

Global Markets Roundup

National Bank of Greece | Economic Research Division | April 7, 2020



NATIONAL BANK OF GREECE

Aggressive monetary and fiscal support, along with signs of a flattening in the COVID-19 count, have stabilized risk assets

- Global equity markets continued on a slightly downward trend in the past week, ending Q1:2020 deep in the red. Specifically, the S&P500 contracted by 20%, its largest quarterly decline on record. Corporate bond spreads widened significantly both in the Investment spectrum (by 200 bps), as well as in the Speculative Grade spectrum (by 520 bps) on both sides of the Atlantic, as the undergoing global economic recession will inevitably led to increasing debt-repayment delays and/or defaults despite the massive policy response (see below). Core Government bond yields declined (US) or revisited all-time lows (Germany), as central banks took unprecedented support measures, while euro area periphery bond spreads widened (Italy: +40 bps to 200 bps). Gold gained ground modestly (by 4% to \$1577/ounce), while oil prices fell by 68% to \$22/barrel as OPEC+ did not find common ground to cut supply.
- Aggressive monetary policy measures, combined with sizeable fiscal spending announcements, have prevented equity prices to decline further, in our view. The S&P500 bottomed on March 23 (2237) following a -27% 12-month forward Price-to-Earnings decline to 13.9x (15.3 as of April 6th and a peak of 19x mid-February). The Federal Reserve has expanded its balance sheet by over \$1 trillion in the past two weeks via purchases of US Treasuries and agency MBS, as well as due to the expansion of cross-currency swaps. In addition, it is expected to initiate Investment Grade corporate bond purchases and loans in the primary, as well the secondary, market of up to \$200 billion by mid-April. The ECB has committed to purchase new assets (mainly Government and corporate bonds) at a pace of at least €100 billion per month in the course of 2020 with a total envelope of above €1 trillion.
- On the fiscal side, spending has increased across the board, with the US being more aggressive. According to our estimates, the US CARES Act will have a total cost of c. \$2 trillion or 9% of GDP, with European fiscal measures ranging between 2%-4% of GDP (loan guarantees amount to more than 10% of GDP). A coordinated approach at euro area level is also imminent, most probably by using existing instruments of the European Commission, the European Investment Bank and the ESM, albeit with slightly more favorable terms and conditions. In that context, the Eurogroup meeting on Tuesday 7th April is important, with circulating non-papers pointing towards a "solidarity-fund" SPV (highly optimistic).
- As signs of a flattening in the COVID-19 count are indicating (excluding Japan), risk appetite has revived in recent days. Assuming the current rate of deceleration continues, epidemic curves in most developed economies could flatten by end-April (see graphs below). This yardstick, if achieved, could gradually lead countries to, gradually and slowly, relaxing containment measures in the coming months, thus alleviating the duration of the ongoing recession. Indeed, the S&P500 rose by 7% on Monday 6th, with equity futures pointing to further gains on Tuesday, while euro area equity indices have recorded gains of c. 7% in the past two trading sessions. Corporate bond spreads narrowed modestly (5 bps to 15bps) as "fallen angel" (Investment Grade) and default rate (Speculative Grade) uncertainty remains elevated (cont'd on page 2).

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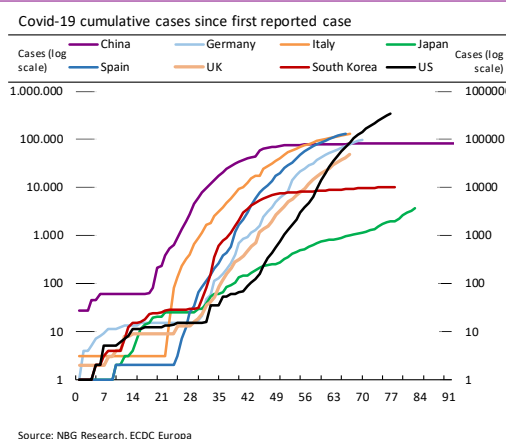
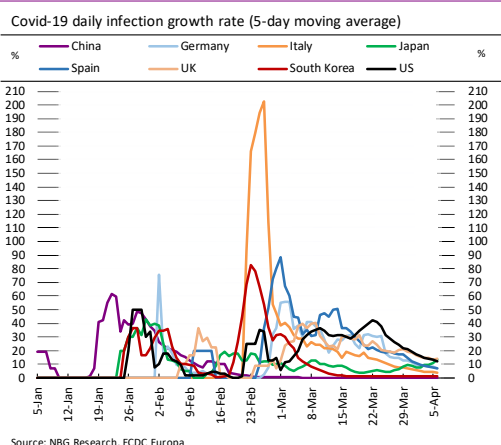
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Charts of the week



...All in all, the retracement in each asset class as a percentage of its maximum drawdown year-to-date due to COVID-19 remains below 50%, with the exception of the Italian-German spread (see graph page 3). Thus, on the one hand, risk premia are still high, suggesting buying opportunities based solely on valuations. On the other hand, uncertainty related to the coronavirus crisis and its implications on the global economy has been, and remains, very high compared with previous pandemics according to Ahir et al (World Pandemic Uncertainty Index – see graph page 3). As a result, high volatility is expected to continue this week, albeit with a less bearish tone compared with the previous two weeks.

US labor market conditions deteriorated sharply in March due to the ongoing public health crisis

- **US employment posted an unprecedented (and far larger than consensus estimates) decline in March, with the deterioration picking up pace during the 2nd half of the month.** Regarding the monthly labor report for March, nonfarm payrolls decreased sharply by 701k (consensus for -100k), while total household employment (including the self-employed and agricultural workers) fell by a far more profound 2987k. As a result, the unemployment rate rose by 0.9 pps to 4.4% versus consensus expectations for 3.8% (the total number of unemployed persons reached 7140k). Moreover, that outcome was reached despite the labor force participation rate decreasing by 0.7pps to 62.7%. Note also that a broader measure of labor market slack, the U-6 unemployment rate (which includes the unemployed, part-time workers for economic reasons, and those workers marginally attached to the labor force), was up by 1.7 pps to 8.7%. Wage growth was resilient in March, with the monthly pace of increase for average hourly earnings at +0.4% mom and the annual pace of increase at +3.1% yoy. Nevertheless, these readings were positively distorted by the fact that job losses during March disproportionately regarded relatively lower-paid occupations (e.g. circa 60% of the total decline in nonfarm payrolls was concentrated in bars and restaurants), with the respective wages dropping out of the calculation. Importantly, the data reference period for the monthly report was the week from March 8th to March 14th, after which the pace of the decrease in employment accelerated sharply, as indicated by the new claims for unemployment insurance. Indeed, **initial jobless claims posted a staggering rise of 6648k in the week ending March 28th (consensus for 3500k) compared with 3307k in the previous week (and 282k in the week coinciding with the reference period for the monthly labor report).** Recall that before the latest two readings, the previous record high for initial jobless claims was 695k in 1982 (respective data are collected since 1967).

Euro area inflation decelerated significantly in March

- **Both headline and core inflation undershot consensus estimates in March.** Specifically, the flash estimate for the annual growth of CPI was down by 0.5 pps to 0.7% yoy, versus expectations for 0.8% yoy. Although the aforementioned easing was partly due to energy prices (-4.3% yoy versus -0.3% in February), core inflation also decelerated considerably as collapsing demand starts to weigh on prices. Indeed, core CPI (which excludes the effects of energy and food components) was down by 0.2 pps to 1.0% yoy (consensus for an unchanged

outcome). Looking forward, as the disruptions in consumer demand related to COVID-19 have intensified since late-March, a further (significant) deceleration in inflation dynamics is expected at least in the short term. According to our estimates, core CPI growth in April will slow towards 0.5% yoy (with risks tilted to the downside), in view also of unfavorable base effects (a high base for services prices as Easter was in April in 2019, boosting prices of items related to travel and leisure in that period). Looking ahead, the outlook is highly uncertain, with inflation dynamics being closely dependent on the timing and speed of the economic recovery post COVID-19.

Japan: Business sentiment deteriorated substantially in March, albeit by modestly less than expected

- **The Tankan survey that assesses business conditions reached its lowest level in seven years among both manufacturers and non-manufacturers, albeit slightly better than consensus estimates.** Specifically, the index for large manufacturers was down by 8 pts to -8 in March (consensus for -10). The index for large non-manufacturers was also down sharply (by 12 pts), albeit remaining in positive territory at +8 in March and modestly above expectations for +6. Regarding activity for three months ahead, the Tankan survey points to further deterioration, with the respective index for manufacturers at -11 (consensus for -14) and for non-manufacturers at -1 (consensus: +2). On a positive note, companies' fixed investment plans (including all surveyed large enterprises | excluding software and R&D investment) for FY:2020 (April 2020-March 2021) were relatively resilient, at +1.8% yoy (software: +0.9% yoy | R&D: +0.6% yoy). It should also be noted, however, that c. 70% of surveyed firms had submitted their responses by March 11th, since when the COVID-19 pandemic has intensified substantially across the globe (excluding China). As a result, a further deterioration in business confidence, at least in the short term, is likely on the cards.

Chinese PMIs suggest economic activity partly recovered in March

- **Business surveys improved substantially in March, as the restrictive measures to stem the coronavirus outbreak eased, exceeding consensus expectations.** Specifically, the Caixin/Markit manufacturing PMI was up by 9.8 pts to 50.1, while its counterpart for the services sector increased by 16.5 pts to 43.0. Moreover, official manufacturing PMI (which covers a broader range of industries) rose to 52 in March, from a record low of 35.7. Finally, official non-manufacturing PMI (which covers the services and construction sectors) rose to 52.3 from 29.6 in February (consensus: 37.8). Overall, the latest improvement should be viewed as a signal of economic activity modestly expanding (the latest readings were moderately above the expansion/contraction threshold of 50.0) from the extremely low levels in February which were suppressed due to the measures to mitigate the spread of COVID-19 (e.g., restrictions in transportations and the movement of people, temporary company shutdowns and shipping restrictions) and not as an indication that activity has returned to pre-coronavirus norms. Attention now turns to the announcement of Q1:20 GDP on April 17th (consensus for -5.0% yoy compared with +6.0% yoy in Q4:19), as well of "hard" activity data (industrial production, fixed assets investment, retail sales) for March, in order to better gauge the condition of the Chinese economy.

Equities

- Global equity markets lost ground in the past week, following the increase in the number of COVID-19 cases, which surpassed 1 mn worldwide, as well as concerns about the magnitude of the economic fallout of growing restrictions on economic activity.** Overall, the MSCI ACWI was down by -2.6% (-24.7% ytd), with both developed (-2.8% wov) and emerging markets (-1.3% wov) recording losses. In the US, the S&P500 fell by -2.1% wov, with Banks leading the decline (-10.9% wov), on the back of lower yields. Selling pressure increased following the release of the Labor Department report, which showed payroll employment declining for the first time since September 2010, by 701k, well below consensus for a 145k fall. This does not include the almost 10 mn workers who claimed unemployment insurance in the final two weeks of the month. The S&P500 index recorded its largest first-quarter decline ever (-20%), which is also its worst quarterly performance since 2008. Regarding the earnings season, consensus EPS expectations for Q1:20 stand at -7.3% yoy from -5.8% last week and +4.3% yoy on December 31. On the other side of the Atlantic, the Eurostoxx fell by -2.2% wov, while Banks fell to a record low (-13.2% wov and -48.1% yoy), on the back of lower yields and the ECB recommendation to banks not to pay dividends or buy back shares during the COVID-19 pandemic. In Japan, the Nikkei 225 declined by -8.1% wov and in the UK, the FTSE 100 ended the week down by -1.7% wov.

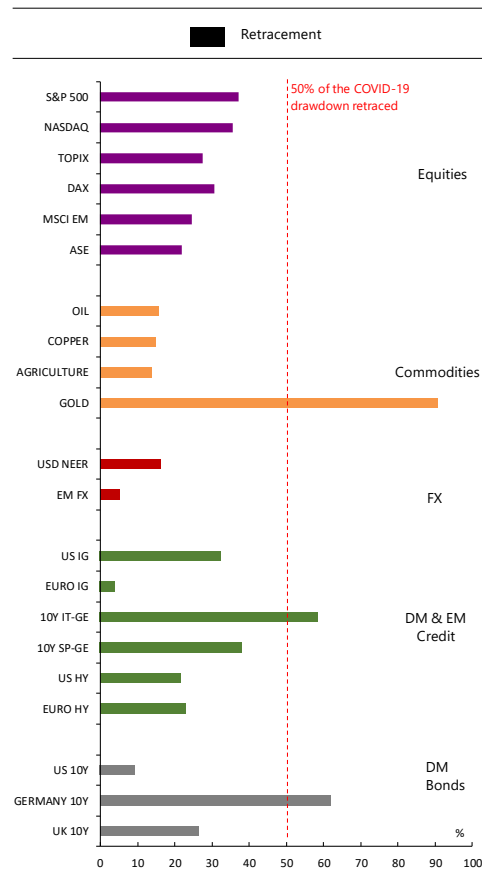
Fixed Income

- Government bond yields were mixed in the past week due to increased safe haven demand, weak US labor data (US) and tumbling euro area PMIs data, with the composite PMI index recording its largest single monthly decline in March to a survey record low of 29.7.** Specifically, the US 10-year yield fell by 8 bps wov to 0.60% and its 2-year peer was down by 1 bp wov to 0.23%. Similarly, in the UK, the 10-Year yield fell by 6 bps wov to 0.31%. In Germany, the 10-year yield rose by 3 bp to -0.44%. Periphery bond yields ended the week significantly higher (Italy: +22 bps to 1.55%, Spain: +20 bps to 0.74%, Portugal: +23 bp to 0.89% and Greece: +40 bps to 1.99%). **Corporate bond spreads narrowed in the investment grade spectrum during the past week.** Indeed, US IG bond spreads decreased by 16 bps to 308 bps, while their euro area counterparts were flat at 239 bps. In the high yield spectrum, US spreads were up by 44 bps to 943 bps, while euro area counterparts decreased by 13 bps to 747 bps.

FX and Commodities

- In foreign exchange markets, the US Dollar rose in the past week on increased safe haven demand.** Overall, the US Dollar ended the week up by +3.1% against the euro to \$1.08. The USD appreciated also by +0.6% against the Japanese Yen to ¥108.55 and by +1.5% against the British Pound to \$1.227. The euro decreased by -1.6% against the British Pound to €0.88 and by -2.6% against the Japanese Yen to ¥117.13, due to concerns over whether EU leaders will reach an agreement over a unified fiscal solution to the crisis. **Finally, in commodities, oil prices increased sharply in the past week, on the back of news that OPEC+ scheduled a virtual meeting for Monday, increasing hopes that OPEC and its allies would reach a large supply-cut agreement.** Oil inventories increased for a 10th consecutive week (+13.8 million barrels to 469 million barrels for the week ending March 27th). Overall, Brent ended the week up by +21.7% to \$29.9/barrel (-55% ytd) and the WTI by +31.8% to \$28.3/barrel (-53.6% ytd), the largest weekly percentage increase on record for both. However, over the weekend, the meeting was postponed until April 9th, causing prices to decline by -6% to \$28.1/bl on Monday. Monday. Gold prices ended the week down by -0.5% to \$1621/ounce), mainly explained by the rise of US Dollar.

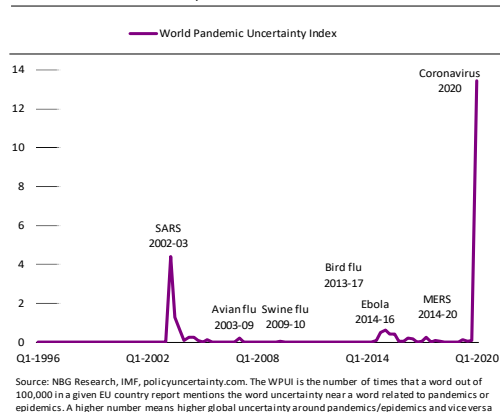
Assets retracements as % of maximum drawdown during the Covid-19 crisis



Source: NBG Research, Bloomberg

Graph 1.

World Pandemic Uncertainty Index



Source: NBG Research, IMF, policyuncertainty.com. The WPU is the number of times that a word out of 100,000 in a given EU country report mentions the word uncertainty near a word related to pandemics or epidemics. A higher number means higher global uncertainty around pandemics/epidemics and vice versa

Graph 2.

Quote of the week: "In this coronavirus crisis, only the strongest of responses will do. We must use every means at our disposal. Every available euro in the EU budget will be redirected to address it, every rule will be eased to enable the funding to flow rapidly and effectively. With a new solidarity instrument, we will mobilise €100 billion to keep people in jobs and businesses running", **President of the European Commission, Ursula von der Leyen, April 2nd 2020.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	April 3rd	3-month	6-month	12-month	Official Rate (%)	April 3rd	3-month	6-month	12-month
Germany	-0,44	-0,50	-0,40	-0,30	Euro area	0,00	0,00	0,00	0,00
US	0,60	0,90	1,00	1,20	US	0,25	0,25	0,25	0,25
UK	0,31	0,52	0,55	0,68	UK	0,10	0,09	0,09	0,09
Japan	-0,01	-0,11	-0,07	-0,03	Japan	-0,10	-0,10	-0,10	-0,10

Currency	April 3rd	3-month	6-month	12-month	April 3rd	3-month	6-month	12-month	
EUR/USD	1,08	1,13	1,13	1,15	USD/JPY	109	106	106	104
EUR/GBP	0,88	0,87	0,86	0,86	GBP/USD	1,23	1,30	1,31	1,34
EUR/JPY	117	119	119	119					

Forecasts at end of period

Economic Forecasts

United States	2018a	Q1:19a	Q2:19a	Q3:19a	Q4:19a	2019a	Q1:20f	Q2:20f	Q3:20f	Q4:20f	2020f
Real GDP Growth (YoY) (1)	2,9	2,7	2,3	2,1	2,3	2,3	0,2	-10,4	-8,1	-6,0	-6,0
Real GDP Growth (QoQ saar) (2)	-	3,1	2,0	2,1	2,1	-	-5,3	-34,8	13,1	11,7	-
Private Consumption	3,0	1,1	4,6	3,1	1,8	2,6	-7,4	-41,3	12,8	13,0	-8,2
Government Consumption	1,7	2,9	4,8	1,7	2,5	2,3	2,0	11,6	13,5	8,9	5,8
Investment	4,6	3,2	-1,4	-0,8	-0,6	1,3	-3,2	-30,8	9,6	9,6	-6,1
Residential	-1,5	-1,1	-2,9	4,6	6,5	-1,5	5,3	-43,8	12,8	6,0	-5,8
Non-residential	6,4	4,4	-1,0	-2,3	-2,5	2,1	-5,5	-27,6	8,9	10,4	-6,3
Inventories Contribution	0,1	0,5	-1,0	0,0	-1,2	0,1	-0,1	-1,9	0,6	0,7	-0,6
Net Exports Contribution	-0,4	0,8	-0,8	-0,2	1,9	-0,2	0,5	-0,1	-0,6	-1,2	0,3
Exports	3,0	4,2	-5,7	0,9	2,1	0,0	-2,4	-7,9	2,6	2,6	-1,5
Imports	4,4	-1,5	0,0	1,8	-8,4	1,0	-4,6	-5,7	5,2	8,6	-2,5
Inflation (3)	2,4	1,6	1,8	1,8	2,0	1,8	2,1	1,3	1,4	1,5	1,6

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	-2,7	-11,6	-8,2	-5,2	-6,9
Real GDP Growth (QoQ saar)	-	1,8	0,6	1,2	0,5	-	-12,5	-31,4	17,7	14,4	-
Private Consumption	1,4	1,6	0,8	2,0	0,5	1,3	-15,4	-38,9	24,2	16,6	-8,9
Government Consumption	1,1	1,7	1,8	2,2	1,4	1,6	1,3	2,9	3,7	3,0	2,2
Investment	2,3	3,7	21,7	-14,2	17,9	5,5	-22,0	-38,4	19,4	22,1	-8,9
Inventories Contribution	0,0	-1,5	0,3	-0,7	-0,4	-0,5	-0,5	-0,8	0,1	0,2	-0,4
Net Exports Contribution	0,4	1,4	-4,7	3,8	-3,2	-0,5	1,2	-1,3	0,4	0,2	-0,3
Exports	3,3	3,8	0,2	2,5	1,7	2,5	-5,0	-17,7	16,6	9,8	-1,8
Imports	2,7	1,0	11,2	-5,3	9,2	3,8	-7,8	-16,8	16,9	10,1	-1,2
Inflation	1,8	1,4	1,4	1,0	1,0	1,2	1,1	0,5	0,7	0,8	0,8

a: Actual, f: Forecasts, 1. Seasonally adjusted YoY growth rate, 2. Seasonally adjusted annualized QoQ growth rate, 3. Year-to-year average % change

12-Month View & Key Factors for Global Markets

	US	Euro Area	Japan	UK
Equity Markets	<ul style="list-style-type: none"> + Massive Fiscal loosening will support the economy but wont avoid a recession - 2020 EPS growth expectations have further room to fall from +2%. Earnings will contract in 2020 - Forget aggressive share buybacks for now due to political pressures - Peaking profit margins - Protectionism and trade wars - P/Es (Valuations) are in line with long-term averages despite P/E contraction of more than 20% since February highs (19x) <p>● Neutral/Positive</p>	<ul style="list-style-type: none"> + Still high equity risk premium relative to other regions + Modest fiscal loosening in 2020 excluding Germany (5% of GDP) - 2020-2021 EPS estimates may turn pessimistic as economic growth fails to pick up - Political uncertainty (Italy, Brexit) could intensify <p>● Neutral</p>	<ul style="list-style-type: none"> + Still aggressive QE and "yield-curve" targeting by the BoJ - Signs of policy fatigue regarding structural reforms and fiscal discipline - Strong appetite for foreign assets - JPY appreciation in a risk-off scenario could hurt exporters <p>● Neutral</p>	<ul style="list-style-type: none"> + 65% of FTSE100 revenues from abroad + Undemanding valuations in relative terms - Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process <p>● Neutral/Negative</p>
Government Bonds	<ul style="list-style-type: none"> + Valuations appear rich with term-premium below 0% + Sizeable fiscal deficit + Underlying inflation pressures if Fed seek makeup strategies - Global search for yield by non-US investors continues - Safe haven demand - Fed to remain at ZLB in the course of 2020-2021 - Fed: Unlimited QE purchases <p>▲ Slightly higher yields expected</p>	<ul style="list-style-type: none"> + Valuations appear excessive compared with long-term fundamentals - Political Risks - Fragile growth outlook - Medium-term inflation expectations remain low - ECB QE net purchases - ECB QE "stock" effect <p>▲ Higher yields expected</p>	<ul style="list-style-type: none"> + Sizeable fiscal deficits + Restructuring efforts to be financed by fiscal policy measures - Safe haven demand - Extremely dovish central bank - Yield-targeting of 10-Year JGB at around 0% <p>● Stable yields expected</p>	<ul style="list-style-type: none"> + Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process + Inflation expectations could drift higher ahead of EU/UK negotiations - The BoE is expected to remain on hold with risks towards rate cuts - Slowing economic growth post-Brexit <p>▲ Higher yields expected but with Brexit risk premia working on both directions</p>
Foreign Exchange	<ul style="list-style-type: none"> + Safe-haven demand - Fed's interest rate differential disappeared following cuts to 0%-0.25% <p>● Broadly Flat EUR against the USD with high volatility around \$1.10</p>	<ul style="list-style-type: none"> + Reduced short-term tail risks + Higher core bond yields + Current account surplus - Sluggish growth - Deflation concerns - The ECB's monetary policy to remain extra loose (Targeted-LTROs, ABSs, Quantitative Easing) <p>● Broadly Flat EUR against the USD with high volatility around \$1.10</p>	<ul style="list-style-type: none"> + Safe haven demand + More balanced economic growth recovery (long-term) - Inflation is bottoming out - Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2% <p>▲ Slightly higher JPY</p>	<ul style="list-style-type: none"> + Transitions phase negotiations + Valuations appear undemanding with REER 6% below its 15-year average - Sizeable Current account deficit - Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process <p>▲ Higher GBP expected but with Brexit risk premia working on both directions</p>

Equity Markets (in local currency)

Developed Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	Emerging Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)
US	S&P 500	2489	-2,1	-23,0	-13,6	-5,9	MSCI Emerging Markets	48898	-0,4	-20,4	-17,9	
Japan	NIKKEI 225	17820	-8,1	-24,7	-18,0	-16,4	MSCI Asia	750	-0,9	-17,9	-15,5	
UK	FTSE 100	5416	-1,7	-28,2	-26,8	-23,0	China	76	-0,4	-11,7	-11,9	
Canada	S&P/TSX	12938	2,0	-24,2	-20,7	-14,7	Korea	550	-1,2	-20,4	-17,4	
Hong Kong	Hang Seng	23236	-1,1	-17,6	-22,4	-21,3	MSCI Latin America	65401	-2,6	-34,7	-29,7	
Euro area	EuroStoxx	290	-2,2	-28,1	-23,0	-21,7	Brazil	222687	-4,8	-39,2	-28,9	
Germany	DAX 30	9526	-1,1	-28,1	-20,5	-20,3	Mexico	30769	-2,3	-23,3	-24,4	
France	CAC 40	4155	-4,5	-30,5	-24,0	-19,2	MSCI Europe	4871	5,7	-23,6	-14,8	
Italy	FTSE/MIB	16384	-2,6	-30,3	-24,5	-27,0	Russia	1103	8,5	-19,0	-4,1	
Spain	IBEX-35	6582	-2,9	-31,1	-31,0	-30,8	Turkey	1159766	0,7	-22,8	-13,7	

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		108,3	7,2	-45,0	-48,1	-48,6	Energy		114,8	7,8	-43,0	-46,6
Materials		192,0	-1,6	-29,5	-26,5	-27,2	Materials		190,8	-0,8	-26,8	-24,1
Industrials		191,7	-6,0	-30,6	-25,2	-24,4	Industrials		192,8	-5,5	-29,5	-24,4
Consumer Discretionary		203,6	-6,3	-26,8	-20,5	-16,3	Consumer Discretionary		198,5	-5,9	-26,0	-20,1
Consumer Staples		216,7	1,9	-13,7	-6,2	-3,6	Consumer Staples		221,3	2,6	-12,0	-4,9
Healthcare		241,0	1,9	-13,7	-2,2	7,6	Healthcare		240,7	2,5	-12,7	-1,6
Financials		79,8	-7,0	-36,5	-30,4	-35,4	Financials		82,2	-6,5	-34,7	-28,7
IT		256,9	-2,8	-17,4	-0,9	13,5	IT		249,9	-2,6	-17,1	-0,8
Telecoms		61,1	-2,0	-21,1	-13,0	-8,3	Telecoms		64,2	-1,8	-20,6	-12,7
Utilities		120,9	-5,8	-19,5	-11,6	-2,5	Utilities		126,2	-5,2	-18,1	-10,3

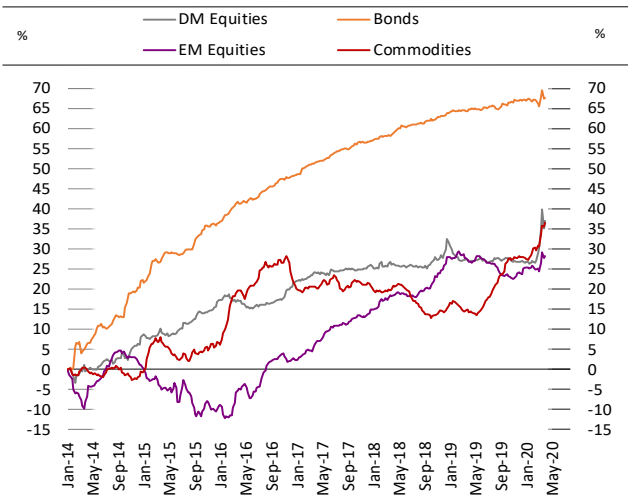
Bond Markets (%)

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		0,60	0,68	1,92	2,52	2,34	US Treasuries 10Y/2Y		37	43	35	18
Germany		-0,44	-0,47	-0,19	-0,01	1,02	US Treasuries 10Y/5Y		21	28	23	20
Japan		-0,01	0,02	-0,01	-0,04	0,44	Bunds 10Y/2Y		22	21	42	57
UK		0,31	0,37	0,82	1,08	1,89	Bunds 10Y/5Y		17	17	29	41
Greece		1,99	1,59	1,47	3,61	9,87	Corporate Bond Spreads (in bps)		Current	Last week	Year Start	One Year Back
Ireland		0,24	0,03	0,12	0,60	3,34	EM Inv. Grade (IG)		371	367	150	168
Italy		1,55	1,32	1,41	2,52	3,10	EM High yield		1162	1159	494	471
Spain		0,74	0,54	0,47	1,11	2,88	US IG		308	324	101	124
Portugal		0,89	0,67	0,44	1,26	4,64	US High yield		943	899	360	390
US Mortgage Market (1. Fixed-rate Mortgage)		Current	Last week	Year Start	One Year Back	10-year average	Euro area IG		239	240	94	121
30-Year FRM¹ (%)		3,5	3,5	4,0	4,4	4,2	Euro area High Yield		747	760	308	373
vs 30Yr Treasury (bps)		226	220	156	144	120						

Foreign Exchange & Commodities

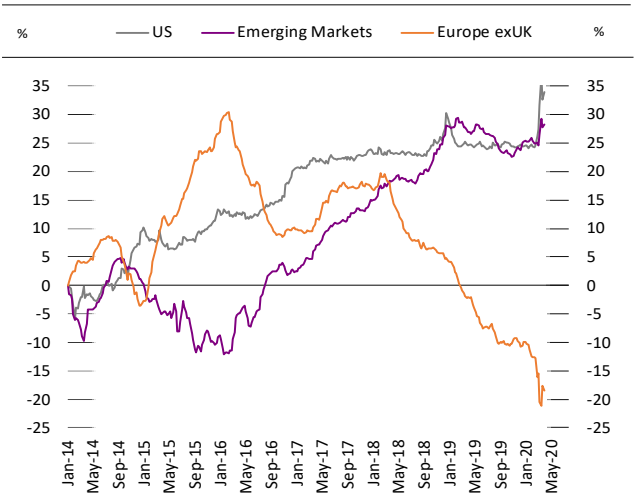
Foreign Exchange		Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)	Commodities		Current	1-week change (%)	1-month change (%)	1-Year change (%)
Euro-based cross rates							Agricultural		306	-3,7	-8,1	-10,2
EUR/USD		1,08	-3,1	-3,0	-3,7	-3,7	Energy		241	18,8	-37,6	-51,0
EUR/CHF		1,06	-0,3	-0,9	-5,9	-2,7	West Texas Oil (\$)		28	31,8	-39,4	-54,4
EUR/GBP		0,88	-1,6	1,8	2,6	4,1	Crude Brent Oil (\$)		30	21,7	-42,1	-56,6
EUR/JPY		117,13	-2,6	-2,2	-6,5	-3,7	Industrial Metals		978	-1,5	-13,5	-23,7
EUR/NOK		11,48	-1,5	11,3	18,9	16,6	Precious Metals		1882	-0,5	-1,3	23,4
EUR/SEK		11,01	-0,1	4,3	5,7	4,8	Gold (\$)		1621	-0,5	-1,0	25,4
EUR/AUD		1,80	-0,1	7,4	14,4	12,9	Silver (\$)		14	-0,6	-16,4	-5,0
EUR/CAD		1,53	-1,5	2,9	2,3	5,3	Baltic Dry Index		616	10,8	9,6	-11,9
USD-based cross rates							Baltic Dirty Tanker Index		1383	12,4	73,7	123,8
USD/CAD		1,42	1,6	6,1	6,3	9,4						
USD/AUD		1,67	2,8	10,5	18,6	17,0						
USD/JPY		108,55	0,6	0,9	-2,8	-0,1						

Global Cross Asset ETFs: Flows as % of AUM



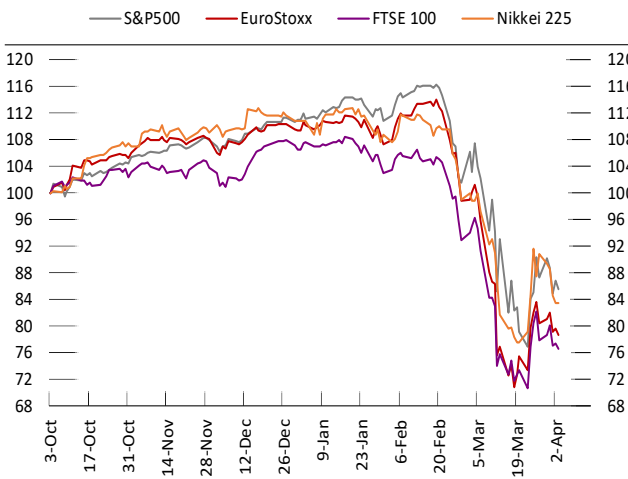
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of April 3rd

Equity ETFs: Flows as % of AUM



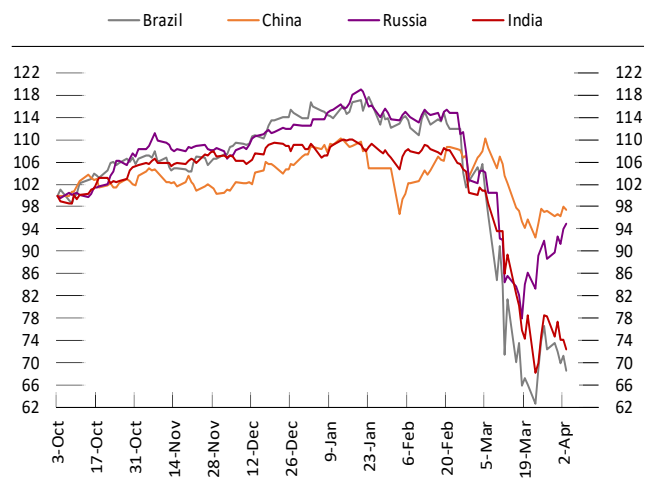
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of April 3rd

Equity Market Performance - G4



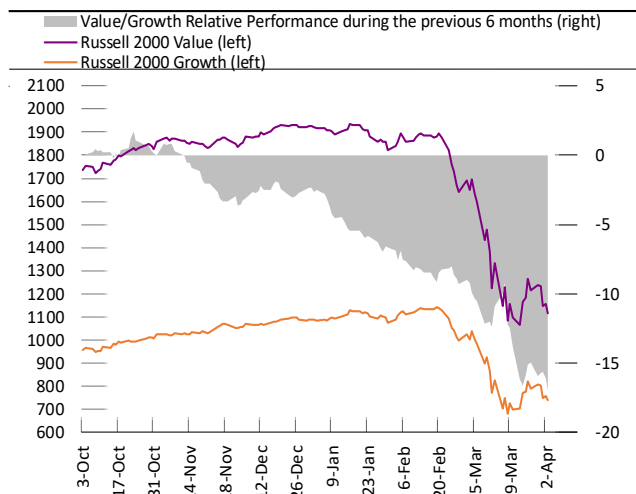
Source: Bloomberg - Data as of April 3rd - Rebased @ 100

Equity Market Performance - BRICs



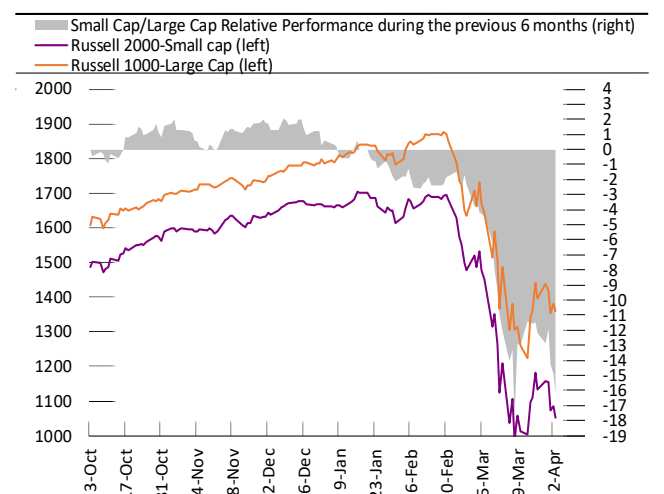
Source: Bloomberg - Data as of April 3rd - Rebased @ 100

Russell 2000 Value & Growth Index



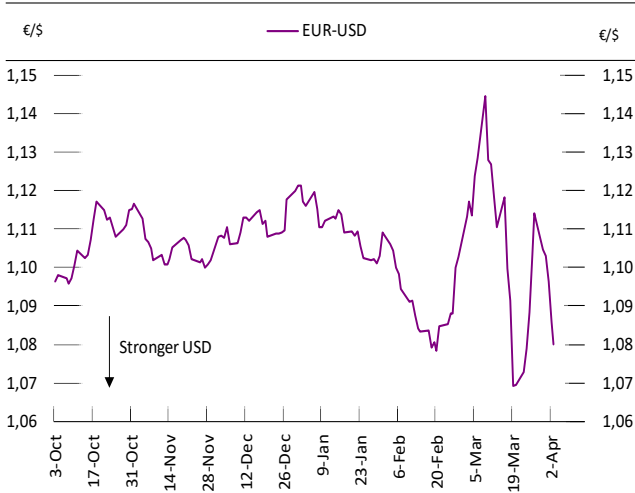
Source: Bloomberg, Data as of April 3rd

Russell 2000 & Russell 1000 Index



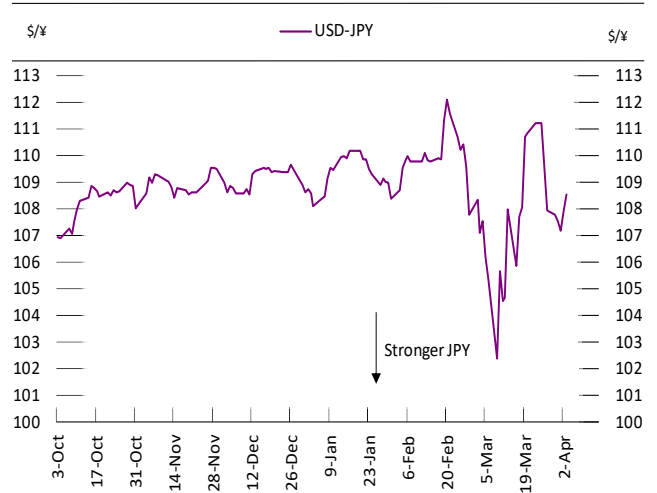
Source: Bloomberg, Data as of April 3rd

EUR/USD



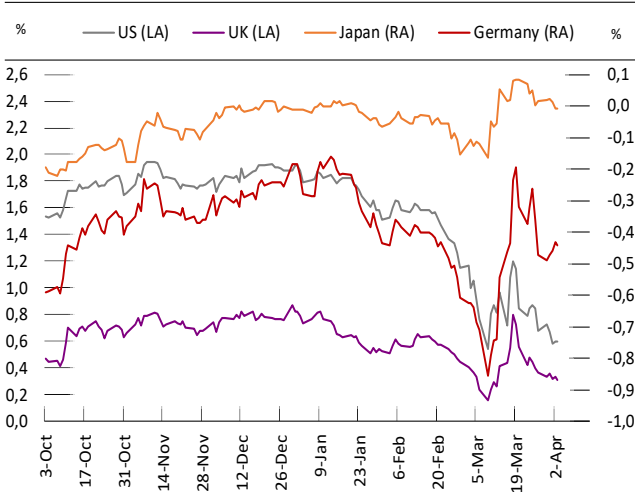
Source: Bloomberg, Data as of April 3rd

JPY/USD



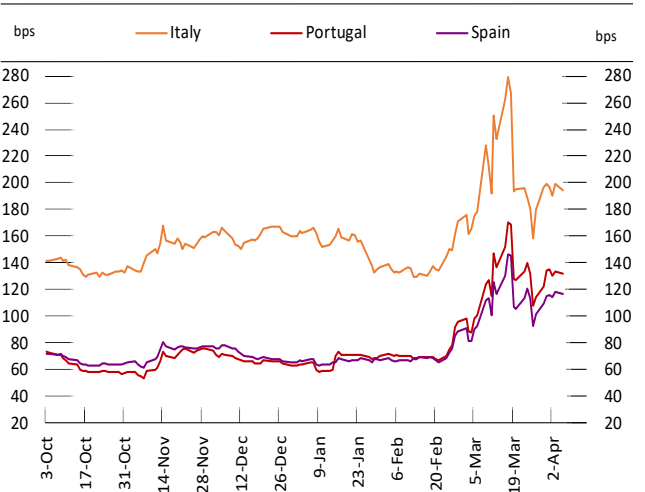
Source: Bloomberg, Data as of April 3rd

10- Year Government Bond Yields



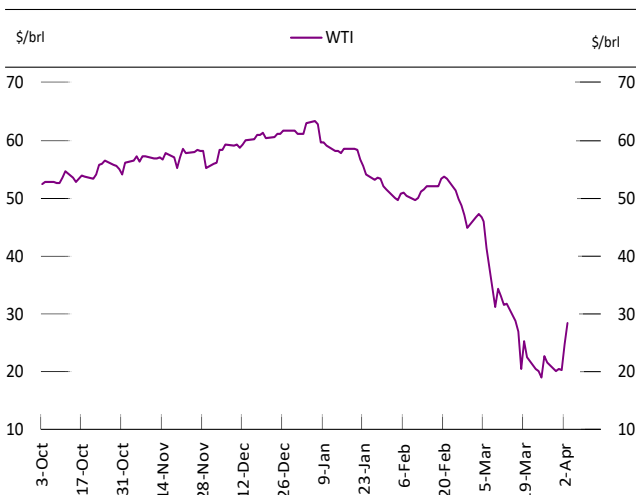
Source: Bloomberg - Data as of April 3rd
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



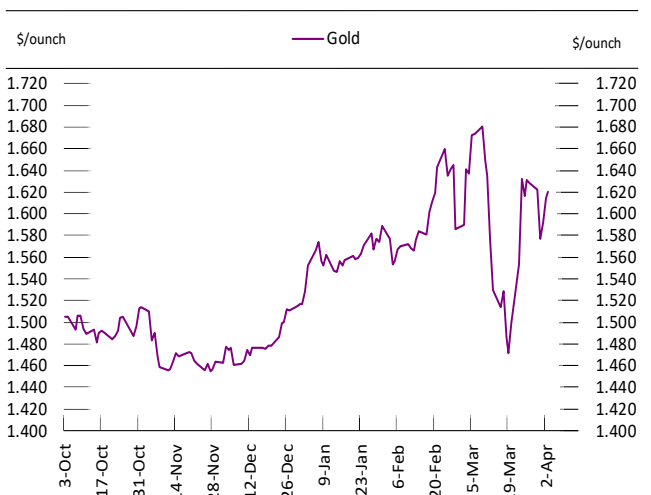
Source: Bloomberg - Data as of April 3rd

West Texas Intermediate (\$/bbl)



Source: Bloomberg, Data as of April 3rd

Gold (\$/ounce)



Source: Bloomberg, Data as of April 3rd

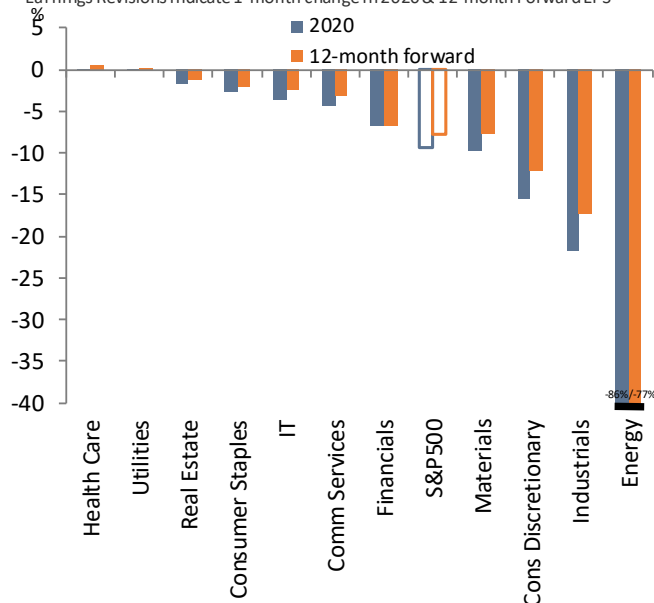
US Sectors Valuation

	Price (\$)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	3/4/20	% Weekly Change	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
S&P500	2489	-2,1	1,2	-2,8	1,8	2,5	20,2	15,8	15,3	15,1	3,7	2,7	2,6	2,5
Energy	229	5,4	-28,8	-85,7	3,9	7,8	21,8	77,1	62,7	19,8	1,6	0,9	0,9	1,7
Materials	268	-3,8	-15,6	-4,4	2,1	3,2	20,2	15,1	14,5	14,7	2,4	1,7	1,7	2,5
Financials														
Diversified Financials	547	-3,0	1,6	-1,4	1,4	2,2	16,2	12,0	11,7	13,8	1,9	1,3	1,2	1,5
Banks	205	-11,0	9,0	-6,5	2,6	5,2	12,3	7,2	7,2	10,9	1,4	0,7	0,7	1,0
Insurance	291	-6,8	15,8	6,2	2,2	3,6	13,4	8,3	8,1	10,8	1,5	0,9	0,9	1,1
Real Estate	182	-6,2	1,9	2,3	3,1	4,2	21,0	15,5	15,3	18,3	3,7	2,8	2,8	3,0
Industrials														
Capital Goods	494	-4,3	-7,0	-5,4	1,8	2,8	21,3	15,0	14,4	15,5	5,8	3,6	3,5	3,5
Transportation	551	-5,2	6,6	-45,4	1,9	2,7	14,7	18,8	16,6	13,5	4,3	3,0	2,9	3,4
Commercial Services	267	-4,0	12,8	-0,8	1,3	1,7	28,5	21,5	20,9	19,9	6,0	4,1	4,1	3,5
Consumer Discretionary														
Retailing	2106	-2,6	3,6	0,7	0,8	1,0	32,9	27,8	26,4	21,3	12,7	9,4	9,0	6,2
Media	515	-1,3	3,8	8,5	0,4	0,5	27,4	19,2	18,4	20,1	4,2	2,9	2,8	3,2
Consumer Services	780	-8,5	5,0	-14,5	2,1	3,7	23,9	16,4	15,5	19,2	14,8	8,8	8,8	6,5
Consumer Durables	234	-9,4	0,4	-2,5	1,4	2,4	19,2	12,5	12,1	16,8	4,0	2,3	2,2	3,2
Automobiles and parts	56	-16,0	-16,4	-38,9	4,2	8,5	8,5	6,9	6,2	8,2	1,4	0,7	0,7	1,7
IT														
Technology	1268	-2,8	2,6	5,8	1,3	1,9	21,6	15,6	15,1	12,7	9,7	8,3	8,5	3,8
Software & Services	2002	-1,7	11,1	11,3	1,0	1,2	29,3	22,2	21,5	17,4	7,9	6,2	6,0	5,2
Semiconductors	1022	-1,7	-12,3	4,9	1,8	2,4	18,9	14,8	14,3	13,9	5,5	4,2	4,1	3,1
Communication Services	144	-1,4	3,0	5,5	1,2	1,5	21,8	15,9	15,4	17,3	3,5	2,5	2,4	2,8
Consumer Staples														
Food & Staples Retailing	453	2,9	2,9	0,1	1,7	1,9	21,5	19,9	19,6	16,2	4,6	4,1	4,0	3,1
Food Beverage & Tobacco	604	3,7	-1,7	1,8	3,3	4,0	19,7	16,4	16,1	17,5	5,3	4,3	4,3	4,9
Household Goods	685	3,6	6,6	6,0	2,3	2,6	25,8	22,4	22,0	19,3	8,9	8,1	8,0	5,1
Health Care														
Pharmaceuticals	890	5,3	9,8	5,6	2,1	2,6	15,9	13,5	13,2	14,4	5,5	4,2	4,1	3,5
Healthcare Equipment	1088	-2,0	10,3	9,1	1,0	1,4	20,4	14,6	14,2	15,2	3,7	2,6	2,5	2,6
Utilities	263	-7,1	4,9	4,2	3,1	4,0	20,7	16,0	15,8	15,8	2,2	1,7	1,7	1,6

Source Factset, 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

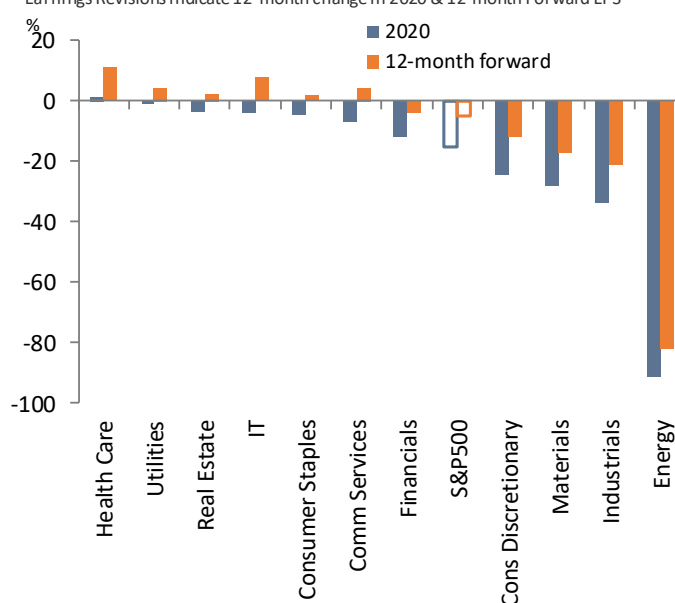
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Source: Factset, Data as of April 3rd
12-month forward EPS are 74% of 2020 EPS and 26% 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 April 3rd
12-month forward EPS are 74% of 2020 EPS and 26% of 2021 EPS

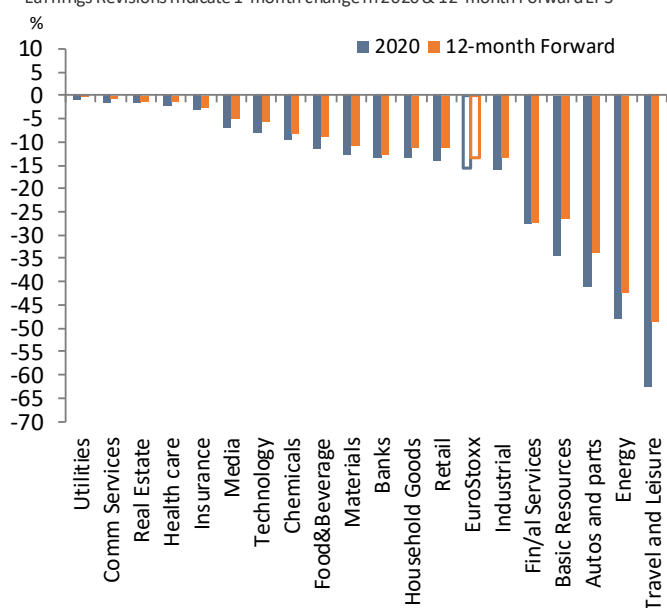
Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	3/4/20	% Weekly Change	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
EuroStoxx	290	-2,2	2,4	-11,5	3,1	4,1	16,8	13,5	12,9	13,1	1,7	1,2	1,2	1,4
Energy	221	5,2	-9,8	-45,2	4,9	7,6	13,8	16,7	15,2	11,4	1,3	0,9	0,9	1,2
Materials	313	-5,3	14,1	-7,3	3,2	5,1	15,4	10,8	10,4	14,2	1,9	1,2	1,2	1,4
Basic Resources	135	1,6	-61,6	-12,5	3,3	5,2	19,3	15,1	13,4	13,5	0,8	0,5	0,5	0,9
Chemicals	902	3,3	-13,3	-4,1	2,7	3,5	21,8	17,7	17,1	15,1	2,1	1,6	1,6	2,2
Financials														
Fin/ai Services	401	0,2	25,4	-23,5	2,4	3,3	15,8	16,2	16,1	14,1	1,7	1,1	1,1	1,3
Banks	50	-13,2	-1,3	-11,1	5,7	9,4	9,2	5,4	5,3	9,4	0,6	0,3	0,3	0,7
Insurance	195	-4,4	13,0	1,3	4,8	8,0	11,0	6,9	6,8	9,2	1,0	0,6	0,6	0,9
Real Estate	177	-0,3	0,1	1,5	4,2	5,7	19,1	13,5	13,3	16,8	1,0	0,7	0,7	1,0
Industrial	614	-5,9	11,4	-7,9	2,3	3,5	20,4	14,3	13,7	15,2	3,2	2,0	2,0	2,3
Consumer Discretionary														
Media	168	5,8	5,4	-1,5	2,9	3,9	17,2	13,0	12,6	15,2	2,4	1,7	1,7	1,8
Retail	507	-0,5	2,8	-9,4	2,5	3,0	25,2	23,4	22,2	19,0	4,3	3,0	3,0	3,1
Automobiles and parts	280	-5,5	-12,2	-39,6	3,7	4,5	8,7	8,1	7,4	8,4	0,9	0,5	0,5	1,0
Travel and Leisure	126	-5,0	-10,1	-58,2	2,2	2,5	16,8	23,5	19,8	14,1	2,0	1,2	1,2	2,0
Technology	484	-2,3	5,8	0,5	1,2	1,2	26,9	20,6	19,6	18,2	4,2	3,0	2,9	3,0
Communication Services	235	0,4	-14,3	12,2	4,2	5,2	17,5	12,6	12,2	14,1	1,9	1,4	1,4	1,8
Consumer Staples														
Food&Beverage	423	-0,8	16,8	-14,4	2,1	3,2	20,5	16,9	16,2	18,5	2,7	1,7	1,7	2,6
Household Goods	868	-2,9	6,9	-6,7	1,6	2,0	29,6	25,3	24,3	20,8	6,1	4,5	4,4	3,7
Health care	735	2,9	7,3	5,6	2,1	2,7	20,1	15,5	15,1	15,1	2,4	1,9	1,8	2,1
Utilities	290	-1,8	57,3	7,8	4,5	5,9	16,2	12,4	12,2	12,6	1,6	1,2	1,2	1,1

Source Factset. 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

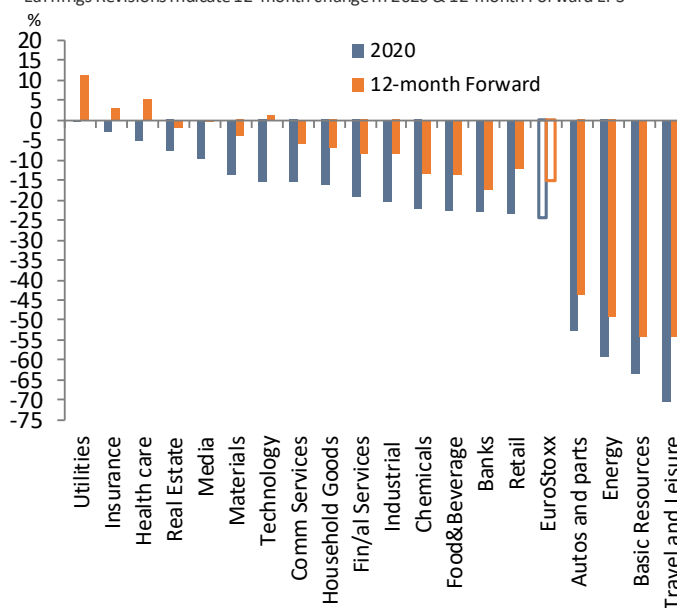
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Source: Factset, Data as of April 3rd
12-month forward EPS are 74% of 2020 EPS and 26% 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 April 3rd
12-month forward EPS are 74% of 2020 EPS and 26% of 2021 EPS

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