Global Markets Roundup

National Bank of Greece | Economic Research Division | December 10, 2019

NATIONAL BANK OF GREECE

The US financial system appears resilient overall, albeit non-financial corporations debt remains at a historical high amid ultra-low interest rates

- According to the Federal Reserve, asset valuations (equities, corporate bonds, commercial real estate prices, house prices) remain above their long-term medians relative to income streams. However, taking into account the ultra-low level of Treasury yields, relative valuations appear less excessive. At the same time, corporate debt has increased to record levels.
- Regarding the major asset classes, the price-to-rent ratio for residential real estate (estimated market value of $37.3 tn or 175% of GDP) has stabilized recently and currently stands only slightly above (103.79) its long-term normalized trend value of 100 (September 2019). On the other hand, prices for commercial real estate (CRE: estimated market value of $20 tn or 94% of GDP) appear high compared with rents. Indeed, capitalization rates (the annual rental income relative to prices for recently purchased commercial properties), stand at historically low levels (6.13% in September). Nevertheless, the premium that investors require versus safe alternative investments (i.e. Treasury Securities) remains well above the long-term median (see graph below).
- The price-to-earnings ratio for equities (estimated market value of $35.6 tn or 167% of GDP) is slightly above its median over the past 30 years (17.9x versus 15.5x). However, investors' willingness to assume risk on top of risk-free assets (Equity Risk Premium) does not appear excessive by historical standards (see graph 1, page 3). Regarding other (smaller sized) asset classes, the Fed observed potential pockets of vulnerability stemming from leveraged loans, for which demand remains strong, albeit easing recently. Furthermore, some signs of excessive risk taking were also observed in corporate bonds, with the yield spreads versus US treasury securities in the high-yield spectrum standing below the long-term median (see Markets section). Investors' pricing of corporate bonds relative to the perceived risk of default (i.e. the gap between bond spreads and expected credit losses) appears benign compared with the norm (see graph 2, page 3).
- Regarding debt burdens, household debt has risen in line with incomes. Moreover, quality has improved, as households with high credit scores accounted for most of the growth. Households with prime ratings, which represent half of total borrowers, hold about ⅔ of total loan balances ($15.5 tn or 73% of US GDP). Regarding mortgage loans, the major category of household debt (⅔ of total), delinquencies as a percentage of total mortgages stand at 3.97% (as of Q3:19), the lowest rate since Q1:1995. Finally, the ratio of outstanding mortgage debt to the aforementioned FRB estimate for the market value of residential real estate property, stands at a healthy 27.9%, suggesting sufficient collateral for mortgage loans, and thus increased lenders' protection against potential credit losses.
- On the other hand, pockets of vulnerability are evident vis-à-vis business debt. Specifically, debt in the non-financial business sector is at a record high (74% of GDP). Moreover, according to Fed calculations, gross leverage -- defined as the ratio of firms' book value of total debt to the book value of total assets -- stood at 35.5% in Q2:2019, also a record high. Furthermore, the balance of new debt generation has been tilted towards relatively riskier firms in recent years, as indicated by the high net issuance of high-yield bonds and institutional leveraged loans (see graph 3, page 3). It should be noted, however, that the median ratio of earnings (before interest and taxes) to interest payments (interest coverage ratio) stands at a relatively resilient 2.94%. This highlights the importance (for financial stability) of maintaining accommodative financial conditions.

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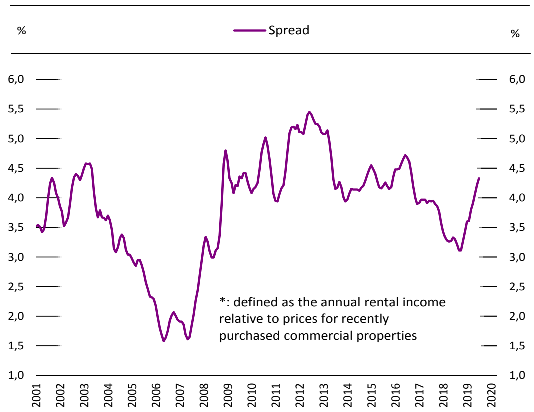
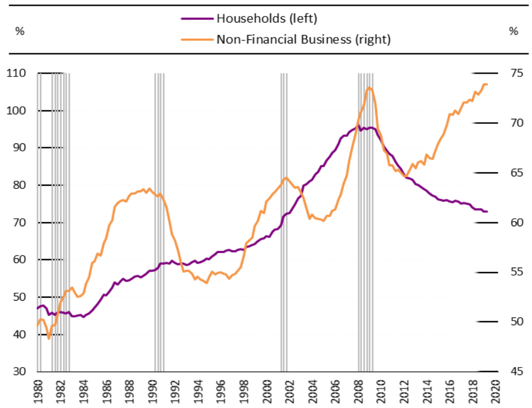
Charts of the week

Spread of CRE Capitalization Rate* to 10-Year US Treasury Yield



Source: Federal Reserve Board, NBG Research

US Non-Financial Business & Households Debt as % of GDP



Source: Federal Reserve Board, NBG Research, shaded areas indicate recessions

See page 12 for disclosures and analyst certification

US job creation surprised on the upside in November…

- **Job growth in the US exceeded expectations by a wide margin in November.** Specifically, nonfarm payrolls increased by 266k, versus +156k in October. Although the latest reading was, in part, boosted by the return of circa 40k workers to the motor vehicles & parts industry following a strike during October, it was nevertheless a sharp outcome, with broad based gains across industries and well above consensus estimates for 180k. Furthermore, there were significant positive net revisions for the previous two months (+41k). Overall, the less volatile 3-month average stood at a strong 205k in November (189k in October). The unemployment rate declined slightly, by 0.1 pp to a 50-year low of 3.5%, although this was due to the labor force participation rate posting a similar decrease to 63.2%. At the same time, 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 down by 0.1 pp, returning to its 19-year low of 6.9%, which was also recorded in September (-0.7 pps yoy).

…while wage growth remains strong

- **Wages maintain their healthy trend.** Specifically, the monthly pace of increase for average hourly earnings was +0.2% mom in November, compared with an upwardly revised (by 0.2 pps) +0.4% mom in October. The annual pace of increase for average hourly earnings accelerated by 0.1 pp to 3.1% yoy, modestly above consensus expectations for 3.0% yoy. Recall that the annual change in the less volatile wages of production and non-supervisory employees (84% of total -- that also have a higher propensity to consume) continued to overperform, at a solid +3.7% yoy (down slightly compared with the 11-year high of 3.8% yoy recorded in October), while high earners saw their compensation accelerating modestly to 0.7% yoy from 0.5% yoy in October.

US consumer confidence remains robust

- **The University of Michigan consumer sentiment indicator increased by 2.4 pts to 99.2 in December (consensus for 97.0).** The latest outcome compares with a long-term average of 85.8. Sentiment was supported by the firm labor market conditions, alongside gains in equity markets and reduced expectations for inflation. Regarding the latter, households' short-term (one-year ahead) inflation expectations (an important input in the Fed's monetary policy decisions) declined by 0.1 pp to 2.4% yoy, the lowest since October 2017. Note also that longer-term inflation expectations (five to ten years ahead) declined by 0.2 pps to 2.3% yoy, matching a record low (recorded on various occasions during the current year).

US business sentiment indicators disappointed in November

- **US business surveys in November deteriorated slightly, versus expectations that an improvement would take place.** Specifically, the downturn in manufacturing continues, with the ISM index at 48.1 compared with 48.3 in October, remaining below the expansion/contraction threshold of 50.0 for a 4th consecutive month (consensus: 49.2). Recall that in August 2018, the index stood at 60.8, the highest level since May 2004. At the same time, the ISM non-manufacturing index was down by 0.8 pts to 53.9 in December, undershooting consensus estimates for 54.5, although it should be noted that even the latest reading remains robust. International trade uncertainties remained key factors in respondents' comments in both surveys. Overall, GDPNowcast models (Atlanta Fed, New York Fed) point to GDP growth of 0.6% - 2.0% qoq saar in Q4:19 (+2.1% qoq saar | +2.1% yoy in Q3:19), while consensus estimates stand at 1.6% qoq saar (2.1% yoy).

Robust euro area private consumption was the main pillar of GDP growth in Q3

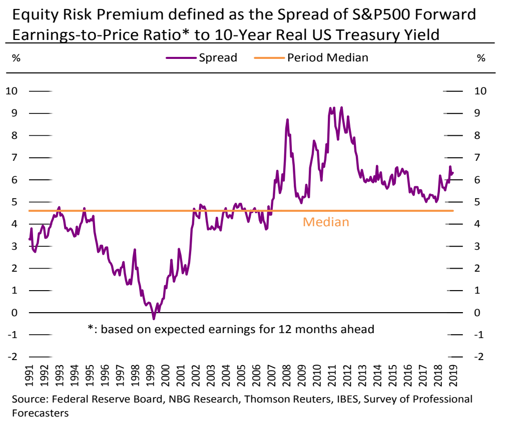
- **The 3rd estimate for euro area GDP growth in Q3:19 (the first including analytical breakdown per expenditure component) was largely unchanged at +0.9% qoq saar (+1.2% yoy), compared with +0.7% qoq saar (+1.2% yoy) in Q2:19.** Private consumption growth came out at a strong +2.0% qoq saar and was the main contributor to the headline figure (+1.1 pp), supported, inter alia, by healthy personal income gains. In the event, total compensation per employee (wages, as well as bonuses, overtime payments and employers' social security contributions) increased by a robust 2.5% qoq saar in Q3:19 (+2.1% yoy), albeit the deceleration in employment growth in recent quarters (+0.5% qoq saar in Q3:19 and +0.9% yoy, compared with a peak of +1.7% yoy in Q4:17) warrants caution. Capital formation rose by 1.1% qoq saar, adding 0.3 pps to overall GDP growth. Specifically, residential investment increased by 2.3% qoq saar, while business investment rose by a more modest +0.8 qoq saar. Government consumption was up by 1.6% qoq saar, contributing 0.3 pps to the headline figure. On the other hand, net trade subtracted 0.3 pps from overall GDP growth, as imports (+2.6% qoq saar) outpaced exports (+1.7% qoq saar). Finally, inventories also posed a drag -0.4 pps) for a 4th consecutive quarter (-0.6 pps on average from Q4:17 to Q3:19). Recall that PMI business surveys suggest that the aforementioned substantial inventory destocking continues in Q4:19. Nevertheless, that development could act as a tailwind for GDP growth in 2020.

China's external trade was subdued in November

- **Both exports and imports recorded modest changes on an annual basis in November.** Specifically, exports -- in USD terms – fell by 1.1% yoy, compared with -0.8% yoy in October, below consensus estimates for +0.8% yoy. The performance of exports to the US (-23% yoy) remained a major drag on the headline figure. At the same time, total imports slightly increased by 0.3% yoy compared with -6.2% yoy in October, overshooting consensus estimates for -1.4% yoy. Imports from the US (+2.7% yoy versus -14.3% yoy in October) accounted for the bulk of the firming in the headline figure. Although analytical data per product and source of imports are not yet available, the latter appears related to a sharp rise in imports of soybeans, as a "gesture of good will" in the context of the ongoing trade negotiations with the US and, thus, could be reversed in the coming months. In the event, China's total imports of soybeans rose by 41% yoy in November. Attention will now focus on economic activity in September (industrial production, fixed assets investment, retail sales), due on December 16th.

Equities

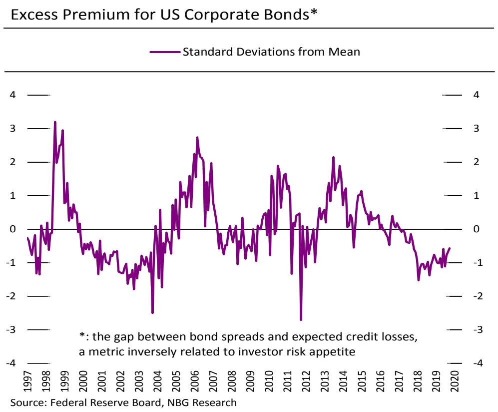
- **Global equity markets were little changed overall in the past week, in view of mixed economic data. Moreover, uncertainty remains regarding the progress in the negotiations for the "Phase 1" trade deal between the US and China, ahead of the tariff hike of 15% from the US, on c. $156 bn worth of imports from China, currently planned for December 15th.** Overall, the MSCI ACWI ended the week slightly up by 0.3% (+20% ytd), with Emerging markets (+0.9% wow) overperforming their Developed peers (+0.2% wow). In the US, the S&P500 index rose by 0.2% on a weekly basis, and reached a fresh record high of 3146 (+25.5% year-to-date), driven by Energy (1.5% wow), as oil prices strengthened. On the other hand, Industrials underperformed (-1.1% wow) in view of weak ISM business surveys, especially in the manufacturing sector). On the other side of the Atlantic, EuroStoxx was slightly down, by 0.2% wow, led by Communication Services (-2.8% wow). In the UK, the FTSE100 recorded losses of 1.5% wow, on account of a stronger British Pound (75% of FTSE100 companies' revenues stem from abroad).



Graph 1.

Fixed Income

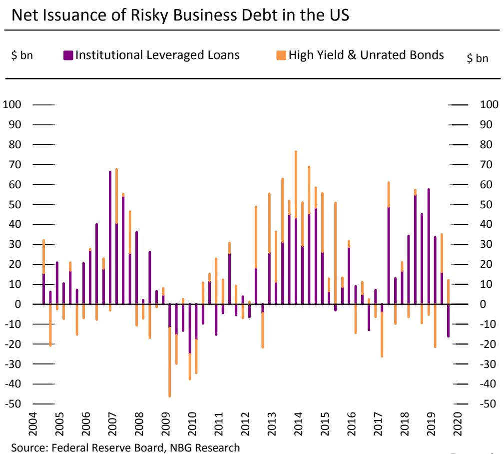
- **Government bond yields moderately rose in the past week**. Specifically, the US Treasury 10-year yield increased by 6 bps wow to 1.84% (-85 bps ytd), mostly due to inflation expectations getting some boost from higher oil prices. The German 10-year Bund yield rose by 7 bps wow to -0.29% (-53 bps ytd), following modest upward revisions for November's PMIs (Manufacturing: +0.3 pts to 44.1 | Services: +0.4 pts to 51.7). Bond yield spreads over the Bund in the 10-year tenor moved sideways in Italy, increasing by 5 bps in the past week and recording an equivalent decline in Monday, to 158 bps. The respective spread in Spain was largely stable at 78 bps in the past week, while it decreased in Portugal (-5 bps to 71 bps). **Corporate bond spreads were largely unchanged in the past week, with the exception of US high yield bonds.** Regarding the latter, after an increase in the start of the week due to week ISM readings, spreads reversed course later on, with higher oil prices leading to a narrowing of spreads in the Energy sector and strong US labor market data resulting in a more broad based narrowing on Friday. Overall, US high yield spreads ended the week down by 12 bps to 389 bps (long-term -- since 1997 -- median of 485 bps). Their EUR peers were broadly unchanged at 341 bps. In the investment grade spectrum, both US and EUR corporate bond spreads were insifnificantly changed, at 109 bps and 101 bps, respectively.



Graph 2.

FX and Commodities

- **In foreign exchange markets, the British Pound appreciated substantially in the past week, on the back of optimism that the upcoming general elections (December 12th), will lead to a reduction in political uncertainty**. Overall, the British Pound rose by 1.2% wow against the euro to €/0.842 (the strongest since May 2017) and by 1.6% wow against the US dollar to a 7-month high of $1.314. Modest changes for the euro on a weekly basis, +0.4 wow against the US dollar, to $1.106.
- **In commodities, oil prices rose considerably in the past week**. Prices were supported by two factors. First, the so-called OPEC+, i.e. the partnership between OPEC and other oil producing countries (mainly Russia), decided on December 6th to expand the existing oil outputs curbs (an overall supply reduction of 1.2 million barrels per day) by a further 0.5 million barrels per day. Taking also into account a pledge from Saudi Arabia to overachieve its reduction quota, the additional overall supply cut could reach 0.9 million barrels per day. OPEC+ will review these decisions in an extraordinary meeting during March 5th – 6th. Second, a larger than expected fall in US oil inventories took place (-4.9 million barrels to 447 million barrels for the week ending November 29th). Overall, Brent rose by 6.7% wow, to $65.5/barrel and the WTI by 7.3% wow to $59.2/barrel.



Graph 3.

Quote of the week: "I prefer bond purchases to negative rates…negative rates achieve little and have possibly damaging side effects on the financial system..the effect of bond purchases is stronger and more widespread", **ECB's Governing Council member and Governor of the Bank of Italy, Ignazio Visco, December 4th 2019.**

Equity Markets

US

- + Fiscal loosening will support the economy & companies' earnings
- + 2019 EPS growth expectations have stabilized
- + Cash-rich corporates will lead to share buybacks and higher dividends (de-equitization)
- – Peaking profit margins
- – Protectionism and trade wars

Neutral/Positive

Euro Area

- + Still high equity risk premium relative to other regions
- + Credit conditions gradual turn more favorable
- + Small fiscal loosening in 2019
- – 2020 EPS estimates may turn pessimistic due to plateuning economic growth
- – Political uncertainty (Italy, Brexit) could intensify

Neutral

Japan

- + 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

UK

- + 65% of FTSE100 revenues from abroad
- + Undemanding valuations in relative terms
- + High UK exposure to the commodities sector assuming the oil rally re-emerges
- – Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process

Neutral/Negative

Government Bonds

US

- + 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 is expected to cut rates in H2:2019

Slightly higher yields expected

Euro Area

- + 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

Japan

- + 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

UK

- + Elevated Policy uncertainty to remain due to the outcome of the Brexit negotiating process
- + Inflation overshooting due to GBP weakness feeds through inflation expectations
- + The BoE is expected to increase short-term policy rates assuming WA deal
- – Slowing economic growth post-Brexit

Higher yields expected but with Brexit risk premia working on both directions

Foreign Exchange

US

- + Safe-haven demand
- – Fed is expected to cut rates in H2:2019
- – Mid-2018 rally probably out of steam

Broadly Flat USD against the EUR with upside risks towards $1.15

Euro Area

- + 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

Japan

- + 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

UK

- + Transitions phase negotiations
- + The BoE is expected to increase short-term policy rates assuming WA deal
- – 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

Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	December 6th	3-month	6-month	12-month	Official Rate (%)	December 6th	3-month	6-month	12-month
Germany	-0,29	-0,30	-0,20	0,00	Euro area	0,00	0,00	0,00	0,00
US	1,84	1,80	1,90	2,00	US	1,75	1,75	1,75	1,50
UK	0,77	0,85	0,86	0,90	UK	0,75	0,70	0,70	0,70
Japan	-0,01	-0,10	-0,07	-0,01	Japan	-0,10	-0,10	-0,10	-0,10

Currency	December 6th	3-month	6-month	12-month		December 6th	3-month	6-month	12-month
EUR/USD	1,11	1,13	1,15	1,15	USD/JPY	109	109	107	104
EUR/GBP	0,84	0,84	0,85	0,85	GBP/USD	1,31	1,34	1,36	1,35
EUR/JPY	121	123	123	120					

Forecasts at end of period

Economic Forecasts

United States	2017a	Q1:18a	Q2:18a	Q3:18a	Q4:18a	2018a	Q1:19a	Q2:19a	Q3:19a	Q4:19f	2019f
Real GDP Growth (YoY) (1)	2,3	2,9	3,2	3,1	2,5	2,9	2,7	2,3	2,1	2,3	2,4
Real GDP Growth (QoQ saar) (2)	-	2,6	3,5	2,9	1,1	-	3,1	2,0	2,1	1,9	-
Private Consumption	2,6	1,7	4,0	3,5	1,4	3,0	1,1	4,6	2,9	2,2	2,6
Government Consumption	0,7	1,9	2,6	2,1	-0,4	1,7	2,9	4,8	1,6	1,8	2,3
Investment	4,2	5,5	5,2	0,7	2,7	4,6	3,2	-1,4	-1,0	1,3	1,4
Residential	3,5	-5,2	-3,7	-4,0	-4,6	-1,5	-1,1	-2,9	5,1	4,0	-1,6
Non-residential	4,4	8,8	7,9	2,1	4,8	6,4	4,4	-1,0	-2,7	-0,1	2,2
Inventories Contribution	0,0	0,2	-1,5	2,5	0,1	0,1	0,5	-1,0	0,2	-0,5	0,2
Net Exports Contribution	-0,4	0,0	0,7	-2,4	-0,4	-0,4	0,8	-0,8	-0,2	0,4	-0,3
Exports	3,5	0,8	5,8	-6,2	1,5	3,0	4,2	-5,7	0,9	1,5	0,0
Imports	4,7	0,6	0,3	8,6	3,5	4,4	-1,5	0,0	1,5	-1,2	1,4
Inflation (3)	2,1	2,2	2,7	2,6	2,2	2,4	1,6	1,8	1,7	2,1	1,8
Euro Area	**2017a**	**Q1:18a**	**Q2:18a**	**Q3:18a**	**Q4:18a**	**2018a**	**Q1:19a**	**Q2:19a**	**Q3:19a**	**Q4:19f**	**2019f**
Real GDP Growth (YoY)	2,7	2,6	2,2	1,6	1,2	1,9	1,4	1,2	1,2	1,1	1,2
Real GDP Growth (QoQ saar)	-	1,1	1,4	0,8	1,4	-	1,8	0,7	0,9	1,0	-
Private Consumption	1,8	1,5	0,8	0,7	1,5	1,4	1,5	0,9	2,0	1,3	1,3
Government Consumption	1,3	0,6	1,5	0,5	1,7	1,1	1,7	2,0	1,6	1,6	1,6
Investment	3,7	1,5	4,8	3,5	6,7	2,4	1,5	24,9	1,1	1,2	6,9
Inventories Contribution	0,2	0,3	0,0	0,8	-0,9	0,0	-0,9	-0,1	-0,4	-0,2	-0,4
Net Exports Contribution	0,4	-0,5	-0,3	-1,1	-0,2	0,4	1,2	-4,7	-0,3	-0,1	-0,9
Exports	5,8	-1,9	3,7	1,2	3,8	3,3	3,5	0,6	1,7	1,7	2,4
Imports	5,2	-1,0	4,8	3,9	4,7	2,7	1,1	11,8	2,6	2,1	4,6
Inflation	1,5	1,3	1,7	2,1	1,9	1,8	1,4	1,4	0,9	1,2	1,2

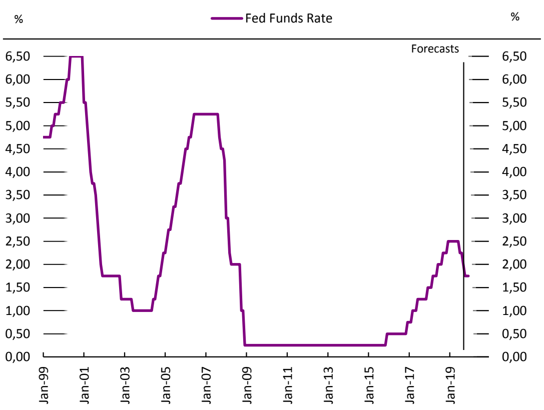
a: Actual, f: Forecasts, 1. Seasonally adjusted YoY growth rate, 2. Seasonally adjusted annualized QoQ growth rate, 3. Year-to-year average % change

Economic Calendar

In the US, investor attention turns to the Fed meeting on Wednesday. The Fed is expected to keep rates unchanged at 1.50-1.75% after 3 cuts in 2019. The press conference though and the quarterly FOMC projections, will gather the attention for a better assessment of monetary policy prospects.

In the Euro area, the ECB meeting on December 12th, the first with Ms. Lagarde presiding, is expected to be largely uneventful decision-wise, after the recent easing package (September) and with pressures mounting for fiscal policy to take the economic support baton, in view of monetary policy possibly already scratching its effectiveness ceiling. ECB staff's quarterly macroeconomic projections will accompany the meeting.

Fed Funds Rate



Source: NBG Research, Bloomberg

Economic News Calendar for the period: December 3 - December 16, 2019

Tuesday 3

UK		S		A	P
Markit/CIPS UK Construction PMI	November	44.5	+	45.3	44.2

Wednesday 4

US		S		A	P
ADP Employment Change (k)	November	135	-	67	121
ISM non-manufacturing	November	54.5	-	53.9	54.7

Thursday 5

US		S		A	P
Initial Jobless Claims (k)	November 30	215	+	203	213
Continuing Claims (k)	November 23	1660	-	1693	1642
Trade balance ($bn)	October	-48.5	+	-47.2	-51.1
Factory Goods Orders (MoM)	October	0.3%		0.3%	-0.8%
EURO AREA					
Retail sales (MoM)	October	-0.5%	-	-0.6%	-0.2%
Retail sales (YoY)	October	2.2%	-	1.4%	2.7%
GDP (QoQ)	Q3:19 F	0.2%		0.2%	0.2%
GDP (YoY)	Q3:19 F	1.2%		1.2%	1.2%
Government expenditure (QoQ)	Q3:19 F	0.4%		0.4%	0.5%
Gross Fixed Capital Formation (QoQ)	Q3:19 F	0.3%		0.3%	5.7%
Household Consumption (QoQ)	Q3:19 F	0.3%	+	0.5%	0.2%

Friday 6

US		S		A	P
Change in Nonfarm Payrolls (k)	November	180	+	266	156
Change in Private Payrolls (k)	November	178	+	254	163
Unemployment rate	November	3.6%	+	3.5%	3.6%
Average Hourly Earnings MoM	November	0.3%	-	0.2%	0.4%
Average Hourly Earnings YoY	November	3.0%	+	3.1%	3.2%
Average weekly hours (hrs)	November	34.4		34.4	34.4
Underemployment rate	November	..		6.9%	7.0%
Labor Force Participation Rate	November	..		63.2%	63.3%
University of Michigan consumer confidence	December	97.0	+	99.2	96.8
GERMANY					
Industrial Production (sa, MoM)	October	0.1%	-	-1.7%	-0.6%
Industrial Production (wda, YoY)	October	-3.6%	-	-5.3%	-4.5%

Monday 9

JAPAN		S		A	P
GDP (QoQ)	Q3:19 F	0.2%	+	0.4%	0.1%
GDP Private Consumption (QoQ)	Q3:19 F	0.4%	+	0.5%	0.4%
GDP Business Spending (QoQ)	Q3:19 F	1.4%	+	1.8%	0.9%
Eco Watchers Current Survey	November	39.7	-	39.4	36.7
Eco Watchers Outlook Survey	November	44.6	+	45.7	43.7
CHINA					
Exports (YoY)	November	0.8%	-	-1.1%	-0.8%
Imports (YoY)	November	-1.4%	+	0.3%	-6.2%

Tuesday 10

US		S	A	P
Nonfarm Productivity (QoQ, annualized)	Q3:19	-0.1%	..	-0.3%
Unit labor costs (QoQ, annualized)	Q3:19	3.4%	..	3.6%
UK				
GDP (MoM)	October	0.1%	..	-0.1%
Industrial Production (MoM)	October	0.2%	..	-0.3%
Industrial Production (YoY)	October	-1.2%	..	-1.4%
GERMANY				
ZEW survey current situation	December	-22.1	..	-24.7
ZEW survey expectations	December	0.0	..	-2.1
CHINA				
CPI (YoY)	November	4.3%	..	3.8%

Wednesday 11

US		S	A	P
CPI (YoY)	November	2.0%	..	1.8%
Core CPI (YoY)	November	2.3%	..	2.3%
Fed announces its intervention rate	December 11	1.75%	..	1.75%

Thursday 12

US		S	A	P
Initial Jobless Claims (k)	December 7	212	..	203
Continuing Claims (k)	November 30	1677	..	1693
EURO AREA				
Industrial Production (sa, MoM)	October	-0.5%	..	0.1%
Industrial Production (wda, YoY)	October	-2.4%	..	-1.7%
ECB announces its intervention rate	December 12	0.00%	..	0.00%
ECB announces its deposit facility rate	December 12	-0.50%	..	-0.50%

Friday 13

US		S	A	P
Retail Sales Advance MoM	November	0.4%	..	0.3%
Retail sales ex-autos (MoM)	November	0.3%	..	0.2%
JAPAN				
Tankan - large manufacturers current index	Q4:19	3	..	5
Tankan - large manufacturers outlook index	Q4:19	4	..	2

Monday 16

US		S	A	P
Empire Manufacturing	December	4.0	..	2.9
NAHB housing market confidence index	December	71	..	70
Markit US Manufacturing PMI	December	..	..	52.6
Net Long-term TIC Flows ($ bn)	October	..	..	-49.5
UK				
Markit UK PMI Manufacturing SA	December	..	..	48.9
Markit/CIPS UK Services PMI	December	..	..	49.3
JAPAN				
PMI manufacturing	December	..	..	48.9

EURO AREA		S	A	P
Markit Eurozone Manufacturing PMI	December	..	..	46.9
Markit Eurozone Services PMI	December	..	..	51.9
Markit Eurozone Composite PMI	December	..	..	50.6
CHINA				
Aggregate Financing (RMB bn)	November	1485.0	..	618.9
New Yuan Loans (RMB bn)	November	1200.0	..	661.3
Money Supply M0 (YoY)	November	5.0%	..	4.7%
Money Supply M1 (YoY)	November	3.9%	..	3.3%
Money Supply M2 (YoY)	November	8.4%	..	8.4%
Industrial production (YoY)	November	5.0%	..	4.7%
Retail sales (YoY)	November	7.6%	..	7.2%

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	3146	0,2	25,5	16,7	19,6
Japan	NIKKEI 225	23354	0,3	16,7	8,6	5,3
UK	FTSE 100	7240	-1,5	7,6	8,0	-1,5
Canada	S&P/TSX	16997	-0,3	18,7	13,8	6,8
Hong Kong	Hang Seng	26498	0,6	2,5	1,3	-6,1
Euro area	EuroStoxx	398	-0,2	21,3	19,0	2,5
Germany	DAX 30	13167	-0,5	24,7	21,8	1,3
France	CAC 40	5872	-0,6	24,1	22,8	9,3
Italy	FTSE/MIB	23183	-0,3	26,5	24,3	3,9
Spain	IBEX-35	9383	0,3	9,9	7,1	-7,9

Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
MSCI Emerging Markets	58671	0,7	9,8	8,1	0,3
MSCI Asia	869	0,7	10,8	8,7	-1,9
China	80	1,3	13,2	8,3	-4,4
Korea	648	0,0	7,3	5,1	-12,7
MSCI Latin America	96947	1,5	12,2	10,5	18,7
Brazil	353871	2,7	22,5	20,3	42,5
Mexico	38707	-2,2	0,0	-0,9	-12,5
MSCI Europe	6130	-0,5	15,5	13,2	16,9
Russia	1310	0,1	23,3	20,8	36,4
Turkey	1436598	0,8	14,7	13,8	-1,4

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	189,2	1,1	3,5	-4,2	-10,8
Materials	262,3	0,2	15,2	13,3	-1,6
Industrials	273,4	-0,1	24,3	18,3	7,3
Consumer Discretionary	269,6	-0,3	20,8	13,7	15,6
Consumer Staples	247,7	0,5	18,6	12,4	4,8
Healthcare	271,8	0,6	18,2	11,5	21,5
Financials	122,5	0,3	18,9	13,1	-1,5
IT	298,0	-0,2	39,9	30,8	37,4
Telecoms	76,3	0,4	23,7	17,5	9,4
Utilities	145,1	0,2	15,2	11,8	9,9

in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	195,2	0,8	3,2	-4,2	-9,1
Materials	253,6	-0,2	15,7	13,9	1,1
Industrials	271,7	-0,4	24,8	18,2	8,5
Consumer Discretionary	261,0	-0,6	21,1	13,6	16,3
Consumer Staples	249,8	0,2	18,9	12,5	6,4
Healthcare	269,8	0,4	18,5	11,6	22,5
Financials	123,7	0,0	19,2	13,5	0,5
IT	289,2	-0,3	40,1	30,8	37,7
Telecoms	79,9	0,2	23,8	17,4	11,0
Utilities	149,7	0,0	15,8	12,3	11,9

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	1,84	1,78	2,69	2,90	2,41
Germany	-0,29	-0,36	0,24	0,24	1,14
Japan	-0,01	-0,07	0,00	0,06	0,49
UK	0,77	0,70	1,28	1,25	2,00
Greece	1,51	1,45	4,40	4,26	10,02
Ireland	0,06	0,05	0,90	0,88	3,49
Italy	1,35	1,23	2,74	3,20	3,19
Spain	0,49	0,42	1,42	1,46	2,99
Portugal	0,42	0,40	1,72	1,81	4,76

US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average
30-Year FRM[1] (%)	4,0	4,0	4,8	5,1	4,2
vs 30Yr Treasury (bps)	169	176	183	192	115

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	22	16	20	14	146
US Treasuries 10Y/5Y	18	15	17	14	76
Bunds 10Y/2Y	34	27	85	86	120
Bunds 10Y/5Y	26	22	55	56	75

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
EM Inv. Grade (IG)	159	159	213	205	213
EM High yield	522	519	586	554	648
US IG	109	111	159	151	151
US High yield	389	401	533	450	502
Euro area IG	101	102	154	156	141
Euro area High Yield	341	341	506	498	490

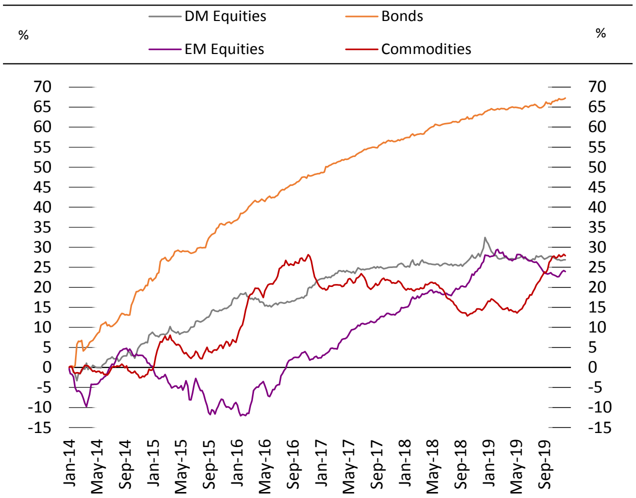
Foreign Exchange & Commodities

Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1,11	0,4	0,0	-2,7	-3,5
EUR/CHF	1,10	-0,6	-0,3	-3,0	-2,8
EUR/GBP	0,84	-1,2	-2,1	-5,4	-6,3
EUR/JPY	120,12	-0,4	-0,4	-6,3	-4,4
EUR/NOK	10,10	-0,7	-0,5	4,2	1,9
EUR/SEK	10,51	-0,5	-1,4	2,7	3,5
EUR/AUD	1,62	-0,7	0,6	2,8	-0,6
EUR/CAD	1,47	0,2	0,6	-3,6	-6,1
USD-based cross rates					
USD/CAD	1,33	-0,2	0,6	-1,0	-2,8
USD/AUD	1,46	-1,1	0,7	5,8	3,1
USD/JPY	108,58	-0,8	-0,4	-3,6	-1,0

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	332	-0,4	-0,2	-7,6	-5,0
Energy	481	5,9	3,1	10,3	25,6
West Texas Oil ($)	59	7,3	5,1	15,0	30,4
Crude brent Oil ($)	65	6,7	5,6	10,5	23,1
Industrial Metals	1186	0,2	-4,0	-3,1	-0,2
Precious Metals	1713	-0,7	-2,6	16,7	12,6
Gold ($)	1460	-0,3	-2,0	18,0	13,9
Silver ($)	17	-2,7	-6,0	14,6	7,0
Baltic Dry Index	1558	2,0	1,6	16,4	22,6
Baltic Dirty Tanker Index	1315	3,8	40,2	12,6	5,0

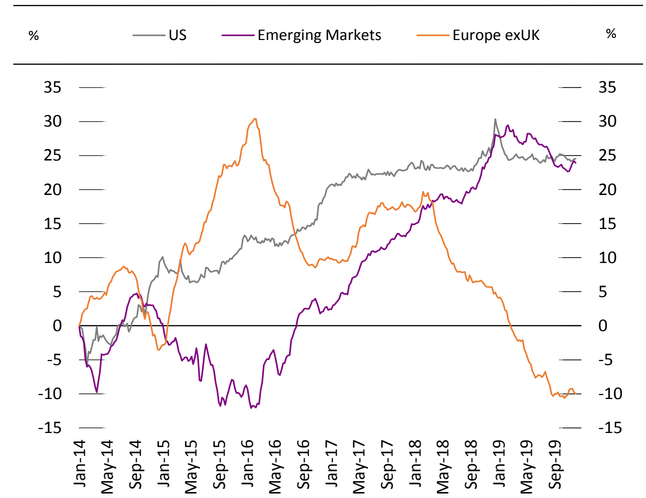
Source: Bloomberg, as of December 6th, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

Global Cross Asset ETFs: Flows as % of AUM



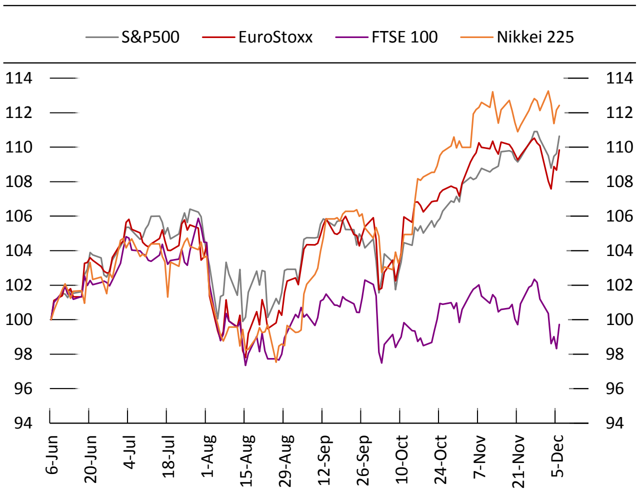
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of December 6th

Equity ETFs: Flows as % of AUM



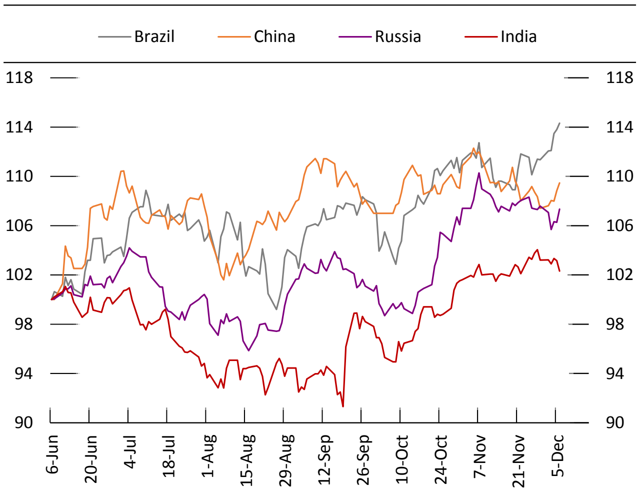
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of December 6th

Equity Market Performance - G4



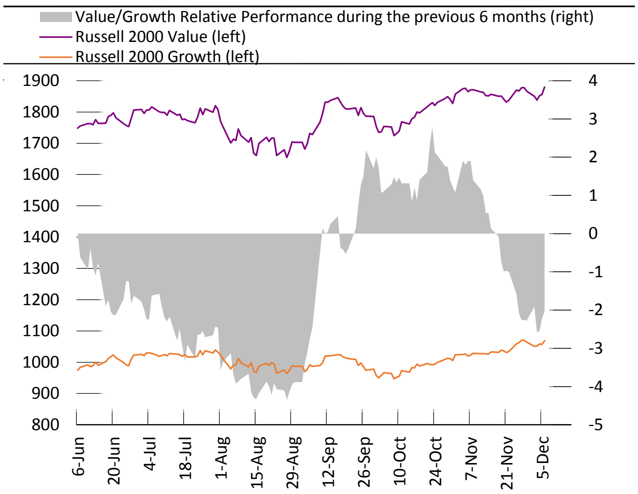
Source: Bloomberg - Data as of December 6th – Rebased @ 100

Equity Market Performance - BRICs



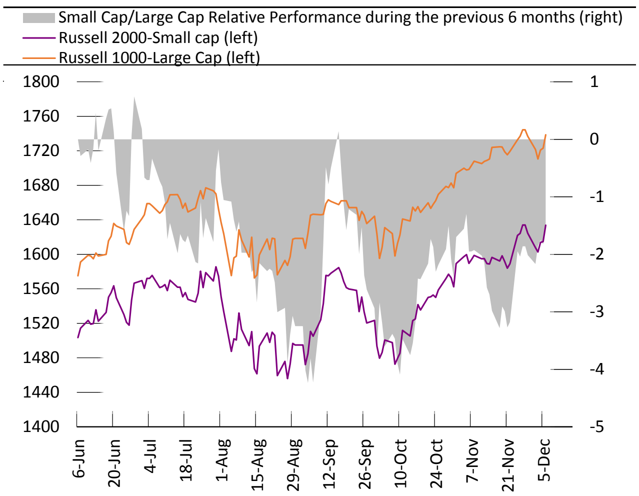
Source: Bloomberg - Data as of December 6th – Rebased @ 100

Russell 2000 Value & Growth Index



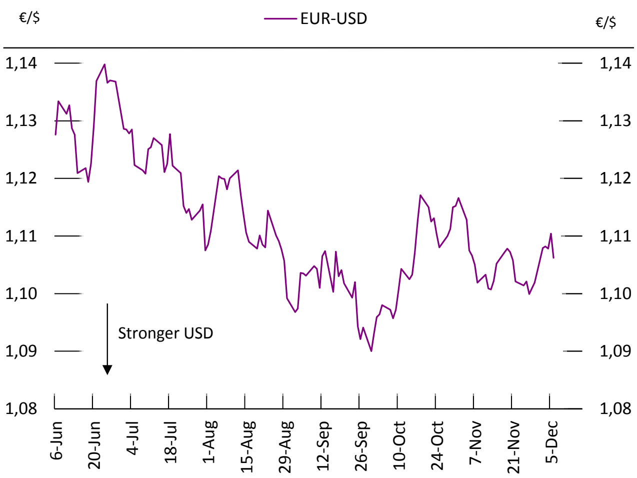
Source: Bloomberg, Data as of December 6th

Russell 2000 & Russell 1000 Index



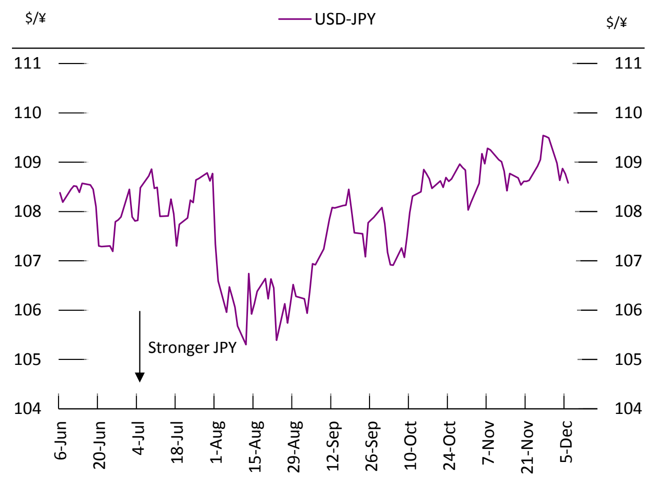
Source: Bloomberg, Data as of December 6th

EUR/USD



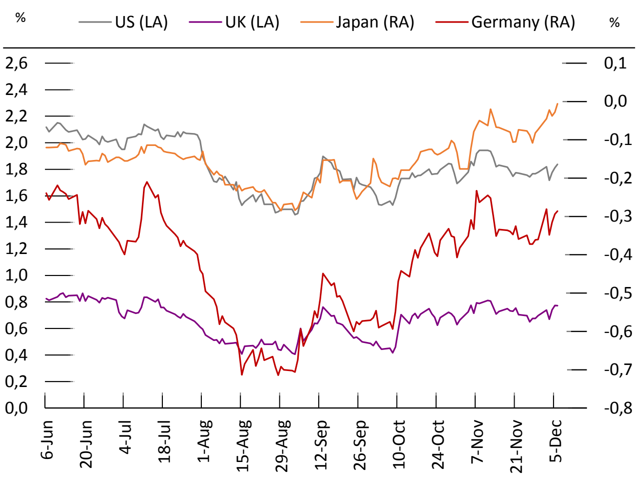
Source: Bloomberg, Data as of December 6th

JPY/USD



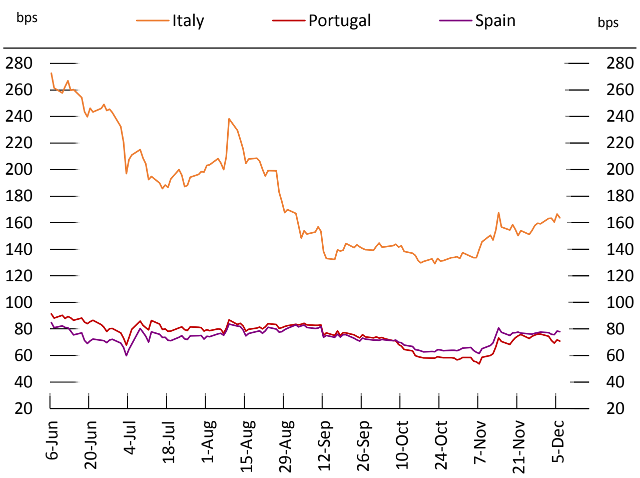
Source: Bloomberg, Data as of December 6th

10- Year Government Bond Yields



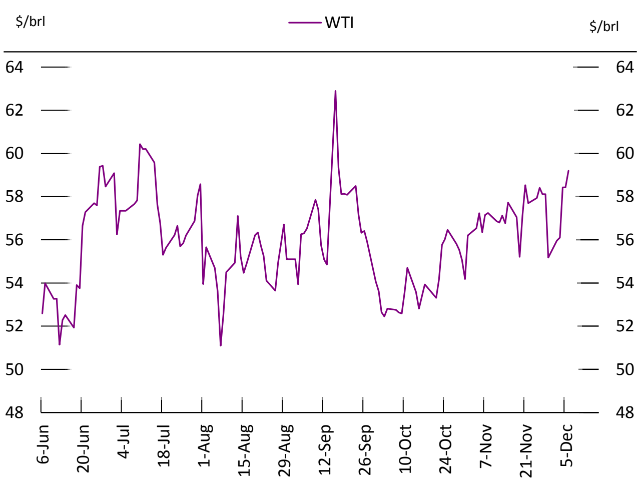
Source: Bloomberg - Data as of December 6th
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



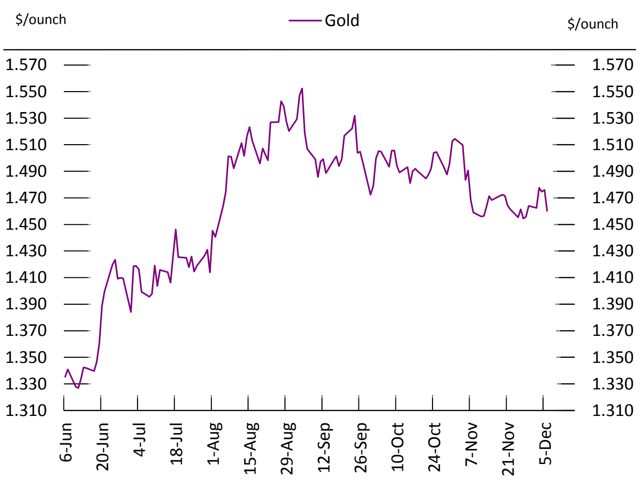
Source: Bloomberg - Data as of December 6th

West Texas Intermediate ($/brl)



Source: Bloomberg, Data as of December 6th

Gold ($/ounch)



Source: Bloomberg, Data as of December 6th

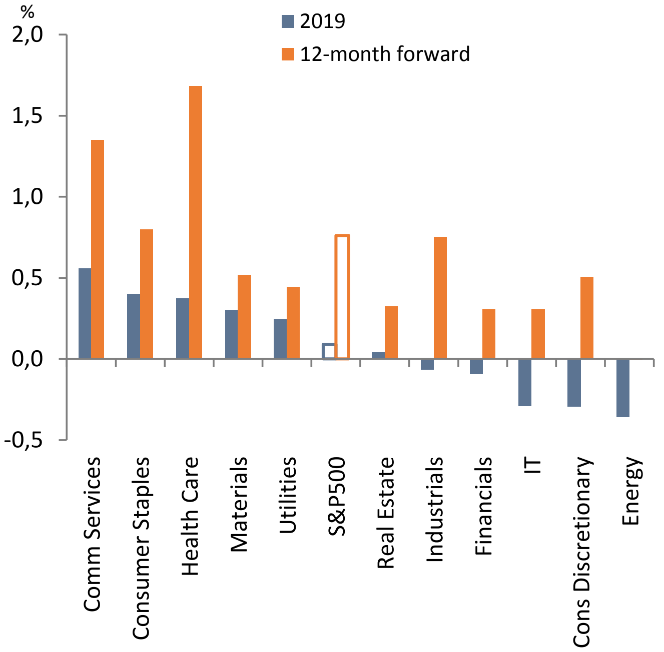
US Sectors Valuation

	Price ($)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	6/12/2019	% Weekly Change	2018	2019	2018	2019	2018	2019	12m fwd	10Yr Avg	2018	2019	12m fwd	10Yr Avg
S&P500	3146	0,2	18,0	4,4	2,0	1,8	17,5	19,4	17,8	15,0	3,2	3,5	3,3	2,5
Energy	438	1,5	64,4	-13,1	3,2	4,0	19,9	20,4	17,2	19,6	1,8	1,5	1,5	1,8
Materials	375	0,0	23,5	-16,3	1,9	2,1	16,7	20,0	17,8	14,7	2,6	2,4	2,3	2,5
Financials														
Diversified Financials	737	0,9	28,2	6,1	1,3	1,4	16,0	15,8	15,0	13,8	1,9	1,8	1,7	1,5
Banks	370	1,1	24,6	9,8	2,2	2,6	13,0	12,2	11,9	11,2	1,4	1,4	1,3	1,0
Insurance	435	-0,7	33,0	3,3	2,2	2,0	12,3	13,1	12,3	10,8	1,4	1,5	1,4	1,1
Real Estate	238	-0,3	5,8	3,3	3,8	3,1	16,7	20,6	19,6	18,2	3,1	3,8	3,9	2,9
Industrials														
Capital Goods	722	-1,0	15,3	-4,3	2,0	1,9	19,1	20,5	17,2	15,5	4,7	5,3	4,6	3,4
Transportation	771	-1,9	25,0	9,5	1,8	2,0	14,0	14,1	13,2	13,6	3,6	4,2	3,8	3,4
Commercial Services	338	-0,2	16,7	8,7	1,5	1,3	22,8	27,1	25,1	19,7	4,1	5,7	5,3	3,4
Consumer Discretionary														
Retailing	2362	-1,7	22,4	18,6	0,8	0,8	31,1	31,2	27,8	20,9	10,2	12,1	10,5	6,0
Media	644	0,4	18,9	11,6	0,4	0,4	23,9	25,9	22,3	19,9	4,1	4,0	3,5	3,1
Consumer Services	1260	0,6	16,4	10,2	2,2	2,2	20,8	22,7	20,7	19,1	8,8	14,0	13,2	6,2
Consumer Durables	361	1,6	15,0	-0,7	1,5	1,5	16,7	18,9	17,3	16,8	3,3	3,9	3,6	3,1
Automobiles and parts	116	-0,3	-5,4	-20,6	3,7	4,1	7,8	8,7	7,4	8,5	1,6	1,4	1,3	1,7
IT														
Technology	1481	0,3	17,0	2,5	1,8	1,5	15,1	19,3	17,9	12,5	5,2	8,8	8,9	3,6
Software & Services	2234	-0,8	14,1	10,2	1,3	1,0	22,7	27,5	24,7	17,0	6,9	7,3	6,9	5,1
Semiconductors	1164	-0,3	16,1	-3,4	1,9	1,9	14,8	17,6	16,9	13,9	4,3	5,3	4,9	3,0
Communication Services	179	0,7	17,8	8,3	1,4	1,2	19,3	20,8	18,7	17,2	3,4	3,3	3,0	2,8
Consumer Staples														
Food & Staples Retailing	496	-0,2	12,1	2,9	2,1	1,7	17,4	21,9	21,1	16,0	3,6	4,6	4,4	3,1
Food Beverage & Tobacco	703	1,1	12,5	-2,6	3,3	3,3	18,3	19,5	18,4	17,4	5,1	5,2	5,0	4,9
Household Goods	737	1,4	9,9	4,5	3,1	2,3	19,3	25,6	24,0	19,0	5,4	8,8	8,7	4,9
Health Care														
Pharmaceuticals	958	1,3	8,1	13,3	2,3	2,2	15,3	15,4	14,4	14,3	4,2	5,2	4,3	3,4
Healthcare Equipment	1350	0,5	13,1	16,1	1,1	1,0	18,0	19,7	18,1	15,0	3,3	3,6	3,2	2,6
Utilities	319	0,2	5,2	4,0	3,9	3,1	16,4	20,3	19,4	15,5	1,7	2,2	2,1	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 2019 & 12-month Forward EPS

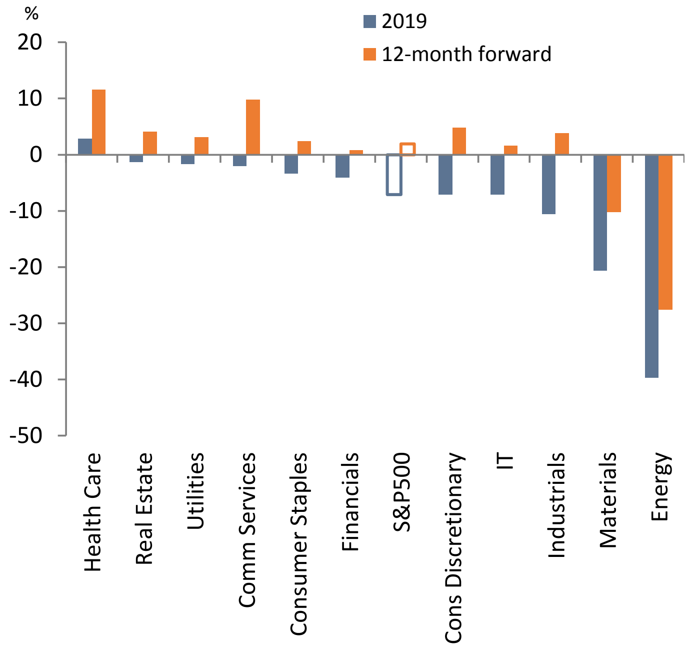
Earnings Revisions indicate 1-month change in 2019 & 12-month Forward EPS



Source: Factset, Data as of December 6th
12-month forward EPS are 6% of 2019 EPS and 94% of 2020 EPS

12-month revisions to 2019 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2019 & 12-month Forward EPS



Source: Factset, Data as of December 6th
12-month forward EPS are 6% of 2019 EPS and 94% of 2020 EPS

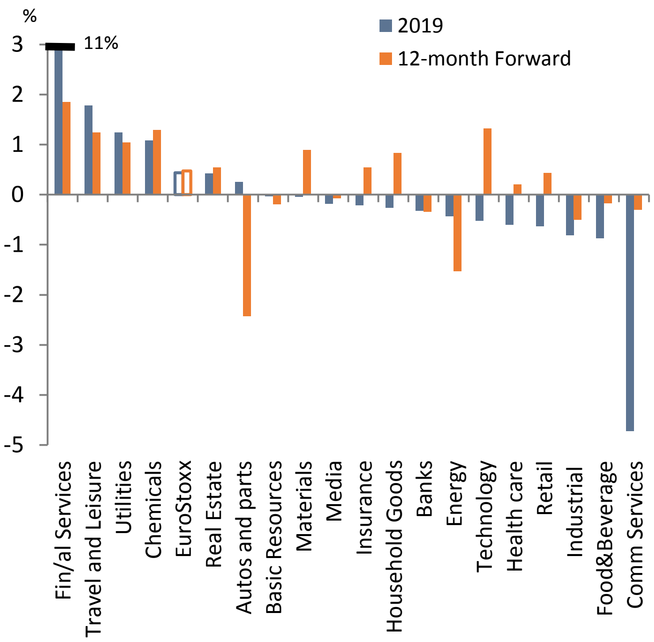
Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	6/12/2019	% Weekly Change	2018	2019	2018	2019	2018	2019	12m fwd	10Yr Avg	2018	2019	12m fwd	10Yr Avg
EuroStoxx	398	-0,2	7,3	-4,7	3,2	3,2	14,8	16,2	15,0	13,2	1,6	1,7	1,6	1,4
Energy	322	0,3	7,3	7,8	4,8	5,1	13,6	13,0	11,3	11,4	1,2	1,2	1,2	1,2
Materials	484	0,4	10,1	8,3	3,1	3,2	15,1	15,4	14,1	14,1	1,7	1,9	1,8	1,4
Basic Resources	201	1,0	-4,3	-54,1	2,2	3,2	12,7	20,7	13,2	13,7	1,2	0,8	0,8	0,9
Chemicals	1154	-0,1	5,1	-21,3	2,8	2,7	16,0	21,4	19,5	15,0	2,4	2,0	2,0	2,2
Financials														
Fin/al Services	499	-0,2	15,4	16,5	2,5	2,5	15,9	14,8	16,0	14,1	1,7	1,7	1,6	1,3
Banks	94	0,8	12,1	-10,6	4,1	5,9	11,5	8,9	8,7	10,1	0,9	0,6	0,6	0,7
Insurance	300	-0,3	14,2	8,7	5,0	4,9	10,8	10,8	10,3	9,2	1,0	1,0	1,0	0,9
Real Estate	242	-0,4	9,3	3,6	4,2	4,3	18,7	18,8	18,0	16,6	1,0	1,0	1,0	1,0
Industrial	934	-0,2	12,1	3,4	2,6	2,4	18,1	19,8	17,8	15,1	2,8	3,1	2,9	2,3
Consumer Discretionary														
Media	219	-0,6	0,2	8,7	3,7	3,8	17,6	15,8	14,8	15,5	2,3	2,3	2,1	2,1
Retail	573	1,7	11,4	5,3	2,7	2,7	20,3	23,1	21,0	18,4	2,8	3,6	3,4	2,7
Automobiles and parts	490	-1,2	4,6	-23,0	3,3	3,7	8,2	8,7	8,0	8,9	1,2	0,9	0,9	1,0
Travel and Leisure	209	-0,2	2,1	-30,1	1,7	2,1	12,0	15,5	12,7	16,2	2,0	1,9	1,8	1,8
Technology	595	0,4	2,7	1,2	1,6	1,1	21,4	25,3	22,7	18,0	3,6	4,0	3,6	3,0
Communication Services	300	-2,8	-1,1	-13,7	4,4	4,2	14,4	17,0	14,8	14,0	1,8	1,9	1,9	1,8
Consumer Staples														
Food&Beverage	604	-0,2	15,5	5,0	2,9	2,1	20,6	20,3	19,4	18,4	2,9	2,7	2,5	2,6
Household Goods	1064	-0,6	7,8	10,4	1,9	1,7	23,2	28,6	25,9	20,5	4,3	5,9	5,4	3,7
Health care	848	-0,6	5,0	-3,8	2,5	2,2	17,0	19,1	17,6	15,0	2,1	2,3	2,2	2,1
Utilities	337	-1,3	-4,1	14,8	5,2	4,7	14,0	15,5	14,4	12,5	1,2	1,5	1,5	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 2019 & 12-month Forward EPS

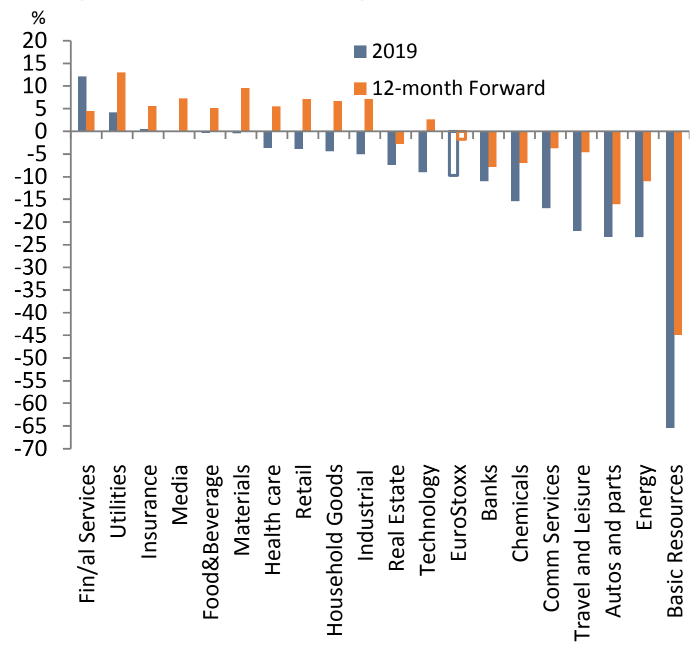
Earnings Revisions indicate 1-month change in 2019 & 12-month Forward EPS



Source: Factset, Data as of December 6th
12-month forward EPS are 6% of 2019 EPS and 94% of 2020 EPS

12-month revisions to 2019 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2019 & 12-month Forward EPS



Source: Factset, Data as of December 6th
12-month forward EPS are 6% of 2019 EPS and 94% of 2020 EPS

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