



US Technology leaders support US equity over-performance

- The S&P500 Q1 earnings season is almost over, with the pace of announced earnings growth at its lowest since Q3:2009. Specifically, Q1:2020 EPS growth was down by -14% yoy with Consumer Discretionary (-52% yoy), Financials (-44% yoy) and Energy (-28% yoy) leading the decline. On the other hand, Information Technology and Defensive sectors fared better, posting mid-single-digit EPS growth. Looking forward, analyst consensus estimates for Q2/Q3/Q4 EPS growth remain negative resulting in 2020 S&P500 EPS level of \$127 or -21% lower compared with 2019 (see graph page 3).
- However, equity investors remain focused on how quickly can foregone earnings, due to the lockdown, be recovered. The consensus baseline forecast is for S&P500 EPS to reach \$163 in 2021 resulting in +28% annual growth and slightly higher compared with the 2019 level (\$162). These expectations broadly assume that economic activity normalizes gradually, whereas social distancing is projected to continue, albeit to a lesser extent, in the second half of 2020 before diminishing further in 2021. However, the degree of uncertainty vis-a-vis the EPS outlook remains elevated compared with the historical norm. Note that the total number of S&P500 companies issuing EPS guidance year-to-date for Q2:2020 (35) is well below the five-year average for a given quarter of 107 companies. Key factors that make EPS predictions more challenging than usual are: i) the pace of economic re-opening relative to second wave COVID-19 infections; ii) the possibility of a medical breakthrough (new therapies, testing, vaccine); iii) the impact of a double-digit unemployment rate on consumer spending (70% of US GDP — see Economics) and/or a long-lasting effect on the economy (elevated business and household insolvencies).
- With the S&P500 up by 28% since its mid-March lows (-2% wow & -11% YtD), equity prices appear very expensive focusing on traditional metrics such as the next 12-month forward P/E ratios. The S&P500 hovers at 21x or 2.8x STDEV above its 15-year average. However, in view of the policy-induced nature of the 2020 earnings collapse (lockdown) and expectations for a gradual return to normalcy, one should check FY2 forward P/E ratios. Based on data from Factset, the S&P500 FY2 P/E ratio at 17x still remains above its 15-year average, albeit at less extreme levels of 1.8x STDEV (see graph below). On the other side of the Atlantic, the Eurostoxx is trading at 17x or 2.1x STDEV above its 15-year average (12-mth forward P/E) and at 13x or 0.8x STDEV above its 15-year average (24-mth forward P/E).
- The S&P500 carries large earnings and market capitalization weights in the relatively “immune” sectors of the economy. Indeed, IT (MSFT, APPLE) and Communication Services (Google, FB) account for circa 10% of S&P500 2019 Earnings before Taxes and 17% of S&P500 Market capitalization of \$25 trillion (as of May 15, 2020). Alongside Amazon (AMZN / Consumer Discretionary), these five companies or FAAMG account for circa 22% of the S&P500 market capitalization, marking the highest concentration ratio since 1985 and are up by +11% YtD (equal-weighted) vs -17% YtD for the S&P500 excluding FAAMGs (see graph below). This high-valuation basket (FAAMGs) relies on healthy fundamentals (steady stream of revenues and low debt albeit with higher Covid-19 related expenses — see Amazon) suggesting that “catching-down” (sharp price decline) (cont’d on page 2)

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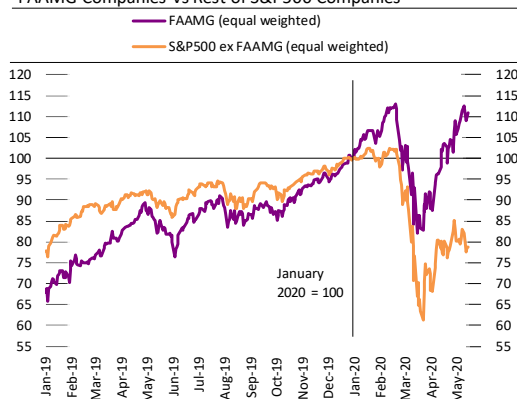
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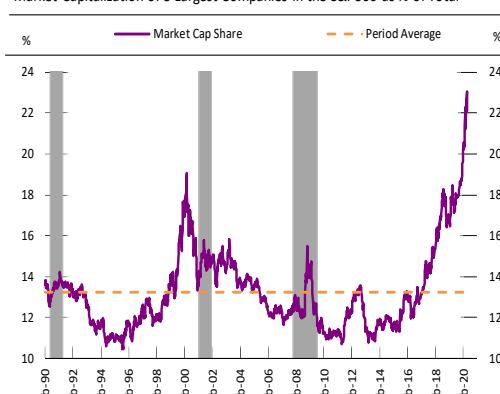
Charts of the week

FAAMG Companies vs Rest of S&P500 Companies



Source: NBG Research, Bloomberg, FAAMG= Facebook, Amazon, Apple, Microsoft, Google

Market Capitalization of 5 Largest Companies in the S&P500 as % of Total



Source: NBG Research, Bloomberg, *Facebook, Amazon, Apple, Microsoft, Google

...with low-valuation sectors (Energy: -35% YtD, Autos: -40% YtD, Banks: -25% YtD) appears less likely, assuming that economic activity normalizes in the course of the year. Buying US (Technology) leaders could continue to offer value.

US retail sales plunged in April

- **US nominal retail sales declined by more than expected in April.** Specifically, in value terms, the so-called “control group”, as it feeds into the calculation for GDP (i.e., excluding autos, gas, food services and building materials) posted an unprecedented decline on a monthly basis, by -15.3% mom (+3.1% mom in March). As a result, the annual pace of growth came out at -10.6% yoy. Although a large drop was expected due to the lockdown, the outcome was below consensus estimates for -4.6% mom. Looking forward, since pandemic-related restrictions have started to ease gradually as of early May, consumption is expected to bottom out starting from the current month, albeit the strength of the recovery is highly uncertain and dependent, *inter alia*, on the improvement in consumer confidence. In the event, the University of Michigan consumer sentiment indicator increased slightly in May by 1.9 pts, albeit to a still very weak 73.7 (long-term average of 85.3). Notably, the increase in the headline index was solely due to an improvement in the assessment of current economic conditions (the respective index was up by 8.7 pts to 83.0), on the back of relief checks related to Coronavirus Aid, Relief, and Economic Security (CARES) Act and lower prices (see below). On the other hand, the index of consumers expectations (for the year ahead) declined further from already depressed levels in April, by 2.4 pts to 67.7, which does not bode well for a fast recovery in private consumption. Survey respondents cited the uncertainty regarding labor market conditions as the main factor weighing on confidence. In the event, recall that a large number of US citizens applied for unemployment insurance for an 8th consecutive week. Indeed, initial jobless claims were 3.0 mn for the week ending May 8th. Continuing claims reached 22.8 mn in the week ending May 1st.

US manufacturing output decreased sharply in April

- **US industrial production was down by 11.3% mom in April following a weak outcome in March (-4.5% mom), with the annual pace of growth at -15.0% yoy, due to the negative economic repercussions from the public health crisis.** The less volatile manufacturing production (78% of total) declined by 13.7% mom (-18% yoy), compared with -5.5% mom in March. The decrease was due to the suspension of several operations during the month as part of the measures to stem the spread of Covid-19, with output of motor vehicles and parts underperforming (c. -70% mom). Recall that the latest monthly declines surpassed all other precedents (for both manufacturing and overall industrial output), with records starting from 1919.

US inflation dropped substantially in April, in view of depressed consumer demand and energy prices

- **Headline CPI decelerated by 1.2 pps to 0.3% yoy in April, the lowest since October 2015 and largely in line with consensus expectations.** Unsurprisingly given the particularly low oil prices, the headline figure was weighed substantially by the energy index, which was down sharply by 17.7% yoy (-5.7% yoy in March). Furthermore, the depressed consumer demand due to the lockdown led to declines in the other price categories, with the exception of the food index (+3.5% yoy in April versus +1.9% yoy), as the latter category faces inelastic demand, while supply side

disruptions also likely contributed to a rise in prices. Specifically, core CPI was down by 0.4% mom and, as a result, the annual pace of growth decelerated by 0.7 pps to 1.4% yoy (consensus: 1.7% yoy). Finally, note that the PCE deflator (the Fed’s preferred measure for gauging inflationary pressures) was 1.3% yoy in March, while the core figure stood at 1.7% yoy. According to the Federal Reserve Bank of Cleveland, PCE growth is expected at 0.5% yoy in April and its core counterpart at 1.1% yoy.

Japanese GDP declined for a 2nd consecutive quarter in Q1:20, entering technical recession

- **Japanese GDP contracted by 3.4% qoq saar in Q1:20 according to the preliminary estimate (-2.2% yoy), due to pandemic-related disruptions.** The outcome in Q1, despite being slightly above consensus for -4.6% qoq saar, is particularly weak in view of the low base of comparison. Indeed, it follows a very weak -7.3% qoq saar (-0.7% yoy) in Q4:19, when the VAT hike in October (from 8% to 10%) weighed on consumption and typhoons disrupted supply chains, while also hurting housing construction. Regarding Q1, the weakness was broad based across GDP expenditure components. Specifically, **private consumption** fell by 2.8% qoq saar (-1.6 pps contribution to the headline figure), following a sharp decline of -11.1% qoq saar in Q4:19. **Business investment** decreased by 2.1% qoq saar (-17.7% in Q4:19), subtracting 0.3 pps from overall GDP growth. **Residential investment** was down sharply for a 2nd consecutive quarter, by 16.9% qoq saar (-9.6% in Q4), with a negative contribution of -0.5 pps to the headline outcome. **Public investment** was down by a relatively more modest -1.6% qoq saar, while **government consumption** was largely flat on a quarterly basis (these two expenditure components had minor contributions to overall GDP growth). **Net exports** subtracted a further 0.7 pps, with a sharp decline in both imports (-18.4% qoq saar) and exports (-21.8% qoq saar). Finally, **inventories** were largely neutral to the headline figure. It should be noted that, historically, the GDP components of business investment and inventories are revised meaningfully in the 2nd GDP estimate (due on June 8th), which incorporates more inclusive data for the corporate sector and, thus, the respective figures in the preliminary estimate should be noted with caution. Looking forward, a further contraction in GDP is expected in the current quarter, in view of continued disruptions from the pandemic.

China: economic activity recovers gradually post-lockdown

Economic activity accelerated in April, as expected, as the vast majority of pandemic-related restrictions were lifted, although consumer demand remains far below pre-coronavirus levels.

Specifically, the annual pace of growth of retail sales (in value terms) remained in negative territory, at -7.5% yoy in April (consensus: -7.0% yoy), albeit recording a sharp improvement compared with the previous month (-15.8% yoy). At the same time, industrial production appears to be somewhat ahead of demand, having recovered more substantially, a development that may also be linked to authorities’ interventions. Indeed, annual growth accelerated by 5.0 pps to 3.9% yoy, above expectations for 1.5% yoy. Finally, fixed asset investment growth was -10.3% yoy in April, compared with -16.1% in March. Attention now turns to the annual meeting of the National People’s Congress (NPC) on May 22nd, China’s top legislative body, *inter alia*, for potential announcements of further supportive policy measures.

Equities

- Global equity markets lost ground in the past week, due to diminishing investors' hopes for v-shaped recovery, weak economic data, elevated US-China tensions and concerns about a rise in infection rates in countries that have eased lockdown restrictions.** Overall, the MSCI ACWI declined by -2.4% (-15.4% ytd), with emerging markets (-1.2% wow) overperforming their developed market peers (-2.6% wow). In the US, the S&P500 ended the week down by -2.3% wow, with Banks leading the decline (-9% wow), on the back of lower yields and concerns that dividends will be suspended. Selling pressure increased following Federal Reserve Chairman Jerome Powell's pessimistic outlook for the US economy. Regarding the earnings season, out of the 460 companies that have reported results so far, 64% have surpassed analyst estimates. Consensus EPS expectations for Q1:20 stand at -13.8% yoy from -13.6% in the past week, with negative earnings surprises reported by companies in the Consumer Discretionary sector [Norwegian Cruise Line Holdings (-\$0.99 vs. -\$0.34) and Marriott International (\$0.26 vs. \$0.87) being the key players. On the other side of the Atlantic, the Eurostoxx declined by -4.3% wow, recording its largest weekly decline since March 13th. In Japan, the Nikkei 225 ended the week down by -0.7% wow. In the UK, the FTSE 100 fell by -2.3% wow and in Germany, the DAX 30 declined by -4% wow.

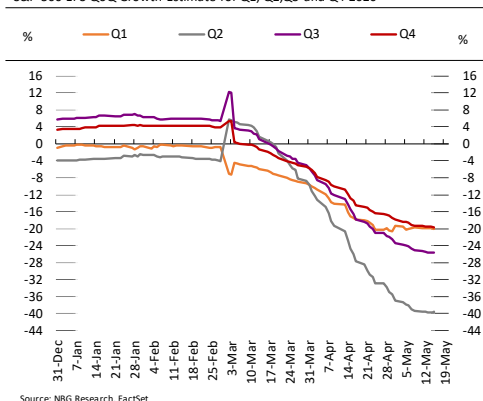
Fixed Income

- Government bond yields were mixed in the past week in major advanced economies.** Specifically, the US 10-year yield declined by 4 bps to 0.64%, while 2-year yields decreased by 1 bp wow to 0.15%, due to weak economic data (CPI, jobless claims, retail sales) and continued purchases by the Federal Reserve of longer-term maturities. In the UK, the 10-year yield remained stable wow at 0.23%. In Germany, the 10-year Bund yield ended the week down by 1 bp to -0.53%. Regarding periphery bond yields, in Italy, the 10-year yield increased by 2 bps wow to 1.86%, while in Portugal the 10-year yield declined by 5 bps wow to 0.88%, in Spain by 4 bps wow to 0.76% and in Greece by 13 bps wow to 2.07%. Corporate bond spreads were also mixed in the past week, with US IG spreads overperforming their HY peers. Indeed, US high yield spreads ended the week up by 26 bps to 778 bps, while their Investment Grade counterparts declined by 2 bps to 220 bps. In the euro area, both Investment Grade and high yield spreads rose by 7 bps to 196 bps and 659 bps, respectively.

FX and Commodities

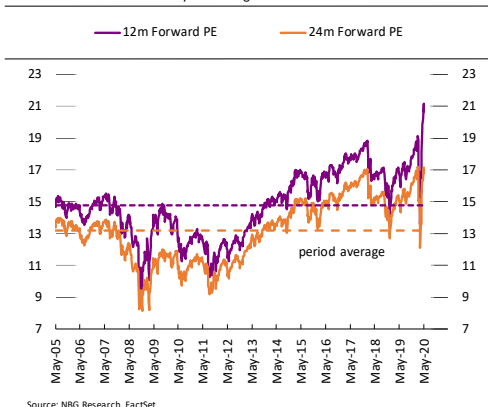
- In foreign exchange markets, the US dollar rose in the past week on the back of increased "safe haven" demand, Federal Reserve Chairman Jerome Powell's comments that the Fed is not considering negative interest rates and the positive tone from President Trump regarding the strong dollar.** Overall, the USD rose by 0.7% in NEER terms, by 0.2% against the euro to \$1.08 and by 0.4% against the Japanese Yen to ¥107.06. The British Pound declined due to concerns about a "no-deal" Brexit after the latest round of negotiations concluded on Friday with little progress being made and investors pricing-in the possibility of the BoE cutting its interest rate to negative territory. Overall, the British Pound ended the week down by -2.5% against the US Dollar to \$1.21, its lowest level since March 28th and by -2.3% against the euro to €0.89, its lowest level since April 1st. Finally, in commodities, oil prices increased for a third consecutive week, for the first time since January 3rd, due to the breaking of 15 consecutive weeks of inventory building (-0.7 million barrels to 531.5 million barrels for the week ending May 8th) and a further production cut announcement from Saudi Arabia. In addition, news that OPEC+ group is considering maintaining existing oil cuts beyond June and reports that the number of oil rigs operating in the US decreased to an all-time low, eased concerns over the global storage space shortage. Overall, WTI rose by 20.2% wow (-51.8% ytd) to \$29.4/barrel (over \$32/barrel on Monday), having tripled its price since April 21st. Brent increased by 10.1% wow (-52.6% ytd) to \$31.5/barrel.

S&P 500 EPS QoQ Growth Estimate for Q1, Q2, Q3 and Q4 2020



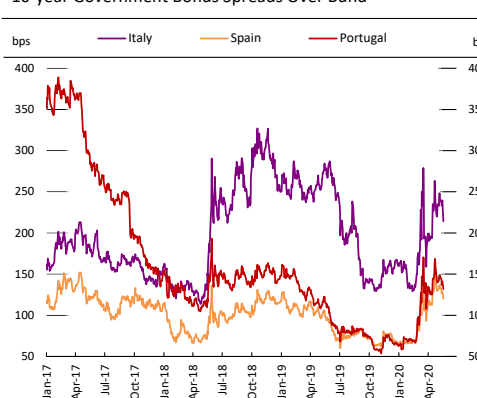
Graph 1.

S&P Forward PE ratios vs. 15-year Average



Graph 2.

10-year Government Bonds Spreads Over Bund



Graph 3.

Quote of the week: "At the Fed, we will continue to use our tools to their fullest until the crisis has passed and the economic recovery is well under way. Recall that the Fed has lending powers, not spending powers...additional fiscal support could be costly, but worth it if it helps avoid long-term economic damage and leaves us with a stronger recovery. This tradeoff is one for our elected representatives, who wield powers of taxation and spending.", **Fed Chair, Jerome Powell, May 13th 2020.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	May 15th	3-month	6-month	12-month	Official Rate (%)	May 15th	3-month	6-month	12-month
Germany	-0,53	-0,50	-0,40	-0,30	Euro area	0,00	0,00	0,00	0,00
US	0,64	0,90	1,00	1,20	US	0,25	0,25	0,25	0,25
UK	0,23	0,50	0,55	0,70	UK	0,10	0,10	0,10	0,10
Japan	0,00	-0,10	-0,07	-0,02	Japan	-0,10	-0,10	-0,10	-0,10

Currency	May 15th	3-month	6-month	12-month	May 15th	3-month	6-month	12-month	
EUR/USD	1,08	1,13	1,13	1,15	USD/JPY	107	105	105	103
EUR/GBP	0,89	0,88	0,87	0,87	GBP/USD	1,21	1,28	1,30	1,32
EUR/JPY	116	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	<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	2864	-2.3	-11.4	-0.4	5.2	MSCI Emerging Markets	52826	-0.9	-14.1	-6.4	
Japan	NIKKEI 225	20037	-0.7	-15.3	-4.9	-11.8	MSCI Asia	815	-0.5	-10.8	-2.8	
UK	FTSE 100	5800	-2.3	-23.1	-21.1	-25.0	China	81	-0.2	-4.9	1.7	
Canada	S&P/TSX	14639	-2.2	-14.2	-11.0	-9.1	Korea	598	-1.3	-13.5	-3.1	
Hong Kong	Hang Seng	23797	-1.8	-15.6	-15.8	-23.5	MSCI Latin America	71103	-4.2	-29.0	-18.5	
Euro area	EuroStoxx	308	-4.3	-23.6	-17.6	-21.8	Brazil	247444	-3.5	-32.4	-14.9	
Germany	DAX 30	10465	-4.0	-21.0	-15.0	-19.5	Mexico	33148	-5.2	-17.4	-17.0	
France	CAC 40	4278	-6.0	-28.4	-21.5	-23.2	MSCI Europe	4935	-1.8	-22.6	-11.2	
Italy	FTSE/MIB	16852	-3.4	-28.3	-20.3	-29.0	Russia	1098	-2.0	-19.4	-5.2	
Spain	IBEX-35	6475	-4.5	-32.2	-30.4	-36.0	Turkey	1236467	1.2	-17.7	4.9	

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 (%)	
Energy	117.2	-6.5	-40.5	-42.4	-50.9	Energy	124.2	-5.9	-38.4	-41.0	
Materials	221.2	-2.9	-18.7	-10.1	-21.1	Materials	218.5	-2.2	-16.2	-8.4	
Industrials	207.8	-4.5	-24.8	-17.9	-19.6	Industrials	208.2	-4.1	-23.8	-17.4	
Consumer Discretionary	248.1	-2.1	-10.8	-2.4	-1.3	Consumer Discretionary	241.3	-1.8	-10.1	-2.1	
Consumer Staples	223.8	-1.7	-10.8	-5.1	3.7	Consumer Staples	228.2	-1.2	-9.3	-4.4	
Healthcare	275.6	0.5	-1.3	15.6	20.9	Healthcare	274.7	0.8	-0.4	15.9	
Financials	84.0	-5.7	-33.2	-26.4	-33.2	Financials	86.2	-5.2	-31.6	-25.3	
IT	311.7	-1.6	0.3	19.7	29.4	IT	302.9	-1.5	0.5	19.8	
Telecoms	71.5	-1.4	-7.7	0.4	10.1	Telecoms	75.1	-1.2	-7.1	0.6	
Utilities	126.7	-3.0	-15.7	-7.1	3.1	Utilities	132.0	-2.7	-14.3	-6.1	

Bond Markets (%)

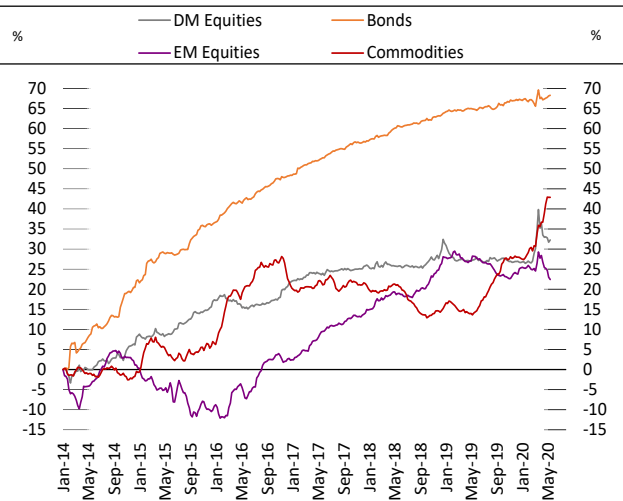
10-Year Government Bond Yields						Government Bond Yield Spreads (in bps)					
	Current	Last week	Year Start	One Year Back	10-year average		Current	Last week	Year Start	One Year Back	
US	0.64	0.69	1.92	2.40	2.30	US Treasuries 10Y/2Y	50	53	35	20	
Germany	-0.53	-0.54	-0.19	-0.10	0.98	US Treasuries 10Y/5Y	34	35	23	23	
Japan	0.00	0.00	-0.01	-0.06	0.43	Bunds 10Y/2Y	20	24	42	55	
UK	0.23	0.24	0.82	1.07	1.85	Bunds 10Y/5Y	20	22	29	41	
Greece	2.07	2.19	1.47	3.47	9.80	Corporate Bond Spreads (in bps)					
Ireland	0.10	0.13	0.12	0.48	3.28		Current	Last week	Year Start	One Year Back	
Italy	1.86	1.84	1.41	2.68	3.08	EM Inv. Grade (IG)	290	292	150	165	
Spain	0.76	0.80	0.47	0.91	2.84	EM High yield	933	945	494	504	
Portugal	0.88	0.92	0.44	1.08	4.60	US IG	220	222	101	124	
US Mortgage Market (1. Fixed-rate Mortgage)						US High yield	778	752	360	406	
	Current	Last week	Year Start	One Year Back	10-year average	Euro area IG	196	189	94	121	
30-Year FRM ¹ (%)	3.4	3.4	4.0	4.4	4.2	Euro area High Yield	659	652	308	404	
vs 30Yr Treasury (bps)	210	205	156	157	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 (%)	
Euro-based cross rates						Agricultural	294	-1.5	-2.9	-9.8	
EUR/USD	1.08	-0.2	-0.8	-3.2	-3.5	Energy	185	3.7	-6.5	-63.9	
EUR/CHF	1.05	-0.1	-0.1	-6.8	-3.1	West Texas Oil (\$)	29	20.2	48.1	-53.2	
EUR/GBP	0.89	2.3	2.6	2.4	5.7	Crude Brent Oil (\$)	32	10.1	42.3	-57.4	
EUR/JPY	115.90	0.4	-1.1	-5.6	-4.8	Industrial Metals	1001	-2.1	-1.1	-17.9	
EUR/NOK	11.07	0.0	-3.4	13.3	12.5	Precious Metals	2022	2.9	1.5	33.5	
EUR/SEK	10.65	0.6	-2.7	-1.1	1.4	Gold (\$)	1744	2.4	1.6	35.5	
EUR/AUD	1.69	1.7	-2.3	4.1	5.6	Silver (\$)	17	7.3	7.4	14.1	
EUR/CAD	1.53	1.1	-0.9	1.5	4.8	Baltic Dry Index	407	-20.8	-42.4	-60.6	
USD-based cross rates						Baltic Dirty Tanker Index	852	-1.3	-21.4	24.7	
USD/CAD	1.41	1.3	0.0	4.8	8.6						
USD/AUD	1.56	1.8	-1.5	7.5	9.4						
USD/JPY	107.06	0.4	-0.4	-2.5	-1.4						

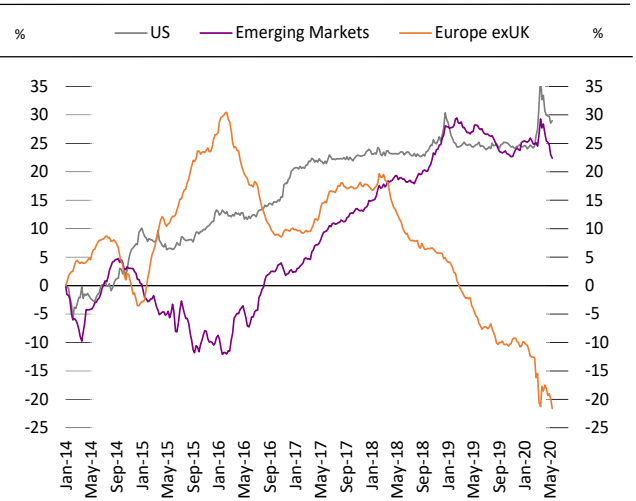
Source: Bloomberg, as of May 15th, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

Global Cross Asset ETFs: Flows as % of AUM



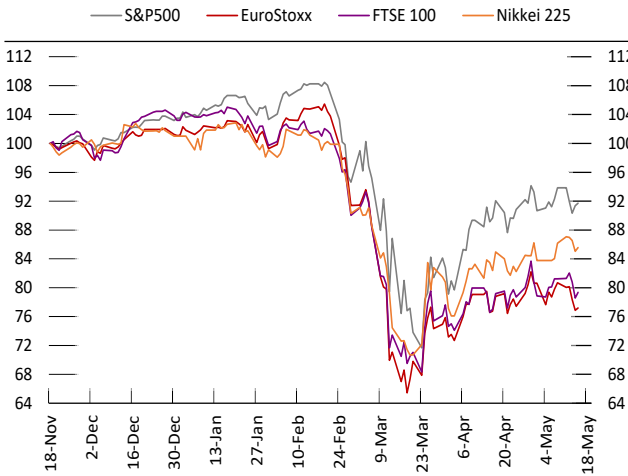
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of May 15th

Equity ETFs: Flows as % of AUM



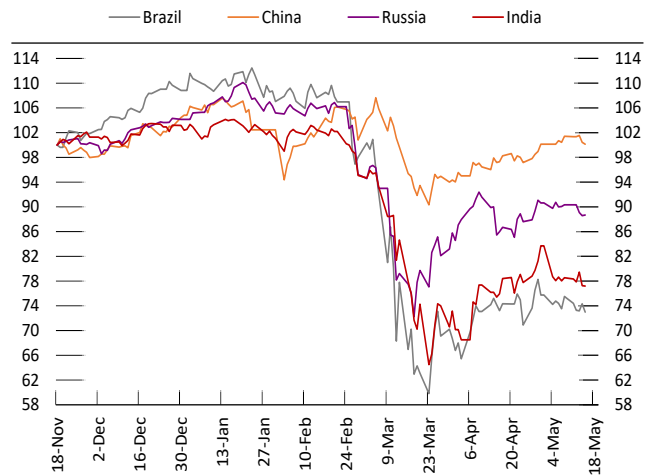
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of May 15th

Equity Market Performance - G4



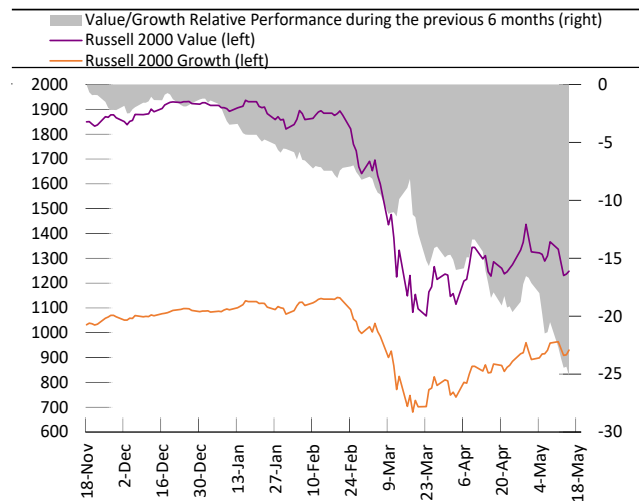
Source: Bloomberg - Data as of May 15th - Rebased @ 100

Equity Market Performance - BRICs



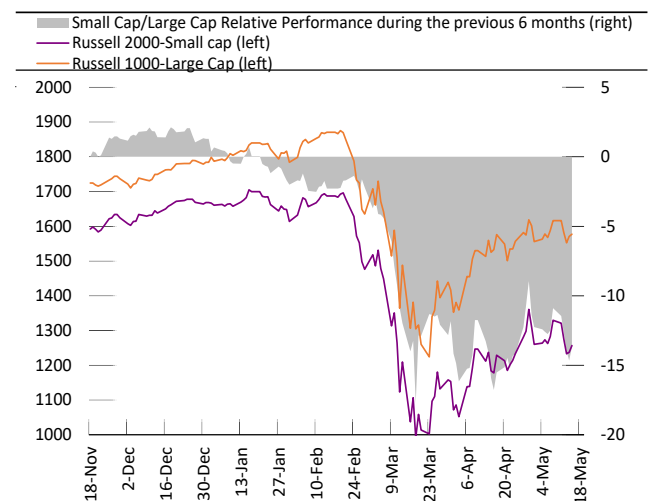
Source: Bloomberg - Data as of May 15th - Rebased @ 100

Russell 2000 Value & Growth Index



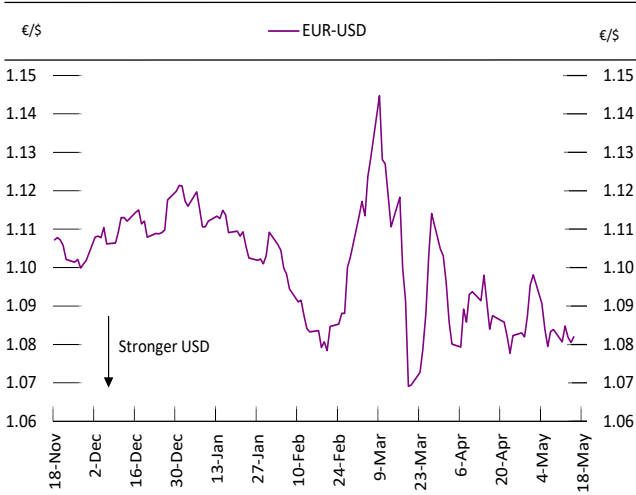
Source: Bloomberg, Data as of May 15th

Russell 2000 & Russell 1000 Index



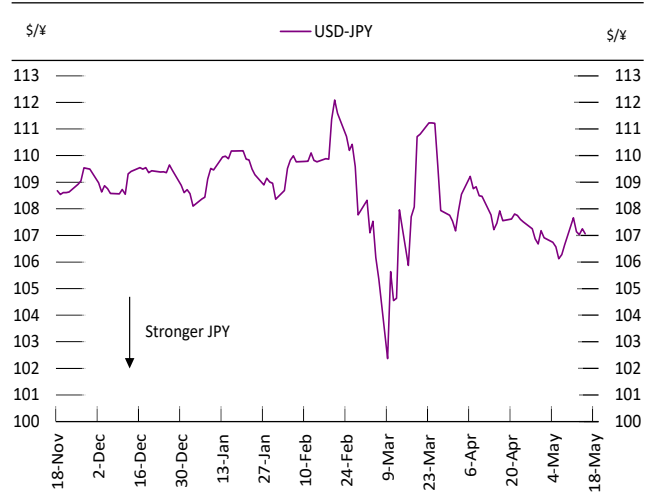
Source: Bloomberg, Data as of May 15th

EUR/USD



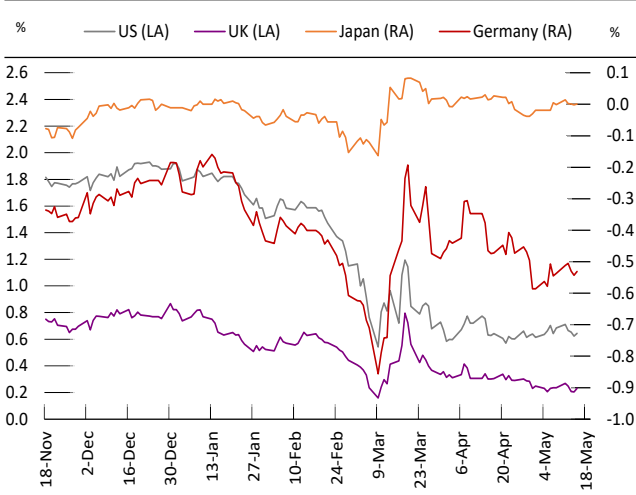
Source: Bloomberg, Data as of May 15th

JPY/USD



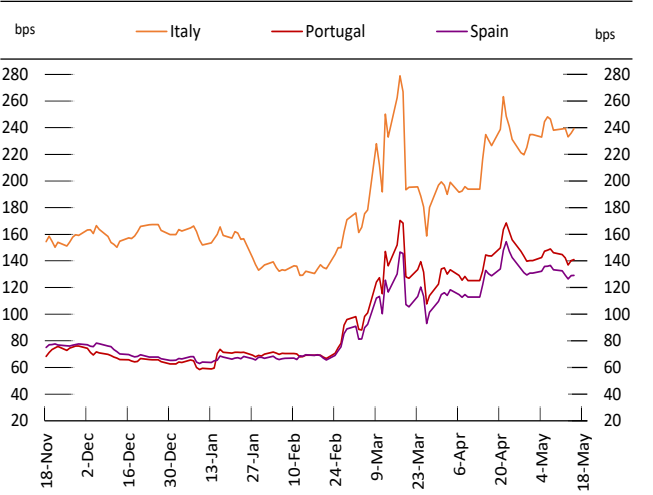
Source: Bloomberg, Data as of May 15th

10- Year Government Bond Yields



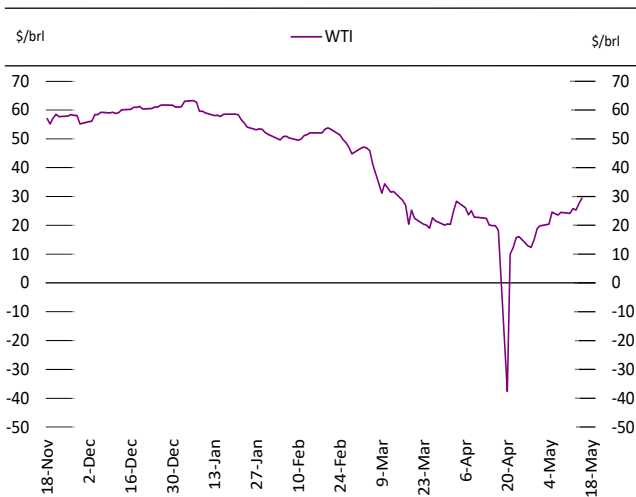
Source: Bloomberg - Data as of May 15th
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



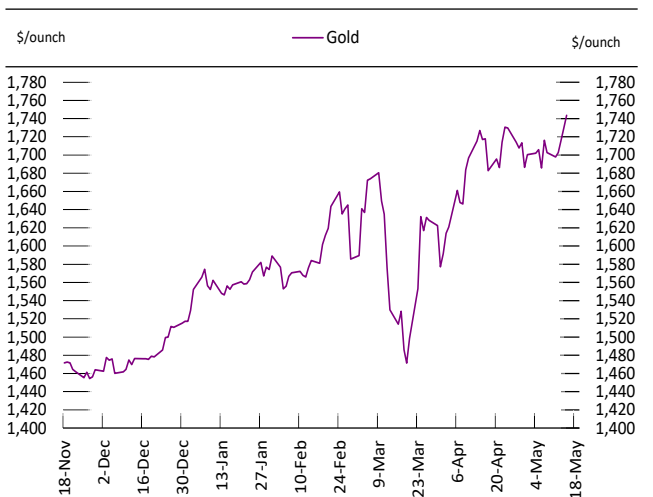
Source: Bloomberg - Data as of May 15th

West Texas Intermediate (\$/bbl)



Source: Bloomberg, Data as of May 15th

Gold (\$/ounce)



Source: Bloomberg, Data as of May 15th

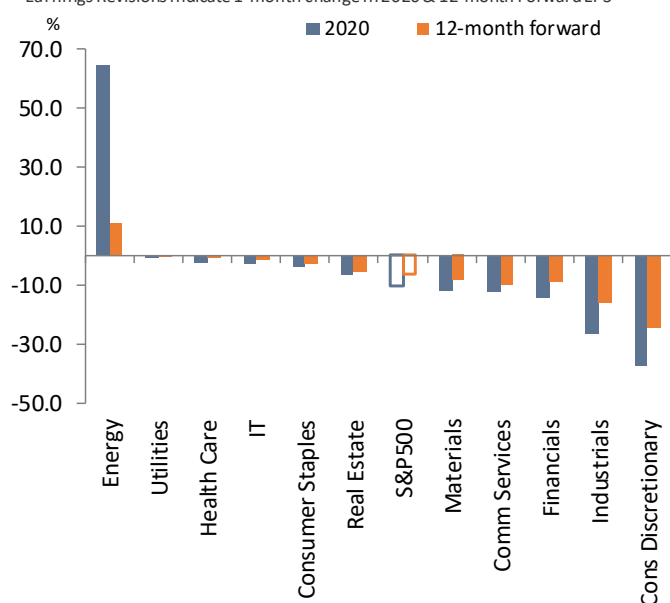
US Sectors Valuation

	Price (\$)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	15/5/20	% Weekly Change	%YTD	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
S&P500	2864	-2.3	-11.4	1.2	-21.0	1.8	2.1	20.3	22.5	20.7	15.2	3.7	3.2	3.1	2.5
Energy	272	-7.6	-40.3	-28.8	N/A	3.9	6.3	21.8	-197.6	-111.6	19.0	1.6	1.2	1.2	1.7
Materials	320	-3.1	-17.0	-15.6	-21.3	2.1	2.5	20.2	21.9	20.1	14.8	2.4	2.1	2.1	2.5
Financials															
Diversified Financials	589	-3.7	-20.6	1.6	-29.4	1.4	1.9	16.2	18.0	16.4	13.8	1.9	1.4	1.4	1.5
Banks	214	-9.0	-43.6	9.0	-53.3	2.6	4.9	12.3	15.1	12.9	10.9	1.4	0.8	0.8	1.0
Insurance	320	-3.8	-27.4	15.8	-4.8	2.2	3.2	13.4	10.2	9.8	10.8	1.5	1.1	1.0	1.1
Real Estate	192	-7.3	-20.2	1.9	-6.6	3.1	3.8	21.0	17.9	17.4	18.2	3.7	2.9	2.9	3.0
Industrials															
Capital Goods	515	-6.2	-29.1	-7.0	-27.1	1.9	2.4	21.2	20.2	18.4	15.6	5.5	3.5	3.4	3.4
Transportation	577	-6.3	-26.3	6.6	N/A	1.9	2.4	14.7	-331.9	-203.6	13.1	4.3	3.4	3.4	3.4
Commercial Services	308	-2.9	-10.7	12.8	-10.6	1.3	1.5	28.5	27.6	26.4	20.0	6.0	4.8	4.7	3.5
Consumer Discretionary															
Retailing	2679	0.7	9.4	4.2	-22.6	0.8	0.7	33.3	46.5	41.0	21.9	13.3	12.5	11.7	6.5
Consumer Services	944	-4.7	-27.5	5.1	N/A	2.1	2.0	24.0	130.3	90.4	19.5	16.3	15.8	15.9	7.0
Consumer Durables	271	-6.2	-27.3	-0.4	-28.8	1.5	2.0	19.7	20.3	18.7	16.9	4.1	2.9	2.9	3.2
Automobiles and parts	71	-6.0	-40.0	-16.4	N/A	4.2	1.8	8.5	-22.4	-10.8	8.0	1.4	1.0	1.0	1.7
IT															
Technology	1564	-1.3	-1.9	2.6	0.8	1.3	1.5	21.6	20.2	19.3	12.7	9.7	10.6	10.9	3.9
Software & Services	2424	-1.4	5.5	11.1	6.0	1.0	1.0	29.3	28.3	27.0	17.5	7.9	7.8	7.5	5.2
Semiconductors	1201	-2.0	-3.3	-12.2	0.0	1.8	2.0	18.9	18.2	17.2	13.9	5.5	5.0	4.8	3.1
Communication Services	172	-1.2	-5.2	3.0	-13.8	1.2	1.2	21.8	23.3	21.7	17.4	3.5	3.1	2.9	2.9
Media	640	-0.5	-1.9	3.8	-14.4	0.4	0.4	27.4	30.2	27.3	20.2	4.2	3.7	3.6	3.2
Consumer Staples															
Food & Staples Retailing	473	-1.2	-4.8	2.9	-4.0	1.7	1.8	21.5	21.7	21.2	16.2	4.6	4.2	4.1	3.2
Food Beverage & Tobacco	621	-2.0	-13.1	-1.7	-4.5	3.3	3.9	19.7	18.0	17.4	17.6	5.3	4.5	4.4	4.9
Household Goods	702	-0.9	-5.6	6.6	4.7	2.3	2.5	25.8	23.2	22.7	19.4	8.9	8.1	8.0	5.1
Health Care															
Pharmaceuticals	1009	2.7	2.4	11.0	3.0	2.2	2.3	16.1	15.9	15.3	14.5	6.3	5.4	5.1	3.8
Healthcare Equipment	1289	-1.3	-6.5	10.0	-4.4	1.0	1.1	20.6	19.9	18.7	15.3	3.8	3.2	3.1	2.6
Utilities	277	-2.7	-15.5	4.9	3.1	3.1	3.8	20.7	17.1	16.7	15.8	2.2	1.8	1.8	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

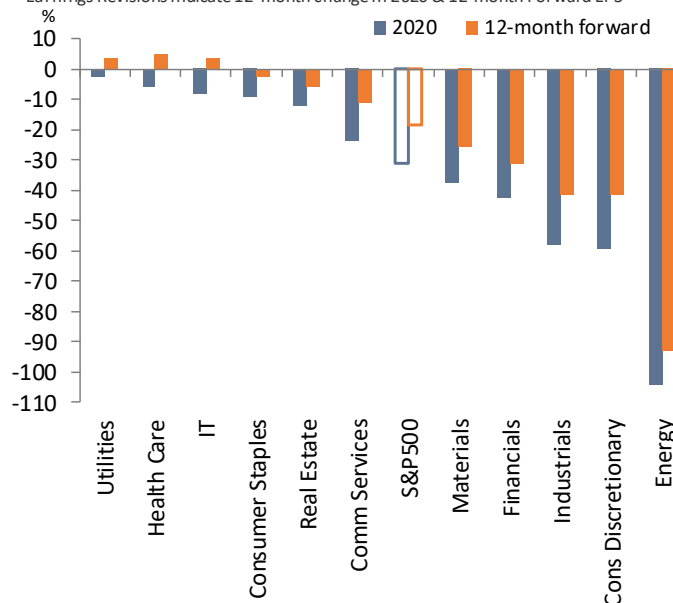
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Source: Factset, Data as of May 15th
12-month forward EPS are 63% of 2020 EPS and 37% of 2021 EPS

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

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



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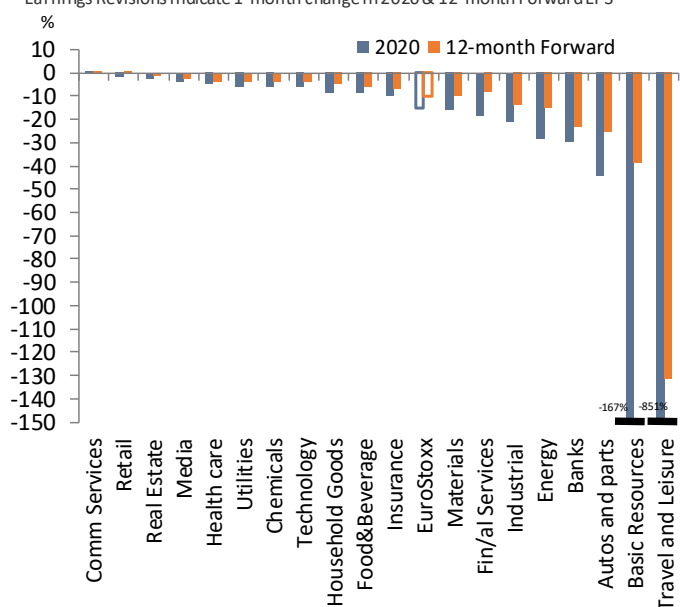
Euro Area Sectors Valuation

	Price (€)			EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	15/5/20	% Weekly Change	%YTD	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
EuroStoxx	308	-4.3	-23.6	2.4	-32.7	3.1	3.1	16.8	18.8	16.9	13.2	1.7	1.3	1.3	1.4
Energy	211	-4.6	-35.8	-9.8	-66.2	4.9	7.7	13.8	25.8	20.8	11.5	1.3	0.9	0.9	1.1
Materials	346	-5.9	-29.1	14.1	-34.3	3.2	4.0	15.4	16.8	14.9	14.2	1.9	1.3	1.3	1.4
Basic Resources	139	-10.2	-32.2	-61.6	N/A	3.3	3.2	19.3	-89.9	-52.1	14.7	0.8	0.6	0.5	0.8
Chemicals	962	-4.8	-18.1	-13.3	-15.1	2.7	3.2	21.8	21.3	20.0	15.2	2.1	1.7	1.7	2.2
Financials															
Fin/ai Services	450	-3.1	-10.7	25.4	-33.4	2.4	2.8	15.8	20.8	19.1	14.2	1.7	1.2	1.2	1.3
Banks	50	-6.8	-48.2	-1.3	-54.3	5.7	4.1	9.2	10.4	9.2	9.4	0.6	0.3	0.3	0.7
Insurance	198	-6.7	-34.4	13.0	-10.7	4.8	7.5	11.0	8.0	7.6	9.2	1.0	0.7	0.6	0.9
Real Estate	181	-4.7	-26.6	0.1	-2.0	4.2	5.1	19.1	14.3	13.9	16.8	1.0	0.8	0.8	1.0
Industrial	672	-4.0	-28.6	11.4	-35.3	2.3	2.5	20.4	22.3	19.5	15.3	3.2	2.2	2.2	2.3
Consumer Discretionary															
Media	172	-3.0	-23.4	5.4	-14.7	2.9	3.3	17.2	15.3	14.4	15.2	2.4	1.8	1.7	1.8
Retail	531	-3.4	-11.7	2.8	-15.5	2.5	2.5	25.2	26.3	24.2	19.1	4.3	3.2	3.1	3.1
Automobiles and parts	316	-8.0	-34.9	-12.2	-70.8	3.7	2.0	8.7	19.1	14.6	8.3	0.9	0.6	0.6	1.0
Travel and Leisure	144	-5.1	-32.6	-10.1	N/A	2.2	0.7	16.8	-19.4	-6.1	13.6	2.0	1.4	1.4	2.0
Technology	553	-3.5	-8.6	5.8	-10.4	1.2	0.9	26.9	26.4	24.2	18.3	4.2	3.5	3.3	3.0
Communication Services	248	-1.3	-14.0	-14.3	10.0	4.2	4.9	17.5	13.6	13.1	14.1	1.9	1.5	1.5	1.8
Consumer Staples															
Food&Beverage	433	-5.1	-27.7	16.8	-26.8	2.1	2.3	20.5	20.1	18.6	18.5	2.7	1.8	1.7	2.6
Household Goods	895	-4.0	-16.3	6.9	-20.3	1.6	1.7	29.6	30.5	28.0	20.9	6.1	4.7	4.5	3.8
Health care	810	-1.7	-6.9	7.3	-1.8	2.1	2.3	20.1	18.4	17.6	15.2	2.4	2.1	2.1	2.1
Utilities	294	-3.7	-15.2	57.3	-2.1	4.5	5.4	16.2	13.8	13.3	12.6	1.6	1.2	1.2	1.1

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

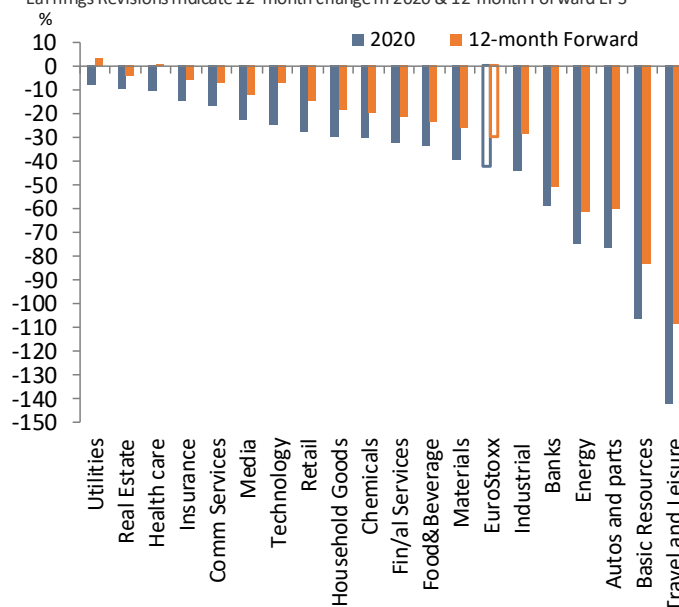
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