5	8,9	10,6	10,5	6,0	6,9	4,2	-3,5	6,2
Imports	-8,7	-3,4	12,4	9,4	20,1	8,3	-0,9	6,6	6,2	0,0	7,3
Inflation	0,3	1,0	1,8	2,9	4,7	2,6	6,1	8,0	9,3	10,3	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

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 + Service-oriented sectors are re-opening + Sentiment (e.g. AAI) and positioning indicators are hitting extreme lows - Peaking profit margins - Recession risks are increasing - P/Es (Valuations) still remain above l-t means, despite the recent correction <p>● Neutral/Negative</p>	<ul style="list-style-type: none"> + Still high equity risk premium relative to other regions + Still loose fiscal policy in 2022 (plus RRF) - Geopolitical uncertainty (Ukraine-Russia, natural gas) could intensify - Logistic disruptions (vaccine) and renewed lockdowns in China delay the export-led recovery <p>● Neutral</p>	<ul style="list-style-type: none"> + Still aggressive QE and "yield-curve" targeting by the BoJ + JPY depreciation @ 20Y highs (¥130) support exporters - Signs of policy fatigue regarding structural reforms and fiscal discipline - Chinese growth deceleration <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 <p>● Neutral/Positive</p>
Government Bonds	<ul style="list-style-type: none"> + Valuations appear rich despite the 200bps increase, with term-premium @ 0% (1% for 2000-2015) + Sizeable fiscal deficit + Underlying inflation pressures under Average Inflation Targeting + Fed: End of asset purchases - Global search for yield by non-US investors (e.g. Japan, repatriation from EM Economies) continues - Safe haven demand <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> + Valuations still appear excessive compared with long-term fundamentals + ECB: End of APP purchases in June 2022, interest rate hikes in H2 - Political Risks - Fragile growth outlook - ECB QE "stock" effect <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> + Sizeable fiscal deficits + Restructuring efforts to be financed by fiscal policy measures - Safe haven demand - Extremely dovish central bank - Yield-targeting of 10-Year JGB at around 0% <p>● Stable yields expected</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 raise rates towards 2% - Slowing economic growth post-Brexit <p>▲ Slightly higher yields expected</p>
Foreign Exchange	<ul style="list-style-type: none"> + Weak global growth / Safe-haven demand status + USD interest rate differential vs peers remain significant + Aggressive Fed tightening - Global political uncertainty to decline <p>● Broadly Flat USD against G10 FX</p>	<ul style="list-style-type: none"> + Current account surplus - Still negative interest rates - Global growth risks remain to the downside <p>● Broadly Flat/Stronger EUR against the USD</p>	<ul style="list-style-type: none"> + Safe haven demand + More balanced economic growth recovery (long-term) + Inflation is bottoming out - Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2% <p>▲ Slightly higher 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 expected</p>

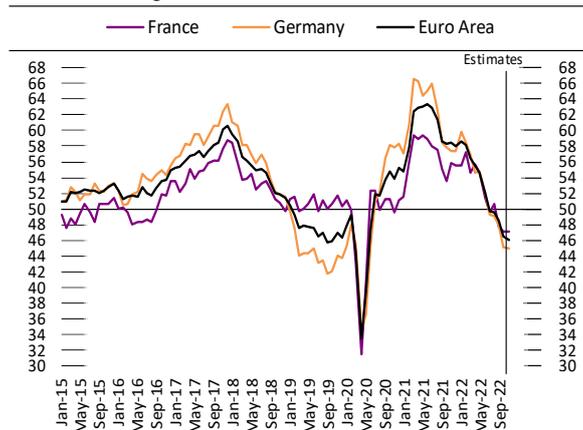
Economic Calendar

In the US, the minutes of the latest Fed meeting will be closely watched. Meanwhile, durable goods orders (October) and new home sales (November) announcements, with gather investors' attention. On Wednesday, attention turns to the weekly initial and continuing jobless claims for a more updated view of labor market conditions.

In the Euro area, attention turns to PMI (23/11) and consumer confidence (22/11) surveys for November, as they will provide valuable insight regarding the current economic momentum.

In Germany, the final estimate of Q3:22 GDP on Friday will be closely watched. GDP is expected to remain unchanged compared with the previous estimate (+0.3% qoq | +1.1% yoy wda).

Manufacturing PMIs



Source: NBG Research

Economic News Calendar for the period: November 15 - November 28, 2022

Tuesday 15					Wednesday 16									
US					GERMANY					US				
Empire Manufacturing	November	-6.5	+	4.5	ZEW survey current situation	November	-68.4	+	-64.5	Retail Sales Advance (MoM)	October	1.0%	+	1.3%
EURO AREA					ZEW survey expectations	November	-50.0	+	-36.7	Retail sales ex-autos (MoM)	October	0.4%	+	1.3%
Trade Balance SA (€ bn)	September	-42.0	+	-37.7						Industrial Production (MoM)	October	0.2%	-	-0.1%
Employment (QoQ)	Q3:22	0.3%	-	0.2%						NAHB housing market confidence index	November	36	-	33
Employment (YoY)	Q3:22	1.8%	-	1.7%						Net Long-term TIC Flows (\$ bn)	September	..	..	118.0
GDP (QoQ)	Q3:22	0.2%	0.2%	0.2%						UK				
GDP (YoY)	Q3:22	2.1%	2.1%	2.1%						CPI (YoY)	October	10.7%	11.1%	10.1%
UK										CPI Core (YoY)	October	6.4%	6.5%	6.5%
ILO Unemployment Rate	September	3.5%	-	3.6%										
JAPAN														
GDP (QoQ)	Q3:22	1.1%	-	-1.2%										
GDP Private Consumption (QoQ)	Q3:22	0.2%	+	0.3%										
GDP Business Spending (QoQ)	Q3:22	2.1%	-	1.5%										
CHINA														
Industrial production (YoY)	October	5.2%	-	5.0%										
Retail sales (YoY)	October	1.0%	-	-0.5%										
Thursday 17					Friday 18					Monday 21				
US					US					US				
Housing starts (k)	October	1410	+	1425	Existing home sales (mn)	October	4.38	+	4.43	Existing home sales (mn)	October	4.38	+	4.43
Building permits (k)	October	1512	+	1526	UK					Retail sales Ex Auto MoM	October	0.6%	-	0.3%
Philadelphia Fed Business Outlook	November	-6.2	-	-19.4	Retail sales Ex Auto MoM	October	0.6%	-	0.3%	JAPAN				
Initial Jobless Claims (k)	November 12	225	+	222	CPI (YoY)	October	3.6%	3.7%	3.0%	CPI (YoY)	October	3.6%	3.7%	3.0%
Continuing Claims (k)	November 05	1500	-	1507	Core CPI (YoY) - ex. Fresh Food	October	3.5%	3.6%	3.0%	Core CPI (YoY) - ex. Fresh Food	October	3.5%	3.6%	3.0%
JAPAN					Core CPI (YoY) - ex. Fresh Food and Energy	October	2.4%	2.5%	1.8%	Core CPI (YoY) - ex. Fresh Food and Energy	October	2.4%	2.5%	1.8%
Imports YoY	October	49.7%	+	53.5%										
Exports YoY	October	28.1%	-	25.3%										
Tuesday 22					Wednesday 23					Monday 28				
EURO AREA					US					UK				
Consumer Confidence Indicator	November	-26.0	..	-27.6	Durable goods orders (MoM)	October	0.4%	..	0.4%	S&P Global UK PMI	November	45.6	..	46.2
					Durable goods orders ex transportation (MoM)	October	0.1%	..	-0.5%	Manufacturing SA	November	48.0	..	48.8
					Initial Jobless Claims (k)	November 19	225	..	222	Markit/CIPS UK Services PMI	November	47.5	..	48.2
					Continuing Claims (k)	November 12	..	..	1507	Markit/CIPS UK Construction PMI	November	47.5	..	48.2
					New home sales (mn)	November	0.6	..	0.6					
					S&P Global US Manufacturing PMI	November	49.9	..	50.4					
					FOMC Minutes	November 2	..	..	..		
					EURO AREA									
					S&P Global Eurozone Manufacturing PMI	November	46.0	..	46.4					
					S&P Global Eurozone Services PMI	November	48.1	..	48.6					
					S&P Global Eurozone Composite PMI	November	47.0	..	47.3					
Thursday 24					Friday 25					Monday 28				
JAPAN					GERMANY					EURO AREA				
PMI manufacturing	November	..	..	50.7	GDP (QoQ)	Q3:22	0.3%	..	0.3%	M3 money supply (YoY)	October	..	..	6.3%
Leading Index	September	..	..	-3.9	GDP (wda, YoY)	Q3:22	1.1%	..	1.1%					
GERMANY														
IFO- Business Climate Indicator	November	85.0	..	84.3										
IFO- Current Assessment	November	93.6	..	94.1										
IFO-Expectations	November	77.0	..	75.6										

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	3965	-0.7	-16.8	-15.7	11.1	MSCI Emerging Markets	57408	1.1	-18.1	-20.5	-15.3
Japan	NIKKEI 225	27900	-1.3	-3.1	-5.7	8.4	MSCI Asia	866	1.9	-19.0	-21.9	-18.5
UK	FTSE 100	7386	0.9	0.0	1.8	15.7	China	59	4.1	-28.8	-35.2	-43.7
Canada	S&P/TSX	19981	-0.6	-5.9	-7.7	18.3	Korea	736	-2.0	-19.2	-17.2	-7.9
Hong Kong	Hang Seng	17993	3.8	-23.1	-28.9	-32.2	MSCI Latin America	91414	-2.4	-1.0	1.1	0.4
Euro area	EuroStoxx	422	0.8	-12.0	-13.3	8.9	Brazil	300144	-2.7	-2.1	-0.8	-10.0
Germany	DAX 40	14432	1.5	-9.1	-11.0	9.3	Mexico	48346	-1.1	-3.1	2.8	23.3
France	CAC 40	6644	0.8	-7.1	-7.0	20.6	MSCI Europe	2620	0.1	-62.2	-64.1	-53.0
Italy	FTSE/MIB	24675	0.9	-9.8	-10.8	14.1	Russia	2206	-0.5	-41.7	-46.1	-28.4
Spain	IBEX-35	8128	0.4	-6.7	-8.7	1.8	Turkey	4468162	0.5	115.0	125.4	191.8

World Market Sectors (MSCI Indices)

in US Dollar terms						in local currency					
	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	254.6	-1.8	45.9	43.8	111.1	Energy	269.0	-1.8	51.9	49.5	119.5
Materials	310.9	-1.1	-13.7	-11.1	5.2	Materials	312.3	-1.0	-8.4	-5.8	12.8
Industrials	301.1	-0.2	-14.1	-14.4	1.8	Industrials	315.2	-0.1	-9.1	-9.4	10.1
Consumer Discretionary	309.3	-2.5	-29.9	-32.8	-11.3	Consumer Discretionary	310.4	-2.4	-27.4	-30.3	-6.4
Consumer Staples	268.4	1.7	-8.5	-4.5	3.0	Consumer Staples	278.2	1.6	-4.5	-0.5	8.6
Healthcare	339.3	0.7	-8.2	-4.9	12.9	Healthcare	342.8	0.7	-5.6	-2.4	17.3
Financials	131.8	-0.8	-11.8	-12.6	17.3	Financials	136.7	-0.8	-8.0	-8.9	23.1
IT	418.4	-1.0	-26.9	-26.7	2.9	IT	411.2	-0.9	-25.9	-25.6	5.1
Telecoms	69.1	-0.5	-35.3	-37.6	-22.2	Telecoms	73.9	-0.5	-33.8	-36.1	-19.7
Utilities	149.0	1.1	-9.3	-3.8	-2.2	Utilities	157.1	1.0	-6.2	-0.6	2.2

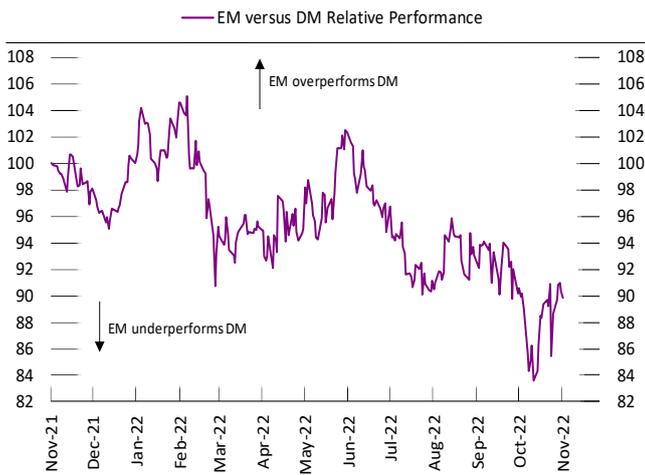
Bond Markets (%)

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	3.81	3.82	1.51	1.59	2.13	US Treasuries 10Y/2Y	-74	-61	78	105	99
Germany	2.01	2.15	-0.18	-0.27	0.45	US Treasuries 10Y/5Y	-18	-13	25	36	50
Japan	0.24	0.23	0.07	0.07	0.20	Bunds 10Y/2Y	-6	-4	46	48	80
UK	3.23	3.35	0.97	0.92	1.47	Bunds 10Y/5Y	4	6	28	30	54
Greece	4.25	4.48	1.32	1.19	5.50	Corporate Bond Spreads (in bps)					
Ireland	2.46	2.66	0.25	0.18	1.35						
Italy	3.90	4.19	1.17	0.94	2.20	EM Inv. Grade (IG)	194	228	139	143	191
Spain	3.00	3.19	0.57	0.45	1.73	EM High yield	742	789	618	681	624
Portugal	2.92	3.11	0.46	0.35	2.47	US IG	145	158	98	94	133
US Mortgage Market (1. Fixed-rate Mortgage)						US High yield	465	481	310	319	449
30-Year FRM¹ (%)	6.90	7.00	3.31	3.20	4.13	Euro area IG	187	192	98	99	119
vs 30Yr Treasury (bps)	290.7	288.2	138.9	120.4	137.7	Euro area High Yield	524	511	331	331	406

Foreign Exchange & Commodities

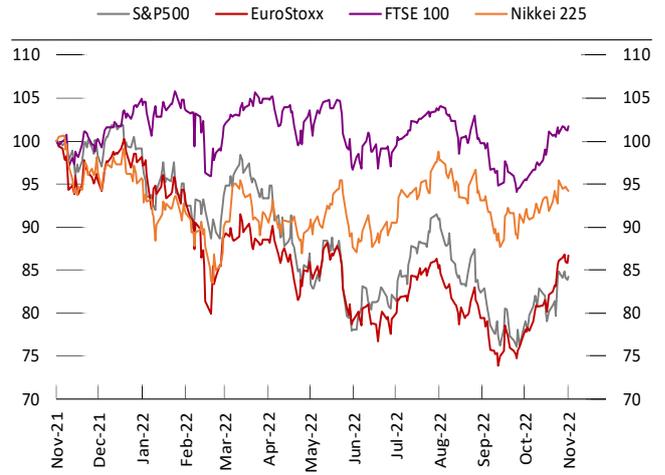
Foreign Exchange						Commodities					
	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	
Euro-based cross rates						Agricultural	465	-0.7	-0.2	3.7	4.5
EUR/USD	1.04	0.3	5.8	-8.7	-8.9	Energy	299	-6.3	-3.5	12.6	18.3
EUR/CHF	0.99	0.9	0.2	-6.3	-4.9	West Texas Oil (\$/bbl)	80	-10.0	-6.4	1.4	6.5
EUR/GBP	0.87	-0.9	-0.1	3.2	3.5	Crude Brent Oil (\$/bbl)	88	-8.7	-5.2	7.9	12.7
EUR/JPY	144.94	0.9	-1.1	11.8	10.7	HH Natural Gas (\$/mmbtu)	6.3	31.3	12.0	27.3	65.0
EUR/NOK	10.54	2.9	1.5	5.1	5.1	TTF Natural Gas (EUR/mwh)	116	18.0	2.7	21.4	64.2
EUR/SEK	10.98	2.4	0.3	8.8	6.6	Industrial Metals	439	-3.3	10.0	-7.4	-12.1
EUR/AUD	1.55	0.5	-0.5	-1.0	-1.0	Precious Metals	2300	-1.0	8.9	-6.1	-3.9
EUR/CAD	1.39	1.3	2.8	-3.3	-3.4	Gold (\$)	1750	-1.2	7.4	-5.9	-3.9
USD-based cross rates						Silver (\$)	21	-3.6	13.3	-15.6	-9.7
USD/CAD	1.34	0.9	-2.8	5.9	6.0	Baltic Dry Index	1189	-12.3	-36.5	-51.5	-46.4
USD/AUD	1.49	0.1	-6.0	8.5	8.7	Baltic Dirty Tanker Index	2365	24.9	38.3	200.1	200.9
USD/JPY	139.89	0.6	-6.6	22.4	21.5						

EM vs DM Performance in \$



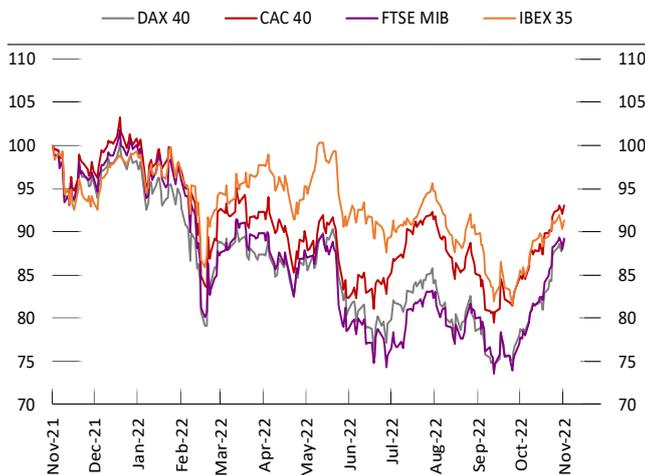
Data as of November 18th – Rebased @ 100

Equity Market Performance - G4



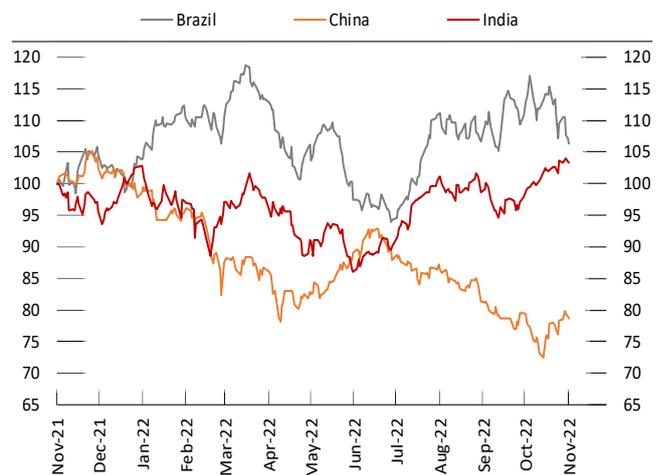
Data as of November 18th – Rebased @ 100

Equity Market Performance – Euro Area G4



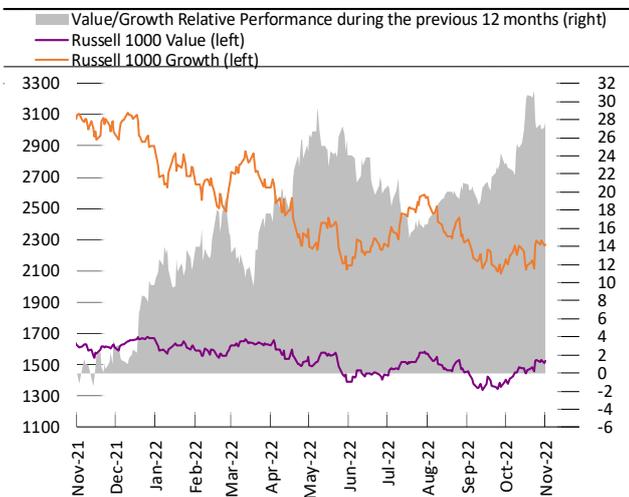
Data as of November 18th – Rebased @ 100

Equity Market Performance – Emerging Markets



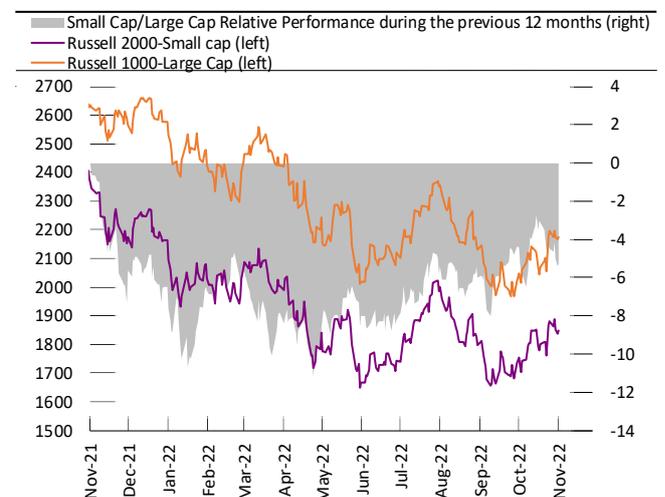
Data as of November 18th – Rebased @ 100

Russell 1000 Value & Growth Index



Data as of November 18th

Russell 2000 & Russell 1000 Index



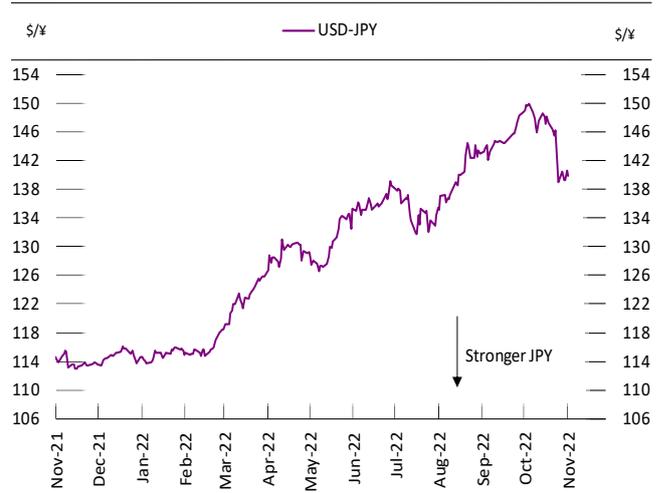
Data as of November 18th

EUR/USD



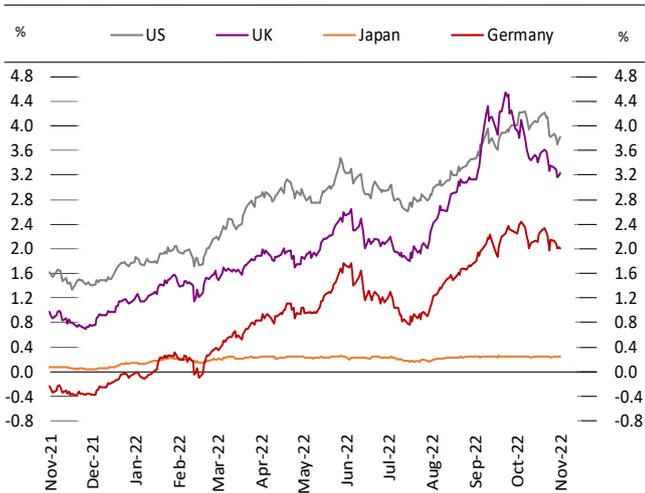
Data as of November 18th

JPY/USD



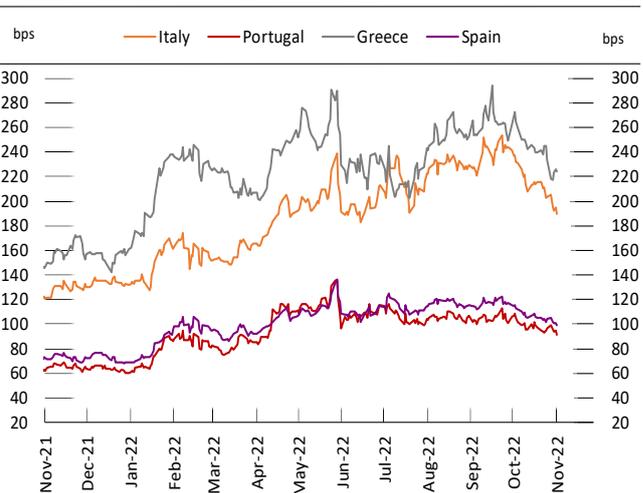
Data as of November 18th

10- Year Government Bond Yields



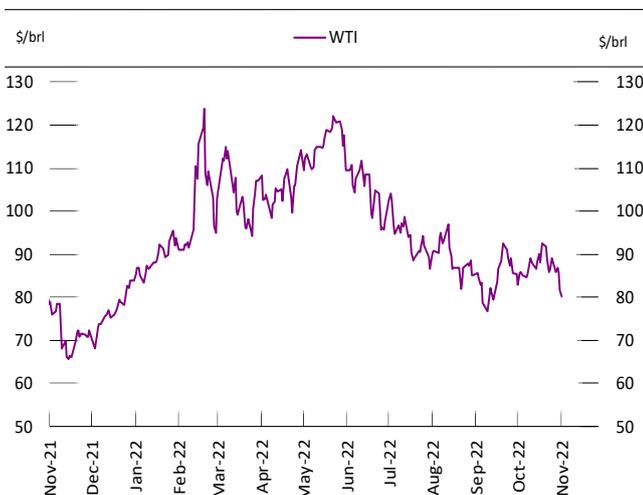
Data as of November 18th

10- Year Government Bond Spreads



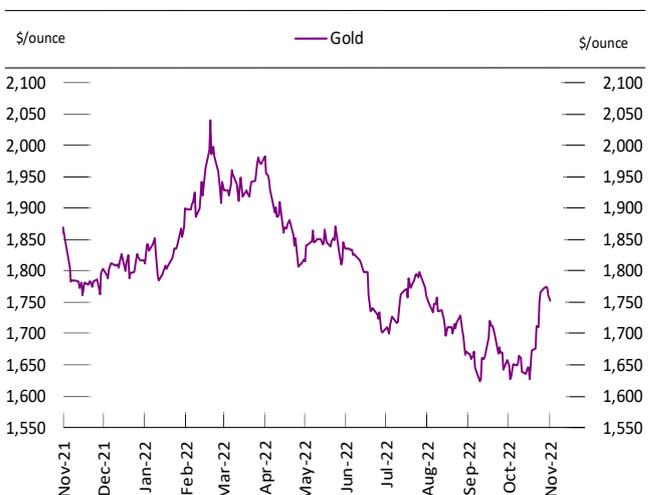
Data as of November 18th

West Texas Intermediate (\$/bbl)



Data as of November 18th

Gold (\$/ounce)



Data as of November 18th

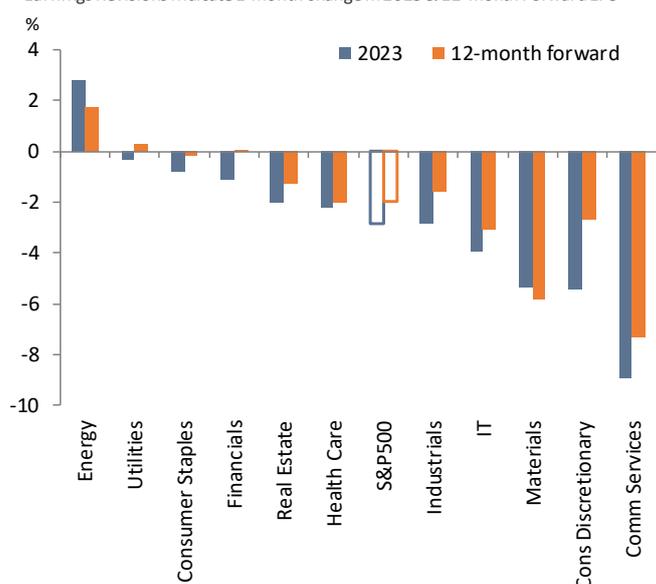
US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	18/11/22	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
S&P500	3965	-0.7	-16.8	5.9	5.7	1.6	1.7	18.2	17.2	17.3	17.3	3.9	3.6	3.6	3.0
Energy	699	-2.4	65.4	158.6	-13.0	3.0	3.1	8.7	10.0	9.9	19.5	2.5	2.3	2.3	1.7
Materials	503	-1.6	-11.8	5.3	-9.1	2.1	2.1	14.8	16.3	16.1	16.2	2.9	2.7	2.7	2.7
Financials															
Diversified Financials	982	-1.9	-10.3	-13.5	8.9	1.6	1.7	16.4	15.1	15.3	15.0	2.0	1.9	1.9	1.6
Banks	347	-2.4	-17.1	-17.2	15.3	3.0	3.2	10.8	9.3	9.5	11.5	1.2	1.1	1.1	1.1
Insurance	592	1.0	7.6	-13.2	28.8	1.9	2.0	17.0	13.2	13.7	11.9	2.2	2.0	2.0	1.3
Real Estate	238	-1.8	-26.6	10.6	3.0	3.7	3.6	17.2	16.7	16.8	18.7	2.7	2.9	2.9	3.3
Industrials															
Capital Goods	873	0.1	-2.0	12.9	17.5	1.7	1.8	22.1	18.8	19.2	17.4	5.0	4.6	4.6	4.0
Transportation	934	-1.8	-17.2	125.6	8.3	1.9	2.1	15.7	14.5	N/A	14.0	5.3	4.5	4.6	4.2
Commercial Services	500	0.9	-8.0	9.7	6.6	1.1	1.2	29.3	27.5	27.7	23.7	6.2	5.7	5.7	4.3
Consumer Discretionary															
Retailing	2914	-2.9	-31.1	-39.8	48.5	0.9	0.9	38.8	26.2	27.6	27.7	10.4	8.6	8.8	9.3
Consumer Services	1313	-0.5	-13.1	N/A	166.7	1.2	1.3	63.4	23.8	N/A	35.9	151.9	93.4	N/A	12.7
Consumer Durables	346	-2.2	-35.2	2.6	-14.9	1.9	2.0	11.9	13.9	13.7	17.0	2.9	2.6	2.7	3.4
Automobiles and parts	108	-6.9	-45.7	30.1	10.8	0.3	0.4	21.8	19.6	N/A	16.2	4.3	3.7	3.7	2.9
IT															
Technology	2859	1.3	-16.2	5.9	3.5	0.9	0.9	22.0	21.2	21.3	15.8	16.2	14.4	14.6	7.1
Software & Services	2895	-1.7	-25.6	10.1	10.9	1.0	1.1	24.9	22.4	22.7	21.8	7.9	6.7	6.8	6.4
Semiconductors	1757	-2.4	-33.2	-4.0	-5.6	1.6	1.7	17.5	18.5	18.4	15.6	4.6	4.3	4.4	3.9
Communication Services	166	-0.1	-37.8	-16.4	10.9	1.0	1.0	16.4	14.8	15.0	19.0	2.7	2.5	2.5	3.2
Media	636	-0.2	-41.3	-17.0	11.2	0.3	0.4	18.5	16.6	16.8	22.4	3.1	2.8	2.9	3.7
Consumer Staples															
Food & Staples Retailing	682	2.7	-2.7	1.8	6.2	1.5	1.5	23.9	22.5	22.6	18.6	5.3	5.0	5.0	3.7
Food Beverage & Tobacco	847	1.2	3.7	4.5	2.9	3.1	3.2	19.7	19.1	19.2	18.6	5.4	5.1	5.2	5.0
Household Goods	821	1.7	-16.0	-3.4	4.7	2.4	2.6	25.8	24.6	24.8	21.7	9.9	9.7	9.7	7.0
Health Care															
Pharmaceuticals	1284	1.5	-1.2	4.5	-8.0	1.9	2.0	15.3	16.6	16.4	15.4	5.6	5.0	5.0	4.4
Healthcare Equipment	1815	0.2	-9.3	3.4	5.4	1.2	1.3	19.4	18.4	18.5	17.1	4.0	3.6	3.6	3.0
Utilities	348	0.8	-4.3	2.2	6.8	3.0	3.2	19.4	18.2	18.3	17.1	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 & 12-month Forward EPS

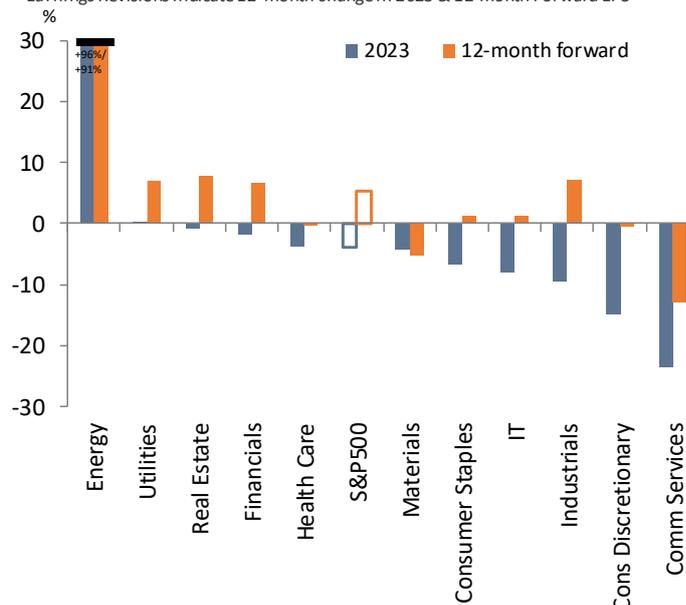
Earnings Revisions indicate 1-month change in 2023 & 12-month Forward EPS



Data as of November 18th
12-month forward EPS are 11% of 2022 EPS and 89% of 2023 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 November 18th
12-month forward EPS are 11% of 2022 EPS and 89% of 2023 EPS

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

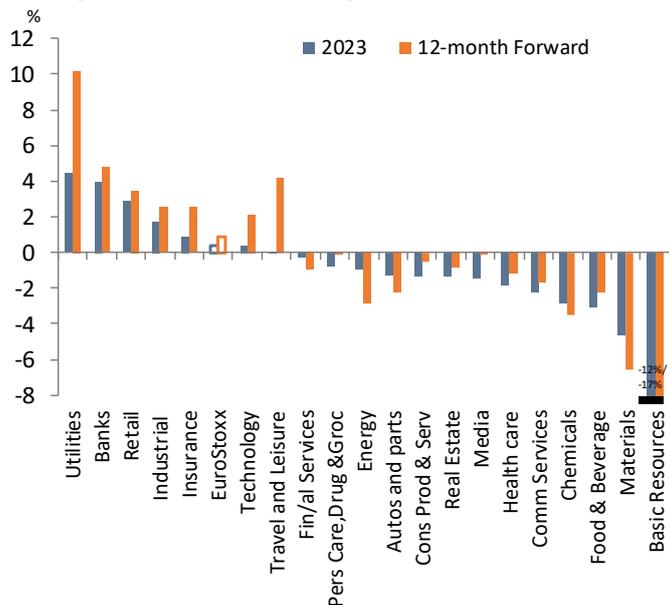
Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	18/11/22	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
EuroStoxx	422	0.8	-12.0	16.5	3.4	3.3	3.4	12.9	12.5	12.5	14.7	1.6	1.5	1.5	1.5
Energy	342	0.3	18.5	133.0	-17.2	5.4	4.7	5.1	6.2	6.1	12.9	1.2	1.1	1.1	1.2
Materials	969	-0.4	-7.1	10.7	-27.4	3.0	3.0	11.0	15.2	14.7	15.7	1.7	1.6	1.6	1.7
Basic Resources	227	-1.2	-8.6	-5.1	-51.7	3.0	3.1	4.4	9.1	8.5	9.8	0.7	0.6	0.6	0.8
Chemicals	1413	-0.3	-6.9	20.8	-15.9	3.0	2.9	14.1	16.8	16.5	16.8	2.2	2.1	2.1	2.2
Financials															
Banks	94	2.7	-6.8	14.1	2.9	6.6	6.9	7.0	6.8	6.9	9.9	0.6	0.6	0.6	0.7
Insurance	309	1.8	1.0	-9.4	28.5	5.4	5.8	11.3	8.8	9.1	9.7	1.3	1.2	1.2	0.9
Financial Services	515	2.1	-11.0	38.2	-10.0	2.9	3.1	11.1	12.4	12.2	16.1	1.3	1.2	1.2	1.3
Real Estate	139	-3.7	-37.8	6.0	2.2	6.2	6.8	10.8	10.5	10.6	17.0	0.6	0.6	0.6	1.0
Industrials															
Industrial Goods & Services	1001	1.2	-14.5	18.8	13.1	2.3	2.6	18.2	16.1	16.4	17.4	2.5	2.3	2.3	2.6
Construction & Materials	470	-1.4	-13.4	-4.8	1.0	3.8	4.0	11.9	11.8	11.8	14.8	1.5	1.4	1.4	1.5
Consumer Discretionary															
Retail	490	-2.4	-29.3	-2.1	7.4	4.4	4.7	20.0	18.7	18.8	26.0	3.9	3.8	3.8	5.6
Automobiles and parts	528	-1.5	-16.2	18.8	-15.6	6.2	5.6	4.8	5.7	5.6	8.0	0.8	0.7	0.7	1.0
Travel and Leisure	187	-0.4	-3.3	N/A	40.9	1.1	1.3	24.1	17.1	N/A	N/A	2.2	2.0	2.0	2.2
Consumer Products & Services	441	-0.7	-16.3	7.4	14.1	1.6	1.7	28.7	25.2	25.6	24.9	6.0	5.3	5.4	4.2
Media	260	-0.9	-9.0	19.2	16.6	2.5	2.7	20.5	17.6	18.0	18.5	2.8	2.6	2.6	2.2
Technology	779	1.9	-20.7	-0.4	21.4	1.1	1.2	25.7	21.2	21.7	21.9	3.6	3.3	3.3	3.7
Consumer Staples															
Food, Beverage & Tobacco	167	0.1	-13.1	13.7	9.6	1.9	2.1	19.0	17.4	17.6	20.1	2.1	1.9	1.9	2.6
Personal Care, Drug & Grocery	171	0.0	-15.0	2.2	7.0	2.6	2.7	15.8	14.7	14.8	17.6	2.3	2.1	2.2	2.3
Health care	785	1.6	-15.9	7.7	5.6	2.4	2.5	15.6	14.7	14.8	16.7	2.0	1.9	1.9	2.3
Communication Services	274	0.1	-5.0	20.7	8.1	4.1	4.4	14.9	13.8	13.9	15.4	1.4	1.4	1.4	1.7
Utilities	354	2.8	-10.1	-44.8	92.0	4.4	4.7	24.1	12.5	13.9	14.1	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 & 12-month Forward EPS

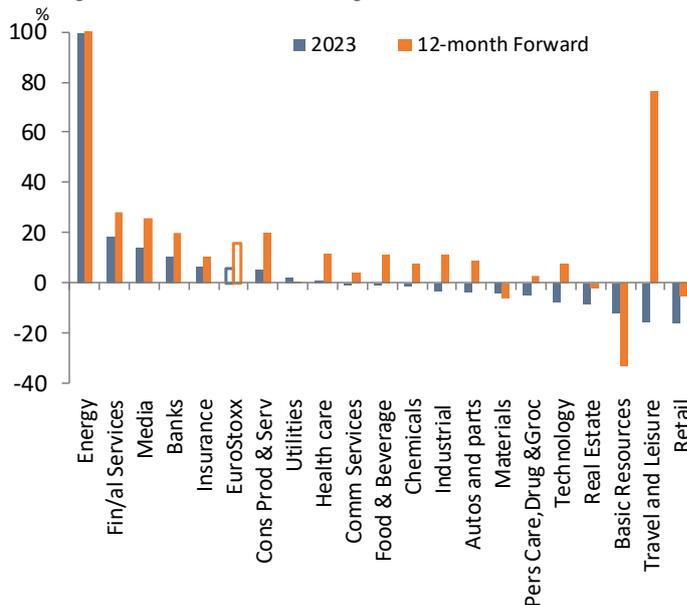
Earnings Revisions indicate 1-month change in 2023 & 12-month Forward EPS



Data as of November 18th
12-month forward EPS are 11% of 2022 EPS and 89% of 2023 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 November 18th
12-month forward EPS are 11% of 2022 EPS and 89% of 2023 EPS

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

DISCLOSURES:

This report has been produced by the Economic Research Division of the National Bank of Greece, which is regulated by the Bank of Greece, and is provided solely as a sheer reference for the information of experienced and sophisticated investors who are expected and considered to be fully able to make their own investment decisions without reliance on its contents, i.e. only after effecting their own independent enquiry from sources of the investors' sole choice. The information contained in this report does not constitute the provision of investment advice and under no circumstances is it to be used or considered as an offer or an invitation to buy or sell or a solicitation of an offer or invitation to buy or sell or enter into any agreement with respect to any security, product, service or investment. No information or opinion contained in this report shall constitute any representation or warranty as to future performance of any financial instrument, credit, currency rate or other market or economic measure. Past performance is not necessarily a reliable guide to future performance. National Bank of Greece and/or its affiliates shall not be liable in any matter whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance on or usage of this report and accepts no legal responsibility to any investor who directly or indirectly receives this report. The final investment decision must be made by the investor and the responsibility for the investment must be taken by the investor.

Any data provided in this report has been obtained from sources believed to be reliable but has not been independently verified. Because of the possibility of error on the part of such sources, National Bank of Greece does not guarantee the accuracy, timeliness or usefulness of any information. Information and opinions contained in this report are subject to change without notice and there is no obligation to update the information and opinions contained in this report. The National Bank of Greece and its affiliate companies, its representatives, its managers and/or its personnel or other persons related to it, accept no responsibility, or liability as to the accuracy, or completeness of the information contained in this report, or for any loss in general arising from any use of this report including investment decisions based on this report. This report does not constitute investment research or a research recommendation and as such it has not been prepared in accordance with legal requirements designed to promote investment research independence. This report does not purport to contain all the information that a prospective investor may require. Recipients of this report should independently evaluate particular information and opinions and seek the advice of their own professional and financial advisers in relation to any investment, financial, legal, business, tax, accounting or regulatory issues before making any investment or entering into any transaction in relation to information and opinions discussed herein.

National Bank of Greece has prepared and published this report wholly independently of any of its affiliates and thus any commitments, views, outlook, ratings or target prices expressed in these reports may differ substantially from any similar reports issued by affiliates which may be based upon different sources and methodologies.

This report is not directed to, or intended for distribution to use or use by, any person or entity that is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to any law, regulation or rule.

This report is protected under intellectual property laws and may not be altered, reproduced or redistributed, or passed on directly or indirectly, to any other party, in whole or in part, without the prior written consent of National Bank of Greece.

ANALYST CERTIFICATION:

The research analyst denoted by an "AC" on page 1 holds the certificate (type Δ) of the Hellenic Capital Market Commission/Bank of Greece which allows her/him to conduct market analysis and reporting and hereby certifies that all of the views expressed in this report accurately reflect his or her personal views solely, about any and all of the subject issues. Further, each of these individuals also certifies that no part of any of the report analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this report. Also, all opinions and estimates are subject to change without notice and there is no obligation for update.