



## Intra-euro area government bond spreads continue to narrow, reflecting expectations of additional ECB measures in December and defying elevated uncertainty vis-à-vis euro area growth prospects

- Euro area business leading indicators revealed on Monday further signs of contraction in economic activity. The euro area composite index decreased to a six-month low of 45.1 in November – a tad lower than consensus expectations of 45.5 – from 52 in October (see Economics).
- The manufacturing PMI fell by 1.2 pts to a three-month low of 53.6, remaining though above the contraction/expansion threshold of 50 as many businesses remain open and foreign demand (US, Asia) has held well. On a more negative note, the services PMI index declined by 5.6 pts to a six-month low of 41.3 as consumer-driven activity (travel, leisure, hospitality outlets) has been essentially halted in major European economies.
- While the hit to economic activity appears less severe compared with the Spring (see graph below) as lockdown measures are less harsh, Europe's second wave of Covid-19 is still underway and the timeline for the roll-back of containment measures remains unclear. As a result, economic activity is expected to contract in Q4:2020 and early in 2021.
- We expect real GDP growth of -3.4% qoq (-7.7% yoy) in Q4:2020 followed by +0.8% qoq (-3.4% yoy) in Q1:2021. The encouraging vaccine developments (Pfizer, Moderna) point to upside growth risks in Q2-Q4:2021. However, caution is warranted until, *inter alia*, the vaccine is fully rolled out and Europe achieves the desired threshold of herd immunity against Covid-19 (e.g. when the pandemic no longer interrupts economic activity) via massive vaccination. Note that equity markets, as discounting mechanisms, have priced in the positive vaccine news, taking in stride the expected short-term contraction of economic activity.
- Indeed, euro area equity momentum continued in the past week with the Eurostoxx index up by +1.4% (+16% MtD | -4% YtD). Regionally, in the light of positive vaccine news, periphery bourses have overperformed month-to-date (IBEX35: +25%, FTSE/MIB +21%), albeit the performance gap versus the core remains wide at circa 1100 bps year-to-date (see graph below). Valuation expansion has accounted for the majority of the IBEX35 price increase, with the 12-month forward P/E increasing to 21x from 17.8x in late October, whereas 12-month forward EPS revisions is picking up in Italy. Note that financials account for a large share of market cap on both indices (IBEX35:17% and FTSE/MIB 15%, respectively). As a result, both headline periphery indices have found support by the circa 30% rally of the SX7P index month-to-date.
- Regarding sovereign bonds, both ECB President Lagarde and Chief Economist Lane, have mentioned that despite positive vaccine news, monetary policy must respond to prevent the short-term (Q4:2020 & early-2021) economic downturn from inducing persistent damage to the economy. We, and consensus, now expect the ECB to extend its pandemic emergency purchase program (PEPP: €1350billion with a usage of €681bn as of November 20<sup>th</sup> or €76 billion per month since inception) beyond June 2021, increasing at the same time the total envelope of the program.
- Expectations for the continuation of ultra-loose monetary policies by the ECB have sent periphery government bond spreads significantly lower in the past month. The BTP/Bund spread has narrowed by 18bps to circa 110bps – its lowest level since April 2016. (cont'd on page 2)

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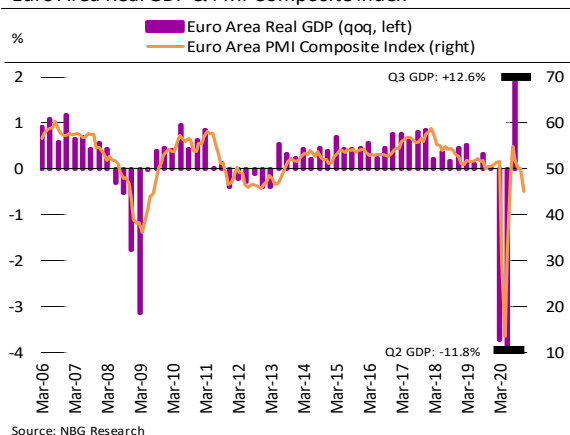
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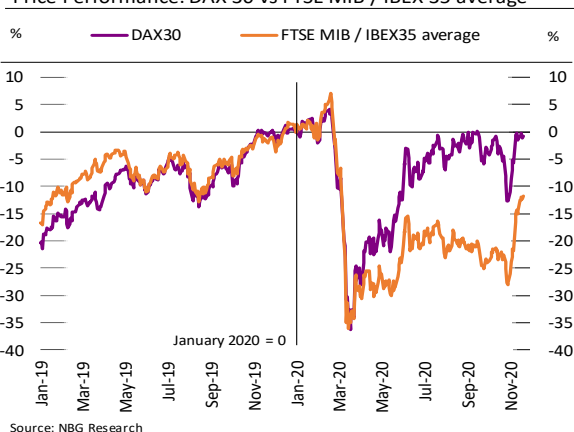
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Charts of the week

Euro Area Real GDP & PMI Composite Index



Price Performance: DAX 30 vs FTSE MIB / IBEX 35 average



... In a similar vein, the GGB/bund spread has declined by 25bps to circa 125bps – its lowest level since September 2009 (see graph page 3).

### **US retail sales undershot expectations in October, with the annual growth of private consumption expenditures remaining in negative territory**

- **Nominal retail sales continued to increase entering Q4, albeit with growth decelerating considerably.** Specifically, in value terms, retail sales were up by 0.3% mom in October (consensus for +0.5% mom), compared with +1.6% mom in September (and +1.4% mom in August). The annual pace of growth came out at +5.7%, versus +5.9% in September (trough of -20% yoy in April 2020, in the midst of the pandemic-related lockdown). Recall that, contrary to the respective trend for retail sales (which mainly include sales of goods), the annual growth of overall private consumption is estimated to remain in negative territory, as it also includes expenditures for services (c. 66% of overall private consumption) which were relatively more heavily weighed down by the pandemic (especially expenditures on transportation, recreation, accommodation, education and personal care). In the event, the annual growth of personal spending in services (in nominal terms) stood at -4.6% in September. Finally, according to consensus estimates for October (the respective data are due on November 25<sup>th</sup>), overall personal spending rose by 0.5% mom, with the annual pace of growth standing at -0.5% yoy. Meanwhile, the University of Michigan's index of consumer sentiment, dropped by 4.8 pts in November, to 77.0 (consensus: 82.0), versus a long-term average of 84.6.

### **Euro area PMIs suggest significant easing of activity in November, especially in the services sector**

- **Euro area PMIs posted a larger than expected fall in November.** Overall, the composite index decreased for a 4<sup>th</sup> consecutive month in November, by 4.9 pts to 45.1, below both the consensus estimates (45.5) and the expansion/contraction threshold of 50. The aforementioned decrease was mostly due to the services PMI (-5.6 pts to 41.3, versus consensus for 44.1), as the deterioration of Covid-19 epidemiological data and the subsequent renewed social distancing measures, weigh sharply (and disproportionately) on the sector, in which a big part of activities (e.g. food services, leisure & hospitality), involve face-to-face interaction of people. The manufacturing PMI also declined, by 1.2 pts to 53.6, below expectations for 54.2. Although the latest reading remains indicative of continued expansion of activity in the sector, it should be noted that its resilience is not broad based at the country level (it remains heavily concentrated in Germany -- see below). On a positive note, the recent promising developments in the medical field against Covid-19 (mainly in respect to vaccines), led to a substantial improvement in respondents' expectations for their output one year ahead (across sectors). Meanwhile, consumer confidence was also considerably down in November, by 2.1 pts to -17.6 (consensus: -18.0), remaining below an average of -11.6 since 2001.
- **Regarding PMI performance by country, Germany significantly overperformed France and the rest of the euro area** (the latter came out below the expansion/contraction threshold of 50.0 on a country weighted basis, for a 4<sup>th</sup> consecutive month in November at the composite level, with the respective index at 42.4 from 47.2

in October, according to Markit). Specifically, in France the composite PMI was 39.9 in November, from 47.5 in the previous month (consensus expectations for 34.0). The decline was mainly on account of the services PMI (-8.5 pts to 38.0), while its manufacturing counterpart also lost considerable ground (-2.2 pts to 49.1).

- **German PMIs pointed to a large divergence of activity momentum between the manufacturing and the services sectors.** Specifically, the services PMI fell by 3.3 pts to 46.2, while its manufacturing counterpart was only slightly down, by 0.3 pts to a still solid 57.9. Notably, the robust recovery of economic activity in China (a major export destination for German manufactured goods) likely continues to provide a decisive boost, as suggested by solid readings for the new export orders component (and as also indicated by respondents' reports). Overall, the composite PMI was 52.0 in November, compared with 55.0 in the previous month, remaining above the expansion/contraction threshold of 50.0 and overshooting consensus estimates for 49.1. Note also that the improved prospects for effective vaccines against Covid-19 starting to be deployed in the next months (allowing a gradual return to normality in the course of 2021), led private corporations' expectations for their output a year ahead at its highest since March 2018.

### **UK PMI in the services sector fell sharply in November, as expected due to the renewed lockdown measures**

- **PMIs in November diverged sharply between the manufacturing and the services sectors.** Specifically, the PMI in the dominant services sector (80% of UK GDP) fell by 5.6 pts to 45.8 (largely in line with consensus estimates), in view of the evolving resurgence of Covid-19 and the respective renewed pandemic-related restrictions, inflicting a large hit in numerous consumer facing activities (especially in leisure and hospitality). In a contrarian note, the manufacturing PMI rose by 1.5 pts to a solid 55.2, exceeding by a wide margin consensus estimates for 51.6. Nevertheless, it should be noted that the latest outcome was positively distorted by temporary factors, namely: i) remaining pockets of pent-up demand after the first lockdown and; ii) other factors related to the imminent Brexit deadline (December 31st). Regarding the latter, sizable preemptive orders by clients in the European Union were reported. In tandem, UK industries embarked on a front-loading of purchases of critical inputs for the manufacturing process. In the event, Markit noted that the stocks of purchases component (10% of the headline index) pointed to the strongest increase in preproduction inventories since October 2019. In addition, the aforementioned developments resulted in supply chain disruptions (shipping delays due to bottlenecks in UK ports) and consequently a sharp lengthening of supplier delivery times (c. 32% of the survey panel reported longer lead times from suppliers, while only 2% noted an improvement), which also distorted to the upside the headline index (usually, such a difficulty for suppliers to meet customer needs comes on the back of a substantial strengthening in the demand, hence the lengthening of delivery times contributes positively to the headline index). Overall, the composite PMI came out at 47.4 in November, from 52.1 in October, declining for a 3<sup>rd</sup> consecutive month and below the expansion/contraction threshold of 50.0 for the first time since past June.

## Equities

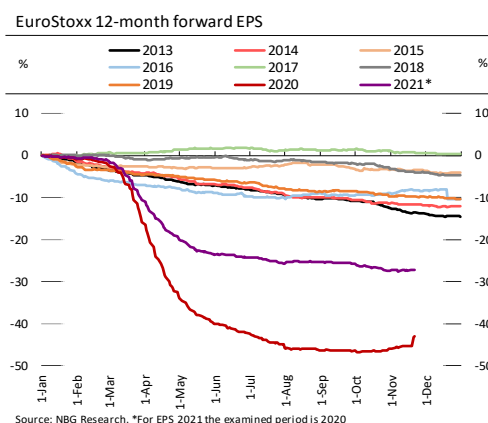
- Global equity markets were mixed in the past week, as investors were trying to balance the positive vaccine developments against the deterioration of the epidemiological data and the re-imposition of restrictions to mobility.** Overall, the MSCI ACWI ended the week up by +0.6% (+7.8% ytd), with Emerging Markets (+1.8% wow) over-performing their Developed Markets peers (+0.4% wow). In the US, the S&P500 declined by 0.8% wow (+10.1% ytd) in the past week. The index briefly posted a record high (3627) on Monday (16/11), following the announcement for Moderna's vaccine, albeit the trend reversed later in the week, due to the surge of daily Covid-19 cases which reached 190k. The 14-day moving average of cases has more than doubled since the end of October (151k vs 71k). The positive vaccine results from University of Oxford/ AstraZeneca and news that the Senate Majority Leader has agreed to resume negotiations with the Democrats for a fiscal stimulus package, reinforced the sentiment, but the letter of the US Treasury to the Federal Reserve stating that some of the pandemic lending programmes would not be extended after year's end, weighed to the downside. Regarding the earnings season, out of the 480 companies that have reported results so far, 84% have surpassed analysts' estimates. Consensus EPS expectations for Q3:20 stand at -6.3% yoy from -21% at the beginning of the earnings season and -31.6% in Q2:20. On the other side of the Atlantic, the EuroStoxx rose by 1.4% wow, with Energy (+5.7%) leading the increase, on account of higher oil prices. Regarding the earnings season, out of the 274 companies that have reported results so far, 59% have exceeded analysts' estimates. Consensus EPS expectations for Q3:20 stand at -21.4% yoy from -34.1% at the end of the second quarter.

## Fixed Income

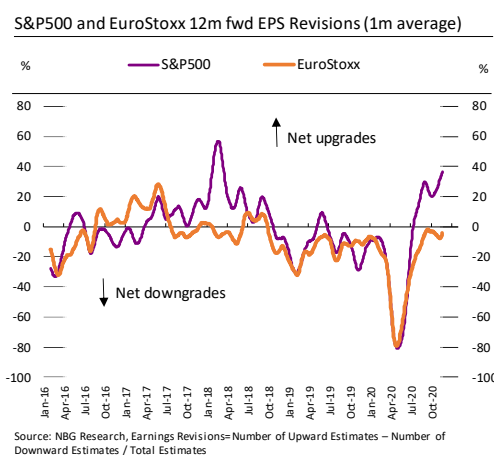
- Government bond yields declined in the past week.** Specifically, the US 10-year yield ended the week down by 5 bps to 0.83%, due to the weaker-than-expected economic data (retail sales, initial jobless claims) and the rise of coronavirus daily cases, with local restrictions being imposed across the country. In the UK, the 10-year Gilt yield fell by 3 bps wow to 0.34%. Similarly, in Germany, the 10-year yield decreased by 3 bps wow to -0.57%, following ECB President C. Lagarde's comments that the pandemic emergency purchase programme (PEPP) is likely to remain one of the main tools for adjusting ECB's monetary policy in December. Note that the cumulative net purchases of German government bonds under the PEPP are €125 bn or 25% of the total PEPP envelope as of end-September, slightly below the capital key allocation guideline. Periphery bond yields in the 10-year tenor decreased too, despite Poland and Hungary vetoing the European Union's next seven-year budget of €1.8 tn, including €750 bn for the "Next Generation EU". Indeed, in Spain, the 10-year yield fell by 3 bps to 0.09%, in Italy by 4 bps to 0.54% and in Greece by 6 bps to 0.69%, with the latter two posting new record lows. **Corporate bond spreads narrowed significantly in the past week.** Indeed, EUR HY bond spreads decreased by 18 bps to 389 bps and their US counterparts narrowed by 14 bps to 449 bps. In the investment grade spectrum, EUR spreads fell by 2 bps to 96 bps and USD spreads declined by 5 bps to 116 bpsps.

## FX and Commodities

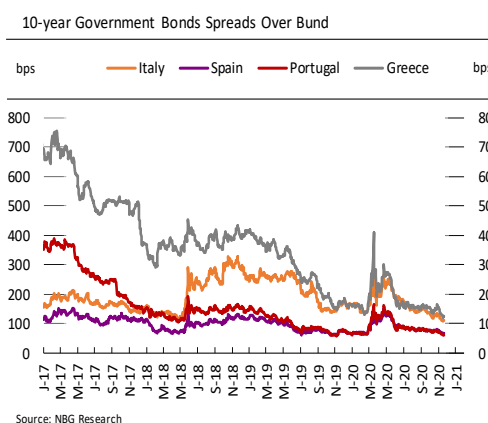
- In foreign exchange markets, the British Pound increased in the past week, due to increased hopes that a trade agreement between the country and the EU will be achieved.** The news that PM B. Johnson is expected to speak with the European Commission President von der Leyen this week in an attempt to resolve the differences, contributed to the upside. Specifically, the Sterling rose by 0.7% wow against the euro to €/0.892 and by 0.9% wow against the US Dollar to \$1.329. **In commodities, oil prices increased in the past week, due to vaccine developments and the smaller-than-expected increase in US oil inventories.** Specifically, US oil inventories increased by 0.8 million barrels to 490 million barrels for the week ending November 13<sup>th</sup>. Overall, the WTI rose by 5% wow to \$42.2/barrel, while Brent rose by 5.1% to \$45.



Graph 1.



Graph 2.



Graph 3.

**Quote of the week:** "We were standing on one side of a massive river of uncertainty and hardship, both from the health and economic point of view. And we couldn't even see the other side of the river... we are now seeing the other side of the river because we know that vaccines are on the horizon", **ECB President, Christine Lagarde, November 19<sup>th</sup> 2020.**

### Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	November 20th	3-month	6-month	12-month	Official Rate (%)	November 20th	3-month	6-month	12-month
<b>Germany</b>	-0.57	-0.50	-0.40	-0.30	<b>Euro area</b>	0.00	0.00	0.00	0.00
<b>US</b>	0.83	0.90	1.00	1.20	<b>US</b>	0.25	0.25	0.25	0.25
<b>UK</b>	0.34	0.26	0.30	0.38	<b>UK</b>	0.10	0.10	0.08	0.06
<b>Japan</b>	0.01	0.00	0.05	0.08	<b>Japan</b>	-0.10	-0.10	-0.10	-0.10

Currency	November 20th	3-month	6-month	12-month	November 20th	3-month	6-month	12-month	
<b>EUR/USD</b>	1.19	1.17	1.18	1.20	<b>USD/JPY</b>	104	105	104	102
<b>EUR/GBP</b>	0.89	0.90	0.90	0.90	<b>GBP/USD</b>	1.33	1.30	1.31	1.34
<b>EUR/JPY</b>	124	123	123	122					

Forecasts at end of period

### Economic Forecasts

United States	2018a	Q1:19a	Q2:19a	Q3:19a	Q4:19a	2019a	Q1:20a	Q2:20a	Q3:20a	Q4:20f	2020f	Q1:21f	Q2:21f	2021f
<b>Real GDP Growth (YoY) (1)</b>	3.0	2.3	2.0	2.1	2.3	2.2	0.3	-9.0	-2.9	-3.2	-3.8	-1.7	9.0	3.1
<b>Real GDP Growth (QoQ saar) (2)</b>	-	2.9	1.5	2.6	2.4	-	-5.0	-31.4	33.1	1.3	-	0.8	3.9	-
<b>Private Consumption</b>	2.7	1.8	3.7	2.7	1.6	2.4	-6.9	-33.2	40.7	3.3	-3.9	-0.4	3.2	3.5
<b>Government Consumption</b>	1.8	2.5	5.0	2.1	2.4	2.3	1.3	2.5	-4.5	-1.6	1.1	2.2	3.3	0.8
<b>Investment</b>	5.2	2.9	-0.4	2.4	1.0	1.9	-1.4	-29.2	28.5	1.9	-3.0	2.5	3.4	3.3
<b>Residential</b>	-0.6	-1.7	-2.1	4.6	5.8	-1.7	19.0	-35.5	59.3	13.5	4.5	4.3	2.8	7.4
<b>Non-residential</b>	6.9	4.2	0.0	1.9	-0.3	2.9	-6.7	-27.2	20.3	0.8	-5.0	2.1	3.6	2.4
<b>Inventories Contribution</b>	0.2	0.2	-1.1	-0.1	-0.9	0.0	-1.7	-4.7	6.3	0.8	-0.7	0.0	0.2	0.7
<b>Net Exports Contribution</b>	-0.3	0.6	-0.9	0.0	1.9	-0.2	1.6	0.3	-5.0	-1.7	0.0	0.3	0.3	-0.8
<b>Exports</b>	3.0	1.8	-4.5	0.8	3.4	-0.1	-9.5	-64.4	59.7	8.7	-13.6	3.3	7.3	4.1
<b>Imports</b>	4.1	-2.1	1.7	0.5	-7.5	1.1	-15.0	-54.1	91.1	16.8	-10.0	0.8	3.1	7.6
<b>Inflation (3)</b>	2.5	1.7	1.8	1.7	2.1	1.8	2.1	0.3	1.2	1.1	1.1	1.5	2.7	2.0

Euro Area	2018a	Q1:19a	Q2:19a	Q3:19a	Q4:19a	2019a	Q1:20a	Q2:20a	Q3:20a	Q4:20f	2020f	Q1:21f	Q2:21f	2021f
<b>Real GDP Growth (YoY)</b>	1.9	1.4	1.3	1.4	1.0	1.3	-3.3	-14.8	-4.4	-7.7	-7.5	-3.4	12.7	4.7
<b>Real GDP Growth (QoQ saar)</b>	-	2.0	0.8	1.1	0.1	-	-14.1	-39.5	60.5	-13.1	-	3.3	12.1	-
<b>Private Consumption</b>	1.4	2.2	0.8	1.7	0.5	1.3	-16.9	-41.0	67.0	-11.8	-8.1	1.6	13.0	5.1
<b>Government Consumption</b>	1.2	2.2	2.0	2.5	1.0	1.8	-3.0	-9.6	13.6	-5.9	-0.8	4.3	7.4	3.3
<b>Investment</b>	3.5	1.7	2.9	-1.1	14.0	5.0	-18.9	-52.7	85.2	-14.8	-8.9	3.7	15.4	5.5
<b>Inventories Contribution</b>	0.1	-3.4	5.6	-5.5	1.0	-0.3	2.4	-0.7	1.3	-0.3	0.3	-0.1	0.0	0.1
<b>Net Exports Contribution</b>	0.2	3.5	-6.0	5.6	-4.1	-0.5	-2.2	-3.1	1.3	-1.1	-1.5	0.8	0.1	0.0
<b>Exports</b>	3.6	4.2	0.0	2.9	0.5	2.5	-14.4	-56.6	82.7	-6.2	-11.1	4.9	5.6	4.3
<b>Imports</b>	3.6	-3.0	14.1	-8.4	10.0	4.0	-11.2	-55.5	81.7	-4.1	-8.9	3.3	5.5	4.5
<b>Inflation</b>	1.8	1.4	1.4	1.0	1.0	1.2	1.1	0.2	0.0	-0.3	0.3	0.3	1.4	1.1

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
<b>Equity Markets</b>	<ul style="list-style-type: none"> <li>+ Massive Fiscal loosening will support the economy but wont avoid a recession</li> <li>- 2020 EPS growth expectations have further room to fall from +2%. Earnings will contract in 2020</li> <li>- Forget aggressive share buybacks for now due to political pressures</li> <li>- Peaking profit margins</li> <li>- Protectionism and trade wars</li> <li>- P/Es (Valuations) are in line with long-term averages despite P/E contraction of more than 20% since February highs (19x)</li> </ul>	<ul style="list-style-type: none"> <li>+ Still high equity risk premium relative to other regions</li> <li>+ Modest fiscal loosening in 2020 excluding Germany (5% of GDP)</li> <li>- 2020-2021 EPS estimates may turn pessimistic as economic growth fails to pick up</li> <li>- Political uncertainty (Italy, Brexit) could intensify</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 due to the outcome of the Brexit negotiating process</li> </ul>
<b>Government Bonds</b>	<ul style="list-style-type: none"> <li>● Neutral/Positive</li> <li>+ Valuations appear rich with term-premium below 0%</li> <li>+ Sizeable fiscal deficit</li> <li>+ Underlying inflation pressures if Fed seek makeup strategies</li> <li>- Global search for yield by non-US investors continues</li> <li>- Safe haven demand</li> <li>- Fed to remain at ZLB in the course of 2020-2021</li> <li>- Fed: Unlimited QE purchases</li> </ul>	<ul style="list-style-type: none"> <li>● Neutral</li> <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>● Neutral</li> <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>● Neutral/Negative</li> <li>+ Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process</li> <li>+ Inflation expectations could drift higher ahead of EU/UK negotiations</li> <li>- The BoE is expected to remain on hold with risks towards rate cuts</li> <li>- Slowing economic growth post-Brexit</li> </ul>
<b>Foreign Exchange</b>	<ul style="list-style-type: none"> <li>▲ Slightly higher yields expected</li> <li>+ Safe-haven demand</li> <li>- Fed's interest rate differential disappeared following cuts to 0%-0.25%</li> </ul>	<ul style="list-style-type: none"> <li>▲ Higher yields expected</li> <li>+ Reduced short-term tail risks</li> <li>+ Higher core bond yields</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, ABSs, Quantitative Easing)</li> </ul>	<ul style="list-style-type: none"> <li>● Stable yields expected</li> <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>▲ Higher yields expected but with Brexit risk premia working on both directions</li> <li>+ Transitions phase negotiations</li> <li>+ Valuations appear undemanding with REER 6% below its 15-year average</li> <li>- Sizeable Current account deficit</li> <li>- Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process</li> </ul>
	<ul style="list-style-type: none"> <li>● Broadly Flat EUR against the USD with high volatility around \$1.20</li> </ul>	<ul style="list-style-type: none"> <li>● Broadly Flat EUR against the USD with high volatility around \$1.20</li> </ul>	<ul style="list-style-type: none"> <li>▲ Slightly higher JPY</li> </ul>	<ul style="list-style-type: none"> <li>▲ Higher GBP expected but with Brexit risk premia working on both directions</li> </ul>

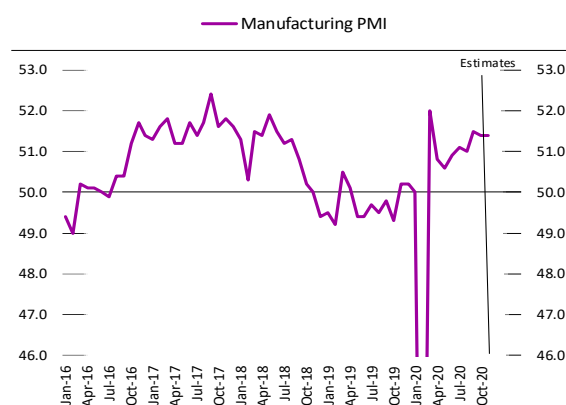
## Economic Calendar

In the US, the main macro event next week is the second estimate of GDP for Q3:20, which is released on Wednesday. GDP growth is expected to be unchanged compared with the previous estimate at 33.1% qoq saar. At the same time, October's personal income and consumption and PCE data (the Fed's preferred measure for gauging inflation developments) for October will gather investors' attention.

In Japan, high frequency activity indicators for October (industrial production, retail sales) will be closely monitored to assess the economic momentum.

In China, November's PMI manufacturing is released on Monday. Official Manufacturing PMI is expected to remain stable at 51.4.

China Manufacturing PMI



Source: NBG Research

**Economic News Calendar for the period: November 17 - November 30, 2020**

Tuesday 17					Wednesday 18					Thursday 19				
US		S	A	P	US		S	A	P	US		S	A	P
Retail Sales Advance MoM	October	0.5%	- 0.3%	1.6%	Building permits (k)	October	1560	- 1545	1545	Initial Jobless Claims (k)	November 14	707	- 742	711
Retail sales ex-autos (MoM)	October	0.6%	- 0.2%	1.2%	Housing starts (k)	October	1460	+ 1530	1459	Continuing Claims (k)	November 7	6360	- 6372	6801
Industrial Production (MoM)	October	1.0%	+ 1.1%	-0.4%	<b>UK</b>					Existing home sales (mn)	October	6.45	+ 6.85	6.57
Net Long-term TIC Flows (\$ bn)	September	..	108.9	27.8	CPI (YoY)	October	0.6%	+ 0.7%	0.5%	Philadelphia Fed Business Outlook	November	22.0	+ 26.3	32.3
NAHB housing market confidence index	November	84	+ 90	85	Core CPI (YoY)	October	1.3%	+ 1.5%	1.3%					
					<b>JAPAN</b>									
					Exports YoY	October	-4.6%	+ -0.2%	-4.9%					
					Imports YoY	October	-12.9%	- -13.3%	-17.4%					
Friday 20					Monday 23									
UK		S	A	P	US		S	A	P			S	A	P
Retail sales Ex Auto MoM	October	0.3%	+ 1.3%	1.5%	Markit US Manufacturing PMI	November	52.9	+ 56.7	53.4					
<b>JAPAN</b>					<b>EURO AREA</b>									
CPI (YoY)	October	-0.4%	+ -0.3%	0.2%	Markit Eurozone Manufacturing PMI	November	53.1	+ 53.6	54.8					
Core CPI (YoY) - ex. Fresh Food	October	-0.6%	- -0.7%	-0.3%	Markit Eurozone Services PMI	November	42.2	- 41.3	46.9					
Core CPI (YoY) - ex. Fresh Food and Energy	October	..	-0.4%	-0.3%	Markit Eurozone Composite PMI	November	45.6	- 45.1	50.0					
PMI manufacturing	November	49.9	- 48.3	48.7	<b>UK</b>									
<b>EURO AREA</b>					Markit UK PMI Manufacturing SA	November	50.3	+ 55.2	53.7					
Consumer Confidence Indicator	November	-18.0	+ -17.6	-15.5	Markit/CIPS UK Services PMI	November	42.0	+ 45.8	51.4					
Tuesday 24					Wednesday 25					Thursday 26				
US		S	A	P	US		S	A	P	UK		S	A	P
S&P Case/Shiller house price index 20 (YoY)	September	4.9%	..	5.2%	GDP (QoQ, annualized) Q3:20	33.1%	..	33.1%		Nationwide House Px NSA YoY	November	6.2%	..	5.8%
Conference board consumer confidence	November	98.0	..	100.9	Initial Jobless Claims (k)	November 21	730	..	742	<b>EURO AREA</b>				
<b>GERMANY</b>					Continuing Claims (k)	November 14	6050	..	6372	M3 money supply (YoY)	October	10.4%	..	10.4%
GDP (QoQ)	Q3:20	8.2%	..	8.2%	Durable goods orders (MoM)	October	1.0%	..	1.9%					
GDP (wda, YoY)	Q3:20	-4.3%	..	-4.3%	Durable goods orders ex transportation (MoM)	October	0.4%	..	0.9%					
Private Consumption (QoQ)	Q3:20	9.3%	..	-11.1%	New home sales (k)	October	973	..	959					
Government Spending QoQ	Q3:20	0.7%	..	2.2%	PCE Deflator (YoY)	October	1.2%	..	1.4%					
IFO- Business Climate Indicator	November	90.2	..	92.5	PCE Core Deflator (YoY)	October	1.4%	..	1.5%					
IFO-Expectations	November	93.3	..	94.7	Personal income (MoM)	October	0.1%	..	0.9%					
IFO- Current Assessment	November	87.3	..	90.4	Personal spending (MoM)	October	0.6%	..	1.4%					
Friday 27					Monday 30									
EURO AREA		S	A	P	US		S	A	P			S	A	P
Business Climate Indicator	November	-15.5	..	-0.7	Pending home sales (MoM)	October	-1.0%	..	-2.2%					
Economic confidence indicator	November	86.5	..	90.9	<b>JAPAN</b>									
					Industrial Production (MoM)	October	1.5%	..	3.9%					
					Industrial Production (YoY)	October	-6.2%	..	-9.0%					
					Retail sales (MoM)	October	..	..	-0.1%					
					Retail sales (YoY)	October	..	..	-8.7%					
					Construction Orders YoY	October	..	..	-10.6%					
					<b>CHINA</b>									
					Manufacturing PMI	November	51.4	..	51.4					

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

**Equity Markets** (in local currency)

Developed Markets						Emerging Markets					
		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
US	<b>S&amp;P 500</b>	3558	-0.8	10.1	14.6	34.3	<b>MSCI Emerging Markets</b>	67984	1.4	10.6	16.3
Japan	<b>NIKKEI 225</b>	25527	0.6	7.9	10.8	18.7	<b>MSCI Asia</b>	1070	1.5	17.1	24.1
UK	<b>FTSE 100</b>	6351	0.6	-15.8	-12.3	-9.9	<b>China</b>	107	0.7	24.9	36.1
Canada	<b>S&amp;P/TSX</b>	17019	2.1	-0.3	0.1	12.7	<b>Korea</b>	800	2.3	15.8	22.6
Hong Kong	<b>Hang Seng</b>	26452	1.1	-6.2	-0.1	1.8	<b>MSCI Latin America</b>	90747	1.7	-9.4	-5.2
Euro area	<b>EuroStoxx</b>	386	1.4	-4.3	-2.5	11.4	<b>Brazil</b>	333441	1.2	-8.9	-3.0
Germany	<b>DAX 30</b>	13137	0.5	-0.8	0.0	16.8	<b>Mexico</b>	38747	2.6	-3.4	-3.3
France	<b>CAC 40</b>	5496	2.2	-8.1	-6.6	10.5	<b>MSCI Europe</b>	5539	1.8	-13.1	-10.6
Italy	<b>FTSE/MIB</b>	21707	3.8	-7.7	-6.8	15.9	<b>Russia</b>	1220	1.1	-10.4	-7.5
Spain	<b>IBEX-35</b>	7978	2.5	-16.5	-13.4	-11.0	<b>Turkey</b>	1559401	1.9	3.8	9.2

**World Market Sectors** (MSCI Indices)

in US Dollar terms						in local currency					
		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
<b>Energy</b>		120.9	5.3	-38.6	-36.6	-40.9	<b>Energy</b>	122.9	4.9	-39.0	-37.7
<b>Materials</b>		295.3	1.2	8.5	13.8	23.4	<b>Materials</b>	276.7	0.8	6.2	10.1
<b>Industrials</b>		295.3	1.6	6.8	8.5	26.4	<b>Industrials</b>	286.0	1.3	4.7	5.6
<b>Consumer Discretionary</b>		348.8	1.9	25.4	31.0	50.6	<b>Consumer Discretionary</b>	331.9	1.7	23.6	28.7
<b>Consumer Staples</b>		258.6	-1.0	3.0	5.8	17.1	<b>Consumer Staples</b>	254.4	-1.2	1.2	3.0
<b>Healthcare</b>		300.1	-2.1	7.5	12.8	25.8	<b>Healthcare</b>	292.2	-2.3	6.0	10.6
<b>Financials</b>		111.8	2.4	-11.1	-7.6	0.5	<b>Financials</b>	110.6	2.1	-12.3	-9.6
<b>IT</b>		407.2	0.0	31.0	38.5	84.3	<b>IT</b>	391.9	-0.1	30.1	37.4
<b>Telecoms</b>		88.9	-0.2	14.8	17.9	38.2	<b>Telecoms</b>	92.2	-0.3	14.0	16.7
<b>Utilities</b>		151.9	-1.9	1.1	5.1	19.2	<b>Utilities</b>	153.3	-2.1	-0.6	2.8

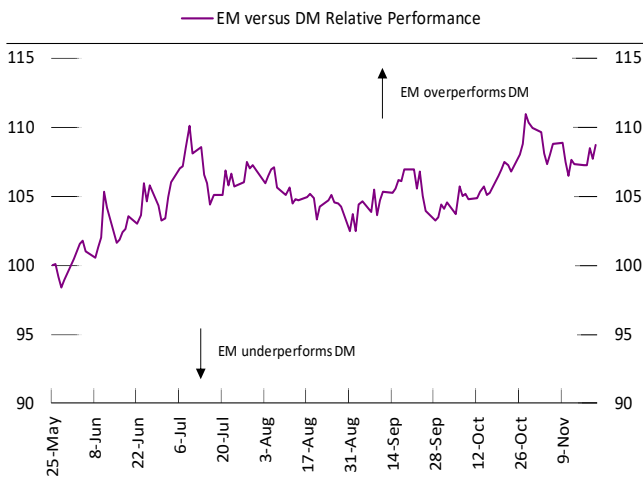
**Bond Markets (%)**

10-Year Government Bond Yields						Government Bond Yield Spreads (in bps)					
		Current	Last week	Year Start	One Year Back	10-year average		Current	Last week	Year Start	One Year Back
US		0.83	0.88	1.93	1.79	2.19	<b>US Treasuries 10Y/2Y</b>	65	68	34	16
Germany		-0.57	-0.54	-0.16	-0.31	0.83	<b>US Treasuries 10Y/5Y</b>	34	37	21	14
Japan		0.09	0.07	-0.01	-0.10	0.38	<b>Bunds 10Y/2Y</b>	19	20	46	33
UK		0.34	0.37	0.84	0.76	1.70	<b>Bunds 10Y/5Y</b>	19	20	30	25
Greece		0.69	0.75	1.43	1.39	9.33	<b>Corporate Bond Spreads (in bps)</b>				
Ireland		-0.26	-0.21	0.18	0.14	2.98					
Italy		0.54	0.57	1.43	1.29	2.93	<b>EM Inv. Grade (IG)</b>	174	173	150	160
Spain		0.09	0.12	0.47	0.44	2.64	<b>EM High yield</b>	613	621	494	524
Portugal		0.04	0.10	0.49	0.46	4.32	<b>US IG</b>	116	121	101	114
<b>US Mortgage Market (1. Fixed-rate Mortgage)</b>							<b>US High yield</b>	449	463	360	417
		Current	Last week	Year Start	One Year Back	10-year average	<b>Euro area IG</b>	96	98	94	105
<b>30-Year FRM<sup>1</sup> (%)</b>		2.8	2.8	3.7	3.7	4.1	<b>Euro area High Yield</b>	389	407	308	365
<b>vs 30Yr Treasury (bps)</b>		126	115	132	146	123					

**Foreign Exchange & Commodities**

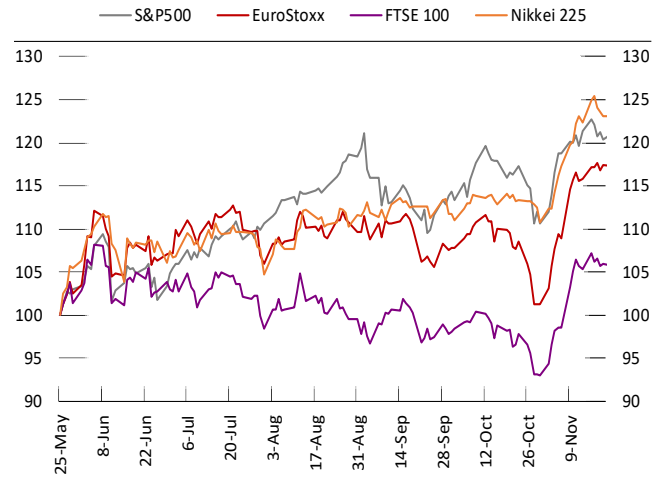
Foreign Exchange						Commodities					
		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)		Current	1-week change (%)	1-month change (%)	1-Year change (%)
<b>Euro-based cross rates</b>											
EUR/USD		1.19	0.3	-0.2	7.0	5.6	<b>Agricultural</b>	337	2.0	3.4	18.7
EUR/CHF		1.08	0.0	0.7	-1.6	-0.6	<b>Energy</b>	145	3.5	4.7	-27.7
EUR/GBP		0.89	-0.7	-1.1	4.1	5.3	<b>West Texas Oil (\$)</b>	42	5.0	5.3	-28.0
EUR/JPY		123.06	-0.5	-0.8	2.4	0.9	<b>Crude Brent Oil (\$)</b>	45	5.1	7.7	-29.7
EUR/NOK		10.67	-1.5	-2.3	5.5	8.2	<b>Industrial Metals</b>	372	4.0	6.1	18.6
EUR/SEK		10.21	-0.8	-1.5	-4.4	-2.9	<b>Precious Metals</b>	2461	-0.9	-2.7	29.1
EUR/AUD		1.62	-0.6	-2.7	-0.5	1.5	<b>Gold (\$)</b>	1870	-1.1	-2.8	27.7
EUR/CAD		1.55	-0.5	-0.5	5.3	6.4	<b>Silver (\$)</b>	24	-2.1	-3.5	41.3
<b>USD-based cross rates</b>											
USD/CAD		1.31	-0.7	-0.3	-1.6	0.8	<b>Baltic Dry Index</b>	1148	3.0	-14.7	-8.5
USD/AUD		1.37	-0.9	-2.6	-7.0	-3.8	<b>Baltic Dirty Tanker Index</b>	438	3.1	3.3	-65.7
USD/JPY		103.82	-0.8	-0.6	-4.3	-4.5					

EM vs DM Performance in \$



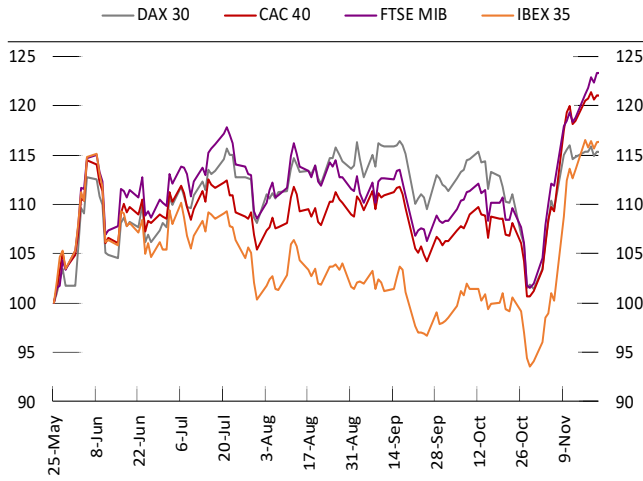
Data as of November 20<sup>th</sup> – Rebased @ 100

Equity Market Performance - G4



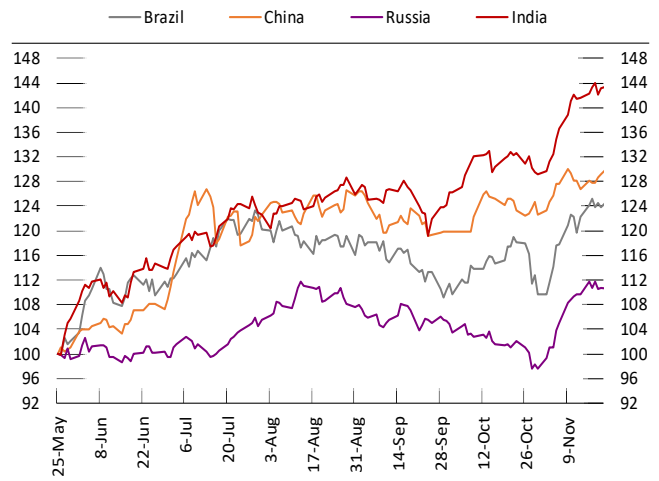
Data as of November 20<sup>th</sup> – Rebased @ 100

Equity Market Performance – Euro Area G4



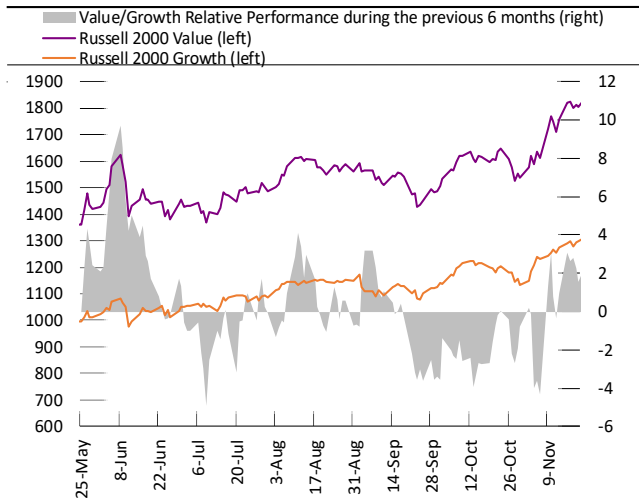
Data as of November 20<sup>th</sup> – Rebased @ 100

Equity Market Performance - BRICs



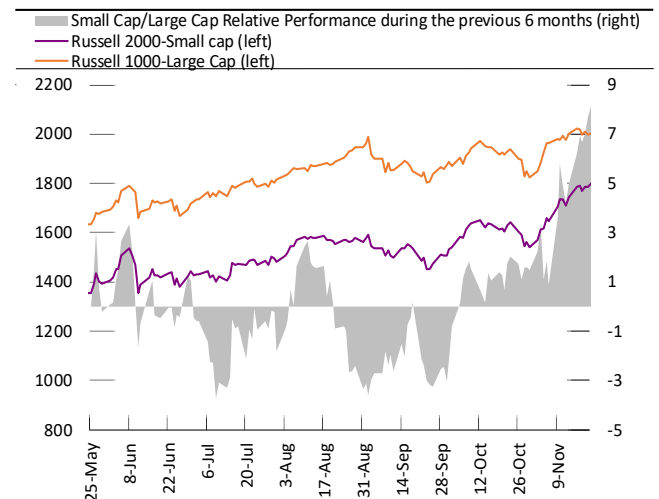
Data as of November 20<sup>th</sup> – Rebased @ 100

Russell 2000 Value & Growth Index



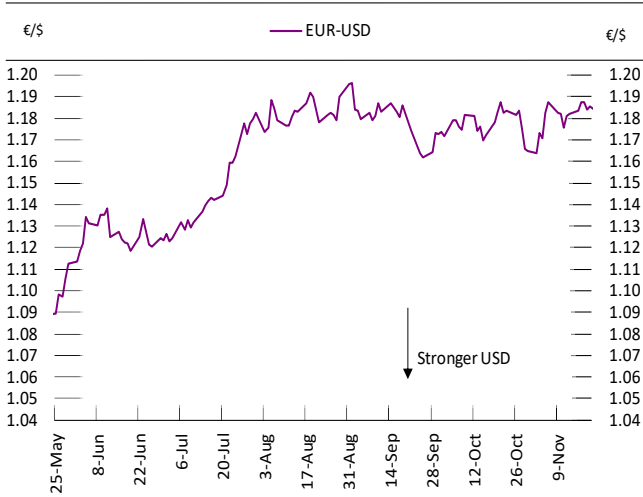
Data as of November 20<sup>th</sup>

Russell 2000 & Russell 1000 Index



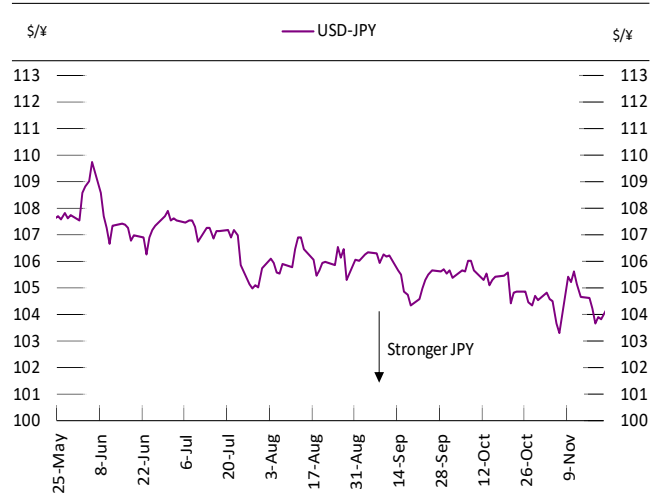
Data as of November 20<sup>th</sup>

EUR/USD



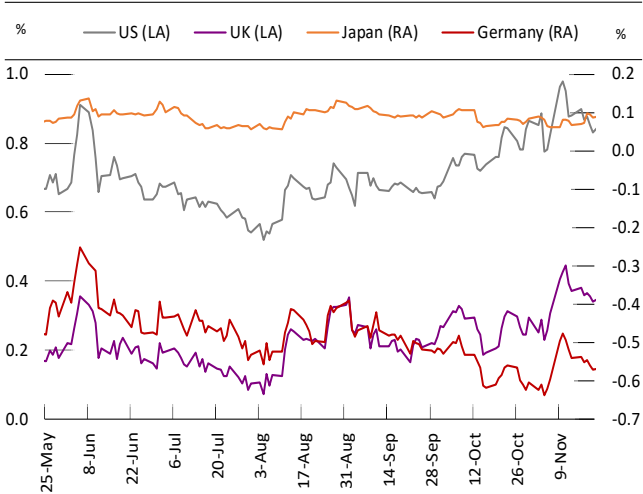
Data as of November 20<sup>th</sup>

JPY/USD



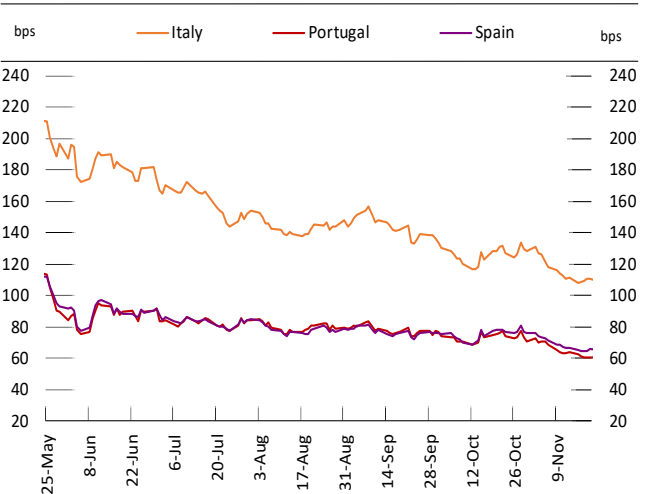
Data as of November 20<sup>th</sup>

10- Year Government Bond Yields



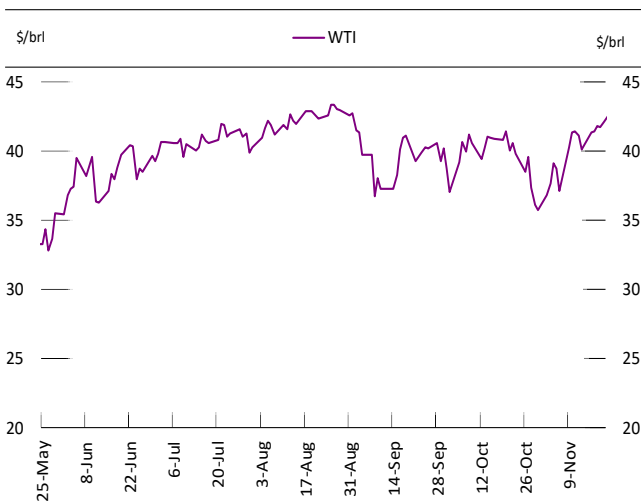
Data as of November 20<sup>th</sup>  
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



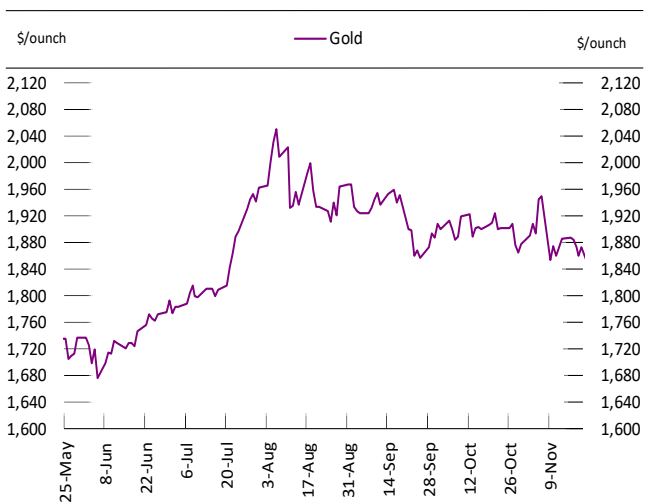
Data as of November 20<sup>th</sup>

West Texas Intermediate (\$/bbl)



Data as of November 20<sup>th</sup>

Gold (\$/ounce)



Data as of November 20<sup>th</sup>



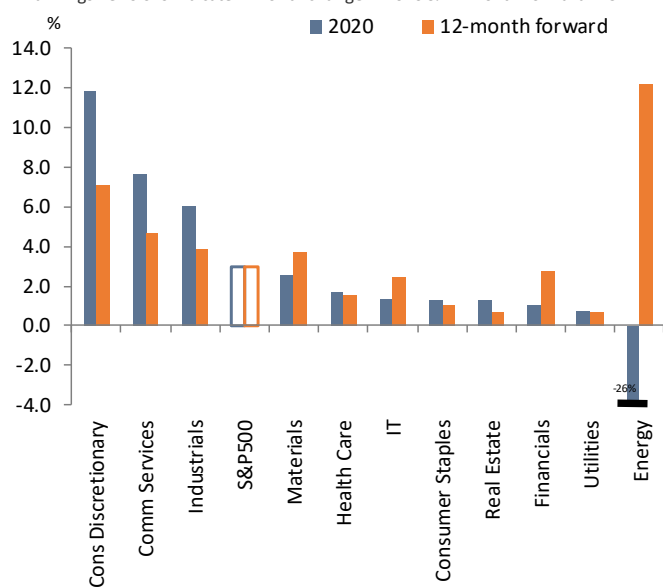
### US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/11/20	% Weekly Change	%YTD	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
<b>S&amp;P500</b>	3558	-0.8	10.1	1.2	-14.7	1.8	1.6	20.3	25.9	21.8	15.7	3.7	3.9	3.7	2.6
<b>Energy</b>	267	5.0	-41.5	-28.3	N/A	3.9	6.4	21.5	N/A	N/A	15.1	1.6	1.2	1.2	1.7
<b>Materials</b>	438	1.1	13.5	-15.6	-10.8	2.1	1.9	20.2	26.5	21.4	15.2	2.4	2.9	2.8	2.5
<b>Financials</b>															
<b>Diversified Financials</b>	756	0.0	1.9	1.4	-14.4	1.4	1.5	16.3	19.1	16.6	14.1	1.9	1.7	1.7	1.5
<b>Banks</b>	281	1.2	-26.0	9.0	-39.9	2.6	3.4	12.3	15.5	12.7	11.0	1.4	1.0	0.9	1.0
<b>Insurance</b>	409	0.4	-7.2	15.8	-6.4	2.2	2.5	13.4	13.3	11.5	11.0	1.5	1.3	1.2	1.1
<b>Real Estate</b>	229	-1.6	-4.9	1.9	-6.7	3.1	3.0	21.0	21.4	20.5	18.3	3.7	3.3	3.5	3.1
<b>Industrials</b>															
<b>Capital Goods</b>	738	1.3	1.7	-7.2	-23.0	1.8	1.7	21.2	27.6	22.4	16.0	5.5	4.7	4.4	3.5
<b>Transportation</b>	917	0.9	17.0	6.5	N/A	1.9	1.5	14.7	N/A	N/A	9.8	4.3	6.4	6.2	3.5
<b>Commercial Services</b>	413	-0.2	19.5	12.8	0.1	1.3	1.1	28.5	33.0	30.1	20.7	6.0	6.1	5.7	3.6
<b>Consumer Discretionary</b>															
<b>Retailing</b>	3408	-1.0	39.1	4.4	2.1	0.7	0.5	33.9	45.7	37.2	23.7	13.9	15.1	12.5	7.2
<b>Consumer Services</b>	1239	0.7	-4.9	5.0	N/A	2.1	1.5	24.2	N/A	N/A	22.5	16.5	25.5	40.8	8.9
<b>Consumer Durables</b>	425	3.4	14.1	-0.4	-8.4	1.5	1.2	19.7	24.8	19.9	17.2	4.1	4.4	4.0	3.2
<b>Automobiles and parts</b>	128	3.4	7.5	-16.8	N/A	4.2	1.0	8.5	N/A	N/A	7.7	1.3	1.5	1.4	1.6
<b>IT</b>															
<b>Technology</b>	2244	-1.2	40.8	2.6	5.6	1.3	1.0	21.6	27.7	24.6	13.3	9.7	14.3	15.2	4.4
<b>Software &amp; Services</b>	2879	-1.5	25.3	11.4	6.9	0.9	0.9	29.5	33.5	29.7	18.5	7.9	9.4	8.5	5.4
<b>Semiconductors</b>	1647	1.1	32.6	-12.3	9.6	1.8	1.4	18.9	22.8	20.4	14.4	5.6	6.8	6.1	3.3
<b>Communication Services</b>	211	-0.9	16.3	3.0	-4.3	1.2	1.0	21.8	25.7	22.9	17.9	3.5	3.7	3.4	2.9
<b>Media</b>	807	-0.8	23.7	3.8	-0.1	0.4	0.3	27.4	32.6	27.6	20.8	4.2	4.7	4.2	3.3
<b>Consumer Staples</b>															
<b>Food &amp; Staples Retailing</b>	573	-0.8	15.2	2.9	0.4	1.7	1.5	21.5	25.1	24.4	16.8	4.6	5.1	4.8	3.3
<b>Food Beverage &amp; Tobacco</b>	700	-0.9	-2.1	-1.7	0.6	3.3	3.4	19.7	19.2	18.2	17.8	5.3	5.2	4.9	5.0
<b>Household Goods</b>	841	-2.9	13.1	6.4	9.9	2.3	2.1	26.0	26.8	25.1	19.9	9.5	10.3	9.9	5.7
<b>Health Care</b>															
<b>Pharmaceuticals</b>	1022	-2.1	3.7	10.8	10.0	2.1	2.3	16.2	15.2	14.1	14.8	6.3	5.4	4.9	4.0
<b>Healthcare Equipment</b>	1511	-3.9	9.6	9.9	3.4	1.0	1.0	20.7	21.7	19.3	15.8	3.8	3.7	3.4	2.7
<b>Utilities</b>	322	-3.9	-2.0	4.9	2.5	3.1	3.2	20.7	19.9	19.1	16.2	2.2	2.1	2.0	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 2020 & 12-month Forward EPS

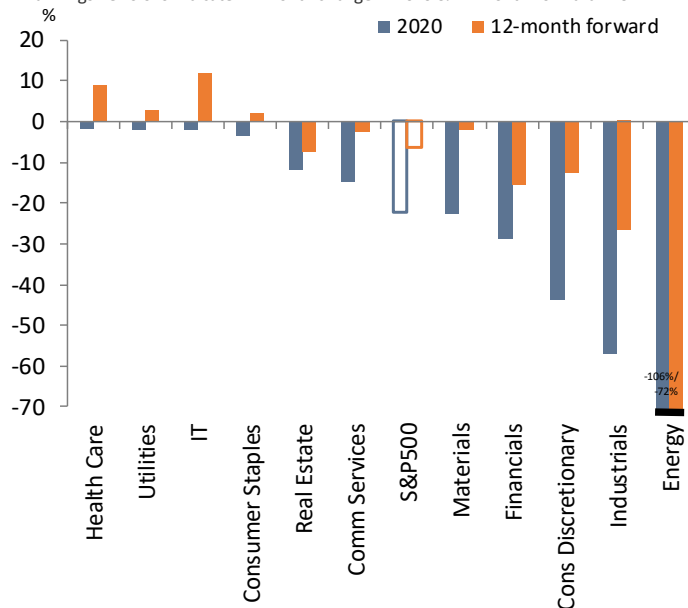
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Data as of November 20<sup>th</sup>  
12-month forward EPS are 11% of 2020 EPS and 89% of 2021 EPS

### 12-month revisions to 2020 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2020 & 12-month Forward EPS



Data as of November 20<sup>th</sup>  
12-month forward EPS are 11% of 2020 EPS and 89% of 2021 EPS

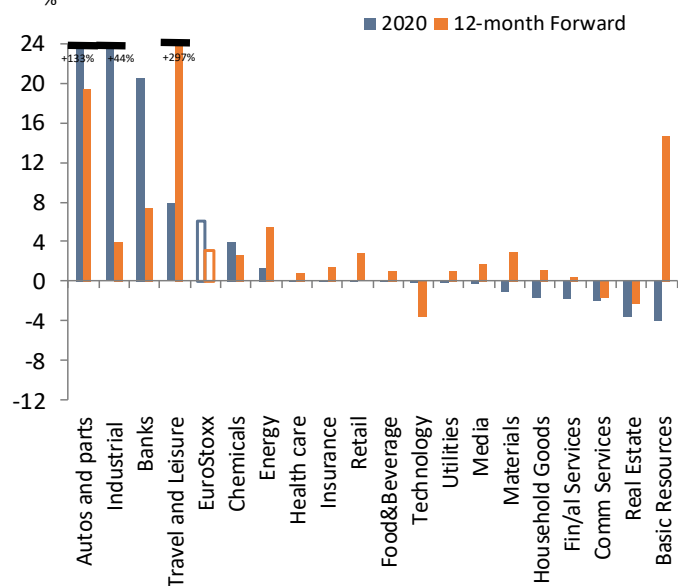
### Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/11/20	% Weekly Change	%YTD	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
<b>EuroStoxx</b>	386	1.4	-4.3	2.2	-38.3	3.0	2.3	16.8	25.7	19.2	13.6	1.7	1.7	1.6	1.4
<b>Energy</b>	241	5.7	-26.7	-10.1	-76.1	5.0	5.0	13.7	41.5	20.0	12.1	1.3	1.2	1.2	1.1
<b>Materials</b>	445	-0.1	-8.8	12.5	-41.3	3.1	2.5	15.4	24.1	16.7	14.3	1.8	1.7	1.6	1.4
<b>Basic Resources</b>	176	2.3	-13.6	-60.5	N/A	3.1	2.0	20.8	N/A	N/A	9.0	0.9	0.9	0.9	0.9
<b>Chemicals</b>	1238	0.7	5.3	-13.5	-13.1	2.7	2.5	21.6	26.5	22.9	15.6	2.1	2.3	2.3	2.2
<b>Financials</b>															
<b>Fin/al Services</b>	472	1.1	-6.3	23.4	-29.1	2.6	2.6	14.7	19.1	17.2	13.7	1.5	1.2	1.1	1.2
<b>Banks</b>	71	4.0	-26.4	-1.1	-49.3	5.7	3.4	9.2	13.3	10.7	9.5	0.6	0.5	0.5	0.7
<b>Insurance</b>	257	2.0	-15.0	12.3	-22.7	4.8	5.6	11.0	12.0	9.4	9.3	1.0	0.8	0.8	0.9
<b>Real Estate</b>	211	1.5	-14.5	0.2	-10.2	4.2	3.9	19.1	18.2	17.4	17.0	1.0	0.9	0.9	1.0
<b>Industrial</b>	946	1.5	0.6	12.0	-23.7	2.4	1.5	20.2	26.3	23.8	15.8	3.2	3.3	3.1	2.4
<b>Consumer Discretionary</b>															
<b>Media</b>	215	-0.1	-4.0	4.1	-20.5	2.6	2.3	17.9	21.4	18.2	15.6	2.5	2.4	2.3	1.9
<b>Retail</b>	670	0.6	11.5	4.9	-38.3	2.6	1.6	26.0	46.8	31.4	22.1	6.7	6.4	5.9	4.2
<b>Automobiles and parts</b>	484	4.2	-0.4	-12.2	N/A	3.7	1.5	8.7	N/A	N/A	15.9	0.9	0.9	0.9	1.0
<b>Travel and Leisure</b>	195	-0.5	-9.1	-10.1	N/A	2.2	0.3	16.8	N/A	N/A	14.0	2.0	2.3	2.4	2.0
<b>Technology</b>	668	1.7	10.3	1.6	-10.5	1.1	0.7	28.0	33.4	28.6	19.1	4.8	4.7	4.4	3.3
<b>Communication Services</b>	254	0.5	-12.1	-9.6	-6.3	4.1	4.2	17.9	16.6	15.5	14.8	1.8	1.5	1.5	1.8
<b>Consumer Staples</b>															
<b>Food&amp;Beverage</b>	510	-1.6	-14.8	16.8	-39.6	2.1	1.5	20.6	28.8	22.7	18.9	2.7	2.3	2.2	2.6
<b>Household Goods</b>	1174	0.9	9.7	6.4	-30.4	1.6	1.1	29.9	46.2	34.8	21.9	6.1	6.3	5.8	3.9
<b>Health care</b>	826	-0.8	-5.0	7.0	-9.7	2.1	2.0	20.2	20.6	18.6	15.7	2.4	2.3	2.2	2.2
<b>Utilities</b>	372	0.9	7.4	57.2	-5.4	4.4	4.1	16.3	18.2	16.5	13.0	1.6	1.6	1.6	1.1

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 2020 & 12-month Forward EPS

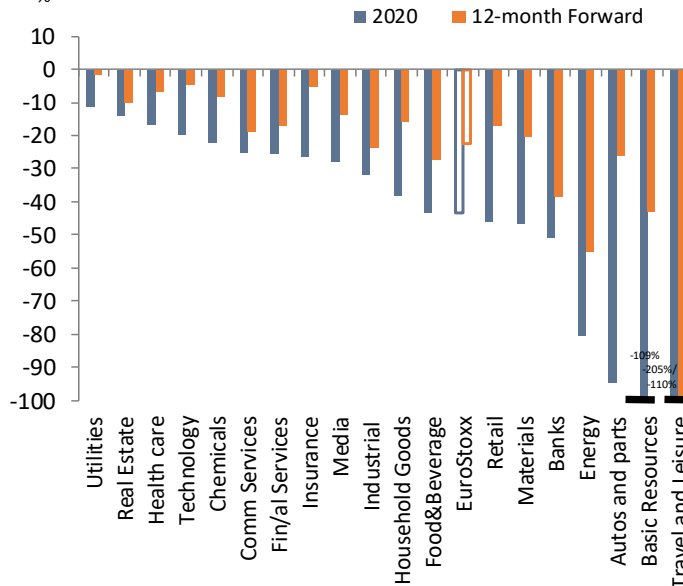
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS %



Data as of November 20<sup>th</sup>  
12-month forward EPS are 11% of 2020 EPS and 89% of 2021 EPS

### 12-month revisions to 2020 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2020 & 12-month Forward EPS %



Data as of November 20<sup>th</sup>  
12-month forward EPS are 11% of 2020 EPS and 89% of 2021 EPS

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