Global Markets Roundup

National Bank of Greece | Economic Research Division | February 25, 2020

NATIONAL BANK OF GREECE

Global equity markets tumble, as COVID-19 spreads further afield

- The spread of COVID-19 to Italy (Iran, S. Korea) generated multi-sigma losses for equity indices and speculative grade corporate bonds on both sides of the Atlantic, while US Treasuries and Gold prices rallied. The S&P500 declined by 3.3% and euro area equities tumbled by -4% (FTSE/MIB:-6%), with US 10-Year yields declining by 10 bps to an all-time low of 1.30%. Market reaction prices in significant uncertainty about the further evolution of COVID-19 and its negative impact on global trade, consumer spending and economic activity in general.
- The Federal Open Market Committee (FOMC) minutes from the January 28-29 meeting confirmed the Fed's intention to maintain monetary policy steady, at least in the short-term, with the federal funds rate in the range of 1.5% - 1.75%. Indeed, the current policy stance was deemed "likely to remain appropriate for a time", barring a material reassessment of its economic outlook (e.g. if the disruptions stemming from the COVID-19 hit the US economy hard).
- FOMC members believe that downside risks for economic activity have recently decreased, highlighting the easing of trade tensions following the US-China "Phase 1" agreement and the ratification of the US-Mexico-Canada trade agreement. However, they noted that the consequences of COVID-19 on the global economy will be closely monitored. Note that the latest FOMC projections (December) point to GDP growth of 2.0% yoy in Q4:20 (consensus: 1.8% yoy).
- FOMC members expect inflation to move closer to the target of 2% in coming months. Indeed, the annual pace of growth for the Personal Consumption Expenditure (PCE) index (the Fed's preferred measure for gauging inflation) was 1.6% yoy in December. According to the Federal Reserve Bank of Cleveland's Inflation Nowcasting model, it is expected at 1.8% yoy in both January and February.
- The FOMC minutes suggest that the reserve maintenance purchases of US Treasury Bills will likely start to be tapered after the April tax season. Recall that these purchases, since their adoption in mid-October to ensure ample reserve balances and alleviate repo-market funding pressures, have proceeded with a monthly pace of c. $60 bn (cumulative net purchases of $260 bn as of February 19th). Markets hold a significantly more benign stance regarding the prospects for monetary policy, fully pricing-in one cut of 25 bps in H1:20 and one more by end-2020.
- On the other side of the Atlantic, the minutes of the ECB meeting of January 23rd supported the view that the ECB will remain on hold in the foreseeable future (Deposit Facility Rate at -0.5% and net asset purchases at a monthly pace of €20 bn). Furthermore, the minutes did not contain any details regarding the issues that the strategy review (set to conclude by year-end) will cover.
- On the economic outlook, ECB officials highlighted the partial reduction of international trade-related uncertainty and survey-based signs of stabilization for growth dynamics. Nevertheless, it should be noted that the meeting preceded the developments in recent days regarding the spread of COVID-19 (in fact, this issued was not referred to in the minutes). Recall that the latest business surveys (PMI) are consistent with the view for a modest improvement in the momentum for economic activity, albeit with signs of supply chain disruptions related to COVID-19 starting to appear (see Economics).

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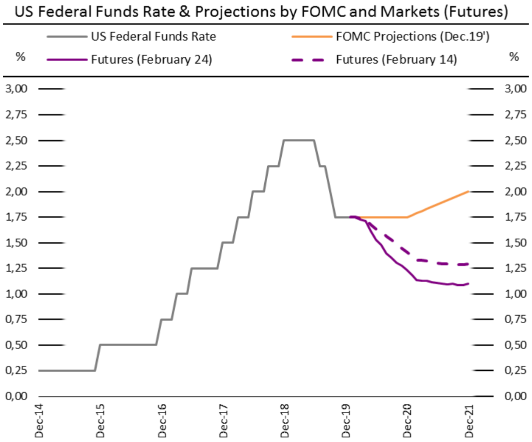
Charts of the week

Assets Daily Change (21-24 February 2020)

Equities		Closing Price	% Daily	Fixed Income	Yield (%)	-1day (bps)
Developed Markets Indices				**10-Yr Gov.Bonds**		
US	S&P 500	3226	-3,4	US	1,37	-10,1
UK	FTSE 100	7157	-3,3	Japan	-0,06	0,0
Euro Area	EuroStoxx	399	-3,9	UK	0,54	-3,3
Germany	DAX 30	13035	-4,0	Germany	-0,48	-5,0
France	CAC 40	5792	-3,9	France	-0,23	-3,1
Italy	FTSE MIB	23427	-5,4	Italy	0,97	5,7
Spain	IBEX 35	9484	-4,1	Spain	0,21	-1,7
Switzerland	SMI	10713	-3,6	Portugal	0,23	-1,2
Hong Kong	Hang Seng	26821	-1,8	Greece	1,01	5,0
Greece	ASE Index	818	-8,4	Ireland	-0,17	-2,4
Tuesday 25-Feb Nikkei225 (closed on Monday): -3,3% | CSI 300: -0,2%				Mexico	8,18	-2,9

US Federal Funds Rate & Projections by FOMC and Markets (Futures)



Source: NBG Research, Bloomberg

See page 11 for disclosures and analyst certification

The outlook for the US housing market remains positive

- **The latest housing market data suggest that activity in the sector slowed only slightly (and by less than expected) entering Q1:20, following a sharp acceleration in December and, overall, continue to point to an upward trajectory for residential investment**. Specifically, housing starts declined by 3.6% mom (+21.4% yoy) in January, versus +17.7% mom in December (+42.4% yoy), to a still strong 1567k (monthly average of 1449k in Q4:19) and well above consensus estimates for 1428k. Existing home sales fell by 1.3% mom (+9.6% yoy) in January, albeit following a robust +3.9% mom in December (+10.4% yoy), to a still solid 5.46 mn (consensus for 5.44 mn). It should also be noted that house price growth has accelerated meaningfully in recent months. Indeed, the annual growth of the median existing home price stood at +6.8% yoy in January compared with a trough of +3.3% yoy in December 2018, a pace well above the respective trend for nominal personal income growth (+3.6% yoy in January). Such divergence, if sustained, could cause housing affordability issues in the longer term, thus ending the ongoing housing market recovery. Finally, the National Association of Home Builders (NAHB) survey index – that captures homebuilders' confidence for new home sales – declined for a 2nd consecutive month in February, to a still high 74 compared with 75 in January and 76 in December, which was the highest reading since June 1999. Respondents continue to highlight firm labor market conditions and lower mortgage rates as the main supporting factors for the housing market. Regarding the latter, the 30Yr fixed mortgage rate currently stands at 3.77%, versus an 8½-year high of 5.17% in November 2018. On the other hand, accelerating price growth was cited as source of concern. Overall, the latest data leave room for optimism that residential investment will continue to increase for a 3rd consecutive quarter in Q1:20, after rising by 5.2% qoq saar on average in Q3:19 & Q4:19.

Euro area PMIs were higher than expected in February, albeit with early signs that negative repercussions from the COVID-19 outbreak may lie ahead

- **Euro area PMIs suggest continued resilience in the services sectors, while sustaining the view that the manufacturing sector, despite remaining in recession, moved closer to stabilization recently.** Overall, the composite index was up slightly, by 0.3 pts to 51.6, versus consensus estimates for 51.0. The services PMI rose by 0.3 pts to 52.8, remaining well above the expansion/contraction threshold of 50.0. Moreover, manufacturing PMI improved to 49.1, compared with 47.9 in January (and 46.3 in December), the highest since February 2019, albeit remaining in contractionary territory for a 13th consecutive month. It should be noted that the latest improvement in the headline figure was partly due to a sharp lengthening in the supplier delivery times. Usually, such a difficulty for suppliers to meet customer needs comes on the back of a substantial strengthening in the demand (hence the lengthening of delivery times contributes positively to the headline index). Nevertheless, in the latest survey, respondents' comments suggest that the aforementioned lengthening was mainly due to supply chain disruptions stemming from the COVID-19 outbreak, a development that, if sustained, does not bode well for production going forward. Note also that, in both sectors, private corporations' optimism eased modestly, with respondents' expectations for one year ahead output decreasing by 0.8 pts at the composite level, albeit compared with a 16-month high in January and remaining at satisfactory levels (60.6). On a positive note, consumer confidence improved meaningfully in February, by 1.5 pts to -6.6 (long-term average of -11.4).

- **Regarding performance by country, PMIs in Germany posted mixed changes across sectors, while the composite PMI improved in France.** These readings suggest that PMIs increased slightly in the rest of the euro area on a country-weighted basis (analytical data are due in early-March). In France, the composite PMI was up by 0.8 pts to 51.9 (consensus for 51.0), due to a recovery in services to 52.6, following a reading of 51.0 in January, which was likely negatively distorted by strikes during that month, especially in the national railway. The aforementioned improvement in services more than offset a deterioration in manufacturing PMI, down by 1.4 pts to a 7-month low of 49.7. Manufacturers cited softer demand in the automotive sector, the discontinuation of Boeing 737 Max production and disruptions related to coronavirus as factors depressing activity.

- **German PMIs were mixed.** Specifically, manufacturing PMI, despite remaining in contractionary territory, improved significantly for a 2nd consecutive month, to 47.8 in February, compared with 45.3 in January and 43.7 in December, well above consensus estimates for 44.8. Nevertheless, almost half of the aforementioned improvement in the headline index was due to a lengthening in supplier delivery times, which respondents mainly linked to coronavirus-related disruptions in China. Respondents also cited developments related to COVID-19 as an important factor for a decrease in new export orders (China represents c. 7% of Germany's goods exports), albeit total new orders largely held their ground on the back of strong domestic demand. Meanwhile, the services PMI was down by 0.9 pts to 53.3 (consensus: 53.8), largely offsetting the increase in its manufacturing counterpart. Indeed, overall the composite PMI was broadly unchanged at 51.1. On a similar note, the IFO business survey was insignificantly changed (+0.1 pt to 96.1), with a moderate increase in the expectations component (expectations for business conditions in the next six months | +0.5 pts to 93.4), offsetting a slight decline in the assessment of current conditions (-0.3 pts to 98.9). Sector-wise, improvement occurred in manufacturing (albeit remaining subdued), while confidence deteriorated slightly in the other sectors covered by the survey (services, trade and construction), although remaining at healthy levels.

Steady UK business confidence in February

- **The UK composite PMI was stable in February at a satisfactory 53.3, thus sustaining its sharp post-election gain during January (+4.0 pts versus December) and modestly overshooting consensus expectations for 52.8.** The changes were mixed across sectors, with the manufacturing PMI up sharply by 1.9 pts to 51.9, a 10-month high and exceeding consensus estimates for 49.7. Nevertheless, the latest reading was positively distorted by a lengthening in supplier delivery times (as was also the case in euro area PMIs), a development that was linked to supply chain bottlenecks in Asia as indicated by respondents' comments. At the same time, PMI in the dominant services sector (80% of UK GDP) decreased by 0.6 pts to 53.3. On a positive note, private corporations' optimism remained high, with respondents' expectations for one year ahead output at its highest since June 2015.

Equities

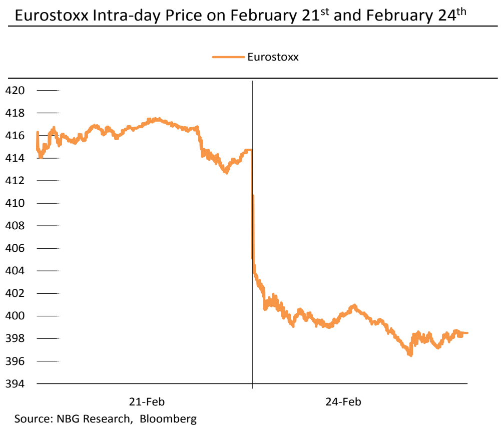
- **Global equity markets lost ground in the past week, following an increase in the number of COVID-19 cases outside China.** Overall, the MSCI ACWI was down by -1.3% (+1.3% ytd), with both developed (-1.2% wow) and emerging markets (-2.0% wow) recording strong losses. In the US, the S&P500 declined by -1.3% wow, with the Technology sector leading the decline (-2.5% wow). The S&P500 12-month forward Price/Earnings ratio passed 19x for the first time since May 2002 on Wednesday, following its record high, falling slightly at 18.8x at the end of the week (20-year average: 15.4x). At the sector level, nine sectors have 12-month forward P/E ratios that exceed their 20-year averages, led by the Utilities (21.4x vs. 14.5x) and Consumer Discretionary (23.7x vs. 17.8x). Energy is the only sector with a P/E ratio below its 20-year average (16.7x vs. 17.0x). Regarding the earnings season, out of the 442 companies that have reported results so far, 71% have exceeded analyst estimates. Consensus EPS expectations for Q4:19 stand at +0.9% yoy from -2.2% yoy in the previous quarter. On Monday, however, the S&P500 index fell by 3.4% and volatility index (VIX index) rose to 25% (15% on average in the previous week) due health-related concerns. On the other side of the Atlantic, EuroStoxx fell by 0.9% wow, with Banks recording strong losses (-2.7% wow), on the back of lower yields. The decline intensified on Monday with EuroStoxx down by -3.9% and the DAX 30 by -4%.

Fixed Income

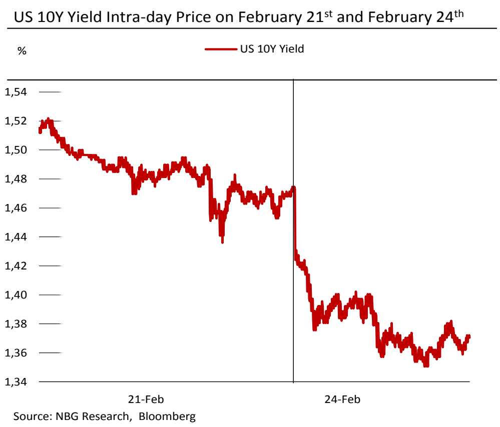
- **Government bond yields declined in the past week due to increased safe-haven demand.** Specifically, US 10-year yields declined by 12 bps wow to 1.47%, the lowest since September 2019. Notably, its 2-year peer was down by 7 bps wow to 1.36%, while the 3-month US Treasury Bill yield stands at 1.55% (-2 bps wow). As a result, the spread between the US 3-month T-bill rate and the UST 10-year yield was in negative territory in the past week (-8 bps at the end of the week, -17 bps on Monday). Recall that an inverted yield curve (i.e. when long-term yields are above shorter-term ones) suggests that investors likely price-in a high probability of an economic downturn in the short to medium term. In Germany, the 10-year yield decreased by 3 bps wow to -0.43%. In Italy, 10-year yield declined by 1 bp wow to 0.91%, increasing by 6 bps on Monday to 0.96% after the COVID-19 outbreak worsened over the weekend, exacerbating concerns about the impact on the economy. **In a similar vein, corporate bond spreads in the US widened significantly.** Specifically, US HY spreads rose by 10 bps wow to 366 bps, while their euro area counterparts declined by 3 bps to 302 bps, mainly due to better-than-expected economic data (PMIs). In the investment grade spectrum, US spreads were up by 3 bps to 105 bps, while euro area IG spreads were broadly stable at 89 bps.

FX and Commodities

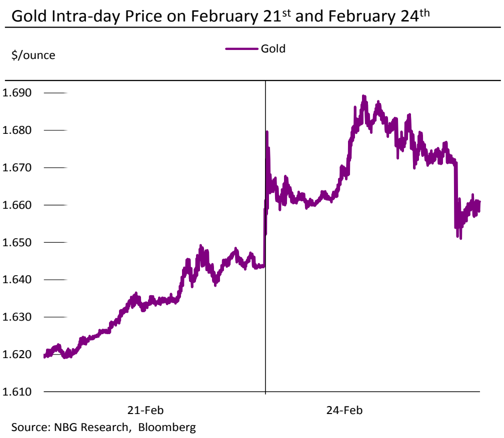
- **In foreign exchange markets, the euro was broadly stable against the US Dollar** in the past week at $1.085, rising by 0.6% wow on Friday, following the better-than-expected economic data in the euro area (PMIs) and slowing business activity in the US (Markit PMI). The Japanese Yen recorded strong losses, due to domestic virus concerns. Overall, the JPY fell by 1.8% against the euro to ¥121 and by 1.7% against the US dollar to ¥111.59, reaching a 10-month low intra-week. Meanwhile, the British Pound recorded losses in the past week (-0.7% against the US dollar to $1.296 and -0.8% wow against the euro to €/0.837), as better-than-expected retail sales failed to offset the drag from heightened uncertainty as both the EU and Britain appear to be hardening their stance before talks begin officially next month. Finally, **in commodities, oil prices rose in the past week after a smaller-than-expected rise in US crude stockpiles and as China leads stimulus efforts across Asia to cushion the impact from the coronavirus. However, on Friday and Monday oil prices declined as concerns increased regarding the impact of the COVID-19.** Specifically US oil inventories rose by 0.4 million barrels to 443 million barrels for the week ending February 14th vs expectations for +2.5 million barrels. Overall, Brent rose by 1.1% wow (-1.1% on Friday) to $57.9/barrel (-3.9% on Monday), and WTI rose by 2.4% wow (-0.9% on Friday to $53.3/barrel).



Graph 1.



Graph 2.



Graph 3.

Quote of the week: "The COVID-19 virus—a global health emergency—has disrupted economic activity in China and could put the recovery at risk…even in the case of rapid containment of the virus, growth in China and the rest of the world would be impacted", **IMF Managing Director, Kristalina Georgieva, February 23rd 2020.**

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	February 21st	3-month	6-month	12-month
Germany	-0,43	-0,20	-0,15	0,00
US	1,47	1,80	1,90	2,00
UK	0,57	0,82	0,80	0,74
Japan	-0,06	-0,08	-0,05	0,01

Official Rate (%)	February 21st	3-month	6-month	12-month
Euro area	0,00	0,00	0,00	0,00
US	1,75	1,75	1,75	1,50
UK	0,75	0,65	0,65	0,60
Japan	-0,10	-0,10	-0,10	-0,10

Currency	February 21st	3-month	6-month	12-month
EUR/USD	1,08	1,13	1,13	1,15
EUR/GBP	0,84	0,84	0,85	0,85
EUR/JPY	121	123	121	120

	February 21st	3-month	6-month	12-month
USD/JPY	112	109	107	104
GBP/USD	1,30	1,34	1,33	1,36

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	2,4	1,9	1,8	1,7	1,7	1,8
Real GDP Growth (QoQ saar) (2)	-	3,1	2,0	2,1	2,1	-	1,4	1,6	1,8	1,8	-
Private Consumption	3,0	1,1	4,6	3,1	1,8	2,6	1,7	1,9	1,9	1,9	2,2
Government Consumption	1,7	2,9	4,8	1,7	2,7	2,3	1,7	1,2	0,9	0,8	1,8
Investment	4,6	3,2	-1,4	-0,8	0,1	1,3	1,9	3,0	3,1	2,9	1,4
Residential	-1,5	-1,1	-2,9	4,6	5,8	-1,5	7,2	4,0	2,7	1,8	4,4
Non-residential	6,4	4,4	-1,0	-2,3	-1,5	2,1	0,3	2,7	3,2	3,1	0,5
Inventories Contribution	0,1	0,5	-1,0	0,0	-1,3	0,1	0,2	0,1	0,1	0,2	-0,2
Net Exports Contribution	-0,4	0,8	-0,8	-0,2	1,8	-0,2	-0,5	-0,5	-0,3	-0,3	0,0
Exports	3,0	4,2	-5,7	0,9	1,4	0,0	1,3	1,9	2,0	2,0	1,1
Imports	4,4	-1,5	0,0	1,8	-8,7	1,0	3,8	4,5	3,4	3,2	0,9
Inflation (3)	2,4	1,6	1,8	1,8	2,0	1,8	2,3	1,9	2,0	2,1	2,1

Euro Area	2018a	Q1:19a	Q2:19a	Q3:19a	Q4:19f	2019f	Q1:20f	Q2:20f	Q3:20f	Q4:20f	2020f
Real GDP Growth (YoY)	1,9	1,4	1,2	1,2	0,9	1,2	0,8	0,9	0,9	1,2	1,0
Real GDP Growth (QoQ saar)	-	1,8	0,6	1,1	0,2	-	1,1	1,2	1,3	1,3	-
Private Consumption	1,4	1,6	0,9	2,0	0,9	1,3	1,3	1,3	1,3	1,3	1,3
Government Consumption	1,1	1,8	2,0	1,6	1,5	1,6	1,4	1,4	1,4	1,4	1,5
Investment	2,4	1,3	22,5	-14,3	0,4	4,3	1,0	1,5	1,7	1,9	0,2
Inventories Contribution	0,0	-1,0	0,1	-0,5	-0,6	-0,4	-0,1	0,0	0,0	0,0	-0,2
Net Exports Contribution	0,4	1,3	-4,6	3,7	0,0	-0,3	0,0	-0,1	-0,1	-0,1	0,1
Exports	3,3	3,5	0,5	2,9	1,2	2,5	1,6	1,9	2,1	2,1	1,8
Imports	2,7	0,8	11,4	-4,6	1,3	3,4	1,7	2,3	2,5	2,5	1,7
Inflation	1,8	1,4	1,4	1,0	1,0	1,2	1,2	1,1	1,2	1,2	1,2

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	+Fiscal loosening will support the economy & companies' earnings +2020 EPS growth expectations have stabilized at 8% +Cash-rich corporates will lead to share buybacks and higher dividends (de-equitization) - Peaking profit margins - Protectionism and trade wars - P/Es at all time high (Ex-dotcom) ● Neutral/Positive	+Still high equity risk premium relative to other regions +Credit conditions gradual turn more favorable +Small fiscal loosening in 2020 - 2020 EPS estimates may turn pessimistic as economic growth fails to pick up - Political uncertainty (Italy, Brexit) could intensify ● Neutral	+Still aggressive QE and "yield-curve" targeting by the BoJ +Upward revisions in corporate earnings - 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 ● Neutral	+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 ●Neutral/Negative
Government Bonds	+Valuations appear rich with term-premium below 0% +Underlying inflation pressures if Fed seek makeup strategies - Global search for yield by non-US investors continues - Safe haven demand - Fed may cut rates in 2020 ▲ Slightly higher yields expected	+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 ▲ Higher yields expected	+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% ● Stable yields expected	+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 ▲ Higher yields expected but with Brexit risk premia working on both directions
Foreign Exchange	+Safe-haven demand - Fed may cut rates in 2020 ● Broadly Flat USD against the EUR with upside risks towards $1.15	+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) ● Broadly Flat EUR against the USD with upside risks towards $1.15	+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% ▲ Slightly higher JPY	+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 ▲ Higher GBP expected but with Brexit risk premia working on both directions

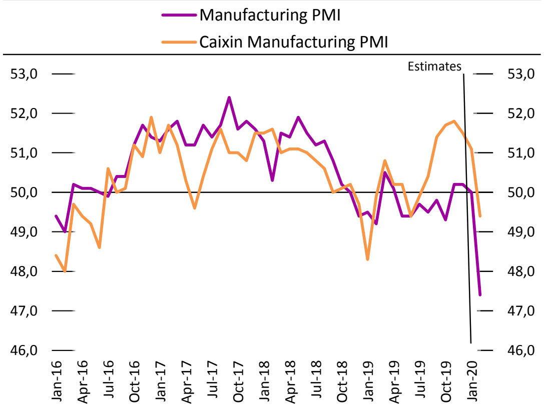
Economic Calendar

In the US, the main macro event next week is the second estimate of GDP for Q4:19, which is released on Thursday. GDP growth is expected to be unchanged compared with the previous estimate at 2.1% qoq saar. On Monday, ISM Manufacturing survey (latest: 50.9 | consensus of 50.5) will provide an update on business confidence.

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

In China, February's PMI manufacturing is released on Monday. Official Manufacturing PMI is expected to decrease sharply at 47.4 from 50 in January.

China PMIs



Source: NBG Research, Bloomberg

Economic News Calendar for the period: February 18 - March 2, 2020

Tuesday 18

		S		A	P
US					
Empire Manufacturing	February	5.0	+	12.9	4.8
NAHB housing market confidence index	February	75	-	74	75
Net Long-term TIC Flows ($ bn)	December	..		85.6	27.1
UK					
ILO Unemployment Rate	December	3.8%		3.8%	3.8%
GERMANY					
ZEW survey expectations	February	21.5	-	8.7	26.7
ZEW survey current situation	February	-10.0	-	-15.7	-9.5

Wednesday 19

		S		A	P
US					
Housing starts (k)	January	1428	+	1567	1626
Building permits (k)	January	1450	+	1551	1420
FOMC Minutes	January 29				
UK					
CPI (YoY)	January	1.6%	+	1.8%	1.3%
CPI Core (YoY)	January	1.5%	+	1.6%	1.4%
JAPAN					
Exports YoY	January	-7.0%	+	-2.6%	-6.3%
Imports YoY	January	-1.8%	-	-3.6%	-4.9%

Thursday 20

		S		A	P
US					
Philadelphia Fed Business Outlook	January	11	+	36.7	17
Initial Jobless Claims (k)	February 15	210		210	206
Continuing Claims (k)	February 8	1717	-	1726	1701
UK					
Retail sales Ex Auto MoM	January	0.8%	+	1.6%	-0.8%
EURO AREA					
Consumer Confidence Indicator	February	-8.2	+	-6.6	-8.1
CHINA					
Aggregate Financing (RMB bn)	January	4200	+	5070	2103
Money Supply M0 (YoY)	January	..		6,6%	5.4%
Money Supply M1 (YoY)	January	4.5%	-	0,0%	4.4%
Money Supply M2 (YoY)	January	8.6%	-	8.4%	8.7%
New Yuan Loans (RMB bn)	January	3100	+	3340	1140

Friday 21

		S		A	P
US					
Markit US Manufacturing PMI	February	51.5	-	50.8	51.9
Existing home sales (mn)	January	5.44	+	5.46	5.53
UK					
Markit UK PMI Manufacturing SA	February	49.7	+	51.9	50.0
Markit/CIPS UK Services PMI	February	53.4	-	53.3	53.9
JAPAN					
CPI (YoY)	January	0.7%		0.7%	0.8%
Core CPI (YoY) - ex. Fresh Food	January	0.8%		0.8%	0.7%
Core CPI (YoY) - ex. Fresh Food and Energy	January	0.8%		0.8%	0.9%
PMI manufacturing	February	..		47.6	48.8
EURO AREA					
Markit Eurozone Manufacturing PMI	February	47.4	+	49.1	47.9
Markit Eurozone Services PMI	February	52.3	+	52.8	52.5
Markit Eurozone Composite PMI	February	51.0	+	51.6	51.3

Monday 24

		S		A	P
GERMANY					
IFO- Business Climate Indicator	February	95.3	+	96.1	96.0
IFO-Expectations	February	92.1	+	93.4	92.9
IFO- Current Assesment	February	98.6	+	99.1	99.2

Tuesday 25

		S	A	P
US				
S&P Case/Shiller house price index 20 (YoY)	December	2.85%	..	2.55%
Conference board consumer confidence	February	132.1	..	131.6
GERMANY				
Private Consumption (QoQ)	Q4:19	0.1%	..	0.4%
Government Spending QoQ	Q4:19	0.3%	..	0.8%
Capital Investment QoQ	Q4:19	-0.2%	..	-0.1%

Wednesday 26

		S	A	P
US				
New Home Sales	January	715	..	694

Thursday 27

		S	A	P
US				
GDP (QoQ, annualized)	Q4:19	2.1%	..	2.1%
Personal Consumption	Q4:19	1.7%	..	1.8%
Durable goods orders (MoM)	January	-1.5%	..	2.4%
Durable goods orders ex transportation (MoM)	January	0.2%	..	-0.1%
Initial Jobless Claims (k)	February 22	211	..	210
Continuing Claims (k)	February 15	1722	..	1726
Pending home sales (MoM)	January	2%	..	-4.9%
EURO AREA				
M3 money supply (YoY)	January	5.3%	..	5.0%
Business Climate Indicator	February	-0.28	..	-0.23
Economic confidence indicator	February	102.8	..	102.8

Friday 28

		S	A	P
US				
Personal income (MoM)	January	0.4%	..	0.2%
Personal spending (MoM)	January	0.3%	..	0.3%
PCE Deflator (YoY)	January	1.8%	..	1.6%
PCE Core Deflator (YoY)	January	1.7%	..	1.6%
UK				
Nationwide House Px NSA YoY	February	2.3%	..	1.9%
JAPAN			..	
Jobless Rate	January	2.2%	..	2.2%
Retail sales (MoM)	January	-0.2%	..	0.2%
Retail sales (YoY)	January	-1.0%	..	-2.6%
Industrial Production (MoM)	January	0.2%	..	1.2%
Industrial Production (YoY)	January	-3.1%	..	-3.1%
Construction Orders YoY	January	..	..	21.4%

Monday 2

		S	A	P
US				
Construction spending (MoM)	January	0.8%	..	-0.2%
ISM Manufacturing	February	50.5	..	50.9
GERMANY			..	
Retail sales (MoM)	January	0.7%	..	-2.0%
Retail sales (YoY)	January	1.5%	..	1.7%
CHINA				
Manufacturing PMI	February	47.4	..	50.0
Caixin PMI Manufacturing	February	49.4	..	51.1

Source: NBG Research, Bloomberg

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

Equity Markets (in local currency)

Developed Markets		Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
US	S&P 500	3338	-1,3	3,3	20,3	23,6
Japan	NIKKEI 225	23387	-1,3	-1,1	9,0	6,4
UK	FTSE 100	7404	-0,1	-1,8	3,3	1,7
Canada	S&P/TSX	17844	0,0	4,6	11,5	14,9
Hong Kong	Hang Seng	27309	-1,8	-3,1	-4,6	-13,1
Euro area	EuroStoxx	415	-0,9	2,7	15,5	8,5
Germany	DAX 30	13579	-1,2	2,5	18,9	8,9
France	CAC 40	6030	-0,7	0,9	16,0	13,7
Italy	FTSE/MIB	24773	-0,4	5,4	22,6	9,4
Spain	IBEX-35	9886	-0,7	3,5	7,6	0,6

Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
MSCI Emerging Markets	61054	-1,2	-0,7	5,6	-3,0
MSCI Asia	910	-1,4	-0,4	6,5	-4,3
China	86	-0,9	0,5	6,6	-10,4
Korea	696	-3,6	0,7	3,9	-5,0
MSCI Latin America	98826	-1,2	-1,3	5,3	7,4
Brazil	357590	-1,1	-2,3	12,2	23,6
Mexico	41408	-0,7	3,2	1,9	-10,0
MSCI Europe	6310	-0,1	-1,0	12,4	10,3
Russia	1357	0,6	-0,4	20,9	26,3
Turkey	1505481	-2,1	0,2	6,7	-5,7

World Market Sectors (MSCI Indices)

in US Dollar terms	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	177,2	-1,0	-10,0	-14,1	-14,9
Materials	262,1	-0,7	-3,7	3,8	-6,7
Industrials	277,3	-1,4	0,3	10,5	4,8
Consumer Discretionary	284,7	-0,9	2,3	16,1	13,7
Consumer Staples	253,7	-0,4	1,0	12,4	12,2
Healthcare	285,0	-0,3	2,1	16,1	24,1
Financials	125,3	-1,5	-0,3	10,7	-4,0
IT	333,3	-2,5	7,2	38,6	43,7
Telecoms	79,9	-1,0	3,2	19,2	18,3
Utilities	162,7	0,5	8,3	20,8	36,6

in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	183,7	-0,9	-8,8	-13,2	-11,6
Materials	255,8	-0,5	-1,9	5,6	-0,7
Industrials	277,8	-1,2	1,7	11,7	8,9
Consumer Discretionary	277,7	-0,7	3,4	17,1	17,0
Consumer Staples	257,2	-0,2	2,2	13,3	16,9
Healthcare	283,8	-0,2	2,9	16,7	27,4
Financials	127,3	-1,3	1,0	11,9	0,3
IT	324,2	-2,5	7,6	39,1	45,3
Telecoms	84,0	-0,8	3,8	19,7	23,3
Utilities	168,8	0,6	9,5	22,2	42,0

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	1,47	1,59	1,92	2,69	2,37
Germany	-0,43	-0,40	-0,19	0,13	1,07
Japan	-0,06	-0,03	-0,01	-0,04	0,46
UK	0,57	0,63	0,82	1,20	1,93
Greece	0,96	0,94	1,47	3,80	9,92
Ireland	-0,15	-0,11	0,12	0,85	3,39
Italy	0,91	0,92	1,41	2,83	3,13
Spain	0,23	0,29	0,47	1,20	2,91
Portugal	0,24	0,29	0,44	1,51	4,68

US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average
30-Year FRM[1] (%)	3,8	3,8	4,0	4,7	4,2
vs 30Yr Treasury (bps)	186	173	156	161	118

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	12	16	35	16	140
US Treasuries 10Y/5Y	15	17	23	18	74
Bunds 10Y/2Y	21	25	42	68	116
Bunds 10Y/5Y	18	21	29	45	73

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
EM Inv. Grade (IG)	151	151	150	181	211
EM High yield	466	468	494	470	641
US IG	105	102	101	132	149
US High yield	366	356	360	404	496
Euro area IG	89	90	94	134	139
Euro area High Yield	302	305	308	418	481

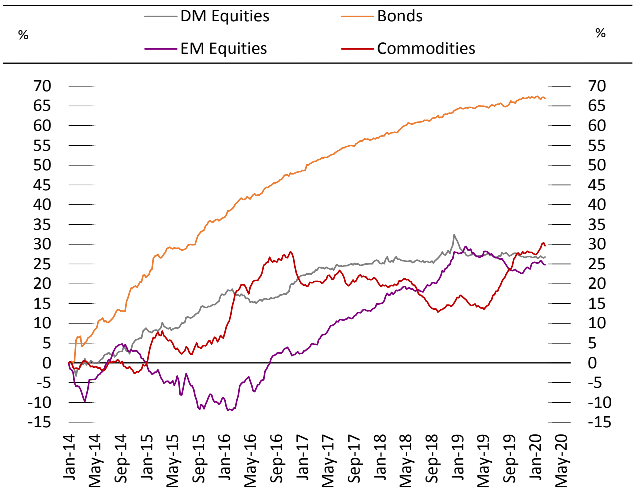
Foreign Exchange & Commodities

Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1,08	0,1	-2,2	-4,3	-3,3
EUR/CHF	1,06	-0,4	-1,2	-6,5	-2,2
EUR/GBP	0,84	0,8	-0,9	-3,7	-1,1
EUR/JPY	121,00	1,8	-0,7	-3,6	-0,6
EUR/NOK	10,06	0,4	1,0	2,9	2,2
EUR/SEK	10,55	0,0	0,0	-0,6	0,4
EUR/AUD	1,64	1,6	1,1	2,5	2,6
EUR/CAD	1,43	-0,1	-1,5	-4,4	-1,5
USD-based cross rates					
USD/CAD	1,32	-0,2	0,7	-0,1	1,8
USD/AUD	1,51	1,3	3,3	7,0	5,9
USD/JPY	111,59	1,7	1,6	0,8	2,7

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	342	0,7	-2,3	-2,3	-1,6
Energy	435	1,4	-6,1	-7,1	-12,5
West Texas Oil ($)	53	2,4	-5,9	-6,1	-12,7
Crude brent Oil ($)	58	1,1	-6,9	-13,1	-12,9
Industrial Metals	1139	-0,6	-6,5	-10,2	-6,6
Precious Metals	1925	4,0	5,5	22,5	7,6
Gold ($)	1643	3,7	5,4	24,2	8,3
Silver ($)	18	4,2	3,6	16,9	3,5
Baltic Dry Index	497	16,9	-20,2	-21,1	-54,4
Baltic Dirty Tanker Index	865	0,0	-30,1	4,5	-45,8

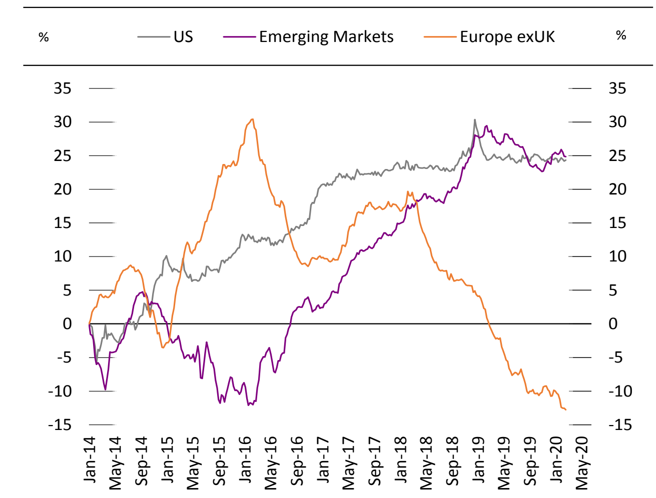
Source: Bloomberg, as of February 21st, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

Global Cross Asset ETFs: Flows as % of AUM



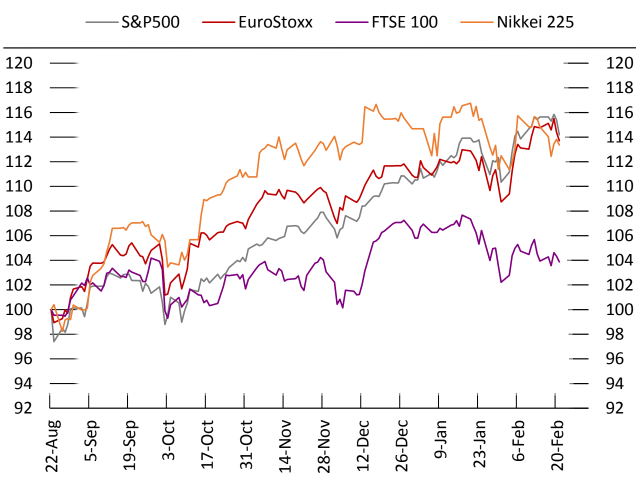
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of February 21st

Equity ETFs: Flows as % of AUM



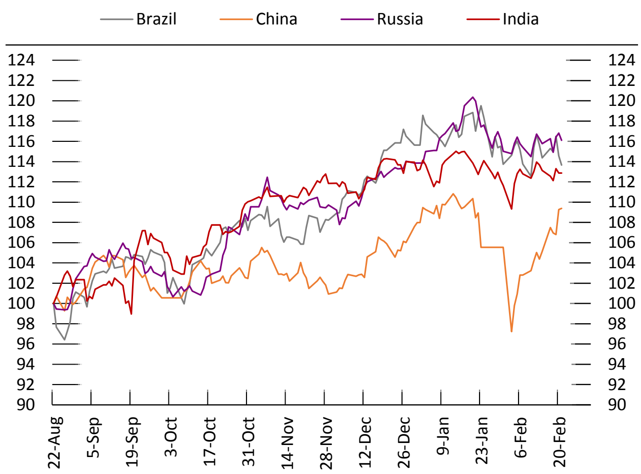
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of February 21st

Equity Market Performance - G4



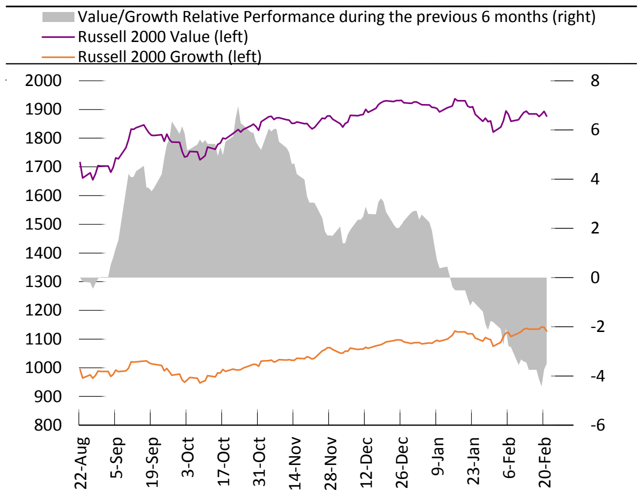
Source: Bloomberg - Data as of February 21st – Rebased @ 100

Equity Market Performance - BRICs



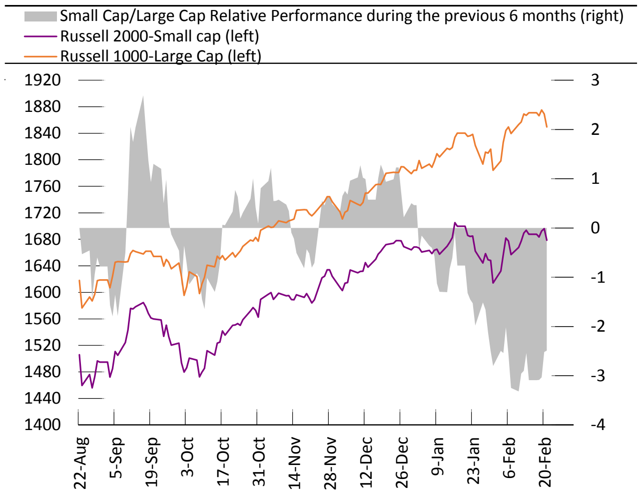
Source: Bloomberg - Data as of February 21st – Rebased @ 100

Russell 2000 Value & Growth Index



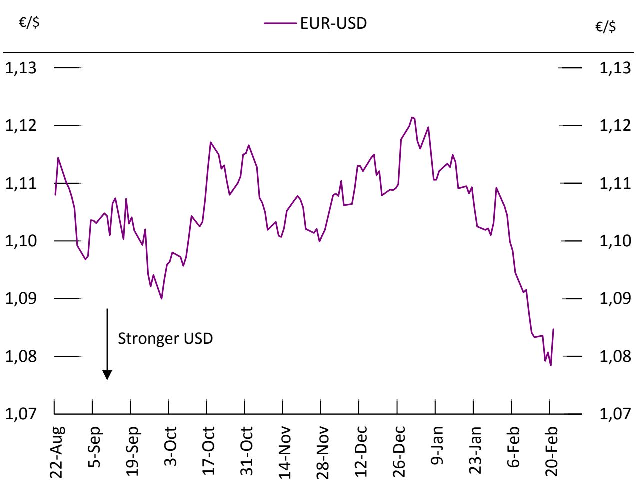
Source: Bloomberg, Data as of February 21st

Russell 2000 & Russell 1000 Index



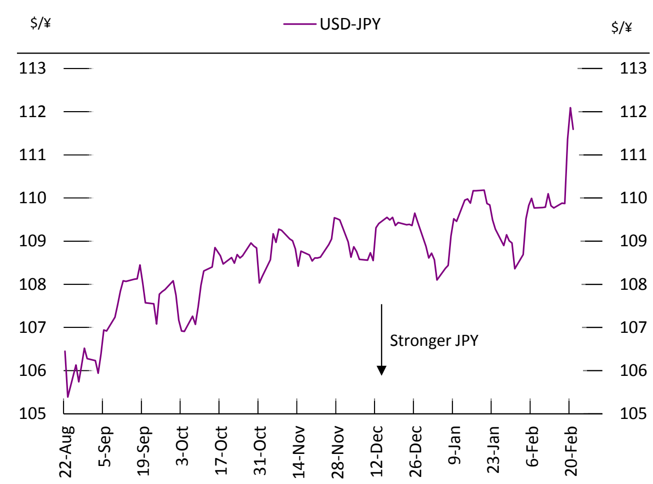
Source: Bloomberg, Data as of February 21st

EUR/USD



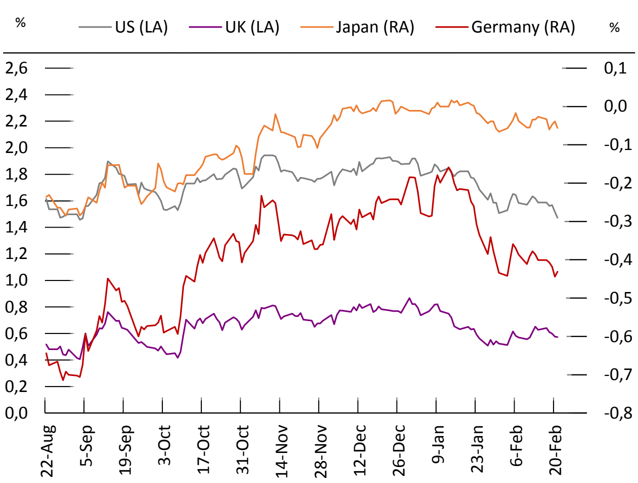
Source: Bloomberg, Data as of February 21st

JPY/USD



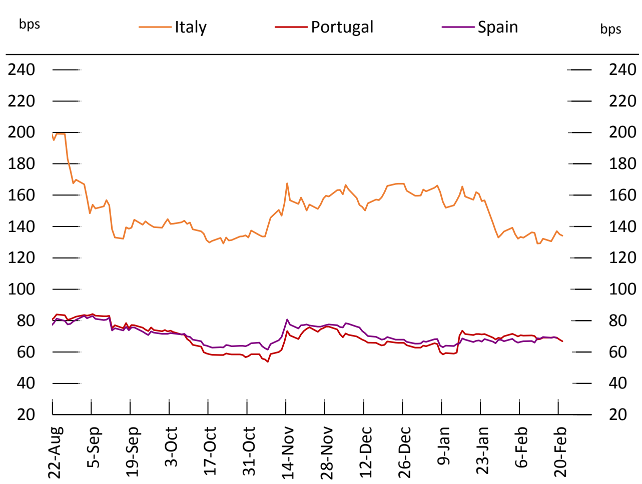
Source: Bloomberg, Data as of February 21st

10- Year Government Bond Yields



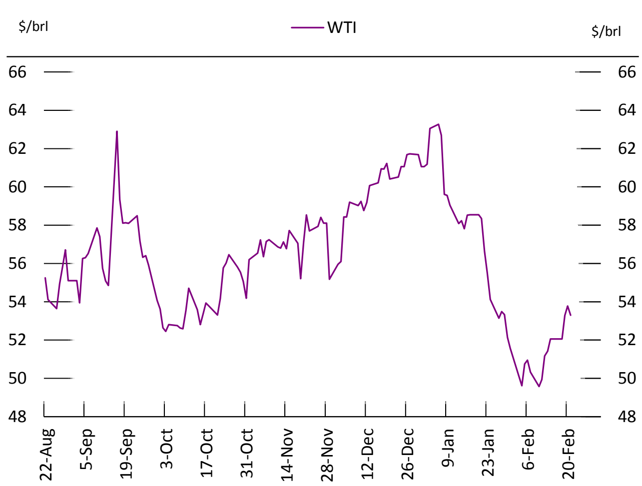
Source: Bloomberg - Data as of February 21st
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



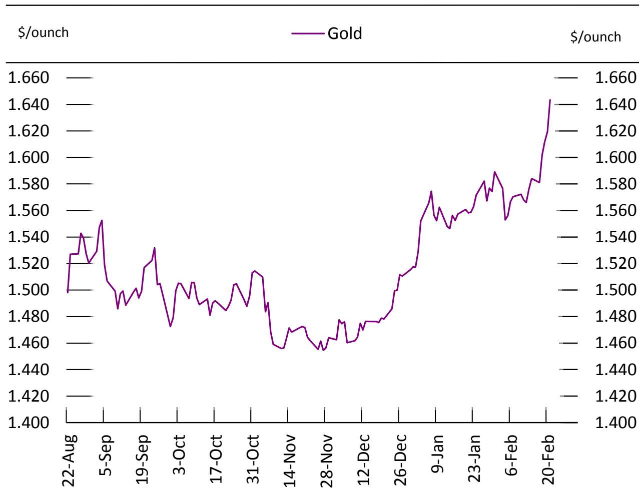
Source: Bloomberg - Data as of February 21st

West Texas Intermediate ($/brl)



Source: Bloomberg, Data as of February 21st

Gold ($/ounch)



Source: Bloomberg, Data as of February 21st

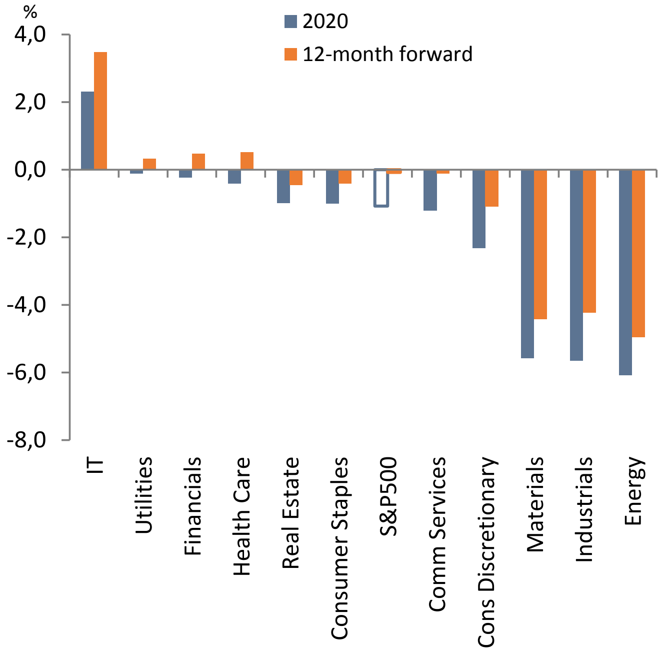
US Sectors Valuation

	Price ($)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	21/2/2020	% Weekly Change	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
S&P500	3338	-1,3	1,2	8,3	1,8	1,9	20,2	19,1	18,8	15,1	3,6	3,5	3,5	2,5
Energy	406	-0,9	-28,9	14,9	3,8	4,6	21,7	16,9	16,7	19,7	1,6	1,4	1,4	1,8
Materials	379	-0,3	-15,6	6,3	2,1	2,2	20,2	19,2	18,9	14,7	2,4	2,4	2,4	2,5
Financials														
Diversified Financials	761	-1,0	1,7	6,2	1,4	1,6	16,2	15,5	15,3	13,8	1,9	1,7	1,7	1,5
Banks	363	-1,3	9,0	3,8	2,6	3,0	12,3	11,5	11,4	11,0	1,4	1,3	1,3	1,0
Insurance	457	-1,7	15,7	7,5	2,2	2,3	13,4	12,9	12,8	10,8	1,5	1,5	1,5	1,1
Real Estate	260	0,0	1,9	4,6	3,1	3,0	21,0	21,7	21,5	18,3	3,7	3,9	3,9	3,0
Industrials														
Capital Goods	742	-1,2	-6,5	7,9	1,9	2,0	21,1	19,6	19,2	15,5	5,4	4,9	4,8	3,4
Transportation	789	-0,9	6,6	4,2	1,9	2,0	14,7	14,1	13,9	13,5	4,3	4,0	3,9	3,4
Commercial Services	376	-2,0	12,9	7,9	1,3	1,3	28,5	27,9	27,5	19,9	6,0	6,0	6,0	3,4
Consumer Discretionary														
Retailing	2645	-0,7	3,7	12,5	0,8	0,8	32,9	31,2	30,6	21,2	12,7	11,4	11,1	6,1
Media	689	-1,6	3,8	15,8	0,4	0,4	27,4	24,1	23,6	20,1	4,2	3,8	3,7	3,2
Consumer Services	1305	-1,8	5,0	5,6	2,1	2,3	23,9	22,2	21,8	19,2	14,8	15,3	15,2	6,4
Consumer Durables	367	-2,3	0,4	9,3	1,4	1,5	19,2	17,4	17,2	16,8	4,0	3,5	3,5	3,2
Automobiles and parts	108	-0,4	-16,4	6,8	4,2	4,4	8,5	7,6	7,5	8,3	1,4	1,2	1,2	1,7
IT														
Technology	1658	-3,0	2,6	11,5	1,3	1,4	21,6	19,4	19,1	12,6	9,7	10,1	10,1	3,7
Software & Services	2558	-2,2	11,1	14,3	1,0	1,0	29,3	27,7	27,2	17,3	7,9	7,9	7,7	5,2
Semiconductors	1309	-2,9	-12,3	9,1	1,8	1,8	18,9	18,2	17,9	13,9	5,5	5,3	5,2	3,1
Communication Services	189	-1,2	3,0	10,6	1,2	1,2	21,7	19,9	19,6	17,3	3,5	3,2	3,1	2,8
Consumer Staples														
Food & Staples Retailing	501	0,6	2,9	3,1	1,7	1,8	21,5	21,4	21,2	16,1	4,6	4,2	4,2	3,1
Food Beverage & Tobacco	738	-0,3	-1,7	4,9	3,3	3,3	19,7	19,4	19,3	17,5	5,3	5,2	5,1	4,9
Household Goods	767	-0,3	6,6	7,7	2,3	2,3	25,8	24,7	24,4	19,2	8,9	9,0	8,9	5,0
Health Care														
Pharmaceuticals	989	-0,2	9,8	6,9	2,1	2,3	15,9	14,8	14,6	14,4	5,5	4,5	4,4	3,5
Healthcare Equipment	1410	-0,9	10,3	9,7	1,0	1,1	20,4	18,8	18,5	15,2	3,7	3,3	3,3	2,6
Utilities	356	-0,2	4,9	4,6	3,1	3,0	20,7	21,6	21,4	15,7	2,2	2,3	2,3	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

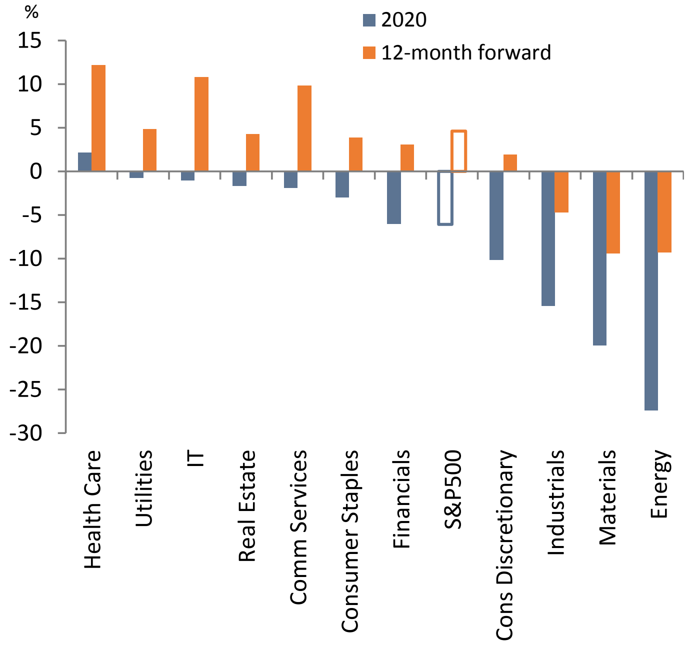
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Source: Factset, Data as of February 21st
12-month forward EPS are 86% of 2020 EPS and 14% 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 February 21st
12-month forward EPS are 86% of 2020 EPS and 14% of 2021 EPS

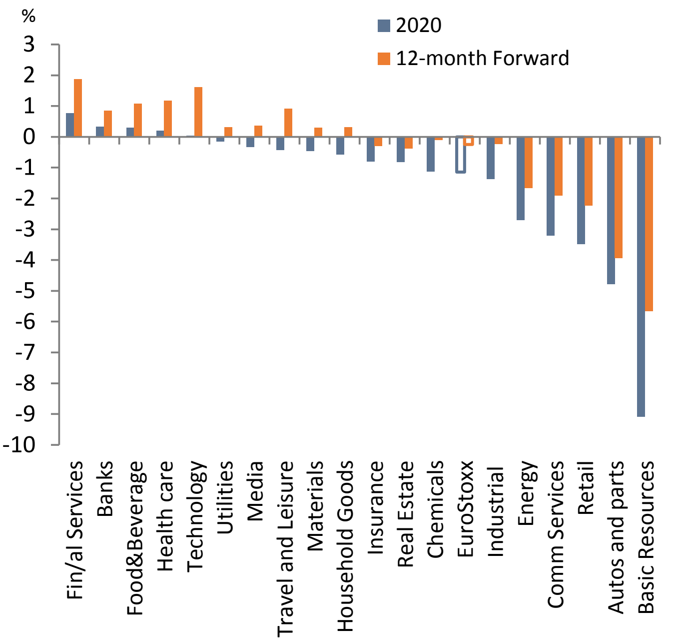
Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	21/2/2020	% Weekly Change	2019	2020	2019	2020	2019	2020	12m fwd	10Yr Avg	2019	2020	12m fwd	10Yr Avg
EuroStoxx	415	-0,9	2,7	6,9	3,1	3,1	16,7	15,9	15,6	13,2	1,7	1,7	1,7	1,4
Energy	304	-1,9	-10,1	13,3	4,9	5,6	13,8	11,1	11,0	11,4	1,3	1,1	1,1	1,1
Materials	502	-0,5	13,9	7,6	3,1	3,3	15,4	14,8	14,6	14,1	1,9	1,8	1,8	1,4
Basic Resources	196	-1,6	-61,6	31,7	3,3	3,5	19,3	14,5	14,0	13,6	0,8	0,8	0,8	0,9
Chemicals	1187	-1,3	-12,7	7,6	2,6	2,7	21,8	20,8	20,5	15,1	2,1	2,1	2,1	2,2
Financials														
Fin/al Services	541	-0,4	25,4	-5,7	2,4	2,4	15,8	17,7	17,4	14,1	1,7	1,6	1,6	1,3
Banks	98	-2,7	-1,0	3,6	5,7	5,8	9,3	9,0	9,0	10,0	0,6	0,6	0,6	0,7
Insurance	309	-2,1	13,0	4,4	4,8	5,1	11,0	10,7	10,6	9,3	1,0	1,0	1,0	0,9
Real Estate	262	-0,2	0,1	3,7	4,2	4,1	19,1	19,6	19,5	16,7	1,0	1,1	1,1	1,0
Industrial	957	-0,9	11,4	10,6	2,3	2,5	20,3	18,5	18,1	15,2	3,2	3,0	3,0	2,3
Consumer Discretionary														
Media	222	-0,4	9,5	8,9	3,3	3,6	17,2	15,5	15,3	15,8	2,3	2,2	2,2	2,0
Retail	613	-1,0	3,4	6,6	2,5	2,7	25,0	23,8	23,4	18,6	3,9	3,7	3,7	2,8
Automobiles and parts	450	-1,3	-12,1	3,7	3,7	3,9	8,8	7,7	7,6	8,6	0,9	0,8	0,8	1,0
Travel and Leisure	207	0,6	-4,8	23,7	2,0	2,2	15,7	12,2	12,0	14,6	1,9	1,7	1,7	1,8
Technology	646	-2,1	6,3	11,2	1,2	1,0	26,6	24,6	24,1	18,1	4,2	3,9	3,9	3,0
Communication Services	309	1,8	-14,3	14,7	4,2	4,1	17,5	16,2	15,9	14,1	1,9	1,9	1,9	1,8
Consumer Staples														
Food&Beverage	595	-0,6	16,8	5,8	2,1	2,3	20,5	19,1	18,9	18,5	2,7	2,4	2,4	2,6
Household Goods	1078	-1,5	6,9	10,5	1,6	1,8	29,6	26,5	26,2	20,7	6,1	5,4	5,3	3,7
Health care	917	0,3	7,3	9,2	2,1	2,2	20,1	18,8	18,5	15,1	2,4	2,3	2,3	2,1
Utilities	408	2,5	56,2	7,8	4,5	4,2	16,1	17,3	17,2	12,6	1,6	1,7	1,7	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

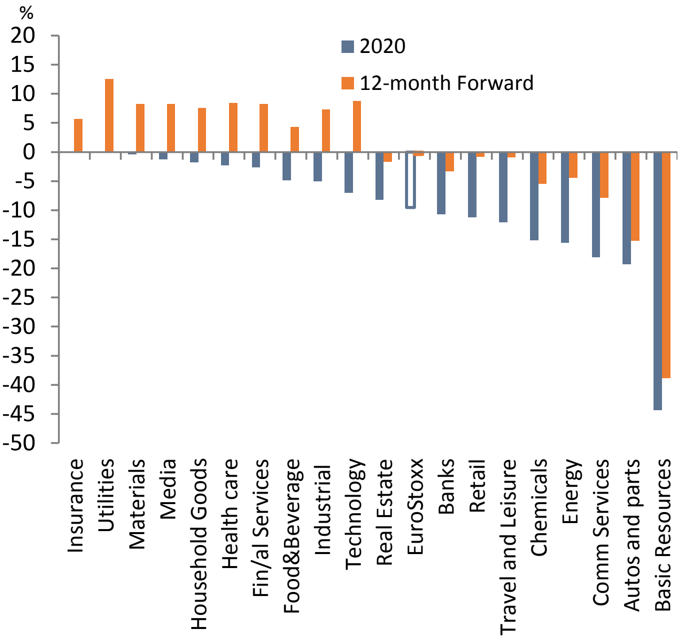
Earnings Revisions indicate 1-month change in 2020 & 12-month Forward EPS



Source: Factset, Data as of February 21st
12-month forward EPS are 86% of 2020 EPS and 14% 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 February 21st
12-month forward EPS are 86% of 2020 EPS and 14% of 2021 EPS

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