# **Global Markets Roundup**





# Euro area equities bounced back by +9% in November

- Euro area equities are up by 9% month-to-date, due to reduced business pessimism and expectations for a deceleration in the pace of interest rate hikes by the ECB. Technology (+14%) and Banks (+8%) have led the increase. Investors' attention now turns to inflation data for November. CPI flash is expected at +10.4% yoy from +10.6% in the previous month.
- Regarding business expectations, the German IFO business climate index rose by 1.8 pts in November, to 86.3, posting a 3-month high, surpassing consensus estimates for 85.0, and rebounding from the lowest level since May 2020 that was recorded in September.
- The expectations component (business conditions in the next six months) was up by 4.1 pts to 80.0 (also a 3-month high), as pessimism regarding the coming months reduced due to i) the slight easing of supply chain disruptions; (ii) better-than-expected real GDP growth in Q3:2022 (+0.4% qoq vs consensus of -0.2% qoq); and (iii) full natural gas storage levels (99%) that curbed concerns regarding energy supply (see graph below).
- Furthermore, export expectations rose to +0.4 points in November (a 5-month high), from -4.6 points in October. On the contrary, the component regarding the assessment of current conditions continued to weaken for a 6<sup>th</sup> consecutive month, falling by 1.1 pts to 93.1, its lowest level since February 2021. Sector-wise, improvement of confidence was broad-based with manufacturing, services, construction, and trade sectors posting a 3-month high in November.
- Following significant gains north of +20% in November, the MSCI China index recorded losses of -3.1% in the past week and by -0.9% on Monday, as the daily Covid-19 cases reached their highest level since the beginning of the pandemic, surpassing 40k new cases on November 27<sup>th</sup> and posting a new record for a 5<sup>th</sup> consecutive day.
- Authorities imposed restrictions to control the spread of infections, weeks only after the easing of some Covid-related policies, including reduced quarantine requirements for international arrivals.
   Additional curbs on mobility now covers 48 cities that comprise almost 1/5 of Chinese GDP, jeopardizing China's economic rebound in 2023 (+4.6% from +3.3% in 2022, OECD)
- On Tuesday however, the MSCI China index rebounded sharply (+5.5%), following the first decline in daily cases since November 19<sup>th</sup> and speculation that a relaxation of restrictions could be announced in the near future.
- At the same time, the PBOC decided to lower the Required Reserve Ratio by 25 bps to 11% (its lowest level since 2007) for major banks in the past week (effective from December 5<sup>th</sup>), aiming to accelerate the supply of credit to the real economy, via liquidity release of c. RMB 500 bn (\$70 bn) or 0.4% of Chinese GDP.
- Moreover, as far as the real estate sector is concerned, China Securities Regulatory Commission (CSRC) lifted a ban on equity refinancing for listed companies, following several supportive measures for the sector announced earlier in the month. Following the announcement, the CSI300 Real Estate index rose by 9.4% on Tuesday and the Hang Seng Mainland Properties index by 8.1%.

Ilias Tsirigotakis<sup>AC</sup> Head of Global Markets Research 210-3341517 tsirigotakis.hlias@nbg.gr

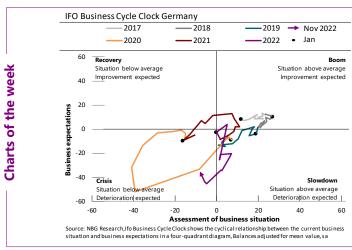
> Panagiotis Bakalis 210-3341545 mpakalis.pan@nbg.gr

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







### **US** housing market slowdown continues

- New residential construction took a step back in October. In Sector-wise, the services PMI was stable at 48.6, with the steepest the event, housing starts fell by -4.2% mom (-8.8% yoy), to 1425k (annualized rate), slightly above expectations for 1410k. In addition, building permits decreased by -3.3% mom (-11.0% yoy) in October, to 1512k (annualized rate), largely in line with consensus estimates. Note that long standing supply chain issues have contributed to an accrual of homes remaining in the phase of construction, at 1.72mn (annualized rate) in October 2022, a record high since 1970. That development, alongside elevated uncertainty for demand, is likely a restraining factor for the opening of new housing projects.
- Regarding demand, existing home sales fell for a 9<sup>th</sup> consecutive month in October, by -5.9% mom (-28.4% yoy), to 4.43mn (on an annualized basis), the lowest since December 2011 excluding particularly depressed readings at the onset of the pandemic. The latest reading is compared with a peak of 6.49mn in January 2022 and a long term (since 1990) average of 4.95mn. At the same time, the National Association of Home Builders (NAHB) survey index - that captures homebuilders' confidence for new home sales – fell sharply for an 11th consecutive month, by 5 pts to 33, the lowest since June 2012 excluding the covid lockdown period (a reading below 50 indicates a negative stance).
- The easing of demand curbs prices, albeit from particularly **elevated levels.** In the event, the median existing home sales price eased for a 4<sup>th</sup> consecutive month in October, -1.1% mom (+6.6% yoy) and -8.4% compared with a peak in June 2022. Nominal levels are still higher by 42.4% relative to January 2020, whereas nominal personal incomes have risen by 15.4% in roughly the same period. Meanwhile, construction costs have stabilized recently, remaining though elevated, with prices paid for goods used in residential construction down by -2.0% cumulatively from June 2022 to October 2022, albeit still +46.5% from a trough in April 2020.
- Finally, higher mortgage interest rates due to monetary policy tightening have limited the capacity of households to finance home purchases. In the event, according to data from Freddie Mac, the 30-year fixed mortgage rate stood at 6.58% for the week ending on November 23<sup>rd</sup>, compared with a trough of 2.77% in early-August 2021 (4.0% on average since 2010). In that context, mortgage applications have posted a sharp decline, according to the Mortgage Bankers Association (-66.0% for the week ending November 18th, compared with late-January 2022).

# Euro area PMIs improved slightly in November, remaining though below the expansion/contraction threshold of 50

PMIs moderately exceeded expectations in November, albeit continuing to suggest decreasing activity. The composite PMI was 47.8 from 47.3 in October, above consensus estimates for 47.0, albeit below the expansion/contraction threshold of 50.0 for a 5<sup>th</sup> consecutive month. According to S&P Global, the performance in October - November suggest that GDP is heading towards a contraction of -0.2% qoq in Q4:22. The new orders component (relatively more forward looking and particularly indicative of demand conditions) remains also at depressed levels. On a positive note, the weaker demand appears to be contributing to a partial smoothening in the functioning of the supply chain and to an alleviation of price increases.

- contraction of activity occurring in real estate, transportation, tourism & recreation, and autos. At the same time, the manufacturing PMI stood at 47.3 from 46.4 previously (output: +1.9 pts to 45.7), with the energy-intensive industries of chemicals & plastics as well as basic resources, continuing to underperform.
- Regarding PMI performance by country, Germany continued to underperform France and the rest of the euro area, albeit by less than in previous months. In France, the composite PMI fell by -1.4 pts to 48.8 in November, with the services PMI down by -2.3 pts to 49.4 and its manufacturing peer rising by +1.9 pts to 49.1 (+2.5 pts to 46.0 for the output component). Meanwhile INSEE's (France's official statistics office) composite business climate indicator was stable at 102.2 in November (still above an average of 100 since 1990).
- Germany's composite PMI rose by 1.3 pts to 46.4 in November. Sector-wise, the improvement was due to manufacturing (+1.6 pts to 46.7 | output: +4.1 pts to 46.4), with the services PMI being little changed (-0.1 pt to 46.4). In a similar note, the IFO business survey improved, albeit remaining subdued, with the business climate index up by +1.8 pts to 86.3, above consensus estimates for 85.0 (average of 96.7 since 2005). The increase was due to the expectations component (expectations for business conditions in the next six months), which rose by +4.1 pts to 80.0, whereas the component regarding the assessment of current conditions declined by -1.1 pt to 93.1. The overall improvement was evident across sectors (manufacturing, services, retail trade, construction), despite confidence in energy-intensive segments continuing to be weighed by sharp uncertainty according to IFO.
- Recall that demand challenges stemming from the rising cost of living remain also evident in consumer surveys. In the event, DG ECFIN's consumer confidence indicator was -23.9 in November. Despite being above consensus for -26.0 and somewhat improved compared with October (-27.5), it remains far below an average of -11.7 since 2001.

## **UK PMIs remained subdued in November**

- PMIs were insignificantly changed in November, remaining below the expansion/contraction threshold of 50.0. Specifically, the PMI in the dominant services sector (c. 80% of UK GDP) was stable at 48.8, versus consensus estimates for 48.0. At the same time, the manufacturing PMI was also unchanged, at 46.2 (output: +0.4 pts to 45.4, in view of modestly easing supply shortages), versus consensus for 46.0. Notably, manufacturers reported the steepest fall in new business from abroad since May 2020 (and since 2009 excluding the pandemic era), citing, inter alia, Brexitrelated constraints on overseas demand.
- Overall, the composite index came out at 48.3 in November from 48.2 in October, with the new orders component at its lowest since January 2021 (and also in contractionary territory) as demand is hampered by the cost-of-living crisis. Higher borrowing costs, inter alia, were also cited as a weighing factor. On a positive note, there were fewer concerns related to domestic pollical uncertainty. In all, according to S&P Global, the performance in October - November is consistent with GDP heading towards a contraction of -0.4% gog in Q4:22.



### **Equities**

• Global equity markets were mostly up in the past week, with the minutes of the latest (November 2<sup>nd</sup>) FOMC meeting, suggesting that a deceleration in the pace of hikes in the Federal Funds Rate ("FFR") could take place in the next meeting (December 14<sup>th</sup>). The S&P500 rose by +1.5% and the EuroStoxx by +1.2% wow, entering though the current week on a negative note (S&P500: -1.5% | EuroStoxx: -0.8% on Monday), with the sentiment being weighed by a worsening pandemic situation in China.

In all, Chinese bourses underperformed (CSI300:-0.7% in the past week and -1.1% on Monday November 28<sup>th</sup>), albeit posting gains on Tuesday (29/11) on the back of a daily fall in Covid-19 infections being reported for the first time since November 19<sup>th</sup> and on speculation that less stringent policies could be on the cards (Tuesday's health authorities' briefing though refrained from such pledges).

### **Fixed Income**

• Government bond yields edged lower in the past week, particularly in longer-term tenors. In the event, the US Treasury 10-year yield fell by -13 bps wow to 3.69% and its 2-year peer by -2 bps to 4.53%. As result, the 10/2 spread reached -84 bps, the lowest since 1982. The German Bund 10-year yield posted a modest -3 bps decline on a weekly basis, to 1.98%, whereas its 2-year peer was up by +12 bps to +2.19%. Notably, the 10/2 spread in Germany has entered negative territory as of mid-November 2022, for the first time since 2008.

Corporate bond spreads narrowed in the past week. Specifically, US high yield spreads were down by -13 bps to 452 bps and their euro counterparts by -32 bps to 492 bps. In the Investment Grade spectrum, US spreads decreased by -5 bps to 140 bps and Euro area spreads declined by -9 bps to 198 bps.

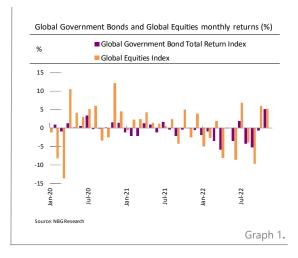
### **FX and Commodities**

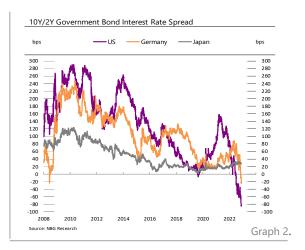
• In foreign exchange markets, the prospect of a FFR hike slowdown, led the US Dollar lower. In the event, the US Dollar lost -0.4% against both the euro to \$1.041. The decline was more meaningful against the British Pound, -1.4% wow to GBP/USD 1.201, as the latter benefitted also from reduced political uncertainty and from more clarity regarding United Kingdom's fiscal path.

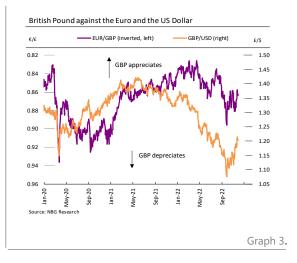
In commodities, oil prices declined in the past week, in view, *inter alia*, of ongoing discussions in the European Union (EU) for a price cap in seaborne Russian crude, with the Brent at -4.6% wow to \$83.6/barrel and the WTI at -4.7% wow to \$76.3/barrel.

Meanwhile, natural gas prices rose in N.America (Henry Hub contract for delivery in December 2022: +11.4% wow to \$7.02/MMbtu), mainly in view of a fall in US natural gas inventories, -80 billion cubic feet to 3564 billion cubic feet for the week ending November 18<sup>th</sup>, versus a prior 5-year average (for the same weekly period) of 3603 billion cubic feet).

Natural gas also rose in Europe (December 2022 Dutch TTF: +7.7% wow to €124.4/mwh), with weather conditions having turned less benign. In addition, the EU Energy Commissioner's initial proposal for a price cap of €275/mwh on "spot" (for delivery in the next month) TTF (to be triggered if prices: i) surpass €275 per megawatt-hour for at least two weeks and at the same time; ii) are €58 higher than the market reference for liquefied natural gas for at least ten consecutive trading days), was unconstructive in holding down market prices (several EU member countries have expressed their disagreement with such a cap, given its large divergence from current market conditions).







Quote of the week: "I would like to see inflation having peaked in October, but I'm afraid that I would not go as far as that...there is too much uncertainty, particularly in one component, that is the pass-through in high energy costs at wholesale level into retail level, to assume that inflation has actually reached its peak. It would surprise me.", ECB President, C. Lagarde, November 28<sup>th</sup> 2022.



0-Yr Gov. Bond Yield (%)	November 25th	3-month	6-month	12-month	Official Rate (%)	November 25th	3-month	6-month	12-month
Germany	1,98	2,15	2,25	2,25	Euro area	1,50	2,00	2,50	2,50
US	3,69	4,00	4,10	4,10	US	4,00	4,50	5,00	5,00
UK	3,12	4,08	3,93	3,67	UK	3,00	3,60	4,25	4,35
Japan	0,25	0,23	0,27	0,33	Japan	-0,10	-0,10	-0,10	-0,10
	November 25th	3-month	6-month	12-month		November 25th	3-month	6-month	12-mont
EUR/USD	1,04	1,02	1,05	1,10	USD/JPY	139	149	141	136
EUR/GBP	0,86	0,88	0,87	0,89	GBP/USD	1,21	1,16	1,20	1,23
EUR/JPY	145	152	148	150					
recasts at end of period									

<b>United States</b>	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21a	2021a	Q1:22a	Q2:22a	Q3:22a	Q4:22f	20221
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	2022
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
	0.3	1.0	1.8	2.9	4.7	2.6	6.1	8,0	9.3	10.3	8,4

	US	Euro Area	Japan	UK
charty manners	Households' balance sheets are healthy Service-oriented sectors are re-opening Sentiment (e.g. AAII) and positioning indicators are hitting extreme lows Peaking profit margins Recession risks are increasing PIES (Valuations) still remain above I-t means, despite the recent correction	+ 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	+ 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 dece	+ Significant exposure to commodities + Undemanding valuations in relative terms relative to other regions - Elevated domestic policy uncertainty
	Neutral/Negative	Neutral	Neutral	Neutral/Positive
	+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	+ 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	+Restructuring efforts to be financed by fiscal policy	+Inflation expectations could drift higher due to sup disruptions (persistent post Brexit, temporary due to China) +The BoE is expected to raise rates towards 2% - Slowing economic growth post-Brexit
	▲ Slightly higher yields expected	▲ Slightly higher yields expected	Stable yields expected	Slightly higher yields expected
	+Weak global growth / Safe-haven demand status + USD interest rate differential vs peers remain significant + Aggresive Fed tightening - Global political uncertainty to decline	+ Current account surplus - Still negative interest rates - Global growth risks remain to the downside	+ 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%	+ Valuations appear undemanding with REER below 15-year average - Sizeable Current account deficit
	Broadly Flat USD against G10 FX	<ul> <li>Broadly Flat/Stronger EUR against the USD</li> </ul>	▲ Slightly higher JPY	Broadly stable GBP expected



### **Economic Calendar**

In the US, the second estimate of GDP for Q3:22 is released on Wednesday. GDP growth is expected to be slightly increased by +0.1% compared with the previous estimate at 2.7% qoq saar. Attention also turns to the labor report for November that is released on December 2<sup>nd</sup>. Consensus expects NFPs of +200k from +261k in October and a stable unemployment rate of 3.7%. Meanwhile, ISM Manufacturing (latest: 55.4 | consensus of 54.5 @ 1/12) and Services (latest: 54.4 | consensus of 55.6 @ 5/12) surveys will provide an update on business confidence.

In the Euro area, attention turns to inflation data for November. CPI flash is expected at 10.4% yoy from 10.6% in the previous month, while the core figure is expected to remain on the same level of 5.0%. Unemployment rate for October is released on Thursday and is expected stable at 6.6%.

#### Euro Area Inflation - CPI Core (YoY) CPI (YoY) Estimates 11.0 — 11.0 10.0 — 10.0 9.0 — 9.0 8.0 — 8.0 7.0 — 7.0 6.0 6.0 5.0 — 5.0 4.0 — 4.0 3.0 3.0 2.0 2.0 1.0 1.0 0.0 0.0 -1.0 -1.0 Jan-14 Jul-14 Jul-15 Jul-15 Jul-15 Jul-16 Jul-17 Jul-17 Jul-18 Jul-19 Jul-19 Jul-20 Jul-20 Jul-21 Jul-21 Jul-21 Jul-22 Jul-22

Source: NBG Research

Economic News Calendar for the period: November 22 - December 05, 2022 Tuesday 22

Tuesday 22					Wednesday 23									
EURO AREA		S	Α	P	us	0	S		A P	UK		S	Α	P
Consumer Confidence Indicator	November	-26.0	+ -23.9	-27.5	Durable goods orders (MoM) Durable goods orders ex	October	0.4%		.1% 0.3%	Manual	November	45.8	+ 46.2	46.2
					transportation (MoM)	October	0.0%	+ 0	.5% -0.99	Markit/CIPS UK Services PMI	November		+ 48.8	48.8
					Initial Jobless Claims (k)	November 19	225	- 2	240 223	marking cir 3 on services i mi	recember	-10.0	-10.0	-10.0
					Continuing Claims (k)	November 12	1517	- 1	551 1503					
					New home sales (mn)	November	0.6		0.6					
					S&P Global US Manufacturing	November	50.0	- 4	7.6 50.4					
					PMI		30.0		7.0 30.4					
					FOMC Minutes	November 2								
					EURO AREA									
					S&P Global Eurozone	November	46.0	+ 4	7.3 46.4					
					Manufacturing PMI S&P Global Eurozone Services									
					PMI	November	48.1	+ 4	8.6 48.6					
					S&P Global Eurozone Composite									
					PMI	November	47.0	+ 4	7.8 47.3					
Thursday 24					Friday 25					Monday 28				
JAPAN		S	Α	Р	GERMANY		S		A P	EURO AREA		S	Α	P
PMI manufacturing	November		49.4	50.7	GDP (QoQ)	Q3:22	0.3%		.4% 0.3%		October	6.2%	5.1%	6.3%
GERMANY	Name	05.0		045	GDP (wda, YoY)	Q3:22	1.2%	+ 1	.3% 1.2%					
IFO- Business Climate Indicator IFO- Current Assesment	November November	85.0 + 93.8 -		84.5 94.2										
IFO-Expectations	November	77.0		75.9										
IFO-Expectations	November	11.0	00.0	75.5										
Tuesday 29					Wednesday 30					Thursday 01				
us		S	Α	Р	us		S		A P	us		S	Α	P
S&P Case/Shiller house price	September	12.4%		13.1%	ADP Employment Change (k)	November	200		239		October	0.4%		0.4%
index 20 (YoY)			-		GDP (QoQ, annualized)	Q3:22	2.7%		2.6%		November 26	235		240
Consumer Confidence Index	November	100.0		102.5	Pending home sales (MoM)	October	-5.0%		10.29		November 19	1573		1551
EURO AREA					EURO AREA					Construction spending	October	-0.3%		0.2%
Business Climate Indicator	November			0.74	CPI flash estimate (YoY)	November	10.4%		10.69		November	49.8		50.2
JAPAN Unemployment rate	October	2.5%		2.6%	CPI Core flash estimate (YoY)  JAPAN	November	5%		5%	PCE Deflator (YoY)	October October	6.0% 5.0%		6.2% 5.1%
Retail sales (MoM)	October	2.5%		1.5%	Industrial Production (MoM)	October	-1.5%		1.79	PCE Core Deflator (YoY)	October	5.0%	••	5.1%
Retail sales (YoY)	October	5.0%		4.8%	Industrial Production (NoV)	October	9.0%		9.6%		November			7.2%
Retail Sales (101)	Octobei	3.076		4.070	Construction Orders YoY	October	5.070		36.69		November			7.270
					CHINA	October			50.07	Unemployment Rate	October	6.6%		6.6%
					Manufacturing PMI	November	48.5		49.2					
					,				.5.2	Retail sales (MoM)	October			0.9%
										Retail sales (YoY)	October			-0.9%
										CHINA				
										Caixin PMI Manufacturing	November	48.7		49.2
Friday 02					Monday 05									
US		S	А	P	US		S		A P					
	November	200		261	Factory Goods Orders	October	0.0%		0.3%					
Change in Nonfarm Payrolls (b)		200	-	233	ISM non-manufacturing	November	55.6		54.4					
Change in Nonfarm Payrolls (k) Change in Private Payrolls (k)	November			3.7%	EURO AREA		23.0		3 1.4					
Change in Private Payrolls (k)	November November	3.7%		0.4%	Retail sales (MoM)	October	-0.6%		0.4%					
Change in Private Payrolls (k) Unemployment rate		0.3%				October	2.7%		0.69					
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM	November			4.7%	Retail sales (YoY)		-							
Change in Private Payrolls (k) Unemployment rate	November November	0.3%	-	34.5	Retail sales (YoY)	Octobe.								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY	November November November	0.3% 4.6%	-		Retail sales (YoY)	October								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YOY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate	November November November November	0.3% 4.6%	-	34.5	Retail sales (YoY)	Caloba								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN	November November November November November	0.3% 4.6%	-	34.5 62.2%	Retail sales (YoY)	October								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	octobe.								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN	November November November November November	0.3% 4.6%	-	34.5 62.2%	Retail sales (YoY)	Scione								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoV)	Scione								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	Scione								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	Stage								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	Stage								
Change in Private Payrolls (k) Unemployment rate Average Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	Stage								
Change in Private Payrolls (k) Unemployment rate vareage Hourly Earnings MoM Average Hourly Earnings YoY Average Hourly Earnings YoY Average weekly hours (hrs) Labor Force Participation Rate Underemployment rate JAPAN Bank of Japan annual rise in	November November November November November November	0.3% 4.6%	-	34.5 62.2% 6.8%	Retail sales (YoY)	Sassa								



Developed N	/larkets	Current	1-week	Year-to-Date	1-Year	2-year	Emerging Markets	Current	1-week	Year-to-Date	1-Year	2-year
		Level	change (%)	change (%)	change (%)	change (%)		Level	change (%)	change (%)	change (%)	change (%)
US	S&P 500	4026	1.5	-15.5	-14.4	10.9	MSCI Emerging Markets	57099	-0.5	-18.5	-20.1	-16.5
Japan	NIKKEI 225	28283	1.4	-1.8	-4.1	7.6	MSCI Asia	861	-0.6	-19.5	-21.5	-19.7
UK	FTSE 100	7487	1.4	1.4	2.4	17.1	China	58	-3.1	-30.9	-35.9	-46.0
Canada	S&P/TSX	20384	2.0	-4.0	-5.7	17.7	Korea	733	-0.4	-19.6	-18.8	-10.6
Hong Kong	Hang Seng	17574	-2.3	-24.9	-29.0	-34.1	MSCI Latin America	90653	-0.8	-1.8	-2.1	-3.0
Euro area	EuroStoxx	427	1.2	-10.9	-10.7	9.1	Brazil	294870	-1.8	-3.8	-6.2	-14.9
Germany	DAX 40	14541	0.8	-8.5	-8.6	9.4	Mexico	48510	0.3	-2.8	3.1	24.4
France	CAC 40	6712	1.0	-6.2	-5.1	20.5	MSCI Europe	2733	4.3	-60.6	-61.4	-51.9
Italy	FTSE/MIB	24719	0.2	-9.6	-8.8	10.8	Russia	2195	-0.5	-42.0	-44.4	-30.0
Spain	IBEX-35	8417	3.6	-3.4	-4.8	3.1	Turkey	4885548	9.3	135.1	138.5	216.5

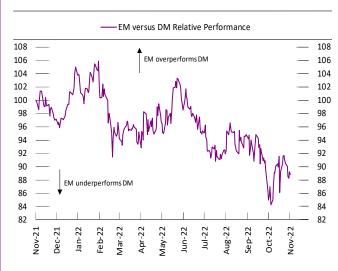
in US Dollar terms	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	257.4	1.1	47.6	44.1	94.9	Energy	271.2	0.8	53.2	48.9	102.6
Materials	319.4	2.7	-11.3	-8.2	5.7	Materials	319.5	2.3	-6.3	-3.7	13.1
Industrials	307.6	2.1	-12.2	-11.6	2.4	Industrials	321.1	1.9	-7.4	-7.2	10.5
Consumer Discretionary	312.9	1.1	-29.1	-31.0	-13.1	Consumer Discretionary	313.4	1.0	-26.6	-28.9	-8.5
Consumer Staples	274.3	2.2	-6.5	-2.3	5.7	Consumer Staples	283.5	1.9	-2.7	1.0	11.2
Healthcare	346.1	2.0	-6.4	-1.6	15.8	Healthcare	349.1	1.9	-3.9	0.6	20.1
Financials	134.6	2.1	-9.9	-11.0	15.8	Financials	139.2	1.8	-6.3	-7.9	21.3
IT	422.4	1.0	-26.2	-25.3	2.2	IT	415.0	0.9	-25.2	-24.3	4.3
Telecoms	69.9	1.1	-34.6	-35.8	-22.9	Telecoms	74.7	1.0	-33.1	-34.4	-20.5
Utilities	153.1	2.7	-6.8	-2.0	-0.2	Utilities	161.1	2.5	-3.8	0.6	4.2

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	3.69	3.81	1.51	1.64	2.13	US Treasuries 10Y/2Y	-84	-74	78	99	98
Germany	1.98	2.01	-0.18	-0.25	0.45	US Treasuries 10Y/5Y	-18	-18	25	30	50
Japan	0.25	0.24	0.07	80.0	0.20	Bunds 10Y/2Y	-21	-6	46	50	80
UK	3.12	3.23	0.97	0.97	1.47	Bunds 10Y/5Y	-3	4	28	32	54
Greece	4.16	4.25	1.32	1.33	5.47						
Ireland	2.39	2.46	0.25	0.22	1.34	Corporate Bond Spreads (in	Current	Last week	Year Start	One Year	10-year
Italy	3.87	3.90	1.17	1.07	2.20	bps)	Current	Last week	rear Start	Back	average
Spain	2.96	3.00	0.57	0.51	1.73	EM Inv. Grade (IG)	190	194	139	140	191
Portugal	2.88	2.92	0.46	0.43	2.46	EM High yield	724	742	618	689	624
						US IG	140	145	98	96	133
US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average	US High yield	452	465	310	332	448
30-Year FRM <sup>1</sup> (%)	6.67	6.90	3.31	3.24	4.13	Euro area IG	178	187	98	103	119
vs 30Yr Treasury (bps)	285.2	290.7	138.9	125.0	138.1	Euro area High Yield	492	524	331	342	406

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	1.04	0.4	3.6	-7.2	-8.5	Agricultural	462	-0.8	-0.7	1.3	3.7
EUR/CHF	0.99	0.0	-0.7	-6.1	-4.9	Energy	289	-3.1	-9.7	8.4	14.7
EUR/GBP	0.86	-1.0	-0.6	2.2	2.5	West Texas Oil (\$/bbl)	76	-4.7	-13.2	-2.7	1.4
EUR/JPY	144.91	0.0	-1.6	12.1	10.7	Crude brent Oil (\$/bbl)	84	-4.6	-12.6	1.7	7.5
EUR/NOK	10.28	-2.5	-0.4	2.3	2.5	HH Natural Gas (\$/mmbtu)	7.0	15.1	33.0	42.5	83.9
EUR/SEK	10.85	-1.2	-0.9	6.8	5.4	TTF Natural Gas (EUR/mwh)	124	7.7	19.2	33.5	76.8
EUR/AUD	1.54	-0.4	-0.4	-1.1	-1.4	Industrial Metals	431	-1.8	2.5	-12.5	-13.7
EUR/CAD	1.39	0.3	2.1	-1.9	-3.1	Precious Metals	2304	0.2	6.4	-1.7	-3.7
USD-based cross rates						Gold (\$)	1755	0.3	5.4	-1.9	-3.7
USD/CAD	1.34	-0.1	-1.4	5.7	5.9	Silver (\$)	22	3.3	10.0	-8.0	-6.7
USD/AUD	1.48	-0.9	-3.8	6.5	7.7	Baltic Dry Index	1324	11.4	-22.4	-50.6	-40.3
USD/JPY	139.25	-0.5	-5.0	20.7	20.9	Baltic Dirty Tanker Index	2494	5.5	38.2	234.8	217.3







#### Data as of November 25th - Rebased @ 100

### Equity Market Performance - G4



Data as of November 25th - Rebased @ 100

### Equity Market Performance – Euro Area G4



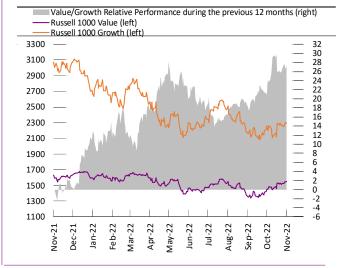
Data as of November 25<sup>th</sup> – Rebased @ 100

### **Equity Market Performance – Emerging Markets**



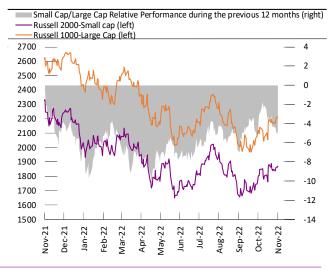
Data as of November 25<sup>th</sup> – Rebased @ 100

### Russell 1000 Value & Growth Index



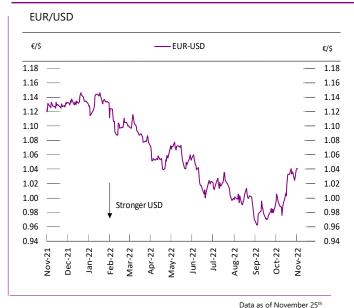
Data as of November 25<sup>th</sup>

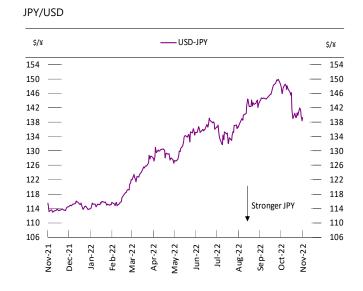
### Russell 2000 & Russell 1000 Index



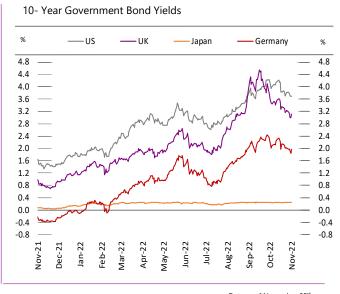
Data as of November 25<sup>th</sup>

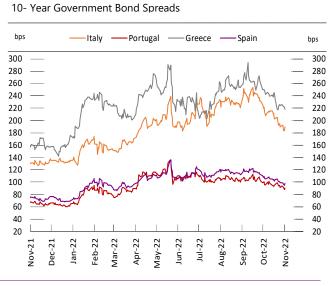




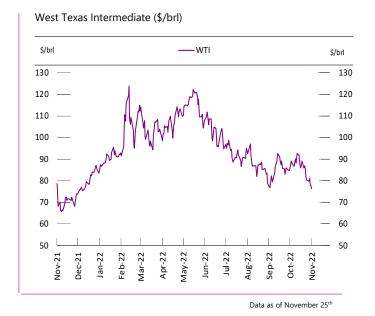


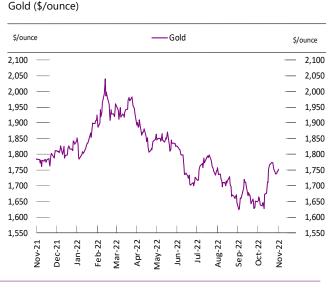
Data as of November 25th





Data as of November 25<sup>th</sup> Data as of November 25<sup>th</sup>





Data as of November 25<sup>th</sup>



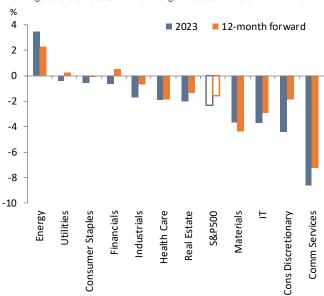
#### **US Sectors Valuation**

		Price (\$)		EPS Gro	wth (%)	Dividend	Yield (%)		P/	E Ratio			P/BV R	atio	
	25/11/22	% Weekly Change	%YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
S&P500	4026	1.5	-15.5	5.9	5.6	1.6	1.7	18.4	17.4	17.5	17.3	4.0	3.6	3.7	3.1
Energy	701	0.3	65.8	159.1	-12.9	3.0	3.1	8.7	10.0	9.9	19.5	2.5	2.3	2.3	1.7
Materials	517	2.9	-9.2	5.1	-8.9	2.0	2.1	15.3	16.8	16.6	16.2	3.0	2.8	2.8	2.7
Financials															
<b>Diversified Financials</b>	1004	2.3	-8.2	-13.3	8.6	1.6	1.7	16.8	15.4	15.6	15.0	2.0	1.9	1.9	1.7
Banks	353	1.9	-15.5	-17.1	15.4	2.9	3.1	11.0	9.5	9.6	11.5	1.2	1.1	1.1	1.1
Insurance	607	2.4	10.2	-13.3	28.8	1.8	2.0	17.4	13.5	13.9	11.9	2.3	2.1	2.1	1.3
Real Estate	243	2.0	-25.2	10.6	2.9	3.6	3.6	17.6	17.1	17.1	18.7	2.8	2.9	2.9	3.3
Industrials															
Capital Goods	891	2.0	0.0	13.1	17.9	1.6	1.7	22.5	19.1	19.4	17.4	5.1	4.7	4.7	4.0
Transportation	951	1.8	-15.7	125.7	8.3	1.9	2.0	15.9	14.7	N/A	14.0	5.4	4.6	4.7	4.2
Commercial Services	506	1.3	-6.8	9.7	6.3	1.1	1.1	29.6	27.9	28.0	23.7	6.3	5.8	5.8	4.3
Consumer Discretionary															
Retailing	2945	1.1	-30.3	-39.8	48.3	0.8	0.9	39.3	26.5	27.8	27.7	10.5	8.7	8.9	9.3
Consumer Services	1326	1.0	-12.2	N/A	163.8	1.2	1.3	63.3	24.0	N/A	36.0	160.8	96.7	N/A	12.9
Consumer Durables	351	1.6	-34.1	2.5	-15.4	1.9	2.0	12.1	14.3	14.1	17.0	2.9	2.7	2.7	3.4
Automobiles and parts	110	1.2	-45.0	30.1	10.7	0.3	0.4	22.0	19.9	N/A	16.2	4.3	3.7	3.8	2.9
IT															
Technology	2820	-1.4	-17.4	5.9	3.4	0.9	0.9	21.7	21.0	21.0	15.9	16.1	14.1	14.3	7.1
Software & Services	2958	2.2	-24.0	10.0	10.8	1.0	1.0	25.4	23.0	23.2	21.8	8.0	6.8	7.0	6.4
Semiconductors	1792	2.0	-31.9	-3.9	-5.5	1.6	1.7	17.8	18.8	18.7	15.6	4.7	4.4	4.4	3.9
Communication Services	168	1.0	-37.2	-16.6	10.7	1.0	1.0	16.6	15.0	15.2	19.0	2.7	2.5	2.5	3.2
Media	642	1.0	-40.7	-17.3	11.1	0.3	0.4	18.7	16.9	17.0	22.4	3.1	2.9	2.9	3.7
Consumer Staples															
Food & Staples Retailing	696	2.0	-0.7	1.8	6.0	1.4	1.5	24.3	23.0	23.1	18.6	5.5	5.1	5.1	3.7
Food Beverage & Tobacco	866	2.3	6.1	4.6	2.8	3.0	3.1	20.1	19.6	19.6	18.6	5.6	5.2	5.3	5.1
Household Goods	835	1.7	-14.5	-3.4	4.7	2.4	2.5	26.2	25.0	25.2	21.7	10.1	9.9	9.9	7.0
Health Care															
Pharmaceuticals	1306	1.7	0.5	4.5	-8.0	1.8	1.9	15.5	16.9	16.7	15.4	5.7	5.0	5.1	4.4
Healthcare Equipment	1855	2.2	-7.4	3.2	5.1	1.1	1.2	19.9	18.9	19.0	17.1	4.0	3.7	3.7	3.1
Utilities	359	3.0	-1.4	2.1	6.8	2.9	3.1	20.0	18.8	18.9	17.2	2.2	2.1	2.1	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

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



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

Earnings Revisions indicate 12-month change in 2023 & 12-month Forward EPS % 30 ■ 2023 ■ 12-month forward 20 10 0 -10 -20 -30 Energy Utilities S&P500 Consumer Staples Real Estate Financials Health Care Materials Industrials Cons Discretionary Comm Services

Data as of November 25<sup>th</sup> 12-month forward EPS are 9% of 2022 EPS and 91% of 2023 EPS



### **Euro Area Sectors Valuation**

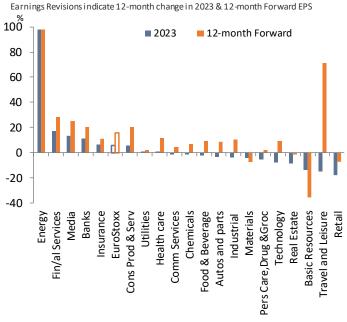
		Price (€)		EPS Gro	wth (%)	Dividend	Yield (%)		Р/	E Ratio			P/E	BV Ratio	
	25/11/22	% Weekly Chang	e %YTD	2022	2023	2022	2023	2022	2023	12m fwd	10Yr Avg	2022	2023	Current	10Yr Avg
EuroStoxx	427	1.2	-10.9	16.6	3.3	3.2	3.3	13.1	12.6	12.7	14.7	1.7	1.5	1.6	1.5
Energy	350	2.5	21.4	131.8	-17.1	5.2	4.6	5.3	6.4	6.3	12.9	1.2	1.1	1.1	1.2
Materials	989	2.0	-5.2	10.7	-27.2	3.0	2.9	11.2	15.4	15.0	15.7	1.7	1.6	1.6	1.7
Basic Resources	229	0.8	-7.9	-5.2	-51.6	3.0	3.1	4.4	9.1	8.7	9.8	0.7	0.6	0.6	8.0
Chemicals	1444	2.2	-4.9	20.6	-15.7	3.0	2.9	14.5	17.2	16.9	16.8	2.2	2.1	2.1	2.2
Financials															
Banks	95	1.9	-5.1	14.6	2.6	6.5	6.8	7.1	6.9		9.9	0.6	0.6	0.6	0.7
Insurance	310	0.5	1.5	-8.8	27.9	5.4	5.8	11.3	8.8	9.1	9.7	1.3	1.2	1.2	0.9
Financial Services	516	0.1	-10.9	38.7	-9.8	2.9	3.1	11.1	12.3		16.1	1.4	1.3	1.3	1.3
Real Estate	139	0.3	-37.6	5.9	1.9	6.1	6.8	10.8	10.6		17.0	0.6	0.6	0.6	1.0
Industrials															
Industrial Goods & Services	1008	0.7	-13.9	18.8	12.8	2.3	2.6	18.4	16.3	16.5	17.4	2.5	2.3	2.4	2.6
Construction & Materials	480	2.1	-11.6	-4.9	0.7	3.7	3.9	12.1	12.1		14.8	1.6	1.5	1.5	1.5
Consumer Discretionary															
Retail	501	2.2	-27.7	-2.6	7.0	4.3	4.6	20.6	19.2		26.0	4.0	3.9	3.9	5.6
Automobiles and parts	529	0.1	-16.1	18.7	-15.4	6.2	5.6	4.8	5.7	5.6	8.0	8.0	0.7		1.0
Travel and Leisure	193	2.9	-0.5	N/A	40.9	1.0	1.2	24.8	17.6	N/A	N/A	2.3	2.1	2.1	2.2
Consumer Products & Services	441	-0.2	-16.5	7.2	14.1	1.6	1.7	28.7	25.2	25.5	24.9	6.0	5.3	5.4	4.2
Media	271	4.3	-5.1	18.3	16.7	2.4	2.5	21.6	18.5	18.8	18.6	2.9	2.8	2.8	2.2
Technology	782	0.4	-20.5	-1.0	22.3	1.1	1.2	26.0	21.2	21.7	21.9	3.6	3.3	3.3	3.7
Consumer Staples															
Food, Beverage & Tobacco	169	1.1	-12.1	13.0	9.0	1.8	2.1	19.3	17.8		20.1	2.1	1.9	2.0	2.6
Personal Care, Drug & Grocery	174	2.0	-13.3	3.0	5.7	2.6	2.7	15.9	15.1	15.2	17.6	2.3	2.2	2.2	2.3
Health care	800	1.9	-14.3	8.0	5.6	2.3	2.5	15.8	15.0	15.1	16.7	2.0	1.9	1.9	2.3
Communication Services	279	1.8	-3.3	21.3	6.9	4.1	4.3	15.1	14.1	14.2	15.4	1.5	1.4	1.4	1.7
Utilities	358	1.1	-9.1	-43.5	88.6	4.4	4.6	23.8	12.6	13.7	14.1	1.7	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

 $Earnings\,Revisions\,indicate\,1-month\,change\,in\,2023\,\&\,12-month\,Forward\,EPS$ 12 ■ 2023 ■ 12-month Forward 10 8 6 4 2 0 -2 -4 -6 Basic Resources Retail Media Energy Health care Materials Autos and parts Real Estate Comm Services EuroStoxx **Travel and Leisure** Chemicals Food & Beverage Fin/al Services Insurance Cons Prod & Serv Pers Care, Drug & Groc **Technology** Industrial

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



Data as of November 25<sup>th</sup> 12-month forward EPS are 9% of 2022 EPS and 91% of 2023 EPS

Data as of November 25<sup>th</sup>

12-month forward EPS are 9% of 2022 EPS and 91% 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  $\Delta$ ) 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.