

## The US Dollar has appreciated strongly against the euro in November (+3%)

- President Biden re-nominated Jerome Powell for a second four-year term as Chair of the Federal Reserve Board, nominating also Lael Brainard to serve as the Vice-Chair. Both are expected to win Senate confirmation. Having said that, the Fed's expected monetary policy stance in 2022 will be mainly driven by the data (inflation, labor market).
- Since the beginning of the year, the USD has appreciated by 8% against the EUR to \$1.124, at the highest level since July 2020 (+3% in November).
- We identify three factors behind the significant USD appreciation month-to-date. First, markets have brought forward the start of the Fed hiking cycle from H2:2022 to June next year. As a result, interest rate differentials have supported the USD.
- The spread of 2Y1Y EUR versus USD interest rate swaps (a proxy for market pricing of central bank interest rates on a two year horizon), has widened by circa 50 basis points to -176 bps since July (see graph). Financial markets assign a small likelihood for the ECB to turn more hawkish.
- Historically, the USD has strengthened before the first interest rate increase by the Fed. Considering the last four Fed hiking cycles, starting in 1994, 1999, 2004 and 2015, USD appreciated by circa 4%, on average, seven months before the first hike and 2% three months before (see graph).
- Second, US economic data surprises (i.e. retails sales, see Economics) turned positive for the first time in 4 months in November, while European data have been lukewarm, excluding the positive PMI outcome today. US real GDP growth is expected to be strong in Q4, according to the Atlanta FED GDPNowcast model (+8% qoq saar).
- Third, Covid developments remain a downside risk for euro area growth and the EUR, as cases are rising across many economies and several countries have begun to tighten restrictions (Austria). These developments have weighed on EUR in the short term, although the impact on FX tends to fade when Covid-19 curves show signs of flattening.
- Investors' USD net positioning based on CFTC future contracts has increased, albeit it has not moved yet into (USD) overbought territory. Positioning could move higher in the coming weeks, favoring a long USD (see graph 3, page 3).
- In the short-term, the Fed is likely to turn more hawkish on December 15<sup>th</sup> due to accelerating inflationary pressures, with market pricing following suit and interest rate differentials remaining in favor of the USD. Deteriorating economic activity, as Covid-19 cases continue to surge across Europe (see graph 2, page 3), remains a key headwind for the EUR.
- Having said that, adverse pandemic developments, which could lead to a re-imposition of containment measures across the region, led equities lower in the past week. Specifically, the EuroStoxx index fell by 0.3% and further by 0.3% on Monday (+21% ytd). The Travel & Leisure sector underperformed declining by -4.7% wow (-1.1% on Monday).

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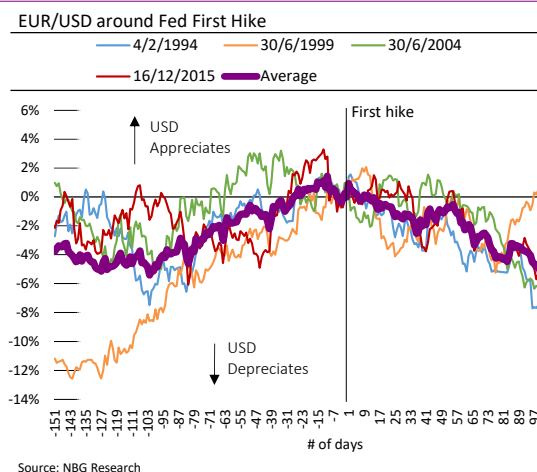
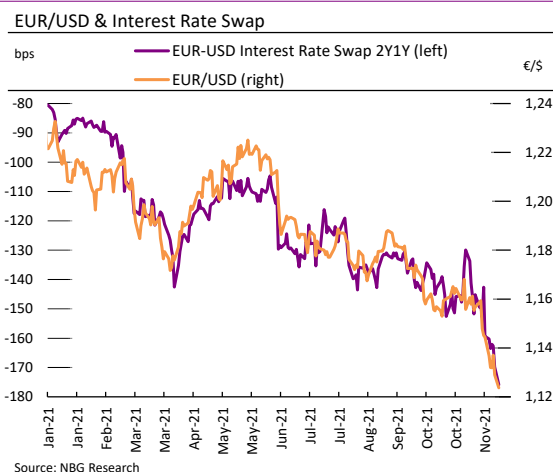
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Charts of the week



## US retail sales surprised to the upside for a 2<sup>nd</sup> consecutive month in October

- **Nominal retail sales increased by 1.7% mom (seasonally adjusted) in October, above consensus estimates for +1.4% mom.** At the same time, the outcome in September was slightly revised upwards, by 0.1 pp to +0.8% mom. Importantly, as far as the annual pace of growth for retail sales is concerned, it came out at +16.3%, from +14.3% in September. Apart from the aforementioned solid sequential momentum, the figure remained boosted by favorable base effects.
- To discount for these effects, we note that the annualized rate of growth of retail sales compared with the same month two years ago, stood at a still particularly robust +10.7% in September, from +10.0% in September.
- Note that retail sales mainly include sales of goods (with a total weight of c. 89%), whereas spending on services consists c. 2/3 of overall private consumption. As a result, attention now turns to the personal spending data for October (+0.6% on a monthly basis | +10.9% yoy in September, in nominal terms), due on November 24<sup>th</sup>.

## US industrial production fully recovered in October after a sharp fall in September due to Hurricane Ida

- **US industrial production rose by 1.6% mom, from -1.3% mom in September, considerably above consensus estimates for +0.8% mom.** Note that the substantial swing in the past two months was in a big part related to Hurricane Ida. In the event, according to the Federal Reserve, half of the gain in October reflected a recovery from the effects of Hurricane Ida. The annual pace of growth was +5.1% (from +4.6% in September), with favorable base effects remaining. Discounting for these effects, we note that the annualized rate of growth of industrial production, compared with the same month two years ago, stood at +0.1% from -1.1% in September. The increase of industrial production in October was broad based. Indeed, utilities output rose by +1.2% mom after having fallen by 3.7% mom in the previous month, when demand for cooling had eased after a particularly warm August. Mining output also rose, by 4.1% mom (-2.3% mom in September due to disruptions stemming from Hurricane Ida in the Gulf of Mexico), mostly on the back of a sharp increase (+5.1% mom) for oil & gas extraction.
- Importantly, manufacturing production (76% of total) increased by 1.2% mom in October (+4.5% yoy), following a -0.7% mom in September (+4.7% yoy), overshooting consensus estimates for +0.7% mom. Apart from a recovery from Hurricane-related disruptions during September, October's outcome also benefitted from a substantial increase (+17.8% mom) in the production of motor vehicles. That development was likely related to a loosening of pandemic related restrictions in southeast Asia, a pivotal region in the global supply chain of semiconductors. Even so, recall that the fallout in the production of motor vehicles compared with January 2021 was still substantial in October (-12%), as shortages in the global supply of semiconductors remain.

## Euro area employment posted a solid increase for a 2<sup>nd</sup> consecutive quarter in Q3:2021

- **According to the preliminary estimate, total employment in the euro area (number of persons employed) increased by 0.9% qoq in Q3:21, following an also strong +0.7% qoq in Q2:21.** As a result, the annual pace of growth accelerated to +2.0% from +1.9% previously. In all, euro area employment in Q3:21 had risen by 2.9% since its trough in Q2:20, with the fallout from pre-pandemic levels (Q4:19) at just -0.3%. Recall that emergency measures from governments (subsidizing and supporting the extension of job retention schemes mainly in the form of short-time work and temporary furloughs), prevented a sharper fall of headline employment at the onset on of the pandemic (-3.1% from Q4:19 to Q2:20), albeit total hours worked, had fallen by 18% in the same period.

## UK inflation accelerated sharply in October

- **Headline CPI came out at +4.2% yoy in October, from +3.1% yoy in September.** Recall that a substantial acceleration was expected, *inter alia*, due to an increase (by 12%) in the energy price cap from the Great Britain's independent energy regulator Office of Gas and Electricity Markets (Ofgem | the price cap limits the rates which suppliers can charge for their default tariffs). Nevertheless, the latest outcome for the headline CPI considerably exceeded consensus estimates for +3.8% yoy, as well as the respective ones (+3.9% yoy) from the Bank of England (BoE | November Monetary Policy Report). In all, the aforementioned increase in Ofgem's price cap, alongside strong base effects and solid sequential momentum, resulted in the energy component recording a +22.3% yoy in October from +9.5% yoy in September, representing the major contributor to the acceleration of the annual growth of the headline CPI. Meanwhile, the annual pace of growth for prices of food, alcoholic beverages & tobacco, was little changed in October, at +1.4% yoy from +1.3% in September.
- Importantly, core CPI (i.e. excluding the two aforementioned components), demonstrated a robust momentum in October (+0.7% mom versus a 20-year average of +0.2% mom) and, as a result, the annual growth accelerated substantially, by 0.5 pps to +3.4%, above expectations for +3.1%. Notably, prices of second-hand cars increased by 4.6% mom (+22.8% yoy). Reportedly, that development is linked, *inter alia*, to the global shortage of semiconductors which limits the production of new cars. Consequently, consumers have increasingly turned to the used cars market.
- Looking forward, a further acceleration for the headline CPI is expected in November, to +4.5% yoy according to BoE (November Monetary Policy Report). The latest data on pipeline price pressures corroborate that view. In the event, Producer Price Inflation (PPI) surged in October, with both price indices of materials and fuels purchased by UK manufacturers (PPI input | +13.0% yoy from +11.9% yoy in September) and factory gate prices (PPI output | +8.0% yoy from +7.0% yoy in September), accelerating sharply.
- In all, the BoE places the peak of CPI inflation in April 2022 (at c. 5.0% yoy), while a gradual deceleration is anticipated thereafter, as international supply disruptions ease, global demand rebalances and energy prices stop rising.

## Equities

- Global equity markets were mixed in the past week, with concerns for renewed lockdowns in Europe, weighing on investors' sentiment.** The MSCI ACWI ended the past week modestly down, by 0.3% w/w, while also entering the current one in the red (-0.6% on Monday | +16% ytd). Emerging Markets (-1.3% w/w | -1.7% ytd) underperformed their Developed Markets peers (-0.1% w/w | +20% ytd) in the past week, with Alibaba's weaker than expected Q3:2021 results (the stock of Alibaba Group Holding Ltd fell by 14% w/w), *inter alia*, weighing on Chinese bourses (MSCI China: -2.1% w/w | -16% ytd). In the US, the S&P500 held its ground, finding support from positive economic data in the past week (-0.3% w/w | +25% ytd), albeit entering the current week on a negative note (-0.3% on Monday). Regarding the Q3:2021 earnings season, out of the 480 companies that have reported results, so far, circa 82% have exceeded analyst estimates, with the total earnings growth rate for the third quarter at +41% yoy. On the other side of the Atlantic, the EuroStoxx index fell by 0.3% in the past week and further by 0.3% on Monday November 22<sup>nd</sup> (+21% ytd). Travel & Leisure (-4.7% w/w and further -1.1% on Monday) underperformed, due to the momentum towards tighter pandemic-related restrictions. Banks fell by 4.3% in the past week, although recouping a part of their losses on Monday (+0.8%), in tandem with the movements in government bond yields (see below).

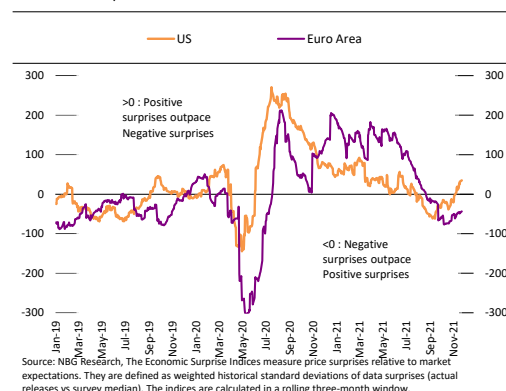
## Fixed Income

- Government bond nominal yields fell in the past week, in view of weaker economic growth expectations.** In the 10-year tenor, the US Treasury yield ended the week down by 5 bps w/w to 1.54% and the yield on its Bund peer fell by 8 bps w/w to -0.32%. On Monday (November 22<sup>nd</sup>) though, the US Treasury 10-year yield rose by 9 bps to 1.63%, after US President Biden announced that he would reappoint Mr. Powell as Chair of the Federal Reserve ("Fed"), cementing markets' expectations regarding the Fed's tightening cycle. Other prominent government bonds followed suit on Monday, with Germany's Bund 10-year yield up by 2 bps to -0.30%. Euro area periphery government bond yields tracked core markets. Specifically, in Italy the 10-year yield fell by 8 bps in the past week, before rising by 7 bps on Monday, to 0.94%. In Spain, it decreased by 8 bps w/w before a +2 bps on Monday, to 0.40%. Finally, in Greece it declined by 5 bps in the past week and rose modestly by 1 bp on Monday, to 1.18%. **Corporate bond spreads widened in the past week.** Specifically, US high yield spreads increased by 15 bps to 324 bps, while their EUR counterparts ended the week up by 4 bps to 334 bps. In the Investment Grade spectrum, the EUR spreads increased by 7 bps to 99 bps, while their USD counterparts rose by 3 bps to 94 bps.

## FX and Commodities

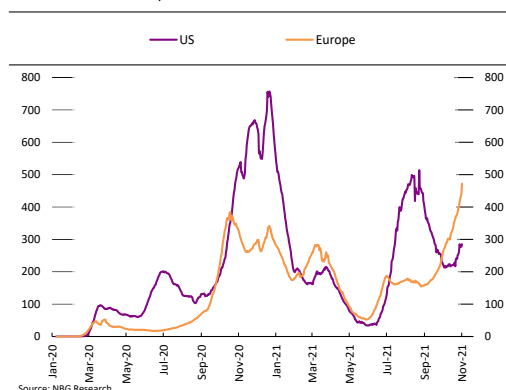
- In foreign exchange markets, the euro lost ground in the past week, with monetary policy divergence against major peers and economic growth concerns due to the ongoing deterioration of epidemiological data, weighing.** Overall, the euro ended the week down by 1.1% w/w against the US Dollar and further by 0.6% on Monday, to \$1.125 (its lowest level since July 2020) and by 1.6% against the British Pound and further by 0.2% on Monday to €0.839 (lowest since February 2020). **Finally, in commodities, oil prices declined in the past week, with pandemic-induced demand concerns** (in view of the prospect of economic growth slowing down due to renewed lockdowns) and reports that major economies are contemplating the release of strategic reserves, more than offsetting a decline of US oil inventories (-2.1 million barrels to 433 million barrels for the week ending November 12<sup>th</sup>). Specifically, the WTI ended the week down by 5.8% to \$76.1/barrel and Brent by 4.0% to \$78.9/barrel.

Economic Surprise Indices



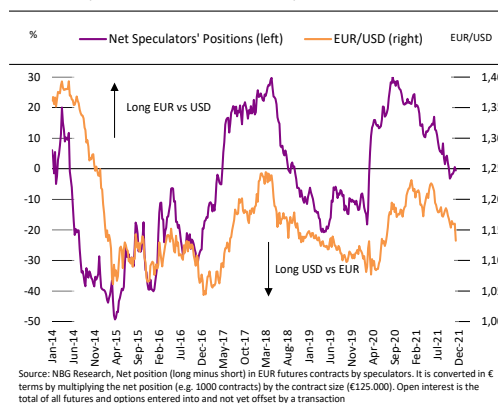
Graph 1.

Covid-19 New Cases per million



Graph 2.

Euro Net Speculators' Positions as % of Open Interest



Graph 3.

**Quote of the week:** "When inflation pressure is expected to fade – as is the case today – it does not make sense to react by tightening policy. The tightening would not affect the economy until after the shock has already passed...the conditions to raise rates are very unlikely to be satisfied next year.", **President of the ECB, Christine Lagarde, November 19<sup>th</sup> 2021.**

### Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	November 19th	3-month	6-month	12-month	Official Rate (%)	November 19th	3-month	6-month	12-month
Germany	-0,32	0,00	0,10	0,20	Euro area	0,00	0,00	0,00	0,00
US	1,54	1,70	1,80	2,00	US	0,25	0,25	0,25	0,50
UK	0,86	0,98	1,01	1,10	UK	0,10	0,22	0,30	0,50
Japan	0,08	0,07	0,11	0,15	Japan	-0,10	-0,10	-0,10	-0,10

Currency	November 19th	3-month	6-month	12-month	November 19th	3-month	6-month	12-month	
EUR/USD	1,13	1,13	1,13	1,14	USD/JPY	114	112	112	111
EUR/GBP	0,84	0,85	0,85	0,86	GBP/USD	1,35	1,32	1,32	1,33
EUR/JPY	129	126	126	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"> <li>+ Massive Fiscal loosening will support the economy</li> <li>+ 2021 EPS growth expectations have further room to increase</li> <li>+ Share buybacks could resume</li> <li>- Peaking profit margins</li> <li>- High market cap concentration</li> <li>- P/Es (Valuations) approaching dot-com levels</li> </ul>	<ul style="list-style-type: none"> <li>+ Still high equity risk premium relative to other regions</li> <li>+ Modest fiscal loosening in 2021</li> <li>+ 2021 EPS estimates remain pessimistic</li> <li>- Political uncertainty (Italy, German Elections) could intensify</li> <li>- Logistic disruptions (vaccine) and renewed lockdowns delay the recovery</li> </ul>	<ul style="list-style-type: none"> <li>+ Still aggressive QE and "yield-curve" targeting by the BoJ</li> <li>- Signs of policy fatigue regarding structural reforms and fiscal discipline</li> <li>- Strong appetite for foreign assets</li> <li>- JPY appreciation in a risk-off scenario could hurt exporters</li> </ul>	<ul style="list-style-type: none"> <li>+ 65% of FTSE100 revenues from abroad</li> <li>+ Undemanding valuations in relative terms</li> <li>- Elevated Policy uncertainty to remain</li> </ul>
	● Neutral/Positive	● Neutral	● Neutral	● Neutral/Negative
Government Bonds	<ul style="list-style-type: none"> <li>+ Valuations appear rich with term-premium below 0%</li> <li>+ Sizeable fiscal deficit</li> <li>+ Underlying inflation pressures under Average Inflation Targeting</li> <li>- Global search for yield by non-US investors continues</li> <li>- Safe haven demand</li> <li>- Fed to remain at ZLB in 2021</li> <li>- Fed: Unlimited QE purchases</li> </ul>	<ul style="list-style-type: none"> <li>+ Valuations appear excessive compared with long-term fundamentals</li> <li>- Political Risks</li> <li>- Fragile growth outlook</li> <li>- Medium-term inflation expectations remain low</li> <li>- ECB QE net purchases</li> <li>- ECB QE "stock" effect</li> </ul>	<ul style="list-style-type: none"> <li>+ Sizeable fiscal deficits</li> <li>+ Restructuring efforts to be financed by fiscal policy measures</li> <li>- Safe haven demand</li> <li>- Extremely dovish central bank</li> <li>- Yield-targeting of 10-Year JGB at around 0%</li> </ul>	<ul style="list-style-type: none"> <li>+ Elevated Policy uncertainty to remain</li> <li>+ Inflation expectations could drift higher due to supply disruptions post Brexit</li> <li>- The BoE is expected to remain on hold with risks towards rate cuts</li> <li>- Slowing economic growth post-Brexit</li> </ul>
	▲ Slightly higher yields expected	▲ Slightly higher yields expected	● Stable yields expected	▲ Slightly higher yields expected
Foreign Exchange	<ul style="list-style-type: none"> <li>+ Safe-haven demand</li> <li>- Fed's interest rate differential disappeared following cuts to 0%-0,25%</li> <li>- Global political uncertainty to decline</li> </ul>	<ul style="list-style-type: none"> <li>+ Reduced short-term tail risks</li> <li>+ Current account surplus</li> <li>- Sluggish growth</li> <li>- Deflation concerns</li> <li>- The ECB's monetary policy to remain extra loose (Targeted-LTROs, Quantitative Easing)</li> </ul>	<ul style="list-style-type: none"> <li>+ Safe haven demand</li> <li>+ More balanced economic growth recovery (long-term)</li> <li>+ Inflation is bottoming out</li> <li>- Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2%</li> </ul>	<ul style="list-style-type: none"> <li>+ Valuations appear undemanding with REER below its 15-year average</li> <li>- Sizeable Current account deficit</li> </ul>
	● Broadly Flat EUR against the USD	● Broadly Flat EUR against the USD	▲ Slightly higher JPY	▲ Higher GBP expected

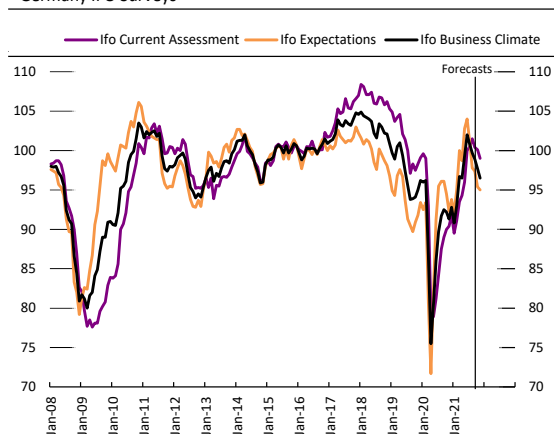
## Economic Calendar

In the US, the minutes of the November 2<sup>nd</sup> – 3<sup>rd</sup> Federal Open Market Committee, in which the commencement of QE tapering was decided, are due on November 24<sup>th</sup>. In addition, the second estimate of GDP for Q3:2021 is released on Wednesday. Consensus expect a modest upward revision to 2.2% qoq annualized from 2% in the previous estimate.

In the Euro area, following the better-than-expected PMI data in November, other prominent business surveys at the country level, include Ifo Institute’s for Germany (24/11) and INSEE’s in France (24/11).

In Japan, PMI data for November are released on Wednesday. PMI manufacturing is expected to decline to 53 from 53,2 in the previous month.

Germany IFO Surveys



Economic News Calendar for the period: November 16 - November 29, 2021

Tuesday 16					Wednesday 17					Thursday 18				
		S	A	P		S	A	P		S	A	P		
<b>US</b>					<b>US</b>					<b>US</b>				
Retail Sales Advance MoM	October	1.2%	+ 1.7%	0.8%	Building permits (k)	October	1630	+ 1650	1586	Initial Jobless Claims (k)	November 13	260	- 268	269
Retail sales ex-autos (MoM)	October	1.0%	+ 1.7%	0.7%	Housing starts (k)	October	1590	- 1520	1530	Continuing Claims (k)	November 6	2120	+ 2080	2209
Industrial Production (MoM)	October	0.8%	+ 1.6%	-1.3%	<b>UK</b>					Philadelphia Fed Business Outlook	November	22.0	+ 39.0	23.8
Net Long-term TIC Flows (\$ bn)	September	..	26.3	79.3	CPI (YoY)	October	3.8%	+ 4.2%	3.1%					
NAHB housing market confidence index	November	80	+ 83	80	Core CPI (YoY)	October	3.1%	+ 3.4%	2.9%					
<b>UK</b>					<b>JAPAN</b>									
ILO Unemployment Rate	September	4.5%	+ 4.3%	4.5%	Exports YoY	October	11.5%	- 9.4%	13.0%					
<b>EURO AREA</b>														
GDP (QoQ)	Q3:21	2.2%	2.2%	2.2%	Imports YoY	October	29.0%	- 26.7%	38.2%					
GDP (YoY)	Q3:21	3.7%	3.7%	3.7%										
Friday 19					Monday 22									
<b>UK</b>					<b>US</b>									
Retail sales Ex Auto MoM	October	0.7%	+ 1.6%	-0.4%	Existing home sales (mn)	October	6.18	+ 6.34	6.29					
<b>JAPAN</b>					<b>EURO AREA</b>									
CPI (YoY)	October	0.2%	- 0.1%	0.2%	Consumer Confidence Indicator	November	-6.0	- -6.8	-4.8					
Core CPI (YoY) - ex. Fresh Food	October	0.2%	- 0.1%	0.1%										
Core CPI (YoY) - ex. Fresh Food and Energy	October	..	-0.7%	-0.5%										
Tuesday 23					Wednesday 24									
<b>US</b>					<b>US</b>					<b>JAPAN</b>				
Markit US Manufacturing PMI	November	59.0	..	58.4	FOMC Minutes	November 3	..	..	2.0%	PMI manufacturing	November	53.0	..	53.2
<b>UK</b>					GDP (QoQ, annualized)					Q3:21				
Markit UK PMI Manufacturing	November	57.1	..	57.8	October	2.2%	..	-1.0%	..	..	..	..	97.7	
Markit/CIPS UK Services PMI	November	58.4	..	59.1	Personal income (MoM)	October	0.3%	..	0.6%	..	..	..	95.4	
<b>EURO AREA</b>					PCE Deflator (YoY)					October				
Markit Eurozone Manufacturing PMI	November	57.3	..	58.3	October	5.1%	..	4.4%	..	..	..	..	100.1	
Markit Eurozone Services PMI	November	53.6	..	54.6	PCE Core Deflator (YoY)	October	4.1%	..	3.6%	..	..	..	..	
Markit Eurozone Composite PMI	November	53.0	..	54.2	November 20	265	..	268	..	..	..	..	..	
					Continuing Claims (k)					November 13				
					New home sales (k)					October				
					Durable goods orders (MoM)					October				
					Durable goods orders ex transportation (MoM)					October				
Thursday 25					Friday 26					Monday 29				
<b>GERMANY</b>					<b>EURO AREA</b>					<b>US</b>				
GDP (QoQ)	Q3:21	1.8%	..	1.8%	M3 money supply (YoY)	October	7.3%	..	7.4%	Pending home sales (MoM)	October	..	..	-2.3%
GDP (wda, YoY)	Q3:21	2.5%	..	2.5%						<b>JAPAN</b>				
Private Consumption (QoQ)	Q3:21	4.6%	..	3.2%						Retail sales (MoM)				
Government Spending QoQ	Q3:21	0.7%	..	1.8%						October				
										Retail sales (YoY)				
										October				
										<b>EURO AREA</b>				
										Business Climate Indicator				
										November				
										Economic confidence indicator				
										November				

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

**Equity Markets** (in local currency)

Developed Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Emerging Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
US	<b>S&amp;P 500</b>	4698	0.3	25.1	31.2	51.1	<b>MSCI Emerging Markets</b>		72071	-0.9	0.5	6.7
Japan	<b>NIKKEI 225</b>	29746	0.5	8.4	16.0	28.5	<b>MSCI Asia</b>		1107	-0.7	-1.7	4.4
UK	<b>FTSE 100</b>	7224	-1.7	11.8	14.0	-0.5	China		91	-2.1	-15.9	-13.9
Canada	<b>S&amp;P/TSX</b>	21555	-1.0	23.6	27.5	26.8	Korea		898	0.3	-3.0	12.3
Hong Kong	<b>Hang Seng</b>	25050	-1.1	-8.0	-5.0	-6.8	<b>MSCI Latin America</b>		90798	-2.7	-9.1	-0.2
Euro area	<b>EuroStoxx</b>	483	-0.3	21.6	25.8	21.6	Brazil		304784	-2.8	-18.5	-9.1
Germany	<b>DAX 40</b>	16160	0.4	17.8	23.5	22.8	Mexico		47040	-1.4	15.7	21.4
France	<b>CAC 40</b>	7112	0.3	28.1	29.9	20.7	<b>MSCI Europe</b>		7176	-2.4	19.5	30.1
Italy	<b>FTSE/MIB</b>	27337	-1.4	23.0	26.9	17.1	Russia		1602	-2.9	21.3	31.5
Spain	<b>IBEX-35</b>	8753	-3.6	8.4	10.4	-5.1	Turkey		1975252	7.3	16.8	26.8

**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 (%)
<b>Energy</b>		171.5	-4.1	32.8	42.2	-9.2	<b>Energy</b>		174.3	-4.0	34.8	42.0
<b>Materials</b>		349.7	-1.7	9.7	18.9	34.0	<b>Materials</b>		331.9	-1.4	13.2	20.3
<b>Industrials</b>		350.9	-1.0	15.3	18.6	28.6	<b>Industrials</b>		347.3	-0.7	19.2	21.0
<b>Consumer Discretionary</b>		460.9	2.7	22.3	31.8	72.5	<b>Consumer Discretionary</b>		446.1	2.9	25.3	34.1
<b>Consumer Staples</b>		280.3	-1.0	5.9	8.0	14.2	<b>Consumer Staples</b>		279.1	-0.8	8.5	9.2
<b>Healthcare</b>		355.5	-0.8	13.8	18.6	33.8	<b>Healthcare</b>		349.9	-0.6	16.0	19.8
<b>Financials</b>		149.3	-2.6	25.0	33.2	23.1	<b>Financials</b>		148.7	-2.3	27.6	34.0
<b>IT</b>		573.8	1.9	29.4	40.0	94.3	<b>IT</b>		556.1	2.0	30.7	40.9
<b>Telecoms</b>		110.3	-1.2	17.2	23.7	46.5	<b>Telecoms</b>		115.3	-1.1	18.7	24.7
<b>Utilities</b>		155.0	0.1	1.1	2.5	6.9	<b>Utilities</b>		158.3	0.4	3.5	3.7

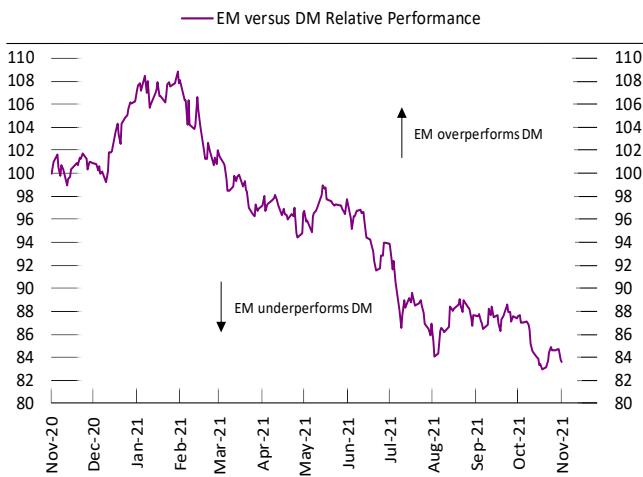
**Bond Markets (%)**

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		1.54	1.58	0.92	0.85	2.04	<b>US Treasuries 10Y/2Y</b>		99	104	80	66	
Germany		-0.32	-0.25	-0.56	-0.56	0.52	<b>US Treasuries 10Y/5Y</b>		33	34	53	35	
Japan		0.08	0.07	0.02	0.02	0.27	<b>Bunds 10Y/2Y</b>		46	50	16	18	
UK		0.86	0.91	0.20	0.32	1.45	<b>Bunds 10Y/5Y</b>		31	31	18	19	
Greece		1.16	1.21	0.62	0.69	7.80	<b>Corporate Bond Spreads (in bps)</b>		Current		Last week	Year Start	One Year Back
Ireland		0.13	0.17	-0.31	-0.26	2.02			<b>EM Inv. Grade (IG)</b>	144	145	163	173
Italy		0.87	0.95	0.45	0.55	2.50			<b>EM High yield</b>	680	702	524	614
Spain		0.38	0.46	0.04	0.07	2.13			<b>US IG</b>	94	91	103	116
Portugal		0.30	0.38	0.03	0.03	3.41			<b>US High yield</b>	324	309	386	448
<b>US Mortgage Market (1. Fixed-rate Mortgage)</b>		Current	Last week	Year Start	One Year Back	10-year average			<b>Euro area IG</b>	99	92	93	96
<b>30-Year FRM<sup>1</sup> (%)</b>		3.20	3.16	2.90	2.99	4.01	<b>Euro area High Yield</b>	334	330	355	391		
<b>vs 30Yr Treasury (bps)</b>		126.9	117.4	126.2	141.1	125.6							

**Foreign Exchange & Commodities**

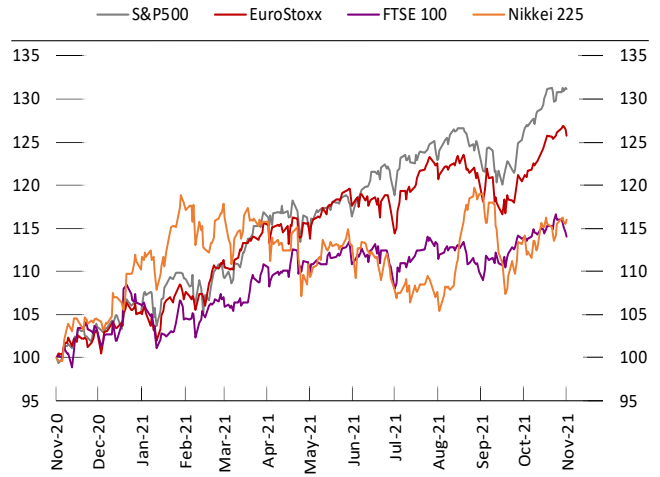
Foreign Exchange		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Commodities		Current	1-week change (%)	1-month change (%)	1-Year change (%)
<b>Euro-based cross rates</b>							<b>Agricultural</b>		449	0.4	6.8	33.3
EUR/USD		1.13	-1.1	-2.8	-4.4	-7.5	<b>Energy</b>		258	-3.8	-9.0	80.6
EUR/CHF		1.05	-0.6	-2.1	-2.9	-3.0	<b>West Texas Oil (\$/bbl)</b>		76	-5.8	-9.3	82.3
EUR/GBP		0.84	-1.6	-0.3	-6.1	-6.1	<b>Crude Brent Oil (\$/bbl)</b>		79	-4.0	-8.1	78.5
EUR/JPY		128.87	-1.2	-3.2	4.8	2.0	<b>HH Natural Gas (\$/mmbtu)</b>		5.1	1.9	4.0	131.3
EUR/NOK		10.04	1.0	3.2	-6.1	-4.1	<b>TTF Natural Gas (EUR/mwh)</b>		87	15.1	-6.8	536.8
EUR/SEK		10.10	0.9	0.9	-1.2	0.5	<b>Industrial Metals</b>		484	-0.6	-8.3	32.0
EUR/AUD		1.56	-0.2	0.6	-4.2	-1.6	<b>Precious Metals</b>		2437	-1.0	3.7	-0.3
EUR/CAD		1.43	-0.6	-0.3	-7.6	-8.2	<b>Gold (\$)</b>		1846	-1.0	3.6	-1.1
<b>USD-based cross rates</b>							<b>Silver (\$)</b>		25	-2.7	0.9	2.3
USD/CAD		1.26	0.6	2.6	-3.4	-0.8	<b>Baltic Dry Index</b>		2552	-9.1	-46.3	125.0
USD/AUD		1.38	0.9	3.5	0.2	6.4	<b>Baltic Dirty Tanker Index</b>		780	-5.0	5.0	78.5
USD/JPY		113.87	-0.1	-0.4	9.6	10.3						

### EM vs DM Performance in \$



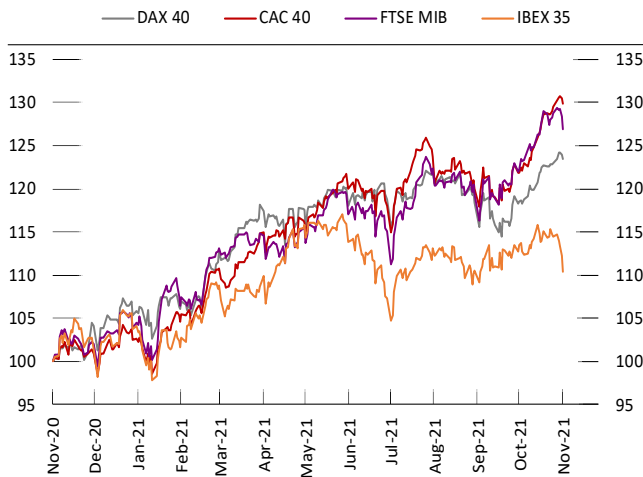
Data as of November 19<sup>th</sup> – Rebased @ 100

### Equity Market Performance - G4



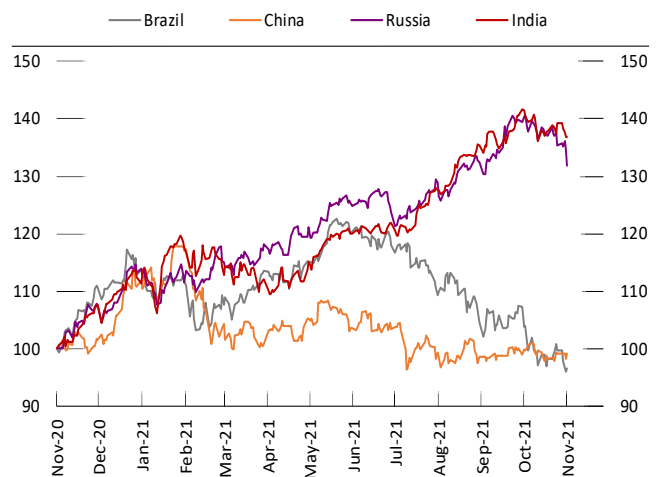
Data as of November 19<sup>th</sup> – Rebased @ 100

### Equity Market Performance – Euro Area G4



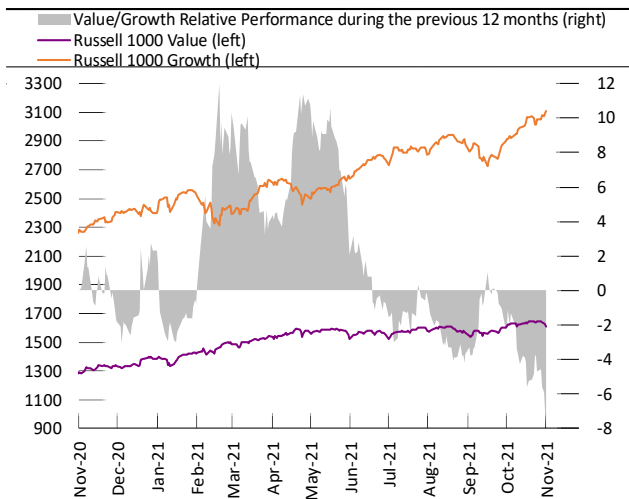
Data as of November 19<sup>th</sup> – Rebased @ 100

### Equity Market Performance - BRICs



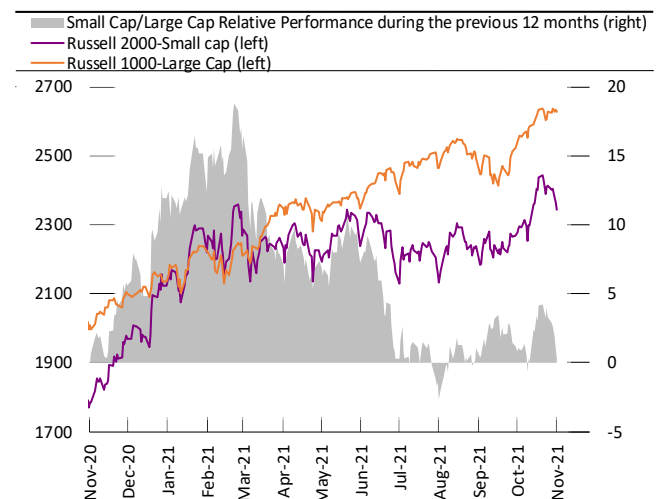
Data as of November 19<sup>th</sup> – Rebased @ 100

### Russell 1000 Value & Growth Index



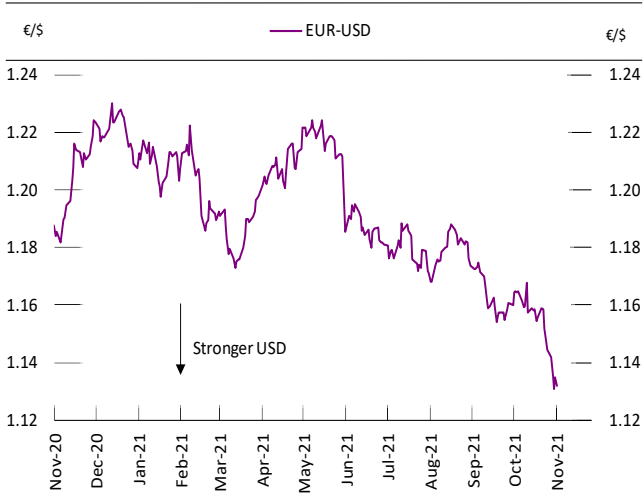
Data as of November 19<sup>th</sup>

### Russell 2000 & Russell 1000 Index



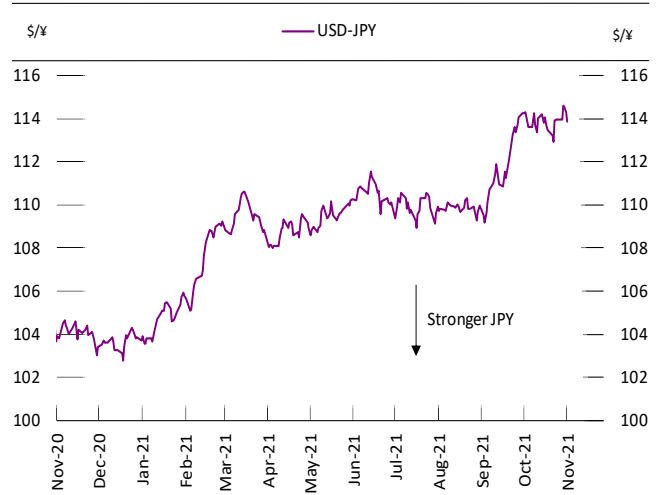
Data as of November 19<sup>th</sup>

EUR/USD



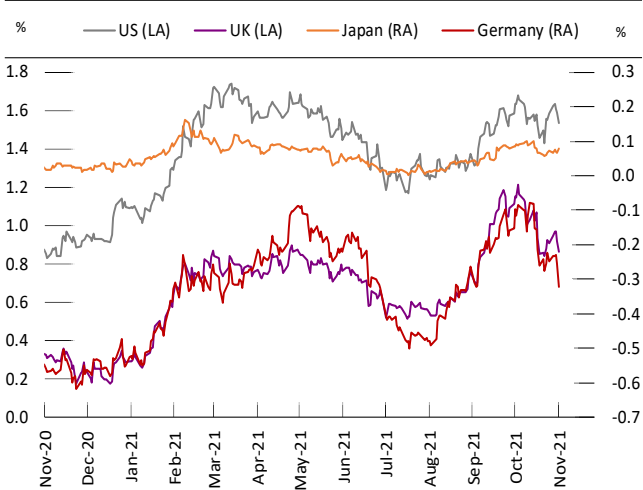
Data as of November 19<sup>th</sup>

JPY/USD



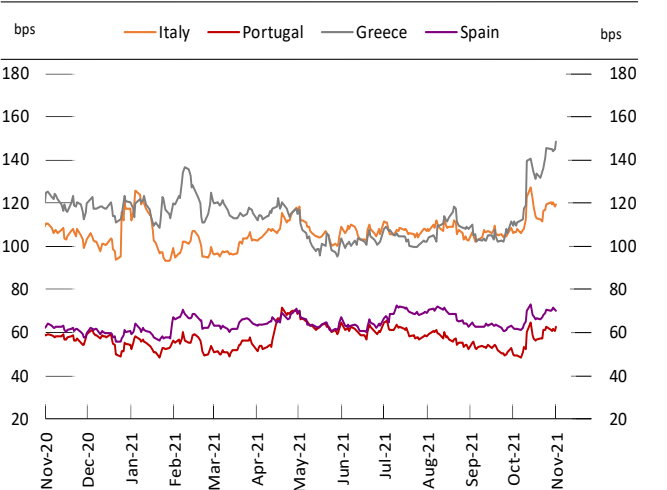
Data as of November 19<sup>th</sup>

10- Year Government Bond Yields



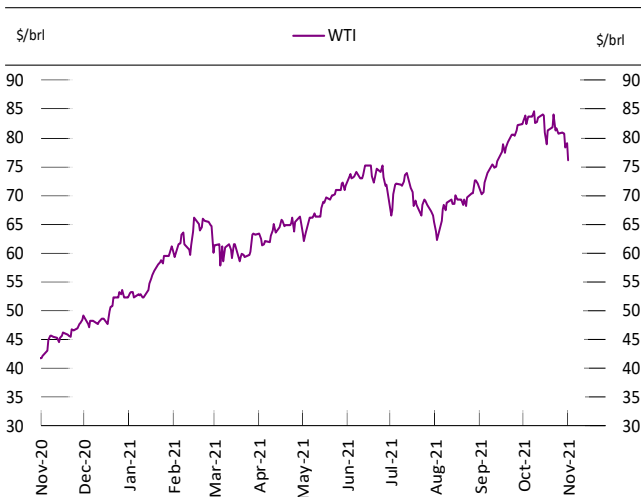
Data as of November 19<sup>th</sup>  
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



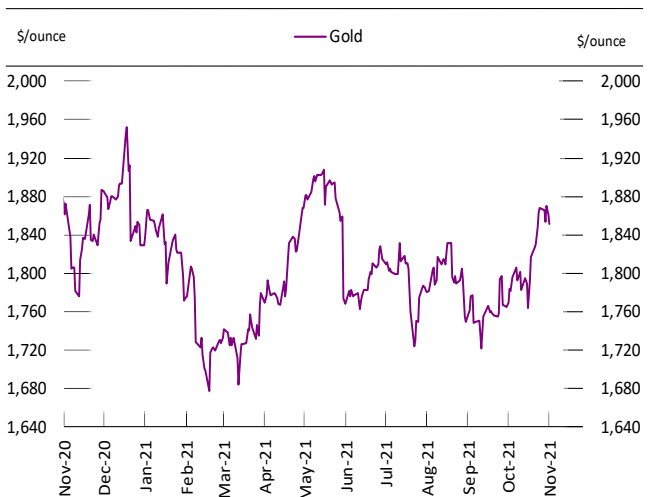
Data as of November 19<sup>th</sup>

West Texas Intermediate (\$/bbl)



Data as of November 19<sup>th</sup>

Gold (\$/ounce)



Data as of November 19<sup>th</sup>



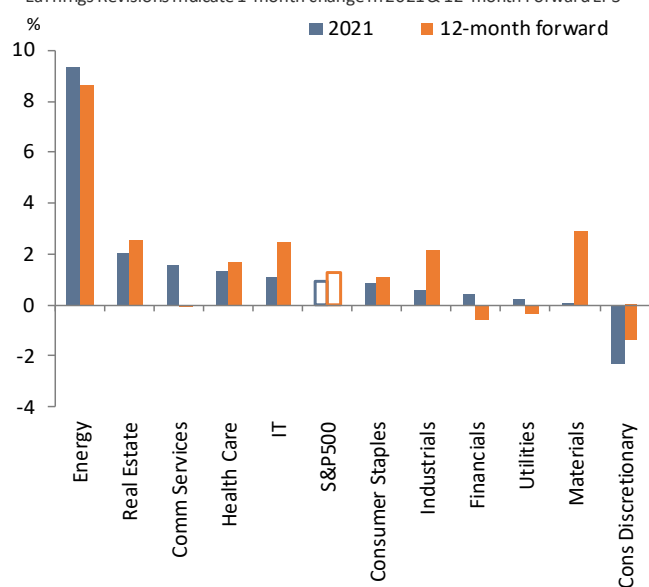
### US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	19/11/21	% Weekly Change	%YTD	2021	2022	2021	2022	2021	2022	12m fwd	10Yr Avg	2021	2022	Current	10Yr Avg
<b>S&amp;P500</b>	4698	0.3	25.1	47.8	8.4	1.3	1.4	23.2	21.4	21.6	16.7	4.9	4.4	4.5	2.9
<b>Energy</b>	412	-5.2	44.0	N/A	28.3	4.3	4.4	N/A	10.7	11.1	15.1	1.8	1.7	1.7	1.7
<b>Materials</b>	554	-2.0	21.6	86.6	1.6	1.7	1.8	17.1	16.8	16.8	15.9	3.3	3.0	3.1	2.6
<b>Financials</b>															
<b>Diversified Financials</b>	1075	-2.6	31.9	58.4	-6.8	1.3	1.4	15.8	17.0	16.8	14.6	2.2	2.1	2.1	1.6
<b>Banks</b>	429	-3.2	35.9	89.2	-15.2	2.2	2.5	11.2	13.2	12.9	11.3	1.4	1.3	1.3	1.0
<b>Insurance</b>	533	-2.3	24.7	31.3	2.9	2.1	2.2	13.7	13.3	13.4	11.4	1.7	1.5	1.6	1.2
<b>Real Estate</b>	301	-0.1	32.1	14.6	6.2	2.4	2.6	24.3	22.9	23.1	18.7	4.0	4.3	4.2	3.3
<b>Industrials</b>															
<b>Capital Goods</b>	897	-1.5	18.0	55.5	20.8	1.5	1.6	24.4	20.2	20.7	16.9	5.6	5.1	5.2	3.8
<b>Transportation</b>	1091	-1.6	17.3	N/A	144.6	1.2	1.4	N/A	18.8	N/A	11.4	7.0	6.1	6.2	3.9
<b>Commercial Services</b>	542	1.4	28.8	19.0	11.0	0.9	1.0	33.0	29.7	30.1	21.0	6.8	6.2	6.3	3.6
<b>Consumer Discretionary</b>															
<b>Retailing</b>	4458	4.2	25.1	26.3	13.5	0.5	0.5	41.2	36.3	36.8	26.0	15.9	13.0	13.3	8.5
<b>Consumer Services</b>	1451	-2.0	10.0	N/A	1297.9	0.9	1.0	N/A	30.9	N/A	27.8	24.5	20.2	20.7	9.4
<b>Consumer Durables</b>	545	2.0	23.6	57.6	13.6	1.1	1.2	19.1	16.8	17.1	17.4	4.7	4.1	4.2	3.4
<b>Automobiles and parts</b>	212	7.7	61.2	97.4	13.9	0.0	0.2	55.2	48.4	N/A	13.7	10.1	8.5	8.6	2.5
<b>IT</b>															
<b>Technology</b>	3091	4.8	22.6	46.2	5.9	0.8	0.8	25.5	24.1	24.2	14.7	17.2	15.4	15.6	5.9
<b>Software &amp; Services</b>	3957	0.1	28.5	21.9	14.4	0.7	0.7	36.9	32.3	32.8	20.4	11.6	10.2	10.3	6.0
<b>Semiconductors</b>	2685	4.5	51.8	37.0	6.6	0.9	1.0	26.2	24.6	24.8	15.2	9.0	7.6	7.7	3.7
<b>Communication Services</b>	275	-1.0	23.9	38.6	7.1	0.8	0.8	23.0	21.5	21.6	18.8	4.4	3.9	4.0	3.1
<b>Media</b>	1120	-0.7	30.9	54.5	9.6	0.2	0.2	27.4	25.0	25.3	22.0	5.8	5.0	5.1	3.6
<b>Consumer Staples</b>															
<b>Food &amp; Staples Retailing</b>	667	-0.8	17.3	19.3	7.2	1.4	1.5	24.2	22.6	22.7	17.8	5.4	4.9	5.0	3.5
<b>Food Beverage &amp; Tobacco</b>	763	-1.8	5.0	11.6	5.2	3.3	3.4	18.5	17.6	17.7	18.2	5.3	5.0	5.0	5.1
<b>Household Goods</b>	890	0.4	5.0	4.0	6.7	2.1	2.3	26.9	25.2	25.4	20.8	10.8	10.3	10.4	6.3
<b>Health Care</b>															
<b>Pharmaceuticals</b>	1225	0.4	14.5	26.1	2.8	1.8	1.9	15.6	15.1	15.2	15.2	6.3	5.2	5.4	4.1
<b>Healthcare Equipment</b>	1881	-2.1	19.3	20.4	5.5	1.0	1.1	21.1	20.0	20.1	16.4	4.2	3.8	3.8	2.9
<b>Utilities</b>	341	0.9	6.8	2.6	4.7	3.1	3.2	20.4	19.5	19.6	16.8	2.1	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 & 12-month Forward EPS

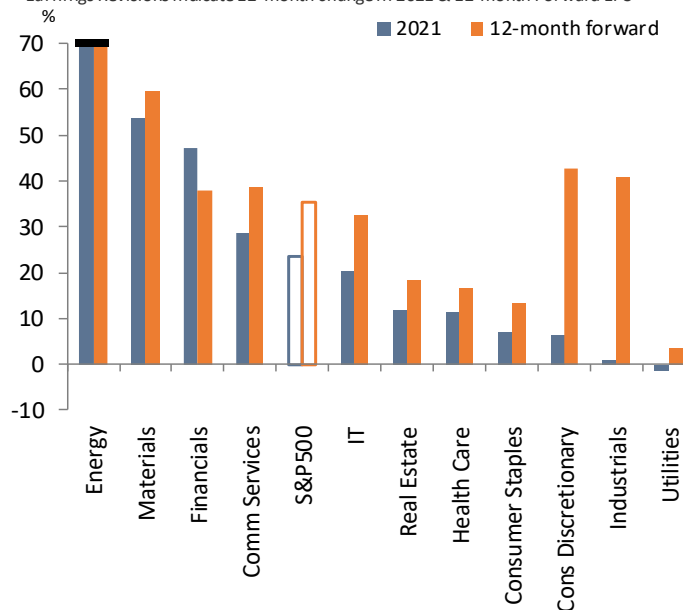
Earnings Revisions indicate 1-month change in 2021 & 12-month Forward EPS



Data as of November 19<sup>th</sup>  
12-month forward EPS are 11% of 2021 EPS and 89% of 2022 EPS

### 12-month revisions to 2021 & 12-month Forward EPS

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



Data as of November 19<sup>th</sup>  
12-month forward EPS are 11% of 2021 EPS and 89% of 2022 EPS

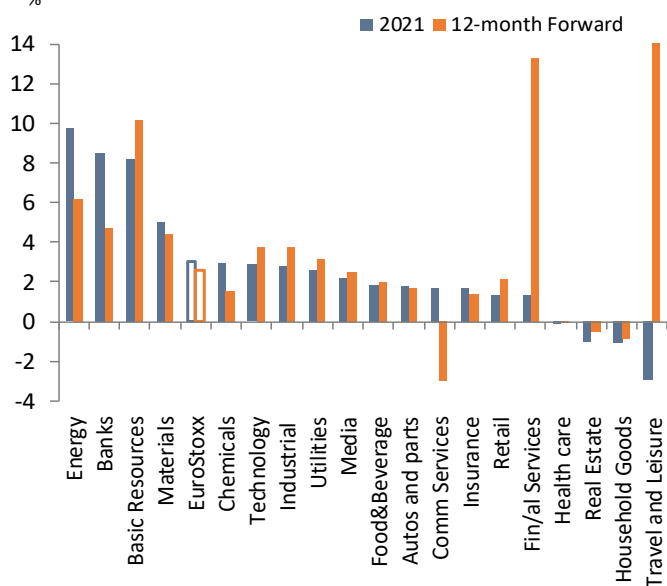
### Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	19/11/21	% Weekly Change	%YTD	2021	2022	2021	2022	2021	2022	12m fwd	10Yr Avg	2021	2022	Current	10Yr Avg
<b>EuroStoxx</b>	483	-0.3	21.6	75.8	6.8	2.4	2.7	17.6	16.5	16.6	14.3	2.0	1.9	1.9	1.5
<b>Energy</b>	281	-3.1	11.2	452.4	9.9	5.0	5.2	10.8	9.9	10.0	13.1	1.3	1.2	1.2	1.2
<b>Materials</b>	1031	-0.6	19.2	156.2	-11.8	2.3	2.5	13.1	14.9	14.7	15.7	2.2	2.0	2.1	1.7
<b>Basic Resources</b>	235	-2.6	13.1	N/A	N/A	2.5	2.8	N/A	5.6	5.4	12.0	0.9	0.8	0.8	0.7
<b>Chemicals</b>	1509	-0.3	19.9	57.2	-0.9	2.3	2.4	19.3	19.5	19.5	16.5	2.8	2.7	2.7	2.3
<b>Financials</b>															
<b>Fin/al Services</b>	582	-1.3	18.6	34.5	20.0	2.3	2.4	16.6	13.8	14.1	14.3	1.8	1.8	1.8	1.2
<b>Banks</b>	100	-4.3	35.0	97.4	-0.9	5.4	5.8	8.6	8.7	8.7	9.8	0.7	0.6	0.6	0.7
<b>Insurance</b>	298	-1.7	14.0	44.2	4.9	5.2	5.5	10.0	9.6	9.6	9.5	0.9	0.9	0.9	0.9
<b>Real Estate</b>	231	0.3	4.9	3.5	12.0	3.4	3.7	19.5	17.4	17.6	16.8	0.9	0.9	0.9	1.0
<b>Industrial</b>	1175	0.5	20.1	29.2	22.7	1.6	2.0	25.5	20.8	21.3	16.9	3.7	3.4	3.4	2.6
<b>Consumer Discretionary</b>															
<b>Media</b>	281	-1.7	28.5	2.0	13.0	1.8	2.0	25.7	22.8	23.1	16.7	6.1	5.4	5.5	2.0
<b>Retail</b>	743	2.8	12.0	66.4	16.2	2.1	2.4	31.2	26.8	27.3	23.3	6.2	5.6	5.7	4.4
<b>Automobiles and parts</b>	663	0.2	31.5	715.6	7.5	3.8	4.2	8.0	7.4	7.5	8.8	1.2	1.0	1.1	1.0
<b>Travel and Leisure</b>	196	-4.7	-8.2	N/A	N/A	0.7	1.4	N/A	N/A	N/A	N/A	2.7	2.7	2.7	2.1
<b>Technology</b>	1036	1.9	44.6	41.6	14.1	0.6	0.7	34.8	30.5	30.9	20.8	5.6	5.0	5.1	3.6
<b>Communication Services</b>	286	-1.3	15.8	29.1	-30.0	3.8	4.1	10.5	15.0	14.4	14.1	1.5	1.5	1.5	1.7
<b>Consumer Staples</b>															
<b>Food&amp;Beverage</b>	571	-0.5	9.8	36.1	14.1	1.5	1.9	24.8	21.7	22.1	19.7	2.6	2.4	2.4	2.6
<b>Household Goods</b>	1600	2.5	31.4	62.3	11.9	1.0	1.1	41.2	36.8	37.3	24.4	7.9	7.0	7.1	3.9
<b>Health care</b>	941	-0.3	15.8	10.6	6.5	1.8	1.9	21.2	19.9	20.1	16.5	2.8	2.6	2.6	2.2
<b>Utilities</b>	377	-0.4	-0.8	31.6	5.5	4.3	4.6	15.0	14.2	14.3	13.5	1.7	1.7	1.7	1.2

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 & 12-month Forward EPS

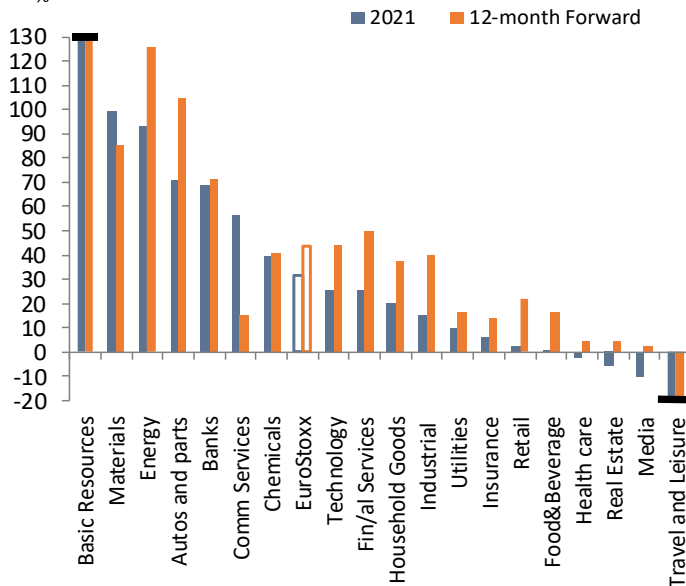
Earnings Revisions indicate 1-month change in 2021 & 12-month Forward EPS %



Data as of November 19<sup>th</sup>  
12-month forward EPS are 11% of 2021 EPS and 89% of 2022 EPS

### 12-month revisions to 2021 & 12-month Forward EPS

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



Data as of November 19<sup>th</sup>  
12-month forward EPS are 11% of 2021 EPS and 89% of 2022 EPS  
National Bank of Greece | Economic Research Division | Global Markets Analysis

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