

The December calendar for central banks' meetings (Federal Reserve and European Central Bank) is likely to shape investors' expectations for monetary policy in 2022

- The lack of negative news regarding Omicron variant led risk markets higher in the past week, albeit volatility resumed on Monday. The S&P500 is trading at 21.4 times 12-month forward earnings of \$221, down from 22.6 times one year ago.
- The increase was broad-based, with all S&P500 industry groups (24) ending the week in positive territory. On the other side of the Atlantic, European equities increased by +2.6%, also with limited return dispersion. Speculative corporate bonds rallied, with USD spreads declining by 27 bps to 329 bps and EUR spreads narrowing by 16 basis points to 342 bps, remaining though circa 25 and 55 bps higher, respectively, from their mid-2021 lows.
- Geopolitical tensions, as Russia has been moving military forces toward the border with Ukraine with a scale at least twice relative to past spring's operation, have mainly affected natural gas prices. Moreover, the US is putting pressure on Germany to block, the newly built but not yet approved, Nord Stream 2 gas pipeline if a Russian invasion takes place.
- As a result, the price of wholesale Dutch TTF benchmark has increased by 14% month-to-date to EUR106/MWh and the December 2022 future contract by 56% to EUR69/MWh, with wholesale electricity prices following suit. Gas prices are expected to remain at high levels until Spring 2022 (see graph page 3).
- On the Federal Reserve, Chair Powell has supported a potential acceleration in the pace of tapering. Large-scale asset purchases are now likely to end in March 2022 instead of June 2022, with Fed reducing Treasury and MBSs purchases by \$30B per month instead of \$15B per month and balance sheet expansion since March 2020 amounting circa \$4.5T to \$8.7T (38% of 2021 GDP).
- A speedier taper will provide FOMC members optionality to increase interest rates sooner, if warranted by fundamentals, based on 2014/2015 sequence's playbook. According to our estimates, the median of FOMC members' assumptions for the appropriate path of the Federal Funds Rate ("FFR") will point to the FFR reaching the longer-term rate of 2.5% (as estimated in September 2021) in the end of 2024, versus an assumed appropriate FFR of 1.8% in end-2024 in September's projections.
- Such an upward revision would come in view of stronger inflation and unemployment rate outcomes in Q4:2021 compared with September's projections, while real GDP (Q4/Q4 is expected at circa 6%) has broadly confirmed expectations.
- The ECB (December 16th) is set to discuss the future of QE after the PEPP's planned end (March 2022), albeit calls to delay the respective decisions have grown, due to the pandemic uncertainty. Recall that the total envelope of PEPP is €1.85T, while holdings amount (as of December 3rd) to €1.55T with a low likelihood of an extension of the current PEPP past March 2022.
- Regarding the Bank of England, investors (according to sterling overnight index swap rates) appear split on a potential rise in the Bank Rate from +0.10% to +0.25% as soon as at the next meeting (December 16th), fully pricing in such an event though, in the February 3rd 2022 meeting.

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

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

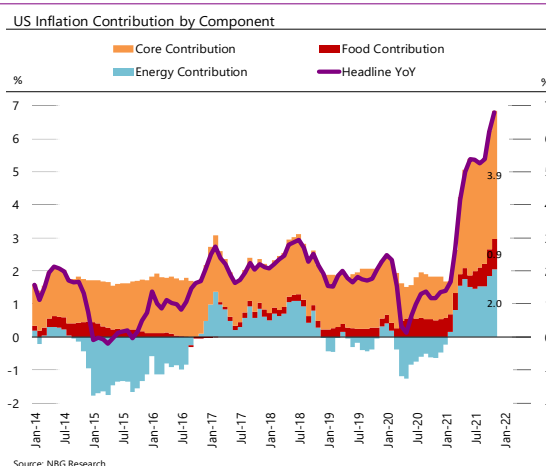
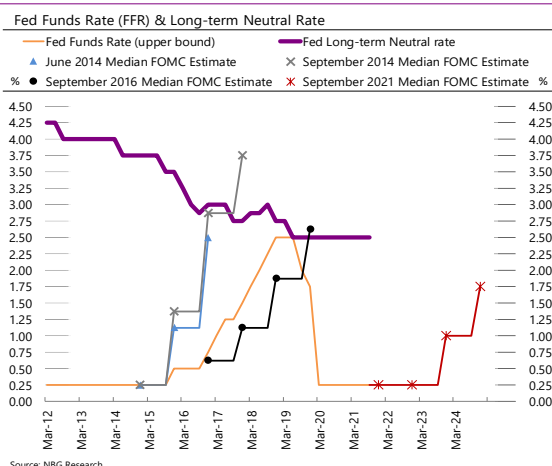
Vasiliki Karagianni
210-3341548
karagianni.vasiliki@nbg.gr

Leonidas Patsios
210-3341533
Patsios.Leonidas@nbg.gr

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Charts of the week



US inflation at multi-year highs in November

- Inflation posted a further, broad-based increase in November.** Specifically, the CPI rose by 0.8% mom (seasonally adjusted | "sa"), from 0.9% mom in October (which had been the highest since June 2008) and versus a 20-year average of +0.2% mom. As a result, the annual pace of growth increased by 0.6 pps to +6.8%, the highest since June 1982 (trough of +1.2% yoy in November 2020), slightly above consensus estimates for +6.7%. The acceleration of the headline reading was broad based. In the event, the energy index came out at +33.3% yoy from +30.0% yoy in October. Although the particularly elevated reading remained in a big part due to favorable base effects in view of a depressed base of comparison for international oil prices (in November 2020, Brent crude oil prices stood at particularly low levels of \$44.0/bbl on average), the latest (further) acceleration of the Energy index's annual growth was mostly due to a sharp sequential momentum (+3.5% mom sa). Meanwhile, the annual growth of food prices also accelerated sharply in November, by 0.8 pps to +6.1% yoy, the highest since October 2008, in view of a solid sequential momentum (+0.9% mom sa, versus a 20-year average of +0.2% mom).
- Importantly, the momentum for core CPI (i.e. CPI excluding food & energy), remained strong.** In the event, the core CPI increased by 0.5% mom (sa) in November from +0.6% mom in October and versus a 20-year average of +0.2% mom. Notably, prices of both new vehicles (+1.1% mom | +11.1% yoy) as well as of used cars and trucks (+2.5% mom | +31.4% yoy) continued to demonstrate strong impetus. That development is linked to the ongoing limitations for the production of automobiles in view of the international supply chain crisis (with the global shortage of semiconductors weighing particularly). Furthermore, the index for shelter prices (which constitute c. 1/3 of the headline CPI and c. 40% of the core index), posted a solid monthly growth for a 3rd consecutive month, +0.5% mom in November (+3.8% yoy), from +0.5% mom in October (+3.5% yoy) and +0.4% mom in September (+3.2% yoy), with both the index's major components, i.e. rent of primary residence and the owners' equivalent rent of residences (i.e. the implicit rent that owner occupants would have to pay if they were renting their homes), recording similar readings. That development suggests a pass through to renting costs from higher house purchase prices. In all, the core CPI's annual pace of growth accelerated by 0.3 pps to +4.9% in November, the highest since June 1991, in line with consensus estimates. Looking forward, according to the Federal Reserve Bank of Cleveland Inflation Nowcasting model, the headline CPI is expected at +7.0% yoy in December and the core at +5.3% yoy.

Euro area GDP in Q3 was largely unrevised in the final estimate, as expected

The 3rd estimate for euro area GDP growth in Q3:21 (the first including analytical breakdown per expenditure component) came out at +2.2% qoq, largely unchanged from the previous estimate (in line with expectations) and matching the respective outcome in the previous quarter. The annual growth

was +3.9% (+3.7% in the 2nd estimate) from +14.4% yoy in Q2:21 (the deceleration was solely due to unfavorable base effects, as the dampening from the pandemic had peaked in Q2:20, with a sharp rebound taking place in the subsequent quarter). Unsurprisingly, the re-opening of the economies, combined with the particularly high accumulated households' savings (the savings rate, i.e. the gross saving divided by gross disposable income, averaged 20.3% from Q2:20 to Q2:21, compared with a pre-pandemic average of 12.9% since 1999), continued to provide a boost to private consumption for a 2nd consecutive quarter. Indeed, **private consumption** was up sharply by 4.1% qoq (+2.5% yoy), following a +3.9% qoq (+12.2% yoy) in Q2:21 and remained by far the major contributor to headline growth (+2.1 pp). At the same time, **government consumption** was up by 0.3% qoq (+2.6% yoy), contributing 0.1 pp to overall growth. Further 0.3 pps were added by **net exports**, as exports (+1.2% qoq | +9.4% yoy) outpaced imports (+0.7% qoq | +9.7% yoy), with a substantial divergence occurring between the two major product groups. In the event, the international supply chain disruptions and particularly so, the congestion in maritime trade, resulted in both exports and imports of goods declining significantly (-1.0% qoq & -0.9% qoq, respectively). On the other hand, the relaxation of international travel restrictions and more generally the recovery of tourism, resulted in both exports and imports of services rising sharply (+7.3% qoq and +4.9% qoq, respectively). On a negative note, **capital formation** fell by 0.9% qoq (+3.1% yoy), subtracting 0.2 pps from the headline GDP growth, with subdued readings for both residential (-1.2% qoq | +3.7% yoy) and business investment (-0.8% qoq | +2.9% yoy). An important weighing factor for capital formation were the aforementioned supply chain bottlenecks, which were especially evident in the automobiles sector in view of a severe global shortage of semiconductors (investment in transport equipment sharply under-performed, down by 8.6% qoq). Finally, **inventories** posed a modest drag of 0.1 pp in Q3:21.

Japan: Business sentiment remains robust

- The Bank of Japan's quarterly Tankan survey that assesses business conditions, pointed to largely stable confidence among manufacturers compared with three months ago, at solid levels, while a substantial improvement was recorded for some services providers.** Specifically, the headline business conditions index for large manufacturers was unchanged at +18 in December (the highest since Q4:18), slightly below consensus estimates for +19. At the same time, the index for large non-manufacturers was up by +7 pts to +9, considerably above expectations for 6. The aforementioned improvement was led by Accommodations, Eating & Drinking Services in view of the pandemic situation having improved substantially compared with three months ago, albeit confidence in the sector remains relatively subdued. Regarding respondents' outlook for activity for three months ahead, the respective index for manufacturers was slightly down, by 1 pt to +13 (consensus: 19) and was up by 5 pts to +8 among non-manufacturers (consensus: +10). Finally, note that companies' fixed investment plans (including all surveyed large enterprises | excluding software and R&D investment) for the fiscal year 2021 (i.e. April 2021-March 2022) were moderately revised down compared with the previous survey, by 0.8 pps to +9.3% yoy (software: +12.3% yoy | R&D: +5.4% yoy).

Equities

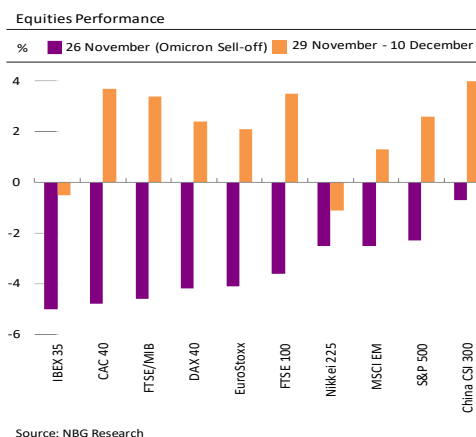
- Global equity markets rebounded in the past week, recovering from the significant declines of late-November, due to the SARS-Cov-2 Omicron variant.** The MSCI ACWI ended the past week up by 3% wow (+16% ytd), with Developed Markets (+3.3% wow | +19% ytd) overperforming their Emerging Markets peers (+1.1% wow | -4% ytd). In the US, the S&P500 rose by 3.8% wow (+26% ytd), posting its largest weekly increase since early-February, while also recording a new all-time high (4712). The positive sentiment was supported by US Chief Medical Advisor, Dr. A. Fauci, comments that the Omicron variant is almost certainly not more severe than Delta. Moreover, the announcement by Pfizer and BioNTech that preliminary laboratory studies indicate that 3 doses of their Covid-19 vaccine still provide effective protection against Omicron contributed to the upside. Sector-wise, all industry groups ended the week with gains, with IT leading the increase (+6% wow), while Apple overperformed (+10.9% wow), recording new all-time highs (\$179), being less than 2% away from becoming the world's first company to reach the \$3 tn in market value milestone. Meanwhile, the Russell 1000 rose by 3.7% wow (+23% ytd), posting its highest weekly increase since February and overperforming its small-cap peer, Russell 2000 (+2.4% wow | +12% ytd) for the 5th consecutive week. On the other side of the Atlantic, the EuroStoxx index rose by 2.6% in the past week (+18% ytd), with the Travel & Leisure sector overperforming (+4.8% wow).

Fixed Income

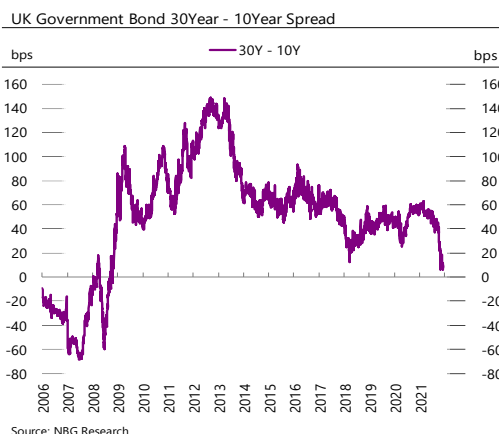
- Government bond nominal yields were mixed in the past week.** In the US, the 10-year yield ended the week up by 15 bps wow to 1.58%, recording its largest weekly increase since early-January, supported by the investors' reduced risk aversion and rising expectations that the Federal Reserve (Fed) will accelerate its QE tapering pace at its next meeting. On the contrary, in the UK, the 10-year yield fell by 6 bps wow to 0.74%, due to significantly reduced expectations that the Bank of England will increase its official Bank rate in its next meeting (December 16th) with markets now forecasting a rate hike in February. The 30-year yield fell by less (-2 bps to 0.86%), resulting in the flattening of the curve, which was close to inversion intra-week, with the UK 10s30s spread declining to 6 bps on Wednesday, recording its lowest level since October 2008. In Germany, the 10-year Bund yield ended the week broadly stable at -0.34%, ahead of the European Central Bank next meeting (December 16th) and possible announcement regarding the future of its QE programmes (PEPP and APP). The ECB is unlikely to risk an unwarranted tightening of financial conditions via a QE cliff edge past March 2022. Recall that net asset purchases have been €96 bn per month on average since April 2021, while a sole reliance on APP purchases (as currently configured) past March 2022, would suggest a monthly pace of €20 bn. Thus, the ECB will likely proceed with a gradual reduction in the monthly pace of net asset purchases via higher APP purchases or a hybrid model. Recall that under the PEPP, c. €35 bn of Greece's Government debt securities (non eligible for participation in the APP) have been bought (as of end-November 2021).

FX and Commodities

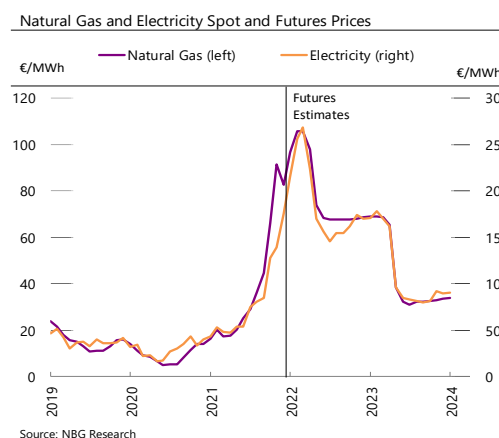
- In foreign exchange markets,** the British Pound ended the week broadly stable, nevertheless it recorded its lowest level since November 2020 against the US dollar on Thursday (\$1.321), following the announcement of new restrictive measures amid concerns over the spread of the Omicron variant and declining expectations that the Bank of England will increase its Bank Rate in the upcoming (December 16th) meeting. **Finally, in commodities, oil prices rose significantly in the past week,** following 6 consecutive weeks with losses, due to eased concerns regarding Omicron impact on future oil demand and a decline of US oil inventories (-0.2 million barrels to 433 million barrels for the week ending December 3rd). Specifically, the WTI ended the week up by 8.2% to \$71.7/barrel and the Brent by 7.5% to \$75.2/barrel.



Graph 1.



Graph 2.



Graph 3.

Quote of the week: "Monetary policy must not be held hostage by fiscal or financial dominance – that is, even if financial markets have become more sensitive to changes in policy, central banks need to find ways to secure price stability without jeopardising financial stability.", **Member of the Executive Board of the ECB, Isabel Schnabel, December 8th 2021.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	December 10th	3-month	6-month	12-month	Official Rate (%)	December 10th	3-month	6-month	12-month
Germany	-0.34	0.00	0.10	0.20	Euro area	0.00	0.00	0.00	0.00
US	1.49	1.70	1.80	2.00	US	0.25	0.25	0.50	1.00
UK	0.74	0.96	1.03	1.10	UK	0.10	0.22	0.30	0.50
Japan	0.05	0.08	0.10	0.13	Japan	-0.10	-0.10	-0.10	-0.10

Currency	December 10th	3-month	6-month	12-month	December 10th	3-month	6-month	12-month	
EUR/USD	1.13	1.13	1.13	1.14	USD/JPY	113	113	113	112
EUR/GBP	0.85	0.85	0.85	0.85	GBP/USD	1.33	1.33	1.32	1.33
EUR/JPY	128	127	127	127					

Forecasts at end of period

Economic Forecasts

United States	2019a	Q1:20a	Q2:20a	Q3:20a	Q4:20a	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21f	2021f
Real GDP Growth (YoY) (1)	2.3	0.6	-9.1	-2.9	-2.3	-3.4	0.5	12.2	4.9	5.6	5.7
Real GDP Growth (QoQ saar) (2)	-	-5.1	-31.2	33.8	4.5	-	6.3	6.7	2.0	7.6	-
Private Consumption	2.2	-6.9	-33.4	41.4	3.4	-3.8	11.4	12.0	1.6	7.3	8.1
Government Consumption	2.2	3.7	3.9	-2.1	-0.5	2.5	4.2	-2.0	0.8	3.7	0.9
Investment	3.2	-2.3	-30.4	27.5	17.7	-2.7	13.0	3.3	-0.8	3.9	7.9
Residential	-0.9	20.4	-30.7	59.9	34.4	6.8	13.3	-11.7	-7.7	-2.9	8.9
Non-residential	4.3	-8.1	-30.3	18.7	12.5	-5.3	12.9	9.2	1.8	6.5	7.6
Inventories Contribution	0.1	-1.0	-4.6	6.6	1.4	-0.6	-3.7	-1.7	1.9	1.4	-0.2
Net Exports Contribution	-0.2	0.1	1.4	-5.6	-2.4	-0.2	-2.0	-0.4	-1.4	-0.5	-1.8
Exports	-0.1	-16.3	-59.9	54.5	22.5	-13.6	-2.9	7.6	-2.5	5.4	3.9
Imports	1.2	-13.1	-53.1	89.2	31.3	-8.9	9.3	7.1	6.0	6.0	13.4
Inflation (3)	1.8	2.1	0.3	1.2	1.3	1.2	1.9	4.9	5.4	5.6	4.5

Euro Area	2019a	Q1:20a	Q2:20a	Q3:20a	Q4:20a	2020a	Q1:21a	Q2:21a	Q3:21a	Q4:21f	2021f
Real GDP Growth (YoY)	1.6	-3.0	-14.5	-4.0	-4.4	-6.5	-1.2	14.2	3.7	5.0	5.1
Real GDP Growth (QoQ saar)	-	-13.2	-39.1	60.9	-1.7	-	-1.2	8.7	9.3	3.7	-
Private Consumption	1.4	-16.0	-42.4	71.6	-11.8	-8.0	-8.8	14.5	13.9	7.1	3.2
Government Consumption	1.8	-0.4	-10.5	24.3	2.8	1.4	-1.9	5.0	2.5	2.0	3.5
Investment	6.4	-16.9	-58.4	68.4	11.5	-7.5	-0.2	4.5	9.7	6.0	5.2
Inventories Contribution	-0.1	1.4	-0.9	-6.4	2.5	-0.5	3.7	-0.9	-0.3	-0.3	0.4
Net Exports Contribution	-0.8	-1.9	1.9	10.2	-0.5	-0.4	0.4	0.2	-0.2	-1.3	1.2
Exports	2.5	-13.8	-56.0	84.6	17.4	-9.3	4.5	11.1	5.6	6.0	9.8
Imports	4.6	-10.7	-59.5	56.2	20.6	-9.2	4.2	11.8	6.6	9.6	7.9
Inflation	1.2	1.1	0.2	0.0	-0.3	0.3	1.0	1.8	2.9	3.7	2.4

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"> + Massive Fiscal loosening will support the economy + 2021 EPS growth expectations have further room to increase + Share buybacks could resume - Peaking profit margins - High market cap concentration - P/Es (Valuations) approaching dot-com levels <p>● Neutral/Positive</p>	<ul style="list-style-type: none"> + Still high equity risk premium relative to other regions + Modest fiscal loosening in 2021 + 2021 EPS estimates remain pessimistic - Political uncertainty (Italy, German Elections) could intensify - Logistic disruptions (vaccine) and renewed lockdowns delay the recovery <p>● Neutral</p>	<ul style="list-style-type: none"> + Still aggressive QE and "yield-curve" targeting by the BoJ - Signs of policy fatigue regarding structural reforms and fiscal discipline - Strong appetite for foreign assets - JPY appreciation in a risk-off scenario could hurt exporters <p>● Neutral</p>	<ul style="list-style-type: none"> + 65% of FTSE100 revenues from abroad + Undemanding valuations in relative terms - Elevated Policy uncertainty to remain <p>● Neutral/Negative</p>
Government Bonds	<ul style="list-style-type: none"> + Valuations appear rich with term-premium below 0% + Sizeable fiscal deficit + Underlying inflation pressures under Average Inflation Targeting - Global search for yield by non-US investors continues - Safe haven demand - Fed to remain at ZLB in 2021 - Fed: Unlimited QE purchases <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> + Valuations appear excessive compared with long-term fundamentals - Political Risks - Fragile growth outlook - Medium-term inflation expectations remain low - ECB QE net purchases - 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"> + Elevated Policy uncertainty to remain + Inflation expectations could drift higher due to supply disruptions post Brexit - The BoE is expected to remain on hold with risks towards rate cuts - Slowing economic growth post-Brexit <p>▲ Slightly higher yields expected</p>
Foreign Exchange	<ul style="list-style-type: none"> + Safe-haven demand - Fed's interest rate differential disappeared following cuts to 0%-0.25% - Global political uncertainty to decline <p>● Broadly Flat EUR against the USD</p>	<ul style="list-style-type: none"> + Reduced short-term tail risks + Current account surplus - Sluggish growth - Deflation concerns - The ECB's monetary policy to remain extra loose (Targeted-LTROs, Quantitative Easing) <p>● Broadly Flat 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>▲ Higher GBP expected</p>

Equity Markets (in local currency)

Developed Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Emerging Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
US	S&P 500	4712	3.8	25.5	28.5	50.0	MSCI Emerging Markets	70597	1.1	-1.5	1.2	
Japan	NIKKEI 225	28438	1.5	3.6	6.3	21.6	MSCI Asia	1083	1.4	-3.8	-0.8	
UK	FTSE 100	7292	2.4	12.9	10.5	1.0	China	86	1.8	-19.8	-17.6	
Canada	S&P/TSX	20891	1.2	19.8	18.7	23.3	Korea	919	1.5	-0.8	4.6	
Hong Kong	Hang Seng	23996	1.0	-11.9	-9.1	-9.9	MSCI Latin America	92898	1.6	-7.0	-4.3	
Euro area	EuroStoxx	468	2.6	17.7	19.3	17.7	Brazil	315658	2.1	-15.5	-12.7	
Germany	DAX 40	15623	3.0	13.9	17.5	18.8	Mexico	47935	1.4	17.9	19.3	
France	CAC 40	6992	3.3	25.9	26.0	19.3	MSCI Europe	6890	-2.2	14.8	16.0	
Italy	FTSE/MIB	26722	3.0	20.2	21.9	15.4	Russia	1503	-4.2	13.7	14.2	
Spain	IBEX-35	8360	1.4	3.5	2.2	-11.0	Turkey	2270199	7.4	34.2	45.1	

World Market Sectors (MSCI Indices)

in US Dollar terms		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	in local currency		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
Energy		175.7	2.9	36.1	27.2	-6.8	Energy		179.3	2.7	38.6	28.7
Materials		348.8	3.3	9.4	11.9	32.2	Materials		332.0	3.1	13.2	14.8
Industrials		345.8	2.7	13.7	15.3	26.4	Industrials		342.6	2.6	17.6	18.5
Consumer Discretionary		441.4	2.3	17.1	21.8	63.5	Consumer Discretionary		427.3	2.3	20.1	24.4
Consumer Staples		283.9	3.5	7.3	8.7	14.8	Consumer Staples		283.1	3.4	10.1	10.9
Healthcare		354.3	3.0	13.4	14.8	30.6	Healthcare		348.8	2.9	15.6	16.6
Financials		147.6	2.2	23.6	26.1	20.6	Financials		147.3	2.0	26.5	28.3
IT		573.7	5.3	29.3	35.5	92.3	IT		556.1	5.3	30.7	36.7
Telecoms		106.4	2.7	13.1	14.6	39.8	Telecoms		111.3	2.6	14.5	15.8
Utilities		157.9	2.5	2.9	5.3	8.5	Utilities		161.5	2.4	5.5	7.5

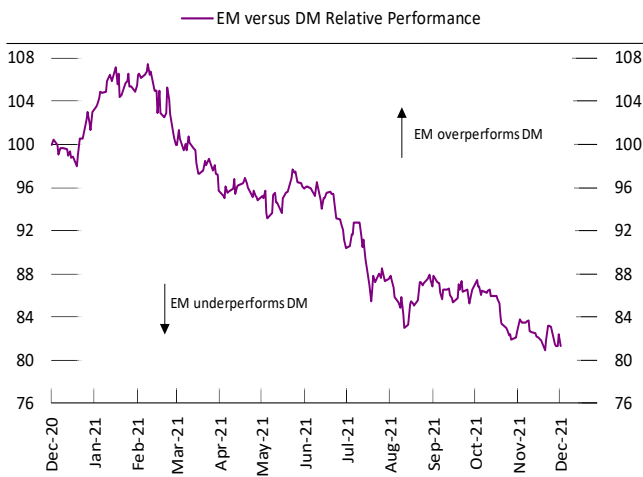
Bond Markets (%)

10-Year Government Bond Yields		Current	Last week	Year Start	One Year Back	10-year average	Government Bond Yield Spreads (in bps)		Current	Last week	Year Start	One Year Back
US		1.49	1.34	0.92	0.91	2.03	US Treasuries 10Y/2Y		79	74	80	75
Germany		-0.34	-0.34	-0.56	-0.58	0.51	US Treasuries 10Y/5Y		23	23	53	39
Japan		0.05	0.05	0.02	0.02	0.26	Bunds 10Y/2Y		36	39	16	19
UK		0.74	0.80	0.20	0.21	1.44	Bunds 10Y/5Y		24	25	18	20
Greece		1.35	1.20	0.62	0.57	7.63	Corporate Bond Spreads (in bps)		Current	Last week	Year Start	One Year Back
Ireland		0.05	0.07	-0.31	-0.30	1.97	EM Inv. Grade (IG)		143	153	163	166
Italy		0.95	0.94	0.45	0.47	2.46	EM High yield		674	723	524	548
Spain		0.35	0.37	0.04	0.04	2.10	US IG		100	103	103	111
Portugal		0.30	0.29	0.03	-0.02	3.34	US High yield		329	356	386	408
US Mortgage Market (1. Fixed-rate Mortgage)		Current	Last week	Year Start	One Year Back	10-year average	Euro area IG		99	104	93	93
30-Year FRM¹ (%)		3.30	3.31	2.90	2.90	4.00	Euro area High Yield		342	358	355	353
vs 30Yr Treasury (bps)		138.4	160.6	126.2	126.2	125.7						

Foreign Exchange & Commodities

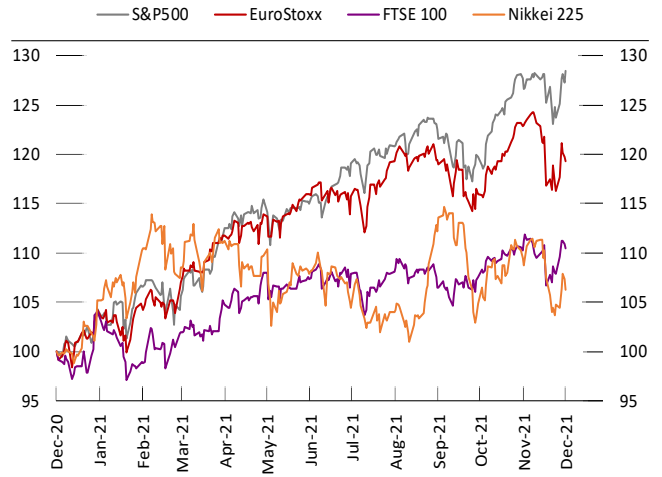
Foreign Exchange		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Commodities		Current	1-week change (%)	1-month change (%)	1-Year change (%)
Euro-based cross rates							Agricultural		442	0.1	0.8	32.7
EUR/USD		1.13	0.2	-1.9	-6.8	-7.6	Energy		243	6.5	-10.3	52.5
EUR/CHF		1.04	0.4	-1.3	-3.2	-3.7	West Texas Oil (\$/bbl)		72	8.2	-11.9	53.2
EUR/GBP		0.85	0.1	0.0	-6.5	-4.5	Crude Brent Oil (\$/bbl)		75	7.5	-9.1	49.6
EUR/JPY		128.22	0.4	-2.3	1.3	1.5	HH Natural Gas (\$/mmbtu)		3.9	3.6	-13.9	60.2
EUR/NOK		10.12	-2.3	2.1	-4.7	-3.4	TTF Natural Gas (EUR/mwh)		106	18.2	50.8	580.7
EUR/SEK		10.24	-1.0	2.6	0.0	1.9	Industrial Metals		476	0.5	0.2	21.1
EUR/AUD		1.58	-1.9	0.7	-2.3	-0.6	Precious Metals		2328	-0.1	-4.3	-3.3
EUR/CAD		1.44	-0.4	0.3	-6.8	-7.8	Gold (\$)		1783	0.0	-3.6	-2.9
USD-based cross rates							Silver (\$)		22	-1.3	-9.6	-7.3
USD/CAD		1.27	-0.6	2.2	0.0	-0.2	Baltic Dry Index		3272	3.2	14.4	181.8
USD/AUD		1.39	-2.1	2.6	4.8	7.6	Baltic Dirty Tanker Index		785	6.5	-5.8	82.6
USD/JPY		113.43	0.2	-0.4	8.6	9.9						

EM vs DM Performance in \$



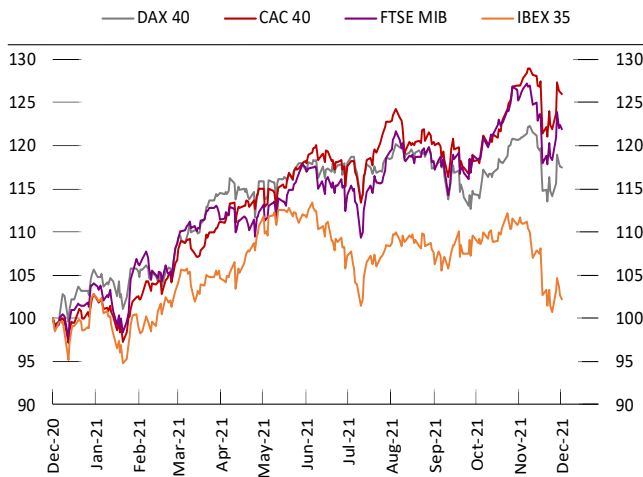
Data as of December 10th – Rebased @ 100

Equity Market Performance - G4



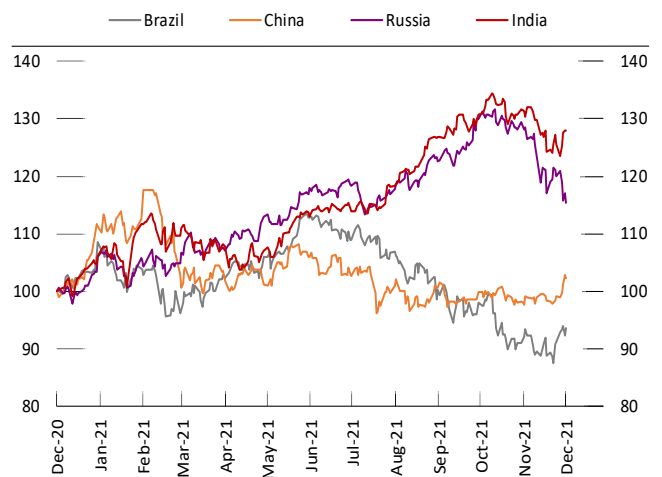
Data as of December 10th – Rebased @ 100

Equity Market Performance – Euro Area G4



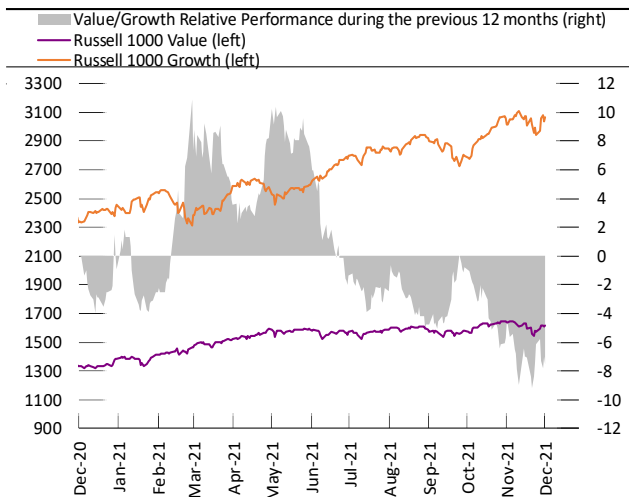
Data as of December 10th – Rebased @ 100

Equity Market Performance - BRICs



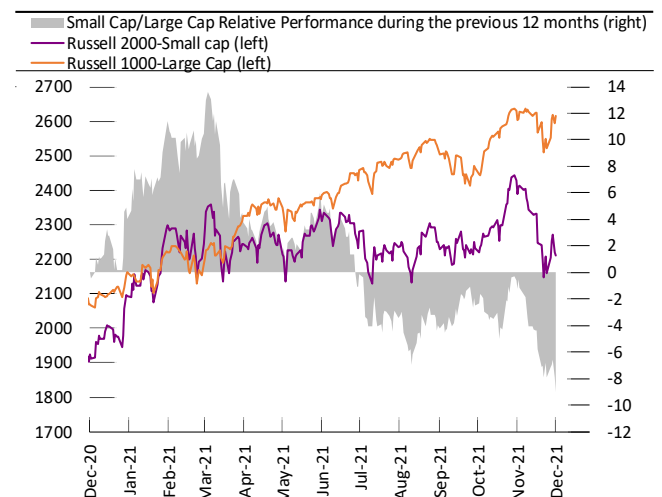
Data as of December 10th – Rebased @ 100

Russell 1000 Value & Growth Index



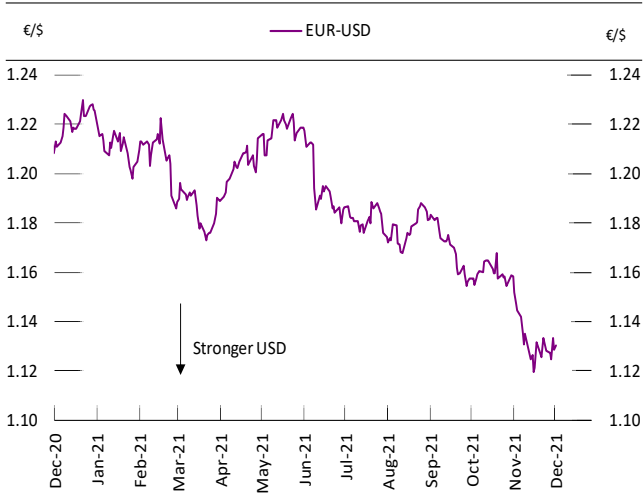
Data as of December 10th

Russell 2000 & Russell 1000 Index



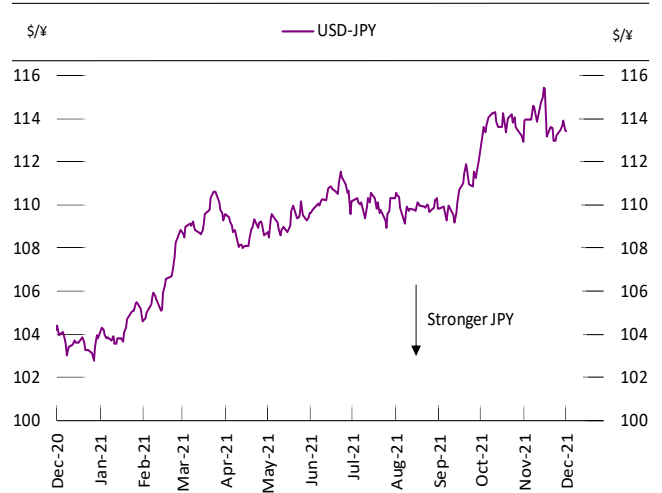
Data as of December 10th

EUR/USD



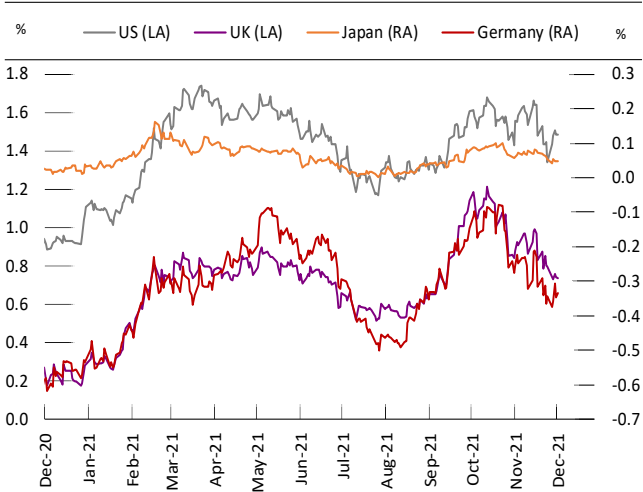
Data as of December 10th

JPY/USD



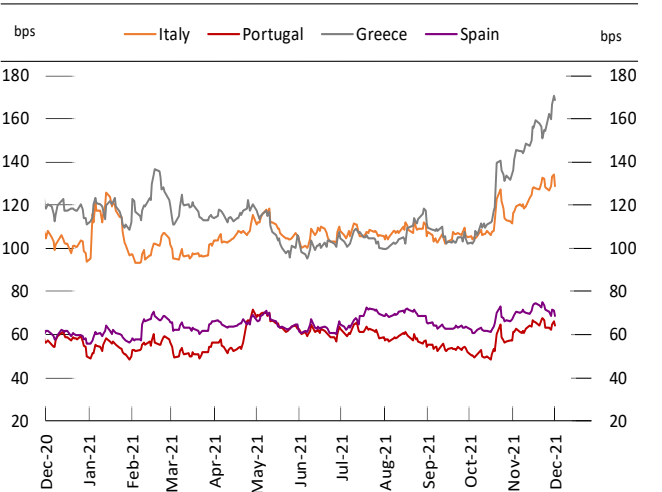
Data as of December 10th

10- Year Government Bond Yields



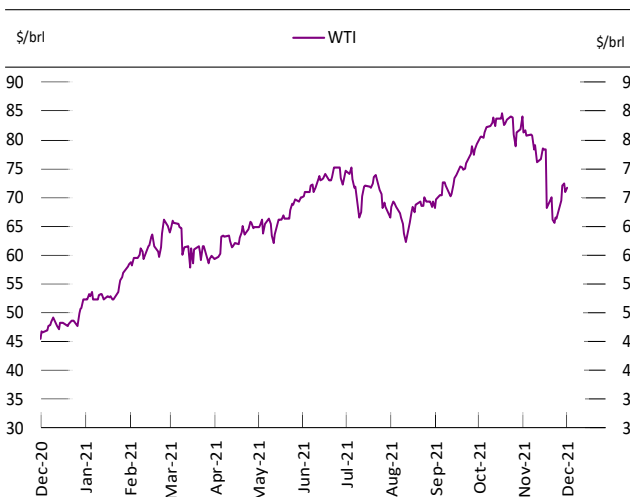
Data as of December 10th
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



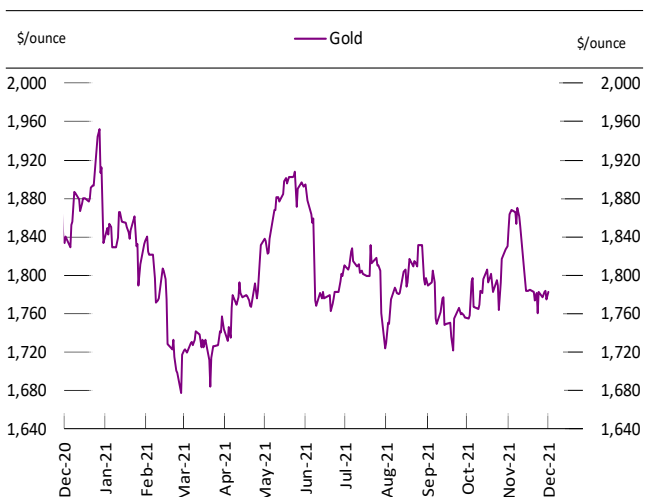
Data as of December 10th

West Texas Intermediate (\$/bbl)



Data as of December 10th

Gold (\$/ounce)



Data as of December 10th

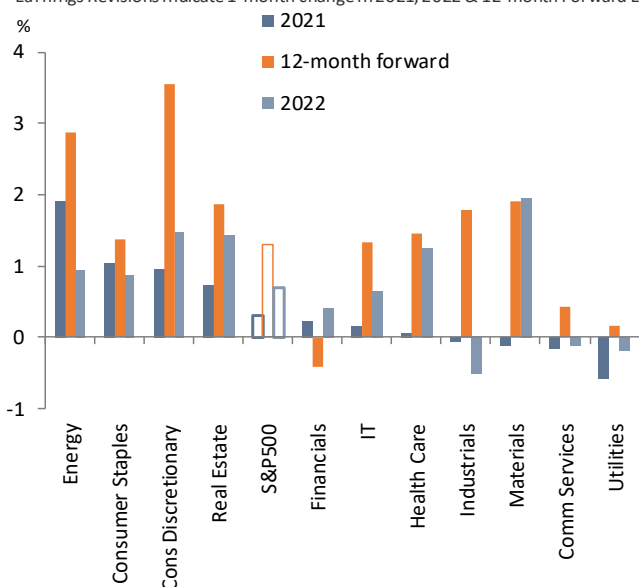
US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	10/12/21	% Weekly Change	%YTD	2021	2022	2021	2022	2021	2022	12m fwd	10Yr Avg	2021	2022	Current	10Yr Avg
S&P500	4712	3.8	25.5	48.1	8.7	1.3	1.4	23.2	21.3	21.4	16.8	4.9	4.4	4.4	2.9
Energy	431	3.7	50.5	N/A	27.1	4.1	4.0	N/A	11.3	11.5	15.2	1.9	1.8	1.8	1.7
Materials	553	3.5	21.3	86.3	3.2	1.7	1.8	17.0	16.5	16.6	15.9	3.3	3.0	3.0	2.6
Financials															
Diversified Financials	1086	3.5	33.2	59.0	-6.4	1.3	1.4	15.9	17.0	16.9	14.6	2.2	2.1	2.1	1.6
Banks	423	1.7	33.8	89.5	-15.2	2.2	2.5	11.0	12.9	12.8	11.3	1.4	1.3	1.3	1.0
Insurance	538	2.6	25.8	31.4	2.7	2.2	2.2	13.8	13.5	13.5	11.5	1.7	1.5	1.6	1.2
Real Estate	307	2.7	34.6	15.1	6.9	2.3	2.6	24.7	23.1	23.2	18.7	4.0	4.2	4.2	3.3
Industrials															
Capital Goods	888	3.1	16.8	55.5	20.7	1.5	1.6	24.2	20.0	20.3	16.9	5.3	4.9	4.9	3.8
Transportation	1103	3.2	18.5	N/A	140.7	1.2	1.4	N/A	19.2	N/A	11.4	7.0	6.2	6.3	3.9
Commercial Services	542	2.7	28.7	19.3	11.0	0.9	1.0	32.9	29.6	29.8	21.0	6.9	6.3	6.3	3.7
Consumer Discretionary															
Retailing	4302	1.9	20.7	26.1	14.0	0.5	0.5	39.8	34.9	35.2	26.1	15.6	12.9	13.0	8.6
Consumer Services	1469	6.3	11.4	N/A	1482.9	0.9	1.0	N/A	31.5	N/A	28.1	25.0	20.8	21.0	9.5
Consumer Durables	540	1.8	22.5	57.5	14.2	1.1	1.2	19.0	16.6	16.7	17.4	4.7	4.1	4.1	3.4
Automobiles and parts	195	1.7	48.7	98.8	14.4	0.0	0.2	50.5	44.2	N/A	13.9	9.2	7.7	7.8	2.5
IT															
Technology	3409	9.2	35.3	46.2	6.0	0.7	0.7	28.1	26.5	26.6	14.8	18.5	16.6	16.7	5.9
Software & Services	3933	5.8	27.7	21.9	14.2	0.7	0.7	36.7	32.1	32.4	20.5	11.5	10.2	10.2	6.0
Semiconductors	2628	2.0	48.6	37.4	7.5	1.0	1.0	25.6	23.8	23.9	15.3	8.2	7.2	7.2	3.7
Communication Services	266	2.9	20.0	38.7	7.4	0.8	0.8	22.2	20.7	20.8	18.8	4.3	3.8	3.9	3.1
Media	1084	3.6	26.8	54.6	10.0	0.2	0.2	26.5	24.1	24.2	22.1	5.6	4.9	4.9	3.6
Consumer Staples															
Food & Staples Retailing	684	4.4	20.1	20.8	7.5	1.4	1.5	24.4	22.7	22.8	17.9	5.5	4.9	5.0	3.5
Food Beverage & Tobacco	779	3.0	7.2	11.8	4.8	3.2	3.4	18.9	18.0	18.1	18.2	5.4	5.1	5.1	5.1
Household Goods	929	3.9	9.7	3.9	6.8	2.0	2.2	28.1	26.3	26.4	20.9	11.3	10.8	10.8	6.4
Health Care															
Pharmaceuticals	1227	1.1	14.6	26.2	4.4	1.8	2.0	15.6	14.9	14.9	15.2	6.3	5.2	5.2	4.1
Healthcare Equipment	1928	5.9	22.3	20.6	5.4	1.0	1.0	21.6	20.5	20.5	16.5	4.3	3.9	3.9	2.9
Utilities	349	2.6	9.5	1.9	5.2	3.0	3.1	21.0	20.0	20.0	16.9	2.2	2.1	2.1	1.7

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

1-month revisions to 2021, 2022 & 12-month Forward EPS

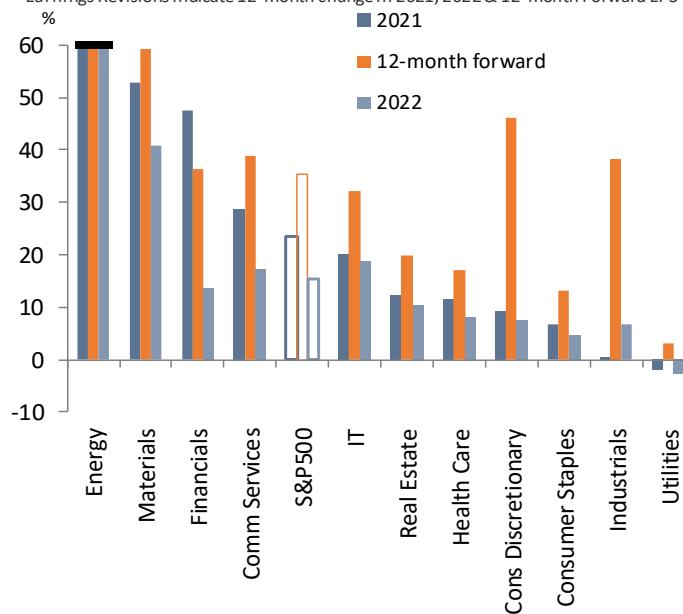
Earnings Revisions indicate 1-month change in 2021, 2022 & 12-month Forward EPS



Data as of December 10th
12-month forward EPS are 6% of 2021 EPS and 94% of 2022 EPS

12-month revisions to 2021, 2022 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2021, 2022 & 12-month Forward EPS



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12-month forward EPS are 6% of 2021 EPS and 94% of 2022 EPS
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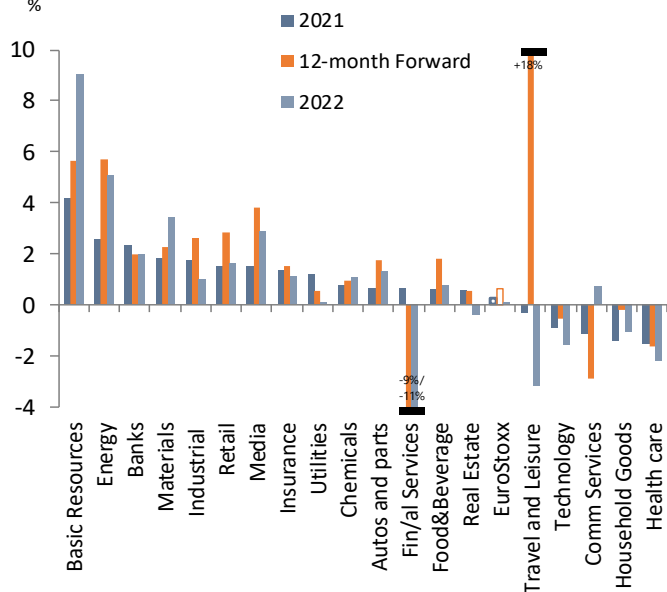
Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	10/12/21	% Weekly Change	%YTD	2021	2022	2021	2022	2021	2022	12m fwd	10Yr Avg	2021	2022	Current	10Yr Avg
EuroStoxx	468	2.6	17.7	75.8	6.8	2.5	2.8	17.0	15.9	15.9	14.3	2.0	1.8	1.9	1.5
Energy	286	2.9	13.2	462.0	12.4	4.9	5.1	10.9	9.7	9.7	13.1	1.3	1.2	1.2	1.2
Materials	1020	3.0	17.9	155.2	-9.7	2.4	2.5	13.0	14.4	14.4	15.7	2.2	2.0	2.0	1.7
Basic Resources	237	2.4	13.8	N/A	N/A	2.6	2.8	N/A	5.3	5.3	12.0	0.9	0.8	0.8	0.7
Chemicals	1489	3.1	18.3	57.5	-0.7	2.4	2.5	19.1	19.2	19.2	16.5	2.7	2.6	2.6	2.3
Financials															
Fin/al Services	556	1.7	13.3	35.0	8.3	2.4	2.6	15.8	14.6	14.6	14.4	1.4	1.3	1.3	1.2
Banks	97	2.0	31.2	97.8	-0.2	5.6	6.0	8.4	8.4	8.4	9.9	0.7	0.6	0.6	0.7
Insurance	297	1.4	13.6	45.5	4.6	5.2	5.5	9.9	9.5	9.5	9.5	0.9	0.9	0.9	0.9
Real Estate	223	0.8	1.1	3.6	10.9	3.5	3.9	18.7	16.9	17.0	16.8	0.9	0.9	0.9	1.0
Industrial	1138	3.7	16.3	29.2	22.2	1.7	2.0	24.7	20.2	20.4	17.0	3.6	3.2	3.3	2.6
Consumer Discretionary															
Media	282	2.7	28.9	1.4	14.1	1.8	2.0	25.9	22.7	22.9	16.8	6.1	5.5	5.5	2.1
Retail	697	1.5	5.0	65.3	16.7	2.2	2.6	29.4	25.2	25.5	23.3	5.8	5.3	5.3	4.4
Automobiles and parts	646	4.7	28.1	675.3	7.4	4.2	4.5	7.4	6.9	6.9	7.9	1.1	1.0	1.0	1.0
Travel and Leisure	185	4.8	-13.4	N/A	N/A	0.7	1.5	N/A	N/A	N/A	N/A	2.6	2.4	2.4	2.1
Technology	955	1.6	33.2	39.9	13.0	0.6	0.7	32.4	28.7	28.9	20.9	5.0	4.5	4.6	3.6
Communication Services	282	2.3	14.1	27.6	-29.5	3.9	4.1	10.4	14.8	14.6	14.1	1.4	1.4	1.4	1.7
Consumer Staples															
Food&Beverage	561	2.8	7.7	35.9	14.4	1.5	1.9	24.3	21.3	21.5	19.8	2.6	2.4	2.4	2.6
Household Goods	1539	3.0	26.4	61.6	12.4	1.0	1.1	39.8	35.4	35.7	24.5	7.7	6.8	6.8	3.9
Health care	907	3.2	11.6	11.0	6.1	1.9	2.0	20.4	19.2	19.3	16.5	2.7	2.5	2.5	2.3
Utilities	379	2.2	-0.3	32.1	4.4	4.3	4.6	15.1	14.4	14.5	13.5	1.8	1.7	1.7	1.2

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1-month revisions to 2021, 2022 & 12-month Forward EPS

Earnings Revisions indicate 1-month change in 2021, 2022 & 12-month Forward EPS %



Data as of December 10th
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