# Global Markets Roundup

**National Bank of Greece | Economic Research Division | May 26, 2020**

NATIONAL BANK OF GREECE


## Corporate credit spreads have tightened significantly, despite record-high levels of debt and increased insolvency risks

- The US corporate business debt-to-GDP ratio has increased rapidly over the past decade, surpassing its historical high in Q1:2020, to circa 75% of 2019 US GDP (euro area business debt-to-GDP is at circa 110%). Moreover, alternative indicators of the leverage of businesses were approaching their highest level in 20 years at the beginning of 2020. According to data from the provider Refinitiv, the ratio of Net Debt to EBITDA for publicly traded US non-financial/non-energy companies was circa 2x as of Q1:2020 from 1.5x in 2015. The following factors could pose a risk to these firms and their stakeholders: i) a historically high level of business debt; ii) tight bank lending standards; and iii) a higher cost of debt (both bank and market-based), particularly among the riskiest firms.
- The interest coverage ratio of US corporate businesses remained high in Q1:2020, suggesting room for maneuver vis-à-vis interest repayments from internal resources. However, as the distribution of COVID-19 economic effects remains uncertain, earnings declines will imply significantly lower interest coverage ratios, which could trigger an increase in firms' default risk. Note that S&P500 bottom-line earnings declined by 14% YoY in Q1:2020, while analyst consensus estimates for full-year 2020 EPS growth are circa -20%. For euro area businesses, consensus estimates for full-year 2020 EPS growth are circa -26%. Finally, Investment Grade and Speculative Grade cost of debt has increased materially.
- Data from the April 2020 Federal Reserve SLOOS indicate that a significant share of US banks tightened standards on commercial and industrial loans in the first quarter of 2020 (net percentage of reporting banks is 40%). While bank loans represent only 15% of US corporate debt, this development, if sustained, could pose additional headwinds to the external financing process of US firms. On the other side of the Atlantic, euro area banks' credit standards for loans to enterprises tightened only modestly in Q1:2020 (net percentage of reporting banks at +4% following +1% in Q4:2019). Note that the degree of tightening was very modest compared with 2008 (+60%) and 2012 (+30%), albeit euro area banks appeared reluctant to fully evaluate the effects of COVID-19 relative to companies' credit risk.
- The aggressive monetary policy response, particularly in the US, has lessened dislocations in credit markets, partially offsetting the March sell-off. Note that the Federal Reserve, via its corporate credit facilities, could purchase single-name bonds, as well as shares in Investment Grade ETFs and a limited amount of shares in High Yield ETFs with a potential firepower of up to $750bn both in the primary and in the secondary market [actual purchases so far in the secondary market: $0bn]. On the other side of Atlantic, the ECB has stepped up its investment-grade rated corporate bond purchases in the past few weeks by EUR 5bn. This brings its total purchases to EUR 27bn Year-to-Date, as the PEPP (announced on March 18th with a maximum amount of EUR 750bn) opens the door for circa EUR 130bn of additional corporate bond purchases based on the historical CSPP (Corporate Sector Purchase Programme) /APP (Asset Purchase Programme) allocation key, on top of the EUR 200bn actual purchases since the CSPP was introduced. All in, US IG corporate bond spreads have recovered a significant portion of their Covid-19 related widening, with the riskier spectrum still lagging (see graph below). On a weekly basis, credit spreads rallied due to (cont'd on page 2)


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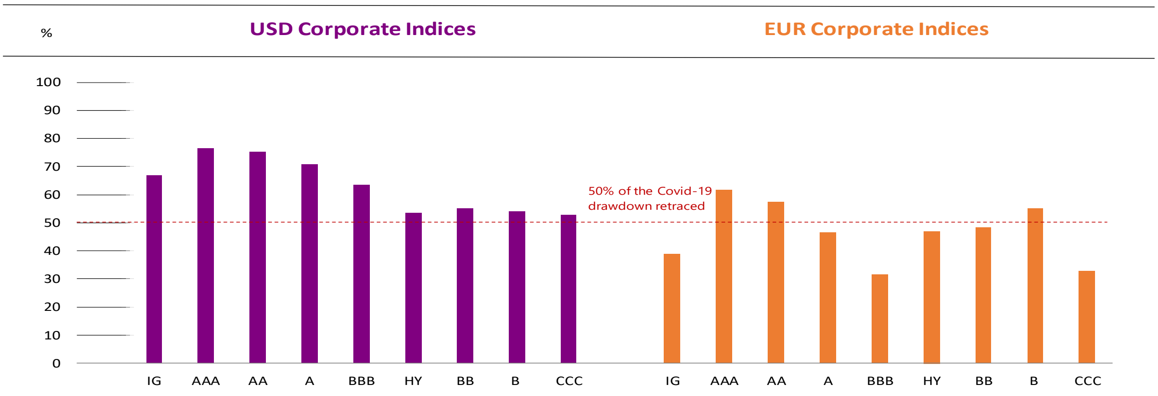
**Charts of the week**

Corporates: Cost of Marketable Debt - Percent of Recovery since COVID19-related Peak




Source: NBG Research, Bloomberg

**See page 11 for disclosures and analyst certification**

… investors' risk-on mode and higher oil prices, with USD Investment Grade down by 23 bps to 197 bps (EUR: down by 12 bps to 184 bps) and USD Speculative Grade down by 72 bps to 706 bps (EUR: down by 43 bps to 616 bps).

### US housing market declined sharply in April due to the lockdown

- **The latest housing market data suggest that activity in the sector slowed sharply in April.** Specifically, housing starts declined by an unprecedented 30.2% mom (-29.8% yoy) in April, following a -18.6% mom in March (+6.4% yoy), to 891k, below consensus estimates for 900k. On a similar note, building permits fell by 20.8% mom (-16.7% yoy) from -5.7% mom (+5.3% yoy) in March (consensus for 1000k). Furthermore, existing home sales fell by 17.8% mom (-17.2% yoy) in April, from -8.5% mom (+0.8% yoy) in March, to 4.33 mn (on an annualized basis), largely in line with consensus estimates. The weak outcomes in April (as well as in March) were due to the Covid-19 lockdown effective as of mid-March . Thus, as the restrictive measures are gradually lifted, housing activity is expected to resume. In the event, the National Association of Home Builders (NAHB) survey index – that captures homebuilders' confidence for new home sales – rose in May, by 7 pts to 37 in May, although it remains at relatively low levels, weighed down by the ongoing uncertainty in the labor market (see below) and supply-side challenges (e.g. constrained availability of building materials).

### A large number of US citizens applied for unemployment insurance for a 9th consecutive week

- **US initial jobless claims were 2.4 mn in the week ending May 15th, largely in line with consensus estimates**. The cumulative figure since the week ending March 20th reached a staggering 38.6 mn, in view of the restrictive measures to contain the spread of Covid-19 (thus 4.3 mn on average per week in that period | previously the weekly record high was 0.7 mn in 1982). More importantly, continuing claims reached 25.1 mn in the week ending May 8th or 16% of the total workforce. Recall, however, that caution is warranted in applying a direct analogy of that ratio to the official unemployment rate as estimated by the Bureau of Labor Statistics in its monthly Employment Situation report, in view of definitional differences as well as other comparability issues related to the distinct reference periods, methodologies, and reporting practices of the two data sources. In the event, the respective report for May -- due on June 5th -- will be closely monitored.

### Euro area PMIs recovered slightly in May, albeit remaining well below the expansion/contraction threshold of 50

- **Euro area PMIs improved in May, on the back of the gradual easing of the Covid-19 lockdown**. Specifically, the composite index was 30.5 in May from 13.6 in April (and 29.7 in March). Although the latest outcome modestly exceeded consensus estimates for 27.0, it remains well below the expansion/contraction threshold of 50.0 and thus is indicative of declining economic activity. Recall also that the recent readings are the weakest on record (since July 1998) by a wide margin, with the previous low at 36.2 in February 2009. The services PMI under-performed, coming out at 28.7 versus 12.0 in April, with hotels, restaurants, as well as travel and tourism industries, remaining paralyzed. The manufacturing PMI stood at a higher, but still subdued, 39.5 from 33.4 in April, with the output component (the part of the manufacturing survey which is incorporated in the calculation of the headline composite index) at 35.4 (18.1 in April). Widespread employment reductions were again cited in both sectors, with the respective component of the composite PMI rising only modestly (+4 pts to 37.4). At the same time, average prices charged, remained depressed in view of weak demand, with the respective PMI component at the lowest since 2009 in services and since 2016 in manufacturing, as firms continued to offer discounts to support sales (that development was also aided by lower input costs, linked to reduced wage burdens and low oil prices). Consumer confidence also improved, by 3.2 pts, albeit to a still weak -18.8 in May (average since 2001: -11.5). Overall, the latest data support the view for a sharp fall in GDP during Q2, of close to 9% on a quarterly basis.

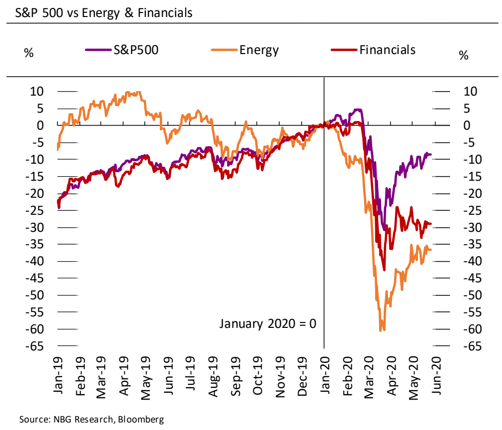
- **Regarding performance by country**, in France, the composite PMI was 30.5 in May, compared with 11.1 in April (28.9 in March). In Germany, the composite PMI was 31.4 in May, compared with 17.4 in April. On a similar note, the IFO business survey partly recovered, rising by 5.3 pts to 79.5, albeit remaining at relatively weak levels (average of 97.3 since 2005). The improvement in May was solely due to the expectations component (expectations for business conditions in the next six months | +10.7 pts to 80.1), while the assessment of current conditions deteriorated slightly further (-0.5 pts to 78.9). An improvement occurred in all surveyed sectors (manufacturing, services, trade, construction), albeit business confidence remained subdued in all cases.

### UK PMIs improved in May, albeit still pointing to reduced business activity

- **UK business confidence partly improved in May, albeit remaining particularly depressed, in view of the ongoing public health crisis.** Overall, the survey results were heavily affected by the pandemic, with banks reporting that the changes in both standards and demand across loan categories occurred late in March (the responses were gathered between March 23rd and April 3rd) as the economic outlook shifted following the rapid global spread of COVID-19. Regarding corporates, 42% of banks reported tightening lending standards for commercial and industrial (C&I) loans to large and middle corporations and 40% to small firms. The PMI in the dominant services sector (80% of UK GDP) rose to 27.8 compared with 13.4 in April (and 34.5 in March). The recent outcomes are by far the lowest on record (the survey started in 1996), with many travel, tourism and leisure firms reporting no activity at all. According to Markit, circa 55% of respondents cited a drop in business activity compared with April and only 12% cited a rise (mainly linked to greater demand for some technology services). The manufacturing PMI came out at 40.6 in May, up from 32.6 in April (the output component was 34.9). Around 54% of respondents cited a decrease in output compared with April and 24% reported an expansion (mostly linked to products related to healthcare). Notably, among manufacturing industries, those related to the automotive supply chain reported the sharpest drop in demand. Overall, the composite PMI improved to 28.9 in May from 13.8 in April, although remaining well below the expansion/contraction threshold of 50.0 and signaling only a modest easing in the recent downturn in economic activity. Note also that the latest readings underperform, by a wide margin, the previous record low (38.1 in November 2008).

## Equities

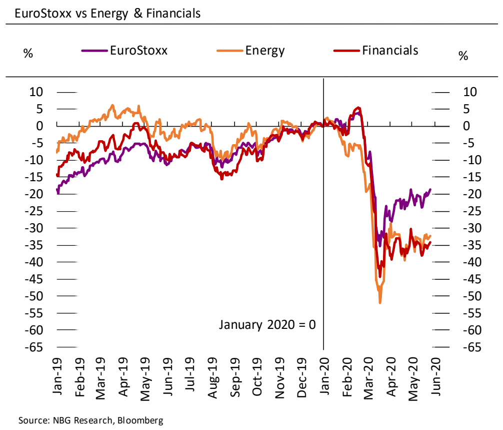
- **Global equity markets rose in the past week, as optimism over a medical breakthrough and the gradual lifting of social distancing measures more than offset renewed US-China trade tensions.** Overall, the MSCI ACWI ended the week up by +2.8% (-13% ytd), with Developed Markets (+3.2% wow | -12% ytd) overperforming their Emerging Markets peers (+0.5% wow | -19% ytd). The S&P500 rose by 3.2% wow (-9% ytd), reaching the highest level since March 6th on Wednesday (2972). Regarding sectors, Autos (+14.2% wow) and Energy (+6.1% wow) overperformed, with the latter being supported by higher oil prices. On the other side of the Atlantic, the Eurostoxx rose by 4.4% wow, and by a further 1.3% on Monday. Cyclical sectors such as travel & leisure (+6% wow) and Autos (+6% wow) outperformed in the past week, on hopes that the easing of Covid-19 lockdowns will lead to a faster economic recovery. In Japan, the Nikkei 225 rose by 1.8% wow and by a further 1.7% on Monday after the BoJ launched a new lending program totalling ¥30tn to support small businesses which are struggling due to the coronavirus. In China, the CSI 300 declined by 2.3% wow after the authorities proposed imposing national security laws on Hong Kong, raising prospects of fresh protests.



Graph 1.

## Fixed Income

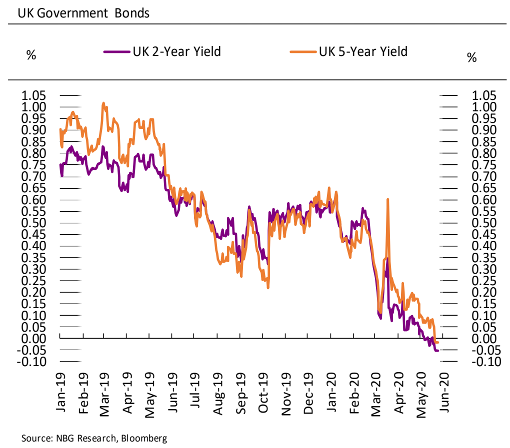
- **Government bond yields were mixed in the past week.** Specifically, the US 10-year yield ended the week stable at 0.66% and the 2-year yield rose by 2 bps to 0.17%. More importantly, the UK 10-year yield declined by 6 bps wow to 0.17% (0.16% historic low in March), as financial markets are pricing in negative interest rates by the BoE by the end of the year (41% probability vs 10% in the past week). As a result, yields on two- and five-year government bonds, that are the most sensitive to monetary policy, recorded all-time lows (-5 bps wow to -0.05% and -10 bps wow to -0.02%, respectively). In addition, note that at Wednesday's auction, £3.75bn of gilts maturing in July 2023 were sold at an average yield below zero (-0.003%) for the first time ever. In Germany, the 10-year yield rose by 4 bps to -0.49%. Periphery bond yield spreads declined heavily in the past week, after a European Union proposal for a recovery fund that could provide grants to help the hardest -hit economies due to Covid-19. Specifically, in Italy, the 10-year spread declined by -31 bps to 208 bps; in Spain, it fell by 18 bps to 111 bps; and in Portugal, by -19 bps to 122 bps. **Corporate bond spreads narrowed significantly in the past week, especially in the High Yield spectrum due to risk-on.** Indeed, EUR HY bond spreads decreased by 43 bps to 616 bps and their US counterparts narrowed by 72 bps to 706 bps (due to higher oil prices). In the investment grade spectrum, EUR spreads fell by 12 bps to 184 bps and USD spreads declined by 23 bps to 197 bps.



Graph 2.

## FX and Commodities

- **In foreign exchange markets, the euro rose against the US Dollar in the past week** (+0.7% to $1.090), following the proposal by France and Germany of a €500bn Recovery Fund to offer grants to regions and sectors hardest hit by the coronavirus crisis. However, on Friday, the US dollar rose (+0.4% against the euro | +0.5% against a basket of trade-weighted currencies-DXY), supported by safe-haven demand. The British Pound recorded small losses in the past week (-0.2% wow against the euro to €/0.896), despite the weaker-than-expected economic data and the risk of sub-zero interest rates.
- **In commodities, oil prices rose in the past week, due to the continued decline in US oil inventories, and the easing of lockdown measures that boost hopes for a recovery in fuel demand.** Specifically, US oil inventories declined for a second consecutive week by 5 million barrels to 526 million barrels for the week ending May 15th. Overall, Brent ended the week up by 14% to $33.6/barrel (-45% ytd), and the WTI rose by 9.6% to $34.5/barrel (-48% ytd), both at a 2-month high.



Graph 3.

Quote of the week: "We are in the midst of an economic downturn without modern precedent. It was sudden, and it is severe... While the burden is widespread, it is not evenly spread... Those taking the brunt of the fallout are those least able to bear it", **Fed Chair, Jerome Powell, May 22nd 2020.**

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## Interest Rates & Foreign Exchange Forecasts

| 10-Yr Gov. Bond Yield (%) | May 22nd | 3-month | 6-month | 12-month | Official Rate (%) | May 22nd | 3-month | 6-month | 12-month |
|---|---|---|---|---|---|---|---|---|---|
| Germany | -0.49 | -0.50 | -0.40 | -0.30 | Euro area | 0.00 | 0.00 | 0.00 | 0.00 |
| US | 0.66 | 0.90 | 1.00 | 1.20 | US | 0.25 | 0.25 | 0.25 | 0.25 |
| UK | 0.17 | 0.32 | 0.36 | 0.54 | UK | 0.10 | 0.10 | 0.08 | 0.08 |
| Japan | 0.00 | -0.10 | -0.07 | -0.02 | Japan | -0.10 | -0.10 | -0.10 | -0.10 |
| **Currency** | May 22nd | 3-month | 6-month | 12-month | | May 22nd | 3-month | 6-month | 12-month |
| EUR/USD | 1.09 | 1.13 | 1.13 | 1.15 | USD/JPY | 107 | 105 | 105 | 103 |
| EUR/GBP | 0.89 | 0.88 | 0.87 | 0.87 | GBP/USD | 1.22 | 1.28 | 1.30 | 1.32 |
| EUR/JPY | 117 | 119 | 118 | 118 | | | | | |

Forecasts at end of period

## Economic Forecasts

| United States | 2018a | Q1:19a | Q2:19a | Q3:19a | Q4:19a | 2019a | Q1:20a | Q2:20f | Q3:20f | Q4:20f | 2020f |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Real GDP Growth (YoY) (1) | 2,9 | 2,7 | 2,3 | 2,1 | 2,3 | 2,3 | 0,3 | -11,3 | -8,2 | -5,7 | -6,2 |
| Real GDP Growth (QoQ saar) (2) | - | 3,1 | 2,0 | 2,1 | 2,1 | - | -4,8 | -37,6 | 17,1 | 13,8 | - |
| Private Consumption | 3,0 | 1,1 | 4,6 | 3,1 | 1,8 | 2,6 | -7,6 | -44,7 | 22,2 | 17,2 | -8,1 |
| Government Consumption | 1,7 | 2,9 | 4,8 | 1,7 | 2,5 | 2,3 | 0,7 | 4,3 | 4,5 | 4,5 | 2,8 |
| Investment | 4,6 | 3,2 | -1,4 | -0,8 | -0,6 | 1,3 | -2,6 | -28,8 | 9,0 | 8,1 | -5,5 |
| Residential | -1,5 | -1,1 | -2,9 | 4,6 | 6,5 | -1,5 | 21,0 | -37,3 | 10,4 | 4,7 | -0,8 |
| Non-residential | 6,4 | 4,4 | -1,0 | -2,3 | -2,5 | 2,1 | -8,6 | -25,9 | 8,6 | 8,9 | -6,8 |
| Inventories Contribution | 0,1 | 0,5 | -1,0 | 0,0 | -1,2 | 0,1 | -0,6 | -1,2 | 0,8 | 0,6 | -0,5 |
| Net Exports Contribution | -0,4 | 0,8 | -0,8 | -0,2 | 1,9 | -0,2 | 1,8 | -0,6 | -0,9 | -0,7 | 0,5 |
| Exports | 3,0 | 4,2 | -5,7 | 0,9 | 2,1 | 0,0 | -8,7 | -14,5 | 7,9 | 5,9 | -3,7 |
| Imports | 4,4 | -1,5 | 0,0 | 1,8 | -8,4 | 1,0 | -15,3 | -8,4 | 10,9 | 8,1 | -5,3 |
| Inflation (3) | 2,5 | 1,7 | 1,8 | 1,7 | 2,1 | 1,8 | 2,1 | 0,2 | 0,5 | 0,7 | 0,9 |
| **Euro Area** | **2018a** | Q1:19a | Q2:19a | Q3:19a | Q4:19a | **2019a** | Q1:20f | Q2:20f | Q3:20f | Q4:20f | **2020f** |
| Real GDP Growth (YoY) | 1,9 | 1,4 | 1,2 | 1,3 | 1,0 | 1,2 | -3,2 | -11,8 | -8,8 | -6,4 | -7,6 |
| Real GDP Growth (QoQ saar) | - | 1,9 | 0,6 | 1,2 | 0,4 | - | -14,2 | -30,7 | 15,9 | 11,1 | - |
| Private Consumption | 1,4 | 1,7 | 0,7 | 2,0 | 0,5 | 1,3 | -17,5 | -38,1 | 21,2 | 17,0 | -9,5 |
| Government Consumption | 1,1 | 1,9 | 1,8 | 2,3 | 1,4 | 1,7 | 0,9 | 7,1 | 5,9 | 3,4 | 3,2 |
| Investment | 2,4 | 3,7 | 21,4 | -14,4 | 18,9 | 5,5 | -28,6 | -44,1 | 27,3 | 18,9 | -11,8 |
| Inventories Contribution | 0,0 | -1,6 | 0,4 | -0,7 | -0,4 | -0,5 | -0,2 | -0,6 | 0,3 | 0,3 | -0,3 |
| Net Exports Contribution | 0,4 | 1,4 | -4,6 | 3,9 | -3,4 | -0,5 | 3,0 | -1,1 | -1,8 | -2,3 | -0,3 |
| Exports | 3,3 | 3,8 | 0,2 | 2,6 | 1,2 | 2,5 | -4,6 | -29,2 | 26,4 | 9,9 | -3,5 |
| Imports | 2,7 | 1,1 | 11,0 | -5,4 | 9,2 | 3,8 | -10,7 | -29,8 | 33,7 | 16,0 | -3,2 |
| Inflation | 1,8 | 1,4 | 1,4 | 1,0 | 1,0 | 1,2 | 1,1 | 0,4 | 0,5 | 0,6 | 0,7 |

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** | + Massive Fiscal loosening will support the economy but wont avoid a recession<br>- 2020 EPS growth expectations have further room to fall from +2%. Earnings will contract in 2020<br>- Forget aggressive share buybacks for now due to political pressures<br>- Peaking profit margins<br>- Protectionism and trade wars<br>- P/Es (Valuations) are in line with long-term averages despite P/E contraction of more than 20% since February highs (19x)<br>**Neutral/Positive** | +Still high equity risk premium relative to other regions<br>+ Modest fiscal loosening in 2020 excluding Germany (5% of GDP)<br>- 2020-2021 EPS estimates may turn pessimistic as economic growth fails to pick up<br>- Political uncertainty (Italy, Brexit) could intensify<br>**Neutral** | +Still aggressive QE and "yield-curve" targeting by the BoJ<br>- Signs of policy fatigue regarding structural reforms and fiscal discipline<br>- Strong appetite for foreign assets<br>- JPY appreciation in a risk-off scenario could hurt exporters<br>**Neutral** | +65% of FTSE100 revenues from abroad<br>+Undemanding valuations in relative terms<br>- Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process<br>**Neutral/Negative** |
| **Government Bonds** | +Valuations appear rich with term-premium below 0%<br>+Sizeable fiscal deficit<br>+Underlying inflation pressures if Fed seek makeup strategies<br>- Global search for yield by non-US investors continues<br>- Safe haven demand<br>- Fed to remain at ZLB in the course of 2020-2021<br>- Fed: Unlimited QE purchases<br>**Slightly higher yields expected** | +Valuations appear excessive compared with long-term fundamentals<br>- Political Risks<br>- Fragile growth outlook<br>- Medium-term inflation expectations remain low<br>- ECB QE net purchases<br>- ECB QE "stock" effect<br>**Higher yields expected** | +Sizeable fiscal deficits<br>+Restructuring efforts to be financed by fiscal policy measures<br>- Safe haven demand<br>- Extremely dovish central bank<br>- Yield-targeting of 10-Year JGB at around 0%<br>**Stable yields expected** | +Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process<br>+Inflation expectations could drift higher ahead of EU/UK negotiations<br>-The BoE is expected to remain on hold with risks towards rate cuts<br>- Slowing economic growth post-Brexit<br>**Higher yields expected but with Brexit risk premia working on both directions** |
| **Foreign Exchange** | +Safe-haven demand<br>- Fed's interest rate differential disappeared following cuts to 0%-0.25%<br>**Broadly Flat EUR against the USD with high volatility around $1.10** | +Reduced short-term tail risks<br>+Higher core bond yields<br>+Current account surplus<br>- Sluggish growth<br>- Deflation concerns<br>- The ECB's monetary policy to remain extra loose (Targeted-LTROs, ABSs, Quantitative Easing)<br>**Broadly Flat EUR against the USD with high volatility around $1.10** | +Safe haven demand<br>+More balanced economic growth recovery (long-term)<br>+Inflation is bottoming out<br>- Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2%<br>**Slightly higher JPY** | +Transitions phase negotiations<br>+Valuations appear undemanding with REER 6% below its 15-year average<br>- Sizeable Current account deficit<br>- Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process<br>**Higher GBP expected but with Brexit risk premia working on both directions** |

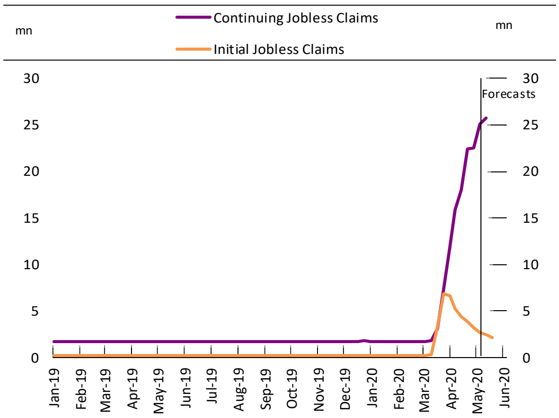
# Economic Calendar

In the US, the 2nd estimate for Q1 GDP is released. Moreover, the ISM manufacturing survey for May and the weekly initial and continuing jobless claims will be closely monitored for a more updated view of economic conditions.

In the euro area, attention turns to April's money supply data, particularly regarding credit to the private sector from commercial banks. Furthermore, May's flash estimate for CPI is released. According to consensus, the annual growth for the headline index will near zero, mostly due to reduced energy prices (alongside weak overall demand).

In China, the manufacturing PMIs for May will be closely monitored for a better assessment of the economic recovery post-lockdowns.

US Unemployment Insurance Claims




Source: NBG Research, FRED Economic Data

**Economic News Calendar for the period: May 19 - June 1, 2020**

**Tuesday 19**

| | | S | | A | P |
|---|---|---|---|---|---|
| **US** | | | | | |
| Housing starts (k) | April | 900 | - | 891 | 1276 |
| Building permits (k) | April | 1000 | + | 1074 | 1356 |
| **UK** | | | | | |
| ILO Unemployment Rate | March | 4.3% | + | 3.9% | 4.0% |
| **GERMANY** | | | | | |
| ZEW survey current situation | May | -87.6 | - | -93.5 | -91.5 |
| ZEW survey expectations | May | 30.0 | + | 51.0 | 28.2 |

**Wednesday 20**

| | | S | | A | P |
|---|---|---|---|---|---|
| **US** | | | | | |
| FOMC Minutes | April 29 | | | | |
| **UK** | | | | | |
| CPI (YoY) | April | 0.9% | - | 0.8% | 1.5% |
| CPI Core (YoY) | April | 1.4% | | 1.4% | 1.6% |
| **EURO AREA** | | | | | |
| Consumer Confidence Indicator | May | -23.8 | + | -18.8 | -22.0 |

**Thursday 21**

| | | S | | A | P |
|---|---|---|---|---|---|
| **US** | | | | | |
| Initial Jobless Claims (k) | May 16 | 2400 | - | 2438 | 2687 |
| Continuing Claims (k) | May 9 | 24250 | - | 25073 | 22548 |
| Markit US Manufacturing PMI | May | 40.0 | - | 39.8 | 36.1 |
| Philadelphia Fed Business Outlook | May | -40.0 | - | -43.1 | -56.6 |
| Existing home sales (mn) | April | 4.22 | + | 4.33 | 5.27 |
| **UK** | | | | | |
| Markit UK PMI Manufacturing SA | May | 37.2 | + | 40.6 | 32.6 |
| Markit/CIPS UK Services PMI | May | 24.0 | + | 27.8 | 13.4 |
| **JAPAN** | | | | | |
| PMI manufacturing | May | .. | | 38.4 | 41.9 |
| Exports YoY | April | -22.2% | + | -21.9% | -11.7% |
| Imports YoY | April | -13.2% | + | -7.2% | -5.0% |
| **EURO AREA** | | | | | |
| Markit Eurozone Manufacturing PMI | May | 38.0 | + | 39.5 | 33.4 |
| Markit Eurozone Services PMI | May | 25.0 | + | 28.7 | 12.0 |
| Markit Eurozone Composite PMI | May | 27.0 | + | 30.5 | 13.6 |

**Friday 22**

| | | S | | A | P |
|---|---|---|---|---|---|
| **UK** | | | | | |
| Retail sales Ex Auto MoM | April | -15.0% | - | -15.2% | -3.8% |
| **JAPAN** | | | | | |
| CPI (YoY) | April | 0.2% | - | 0.1% | 0.4% |
| Core CPI (YoY) - ex. Fresh Food | April | -0.1% | - | -0.2% | 0.4% |
| Core CPI (YoY) - ex. Fresh Food and Energy | April | 0.2% | | 0.2% | 0.6% |

**Monday 25**

| | | S | | A | P |
|---|---|---|---|---|---|
| **GERMANY** | | | | | |
| GDP (QoQ) | Q1:20 | -2.2% | | -2.2% | -2.2% |
| GDP (wda, YoY) | Q1:20 | -2.3% | | -2.3% | -2.3% |
| IFO- Business Climate Indicator | May | 78.5 | + | 79.5 | 74.3 |
| IFO- Current Assesment | May | 80.0 | - | 78.9 | 79.5 |
| IFO-Expectations | May | 75.0 | + | 80.1 | 69.4 |
| Private Consumption (QoQ) | Q1:20 | -2.0% | - | -3.2% | 0.0% |
| Government Spending QoQ | Q1:20 | 0.6% | - | 0.2% | 0.3% |

**Tuesday 26**

| | | S | A | P |
|---|---|---|---|---|
| **US** | | | | |
| S&P Case/Shiller house price index 20 (YoY) | March | 3.40% | .. | 3.47% |
| New home sales (k) | April | 480 | .. | 627 |
| Conference board consumer confidence | May | 87.0 | .. | 86.9 |

**Wednesday 27**

| | | S | A | P |
|---|---|---|---|---|

**Thursday 28**

| | | S | A | P |
|---|---|---|---|---|
| **US** | | | | |
| GDP (QoQ, annualized) | Q1:20 | -4.8% | .. | -4.8% |
| Personal Consumption | Q1:20 | -7.5% | .. | -7.6% |
| Initial Jobless Claims (k) | May 23 | 2100 | .. | 2438 |
| Continuing Claims (k) | May 16 | 25750 | .. | 25073 |
| Pending home sales (MoM) | April | -15.0% | .. | -20.8% |
| Durable goods orders (MoM) | April | -19.8% | .. | -14.7% |
| Durable goods orders ex transportation (MoM) | April | -15.0% | .. | -0.4% |
| **EURO AREA** | | | | |
| Economic Confidence | May | 70.7 | .. | 67.0 |

**Friday 29**

| | | S | A | P |
|---|---|---|---|---|
| **US** | | | | |
| Personal income (MoM) | April | -6.5% | .. | -2.0% |
| Personal spending (MoM) | April | -12.8% | .. | -7.5% |
| PCE Deflator (YoY) | April | 0.5% | .. | 1.3% |
| PCE Core Deflator (YoY) | April | 1.1% | .. | 1.7% |
| **JAPAN** | | | | |
| Jobless Rate | April | 2.7% | .. | 2.5% |
| Retail sales (MoM) | April | -6.9% | .. | -4.6% |
| Retail sales (YoY) | April | -11.2% | .. | -4.7% |
| Industrial Production (MoM) | April | -5.6% | .. | -3.7% |
| Industrial Production (YoY) | April | -10.6% | .. | -5.2% |
| Construction Orders YoY | April | .. | .. | -14.3% |
| **GERMANY** | | | | |
| Retail sales (MoM) | April | -10.5% | .. | -4.0% |
| Retail sales (YoY) | April | -14.3% | .. | -1.2% |
| **EURO AREA** | | | | |
| CPI Estimate YoY | May | 0.1% | .. | 0.4% |
| Core CPI (YoY) | May | 0.8% | .. | 0.9% |
| M3 money supply (YoY) | April | 8.1% | .. | 7.5% |

**Monday 1**

| | | S | A | P |
|---|---|---|---|---|
| **US** | | | | |
| ISM Manufacturing | May | 43.0 | .. | 41.5 |
| Construction spending | April | -7.6% | .. | 0.9% |
| **CHINA** | | | | |
| Manufacturing PMI | May | 51.0 | .. | 50.8 |
| Caixin PMI Manufacturing | May | 49.7 | .. | 49.4 |

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

NATIONAL BANK OF GREECE

## 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 | 2955 | 3,2 | -8,5 | 4,7 | 8,1 | MSCI Emerging Markets | 52821 | 0,0 | -14,1 | -4,3 |
| Japan | NIKKEI 225 | 20388 | 1,8 | -13,8 | -3,6 | -10,1 | MSCI Asia | 807 | -1,0 | -11,7 | -0,8 |
| UK | FTSE 100 | 5993 | 3,3 | -20,5 | -17,1 | -23,0 | China | 79 | -2,6 | -7,4 | 6,6 |
| Canada | S&P/TSX | 14914 | 1,9 | -12,6 | -7,7 | -7,6 | Korea | 613 | 2,5 | -11,3 | -1,1 |
| Hong Kong | Hang Seng | 22930 | -3,6 | -18,7 | -15,9 | -25,2 | MSCI Latin America | 73988 | 4,1 | -26,1 | -16,8 |
| Euro area | EuroStoxx | 322 | 4,4 | -20,2 | -11,2 | -18,0 | Brazil | 262490 | 6,1 | -28,3 | -13,5 |
| Germany | DAX 30 | 11074 | 5,8 | -16,4 | -7,4 | -14,7 | Mexico | 33269 | 0,4 | -17,1 | -15,4 |
| France | CAC 40 | 4445 | 3,9 | -25,7 | -15,8 | -20,1 | MSCI Europe | 5171 | 4,8 | -18,9 | -7,8 |
| Italy | FTSE/MIB | 17316 | 2,8 | -26,3 | -14,0 | -24,4 | Russia | 1159 | 5,5 | -14,9 | -1,9 |
| Spain | IBEX-35 | 6698 | 3,4 | -29,9 | -26,5 | -33,2 | Turkey | 1281809 | 3,7 | -14,7 | 11,6 |

## 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 | 123,5 | 5,4 | -37,3 | -36,8 | -48,0 | Energy | 130,5 | 5,1 | -35,3 | -35,7 |
| Materials | 230,8 | 4,3 | -15,2 | -3,4 | -17,1 | Materials | 227,1 | 4,0 | -12,9 | -2,1 |
| Industrials | 219,7 | 5,7 | -20,5 | -11,1 | -15,5 | Industrials | 219,8 | 5,5 | -19,6 | -10,8 |
| Consumer Discretionary | 258,6 | 4,2 | -7,1 | 4,6 | 2,8 | Consumer Discretionary | 251,3 | 4,1 | -6,4 | 4,8 |
| Consumer Staples | 225,0 | 0,5 | -10,4 | -4,2 | 4,2 | Consumer Staples | 228,9 | 0,3 | -9,0 | -3,8 |
| Healthcare | 276,1 | 0,2 | -1,1 | 15,0 | 20,8 | Healthcare | 274,8 | 0,0 | -0,3 | 15,1 |
| Financials | 86,9 | 3,4 | -30,9 | -22,4 | -30,4 | Financials | 88,9 | 3,2 | -29,4 | -21,6 |
| IT | 323,0 | 3,6 | 3,9 | 28,5 | 33,6 | IT | 313,7 | 3,6 | 4,1 | 28,6 |
| Telecoms | 74,2 | 3,7 | -4,2 | 5,8 | 14,4 | Telecoms | 77,8 | 3,6 | -3,7 | 5,9 |
| Utilities | 130,2 | 2,8 | -13,3 | -5,6 | 5,2 | Utilities | 135,4 | 2,6 | -12,1 | -4,8 |

## Bond Markets (%)

| 10-Year Government Bond Yields | Current | Last week | Year Start | One Year Back | 10-year average |
|---|---|---|---|---|---|
| US | 0,66 | 0,64 | 1,92 | 2,32 | 2,29 |
| Germany | -0,49 | -0,53 | -0,19 | -0,12 | 0,98 |
| Japan | 0,00 | 0,00 | -0,01 | -0,06 | 0,43 |
| UK | 0,17 | 0,23 | 0,82 | 0,95 | 1,84 |
| Greece | 1,71 | 2,07 | 1,47 | 3,43 | 9,79 |
| Ireland | 0,13 | 0,10 | 0,12 | 0,51 | 3,28 |
| Italy | 1,59 | 1,86 | 1,41 | 2,64 | 3,07 |
| Spain | 0,63 | 0,76 | 0,47 | 0,85 | 2,83 |
| Portugal | 0,73 | 0,88 | 0,44 | 1,01 | 4,59 |

| US Mortgage Market (1. Fixed-rate Mortgage) | Current | Last week | Year Start | One Year Back | 10-year average |
|---|---|---|---|---|---|
| 30-Year FRM[1] (%) | 3,4 | 3,4 | 4,0 | 4,3 | 4,2 |
| vs 30Yr Treasury (bps) | 204 | 208 | 156 | 158 | 123 |

| Government Bond Yield Spreads (in bps) | Current | Last week | Year Start | One Year Back |
|---|---|---|---|---|
| US Treasuries 10Y/2Y | 49 | 50 | 35 | 17 |
| US Treasuries 10Y/5Y | 33 | 34 | 23 | 20 |
| Bunds 10Y/2Y | 19 | 20 | 42 | 52 |
| Bunds 10Y/5Y | 19 | 20 | 29 | 40 |

| Corporate Bond Spreads (in bps) | Current | Last week | Year Start | One Year Back |
|---|---|---|---|---|
| EM Inv. Grade (IG) | 267 | 287 | 150 | 172 |
| EM High yield | 855 | 924 | 494 | 513 |
| US IG | 197 | 220 | 101 | 128 |
| US High yield | 706 | 778 | 360 | 422 |
| Euro area IG | 184 | 196 | 94 | 126 |
| Euro area High Yield | 616 | 659 | 308 | 408 |

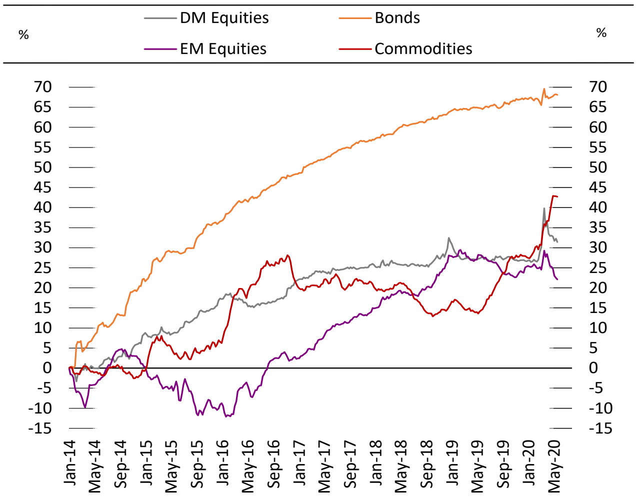
## Foreign Exchange & Commodities

| Foreign Exchange | Current | 1-week change (%) | 1-month change (%) | 1-Year change (%) | Year-to-Date change (%) |
|---|---|---|---|---|---|
| **Euro-based cross rates** | | | | | |
| EUR/USD | 1,09 | 0,7 | 0,7 | -2,5 | -2,8 |
| EUR/CHF | 1,06 | 0,7 | 0,7 | -5,6 | -2,4 |
| EUR/GBP | 0,90 | 0,2 | 2,1 | 1,4 | 5,9 |
| EUR/JPY | 117,34 | 1,2 | 0,6 | -4,3 | -3,6 |
| EUR/NOK | 10,90 | -1,6 | -6,5 | 11,3 | 10,7 |
| EUR/SEK | 10,54 | -1,1 | -3,6 | -2,0 | 0,3 |
| EUR/AUD | 1,67 | -1,2 | -2,6 | 2,9 | 4,4 |
| EUR/CAD | 1,53 | 0,0 | -0,4 | 1,4 | 4,8 |
| **USD-based cross rates** | | | | | |
| USD/CAD | 1,40 | -0,8 | -1,2 | 3,9 | 7,7 |
| USD/AUD | 1,53 | -1,9 | -3,3 | 5,6 | 7,3 |
| USD/JPY | 107,64 | 0,5 | -0,1 | -1,8 | -0,9 |

| Commodities | Current | 1-week change (%) | 1-month change (%) | 1-Year change (%) |
|---|---|---|---|---|
| Agricultural | 295 | 0,2 | -2,5 | -10,4 |
| Energy | 202 | 9,1 | 41,4 | -57,4 |
| West Texas Oil ($) | 34 | 14,0 | 173,2 | -41,9 |
| Crude brent Oil ($) | 35 | 9,6 | 77,8 | -49,0 |
| Industrial Metals | 1026 | 2,5 | 1,3 | -13,2 |
| Precious Metals | 2013 | -0,5 | 1,2 | 32,9 |
| Gold ($) | 1735 | -0,5 | 1,2 | 35,2 |
| Silver ($) | 17 | 3,6 | 14,0 | 17,9 |
| Baltic Dry Index | 498 | 22,4 | -28,2 | -53,4 |
| Baltic Dirty Tanker Index | 735 | -13,7 | -51,8 | 10,4 |

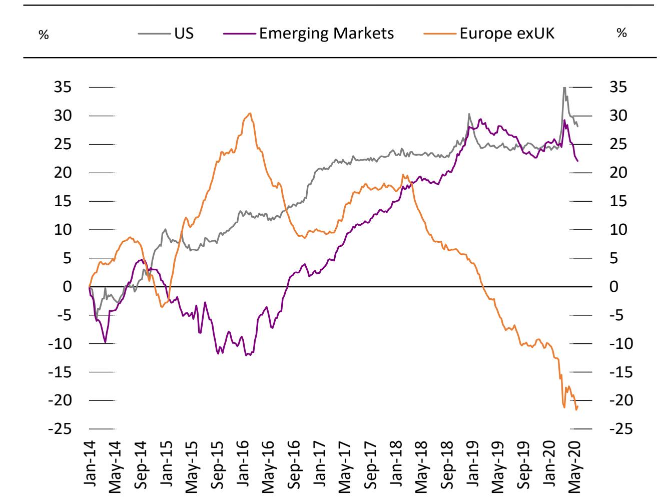
Source: Bloomberg, as of May 22nd, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

## Global Cross Asset ETFs: Flows as % of AUM



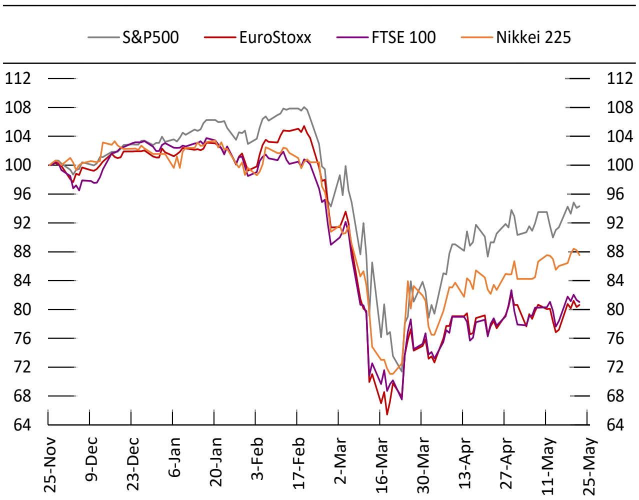

Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of May 22nd

## Equity ETFs: Flows as % of AUM



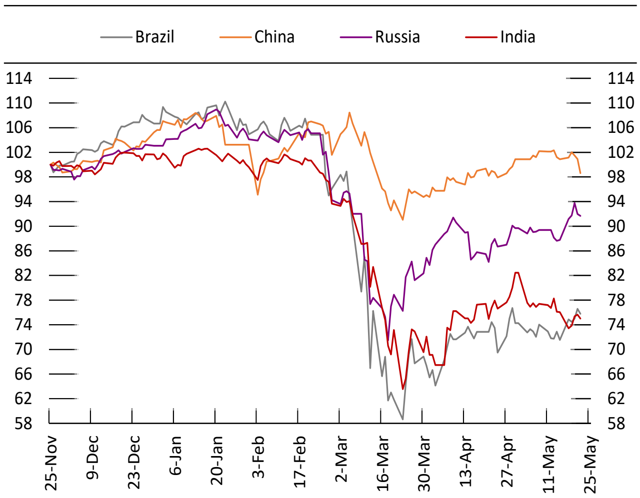

Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of May 22nd

## Equity Market Performance - G4



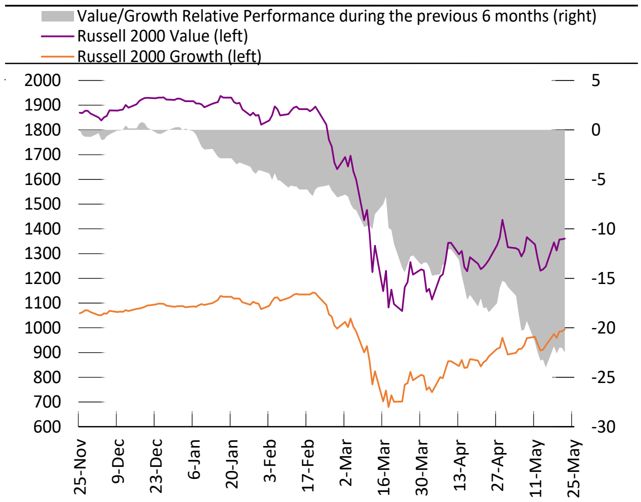

Source: Bloomberg - Data as of May 22nd – Rebased @ 100

## Equity Market Performance - BRICs



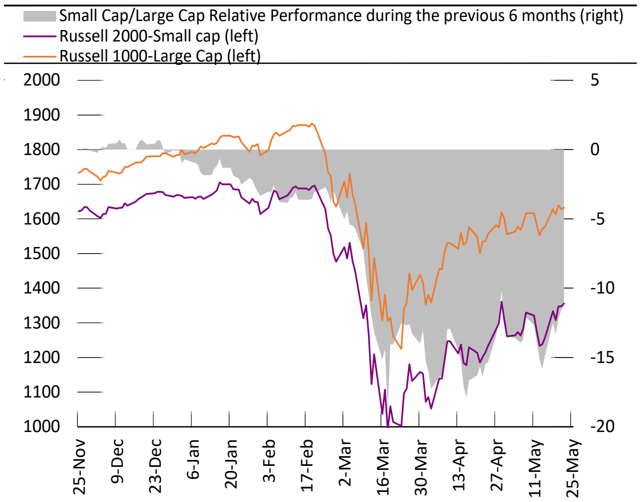

Source: Bloomberg - Data as of May 22nd – Rebased @ 100

## Russell 2000 Value & Growth Index



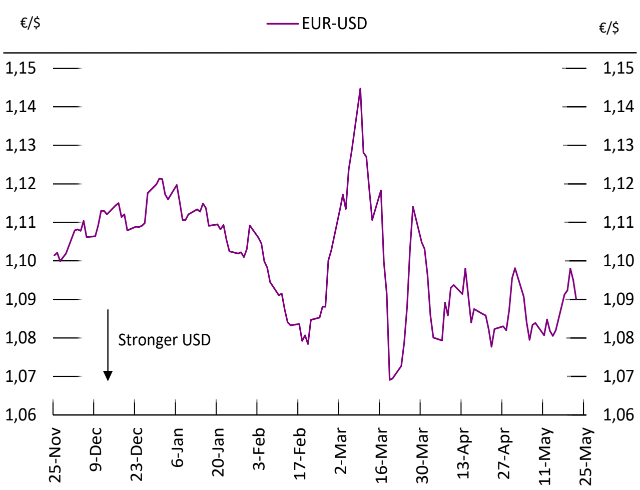

Source: Bloomberg, Data as of May 22nd

## Russell 2000 & Russell 1000 Index



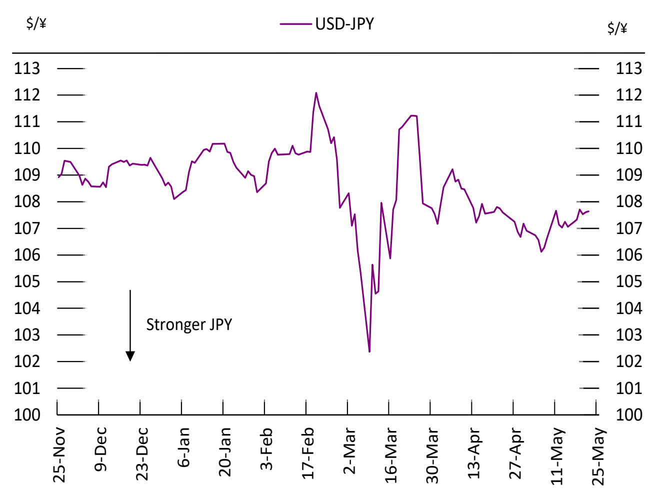

Source: Bloomberg, Data as of May 22nd

EUR/USD



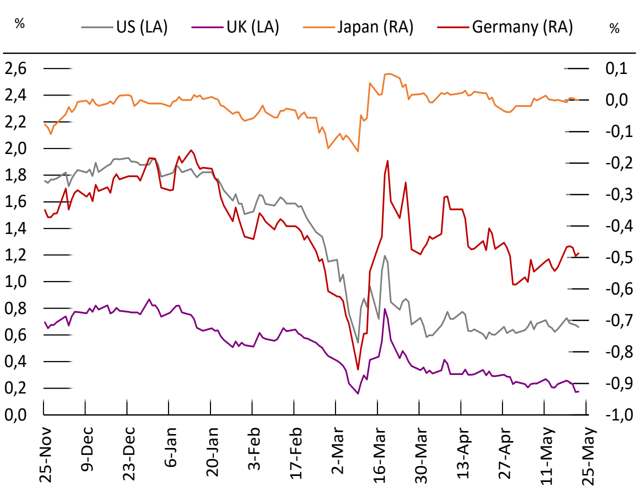

Source: Bloomberg, Data as of May 22nd

JPY/USD



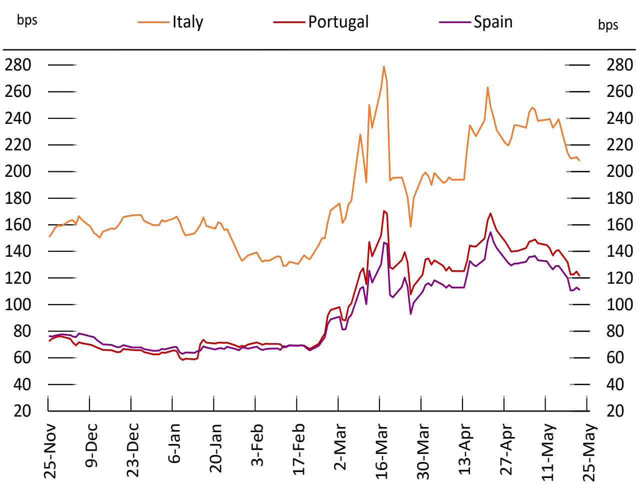

Source: Bloomberg, Data as of May 22nd

10- Year Government Bond Yields



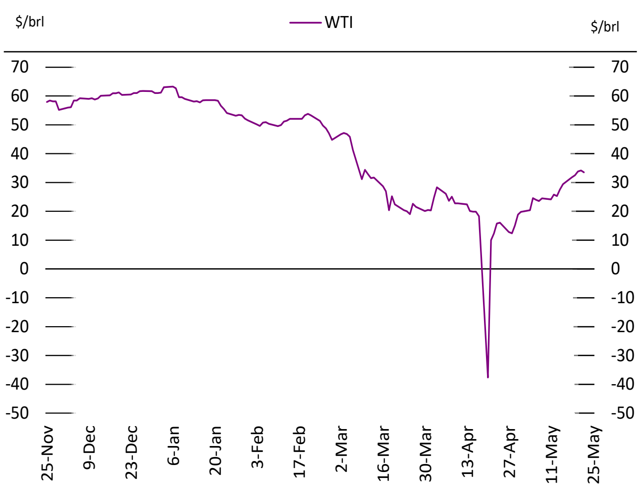

Source: Bloomberg - Data as of May 22nd
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



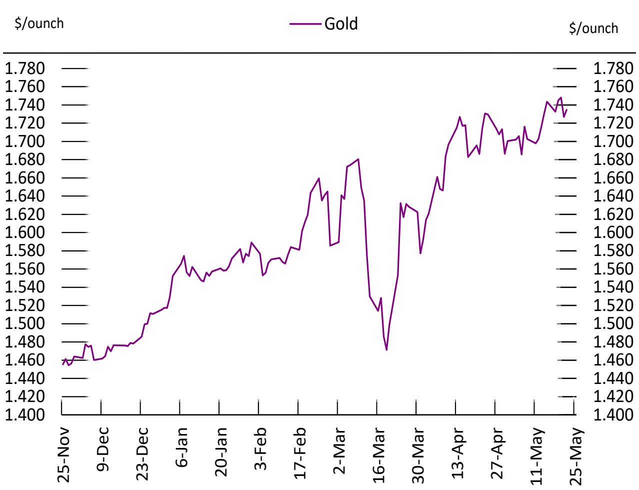

Source: Bloomberg - Data as of May 22nd

West Texas Intermediate ($/brl)




Source: Bloomberg, Data as of May 22nd

Gold ($/ounch)




Source: Bloomberg, Data as of May 22nd

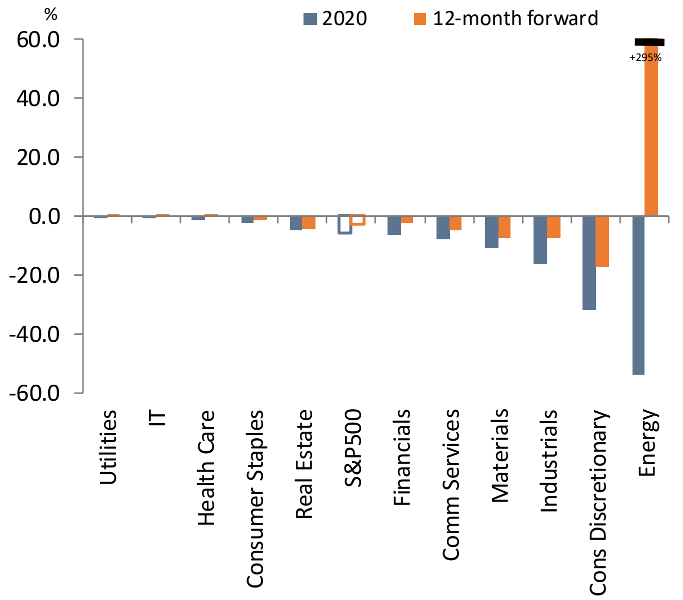
## US Sectors Valuation

| | Price ($) | | | EPS Growth (%) | | Dividend Yield (%) | | P/E Ratio | | | | P/BV Ratio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 22/5/20 | % Weekly Change | %YTD | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 12m fwd | 10Yr Avg | 2019 | 2020 | 12m fwd | 10Yr Avg |
| **S&P500** | 2955 | 3.2 | -8.5 | 1.2 | -21.4 | 1.8 | 2.0 | 20.3 | 23.4 | 21.3 | 15.2 | 3.7 | 3.3 | 3.2 | 2.5 |
| **Energy** | 289 | 6.1 | -36.7 | -29.0 | N/A | 3.8 | 5.9 | 21.8 | N/A | N/A | 18.5 | 1.6 | 1.2 | 1.3 | 1.7 |
| **Materials** | 333 | 4.0 | -13.7 | -15.6 | -21.5 | 2.1 | 2.4 | 20.2 | 22.8 | 20.8 | 14.8 | 2.4 | 2.2 | 2.2 | 2.5 |
| **Financials** | | | | | | | | | | | | | | | |
| **Diversified Financials** | 607 | 3.0 | -18.2 | 1.6 | -29.6 | 1.4 | 1.9 | 16.2 | 18.6 | 16.9 | 13.9 | 1.9 | 1.5 | 1.5 | 1.5 |
| **Banks** | 226 | 5.3 | -40.6 | 9.0 | -53.3 | 2.6 | 4.6 | 12.3 | 16.0 | 13.5 | 10.9 | 1.4 | 0.8 | 0.8 | 1.0 |
| **Insurance** | 337 | 5.4 | -23.5 | 15.8 | -5.5 | 2.2 | 3.1 | 13.4 | 10.8 | 10.4 | 10.9 | 1.5 | 1.1 | 1.1 | 1.1 |
| **Real Estate** | 202 | 5.6 | -15.8 | 1.9 | -7.1 | 3.1 | 3.6 | 21.0 | 19.1 | 18.5 | 18.2 | 3.7 | 3.1 | 3.1 | 3.0 |
| **Industrials** | | | | | | | | | | | | | | | |
| **Capital Goods** | 552 | 7.2 | -24.0 | -7.0 | -27.2 | 1.9 | 2.3 | 21.2 | 21.7 | 19.6 | 15.6 | 5.5 | 3.7 | 3.6 | 3.4 |
| **Transportation** | 631 | 9.2 | -19.6 | 6.6 | N/A | 1.9 | 2.2 | 14.7 | N/A | N/A | 12.5 | 4.3 | 3.7 | 3.7 | 3.4 |
| **Commercial Services** | 318 | 3.1 | -8.0 | 12.8 | -10.5 | 1.3 | 1.5 | 28.5 | 28.4 | 27.1 | 20.1 | 6.0 | 4.9 | 4.8 | 3.5 |
| **Consumer Discretionary** | | | | | | | | | | | | | | | |
| **Retailing** | 2750 | 2.6 | 12.3 | 4.2 | -26.0 | 0.8 | 0.6 | 33.3 | 50.0 | 43.2 | 21.9 | 13.3 | 12.7 | 11.8 | 6.5 |
| **Consumer Services** | 1009 | 6.8 | -22.6 | 5.1 | -95.6 | 2.1 | 1.9 | 24.0 | 418.4 | 265.3 | 20.0 | 16.3 | 18.5 | 19.3 | 7.1 |
| **Consumer Durables** | 297 | 9.7 | -20.2 | -0.4 | -29.2 | 1.5 | 1.8 | 19.7 | 22.4 | 20.6 | 16.9 | 4.1 | 3.2 | 3.3 | 3.2 |
| **Automobiles and parts** | 82 | 14.2 | -31.6 | -16.4 | N/A | 4.2 | 1.6 | 8.5 | N/A | N/A | 7.9 | 1.4 | 1.1 | 1.1 | 1.7 |
| **IT** | | | | | | | | | | | | | | | |
| **Technology** | 1625 | 3.9 | 2.0 | 2.6 | 0.5 | 1.3 | 1.4 | 21.6 | 21.1 | 20.0 | 12.7 | 9.7 | 11.2 | 11.4 | 3.9 |
| **Software & Services** | 2480 | 2.3 | 7.9 | 11.1 | 5.8 | 1.0 | 1.0 | 29.3 | 29.0 | 27.6 | 17.5 | 7.9 | 8.0 | 7.6 | 5.2 |
| **Semiconductors** | 1267 | 5.5 | 2.0 | -12.2 | 0.3 | 1.8 | 1.9 | 18.9 | 19.1 | 18.1 | 14.0 | 5.5 | 5.2 | 5.1 | 3.1 |
| **Communication Services** | 180 | 4.5 | -1.0 | 3.0 | -13.7 | 1.2 | 1.2 | 21.8 | 24.3 | 22.5 | 17.4 | 3.5 | 3.2 | 3.1 | 2.9 |
| **Media** | 672 | 5.1 | 3.1 | 3.8 | -14.6 | 0.4 | 0.4 | 27.4 | 31.8 | 28.6 | 20.2 | 4.2 | 3.9 | 3.7 | 3.2 |
| **Consumer Staples** | | | | | | | | | | | | | | | |
| **Food & Staples Retailing** | 476 | 0.5 | -4.3 | 2.9 | -4.4 | 1.7 | 1.8 | 21.5 | 21.9 | 21.3 | 16.3 | 4.6 | 4.4 | 4.2 | 3.2 |
| **Food Beverage & Tobacco** | 625 | 0.6 | -12.6 | -1.7 | -4.7 | 3.3 | 3.8 | 19.7 | 18.1 | 17.5 | 17.6 | 5.3 | 4.6 | 4.5 | 4.9 |
| **Household Goods** | 698 | -0.6 | -6.1 | 6.6 | 4.6 | 2.3 | 2.5 | 25.8 | 23.1 | 22.6 | 19.4 | 8.9 | 8.1 | 8.0 | 5.1 |
| **Health Care** | | | | | | | | | | | | | | | |
| **Pharmaceuticals** | 987 | -2.2 | 0.1 | 11.0 | 3.2 | 2.2 | 2.4 | 16.1 | 15.5 | 14.9 | 14.5 | 6.3 | 5.3 | 5.0 | 3.8 |
| **Healthcare Equipment** | 1301 | 1.0 | -5.6 | 9.9 | -6.3 | 1.0 | 1.1 | 20.7 | 20.6 | 19.2 | 15.4 | 3.8 | 3.3 | 3.1 | 2.6 |
| **Utilities** | 286 | 3.0 | -13.0 | 4.9 | 3.1 | 3.1 | 3.7 | 20.7 | 17.6 | 17.2 | 15.9 | 2.2 | 1.9 | 1.8 | 1.6 |

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

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

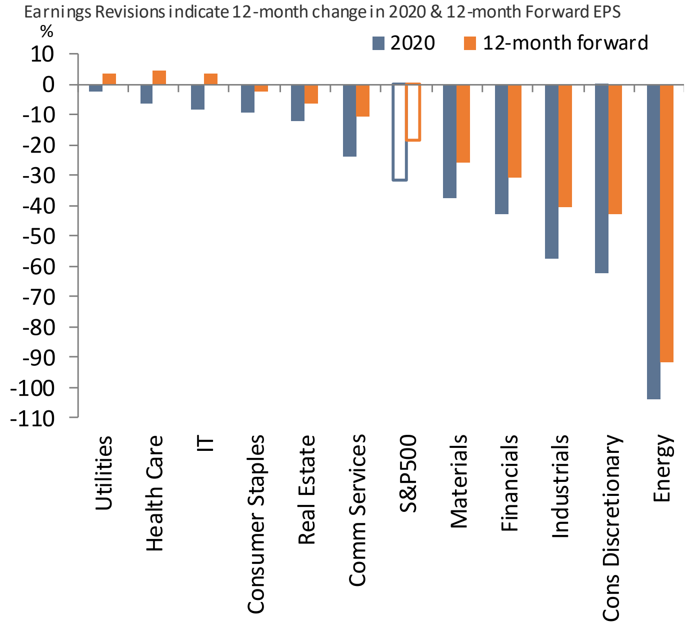
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS




Source: Factset, Data as of May 22nd
12-month forward EPS are 61% of 2020 EPS and 39% of 2021 EPS

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

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




Source: Factset, Data as of May 22nd
12-month forward EPS are 61% of 2020 EPS and 39% of 2021 EPS

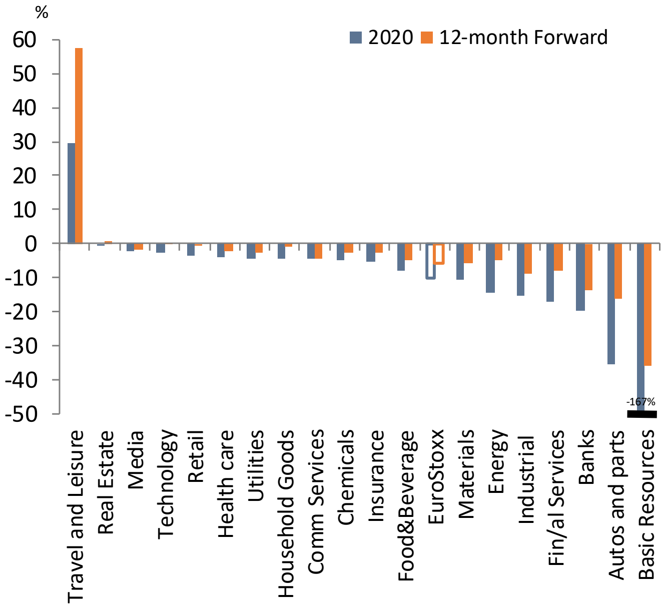
## Euro Area Sectors Valuation

| | Price (€) | | | EPS Growth (%) | | Dividend Yield (%) | | P/E Ratio | | | | P/BV Ratio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 22/5/20 | % Weekly Change | %YTD | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 12m fwd | 10Yr Avg | 2019 | 2020 | 12m fwd | 10Yr Avg |
| **EuroStoxx** | 322 | 4.4 | -20.2 | 2.4 | -33.5 | 3.1 | 3.0 | 16.8 | 19.9 | 17.7 | 13.2 | 1.7 | 1.4 | 1.3 | 1.4 |
| **Energy** | 219 | 3.9 | -33.2 | -9.8 | -66.6 | 4.9 | 7.4 | 13.8 | 27.2 | 21.5 | 11.6 | 1.3 | 0.9 | 0.9 | 1.1 |
| **Materials** | 366 | 5.9 | -25.0 | 14.1 | -35.9 | 3.2 | 3.7 | 15.4 | 18.2 | 16.1 | 14.2 | 1.9 | 1.4 | 1.4 | 1.4 |
| **Basic Resources** | 145 | 4.4 | -29.2 | -61.6 | N/A | 3.3 | 3.1 | 19.3 | N/A | N/A | 14.6 | 0.8 | 0.6 | 0.6 | 0.8 |
| **Chemicals** | 1011 | 5.1 | -14.0 | -13.3 | -15.3 | 2.7 | 3.1 | 21.8 | 22.5 | 20.9 | 15.2 | 2.1 | 1.8 | 1.8 | 2.2 |
| **Financials** | | | | | | | | | | | | | | | |
| **Fin/al Services** | 464 | 3.0 | -8.0 | 25.4 | -34.1 | 2.4 | 2.7 | 15.8 | 21.6 | 19.8 | 14.2 | 1.7 | 1.3 | 1.2 | 1.3 |
| **Banks** | 52 | 4.8 | -45.8 | -1.3 | -55.0 | 5.7 | 3.9 | 9.2 | 11.1 | 9.7 | 9.4 | 0.6 | 0.3 | 0.3 | 0.7 |
| **Insurance** | 208 | 4.7 | -31.3 | 13.0 | -11.0 | 4.8 | 7.2 | 11.0 | 8.4 | 7.9 | 9.2 | 1.0 | 0.7 | 0.7 | 0.9 |
| **Real Estate** | 184 | 1.8 | -25.3 | 0.1 | -2.7 | 4.2 | 5.0 | 19.1 | 14.7 | 14.2 | 16.8 | 1.0 | 0.8 | 0.8 | 1.0 |
| **Industrial** | 716 | 6.5 | -23.9 | 11.4 | -37.0 | 2.3 | 2.3 | 20.4 | 24.4 | 21.1 | 15.3 | 3.2 | 2.4 | 2.3 | 2.3 |
| **Consumer Discretionary** | | | | | | | | | | | | | | | |
| **Media** | 175 | 2.0 | -21.8 | 5.4 | -15.9 | 2.9 | 3.2 | 17.2 | 15.9 | 14.9 | 15.2 | 2.4 | 1.8 | 1.8 | 1.8 |
| **Retail** | 548 | 3.2 | -8.9 | 2.8 | -19.3 | 2.5 | 2.3 | 25.2 | 28.4 | 25.7 | 19.1 | 4.3 | 3.3 | 3.2 | 3.1 |
| **Automobiles and parts** | 338 | 6.9 | -30.4 | -12.2 | -71.9 | 3.7 | 1.8 | 8.7 | 21.2 | 15.9 | 8.3 | 0.9 | 0.6 | 0.6 | 1.0 |
| **Travel and Leisure** | 153 | 6.0 | -28.6 | -10.1 | N/A | 2.2 | 0.7 | 16.8 | N/A | N/A | 13.6 | 2.0 | 1.5 | 1.5 | 2.0 |
| **Technology** | 587 | 6.0 | -3.2 | 5.8 | -9.6 | 1.2 | 0.9 | 26.9 | 27.8 | 25.3 | 18.3 | 4.2 | 3.6 | 3.5 | 3.0 |
| **Communication Services** | 248 | -0.3 | -14.2 | -14.3 | 5.8 | 4.2 | 4.9 | 17.5 | 14.1 | 13.6 | 14.1 | 1.9 | 1.5 | 1.5 | 1.8 |
| **Consumer Staples** | | | | | | | | | | | | | | | |
| **Food&Beverage** | 442 | 2.3 | -26.1 | 16.8 | -28.8 | 2.1 | 2.2 | 20.5 | 21.2 | 19.3 | 18.5 | 2.7 | 1.8 | 1.8 | 2.6 |
| **Household Goods** | 930 | 3.9 | -13.1 | 6.9 | -20.6 | 1.6 | 1.6 | 29.6 | 31.8 | 29.1 | 20.9 | 6.1 | 4.9 | 4.7 | 3.8 |
| **Health care** | 827 | 2.2 | -4.9 | 7.3 | -2.5 | 2.1 | 2.2 | 20.1 | 19.0 | 18.0 | 15.2 | 2.4 | 2.2 | 2.1 | 2.1 |
| **Utilities** | 310 | 5.4 | -10.7 | 57.3 | -1.5 | 4.5 | 5.2 | 16.2 | 14.5 | 13.9 | 12.7 | 1.6 | 1.3 | 1.3 | 1.1 |

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

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

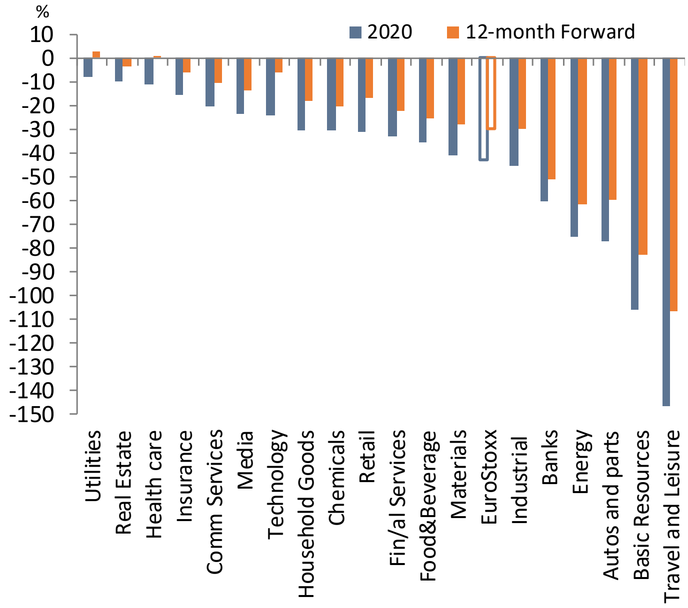
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS




Source: Factset, Data as of May 22nd
12-month forward EPS are 61% of 2020 EPS and 39% of 2021 EPS

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

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




Source: Factset, Data as of May 22nd
12-month forward EPS are 61% of 2020 EPS and 39% of 2021 EPS

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