Global Markets Roundup

National Bank of Greece | Economic Research Division | December 11, 2018

NATIONAL BANK OF GREECE

The ECB is expected to end net QE, albeit maintaining a dovish bias due to slowing growth and elevated financial asset volatility

- The ECB is expected to announce the end of its net asset purchases (current pace of €15bn per month) at its meeting on 13th December 2018. The end of net QE will gradually begin to put upward pressure on Bond yields.
- The ECB has accumulated circa €2.1tn in sovereign bonds since March 2015 (30% of euro area marketable debt), and we expect it to roll-over the full amount of maturing bonds *de minimis* for two years. Consensus forecasts of 0.89% by end-2019 for 10-Year German Government Bonds (forwards: 0.39%) appear well-founded, particularly when the net government bond issuance of the largest euro area members is expected to pick up slightly in 2019 to circa €205bn (see graph).
- The ECB will likely maintain its forward guidance that interest rates will remain at current levels (0% and -0.4%) at least through the summer of 2019. We expect an update of the interest rate forward guidance up to April 2019. Based on our EONIA forward curve estimation, markets expect the first 15 bps hike in Q1:2020, pricing-in a cumulative hiking path of circa 60 bps by end-2021 (see graph).
- We view current market pricing as impracticable over the forecasted horizon (2021). On the one hand, assuming GDP growth converges gradually to potential rate of output (circa +1% to +1.5% from above now) and core CPI increases towards +1.5% as wage pressures begin -- a scenario consistent with ECB forecasts -- the ECB could proceed faster than current market pricing. On the other hand, a lower likelihood scenario involves the ECB remaining unchanged due to a weaker-than-expected domestic economic performance and a more-aggressive-than-expected slowdown in US and China GDP.
- Risk appetite was tempered in the past week. The brief inversion of the 5/2 part of the US Treasury curve (the 10/2 term spread bull-flattened by 7 bps wow to 14 bps reaching 12 bps intra-week -- the lowest since June 2007) intensified the sell-off, reflecting market expectations that the Fed will respond (pause) to the likelihood or inception of a US recession. Concerns regarding US economic growth prevailed sending global equities down by -3.5% wow and -7.6% ytd (MSCI ACW Index). USD High yield corporate bond spreads widened by 21 bps to 450 bps, their highest level since December 2016 (see Markets -- page 3).
- However, US economic data over the past week did not increase the likelihood of a US recession during the next twelve months (NFPs were strong at 155k – see Economics). Trade détente doubts (exaggerated by the arrest of Huawei CFO), the delay of the Brexit Agreement vote and OPEC's fault lines regarding oil supply policy weighed on sentiment.
- Overall, economic growth is expected to decelerate in 2019, albeit the pace of deceleration will set investors' tolerance towards risk. The ongoing reduction of central banks' liquidity (Quantitative Tightening) adds volatility. Our Tactical Asset Allocations end the year with Global Equities slightly below our Strategic Asset Allocations and Cash overweight. Our Global Government Bond underweight position was hit hard during the past week (as yields declined significantly), albeit remains in positive territory ytd.

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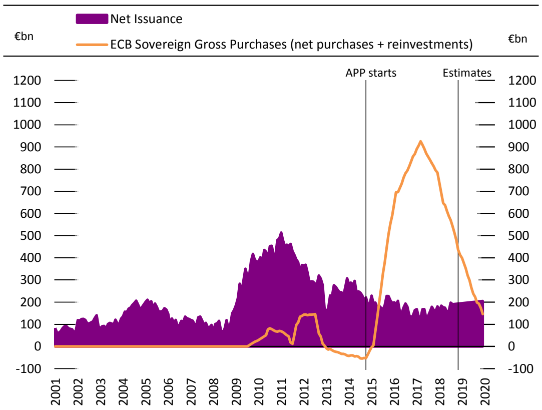
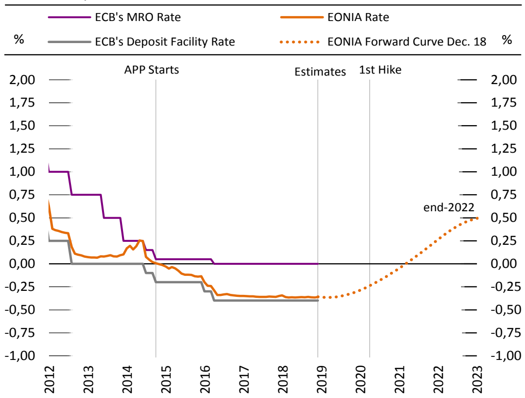
Charts of the week

Euro area Net Sovereign Bond Issuance & ECB Sovereign Bond Purchases



Source: NBG Research, Bloomberg, Data: 12-month moving sum

ECB Policy Rates & EONIA Forward Curve



Source: NBG Research, Bloomberg

See page 14 for disclosures and analyst certification

The Federal Reserve Board assesses the US financial system as resilient, albeit with pockets of vulnerabilities

- The FRB's analysis focused on two main categories of potential vulnerabilities:
  1) Elevated asset valuation pressures (i.e. asset prices that are high in respect to economic fundamentals or historical norms). In the event, the FRB deemed valuation pressures as elevated in general. Regarding the major asset classes, the FRB noted that the price-to-earnings ratio for equities (estimated outstanding market value of $33.8 tn or 164% of GDP) is above its median value over the past 30 years, albeit only slightly, following strong earnings growth in 2018 and the recent equity price correction. Regarding residential real estate (estimated outstanding market value of $33.3 tn or 161% of GDP), the FRB cited that price-to-rent ratios have been rising since 2012, and are now higher compared with estimates for their long-term trend, even with the pace of house appreciation having slowed significantly in recent months. Finally, regarding commercial real estate (estimated outstanding market value of $21.2 tn or 103% of GDP), the continuing fast pace of growth of prices compared with rents, was noted.
  2) Excessive borrowing by businesses and households, as in the case of economic distress (a decline in income or a fall in the value of assets they hold), spending could be reduced sharply, dragging down overall economic activity. Furthermore, loan payments would be stressed and, thus, financial institutions and investors would incur significant losses. The FRB noted that household borrowing is increasing in line with incomes and includes mainly low credit risk borrowers, while overall, it is moderate by historical standards (household debt: 73.8% of GDP in Q3:18 versus a 20-year average of 80.9%).

- On the other hand, the record high debt relative to GDP (72.5%) in the business sector was highlighted. Moreover, regarding the quality of borrowing, growth in riskier forms of debt has accelerated recently, mostly related to leveraged loans (i.e. loans extended to firms with a low credit scoring and thus a relatively higher risk of default), which have grown by an average pace of 13% yoy in the period from Q2:17 to Q2:18. In Q3:18, overall risky business debt (including high yield bonds and leveraged loans) grew by 5% yoy and now amounts to c. $2 tn (13.4% of total business debt outstanding). Finally, the FRB underscored signs of deteriorating credit standards for some forms of business borrowing. Specifically, regarding leveraged loans, the share of newly-issued large loans to corporations with a ratio of debt to EBITDA above 6 (earnings before interest, taxes, depreciation and amortization), has increased in recent quarters. At the same time, the distribution of ratings among high yield (HY) corporate bonds has been broadly stable in recent years, but has deteriorated in the investment grade (IG) spectrum. Indeed, the share of bonds rated at the lowest IG level (e.g. S&P rating of BBB) stands near record levels ($2.25 tn | 35% of total corporate bonds outstanding).

- Other lower risk categories of potential vulnerabilities regarding financial stability included: i) **financial sector leverage** (if excessive, banks would not be able to absorb losses during adverse shocks and could become insolvent) is low by historical standards, in view of high amounts and quality of capital; and ii) **funding risks** (stemming from the possibility of a run by investors to withdraw their funds from a particular institution) are cited as low, in view of limited liquidity and maturity mismatches, as banks hold higher levels of liquid assets (e.g. excess reserves) and are less reliant on sources of funds which are more susceptible to "runs" (e.g., uninsured deposits, repurchase agreements, money market fund shares). Regarding the latter, the FRB's current estimate for total "runnable" liabilities stands at $13.2 tn, representing c. 14% of total financial sector liabilities (64% of GDP compared with a peak of c. 100% of GDP in mid-2008).

US labor market remains strong, albeit slightly below consensus expectations

- **The unemployment rate remains at multi-year lows, albeit job creation has posted some signs of softening recently.** Specifically, nonfarm payrolls increased by 155k in November (237k in October | consensus: 198k). The latest reading bodes well with the recent rise in initial jobless claims (the 4-week average stood at a c. 7-month high of 228k for the week ending November 30th). Nevertheless, even with the aforementioned deceleration, the pace of job gains allowed the unemployment rate (U-3) to remain stable for a 3rd consecutive month at 3.7% in November, its lowest since December 1969. A broader measure of labor market slack though, the U-6 unemployment rate (which includes the unemployed, part-time workers for economic reasons, and those workers marginally attached to the labor force) rose by 0.2 pps to 7.6% in November. Meanwhile, the trend for wage growth remains resilient. The monthly pace of increase for average hourly earnings was 0.2% mom in November, while the annual change in wages was unchanged at +3.1% yoy, the highest since April 2009. It should also be noted that the annual pace of increase for the less volatile wages of production and non-supervisory employees (84% of total | that also have a higher propensity to consume), over-performed slightly, rising by 3.2% yoy. The latter compares with +2.3% yoy on average in 2017 and +2.8% yoy on average, so far, in 2018.

Soft euro area GDP across components

- **GDP in Q3:18, according to the 3rd estimate, increased by +0.6% qoq saar and GDP annual growth stood at +1.6% yoy, the lowest since Q4:14, versus +1.7% qoq saar (+2.2% yoy) in Q2:18.** The softness was widespread across components, with private consumption up by +0.4% qoq saar (+0.8% qoq saar in Q2:18), contributing +0.1 pp to overall GDP growth. Capital formation increased by a weak +0.7% qoq saar, compared with +6.3% qoq saar in Q2:18 (+0.2 pp contribution to overall GDP growth), due to business investment stagnating (+0.1% qoq saar versus +7.1% qoq saar in Q2:18), whereas residential investment performed better (+2.5% qoq saar). Government consumption rose by 0.9% qoq saar (broadly neutral to overall GDP growth), while inventories added a substantial +1.1 pp to the headline figure, a development though which could act as a headwind for GDP growth in Q4:18. Finally, net trade subtracted a sharp 1.1 pp from the headline figure, mostly due to exports performing poorly (-0.4% qoq saar) and being outpaced by imports (+2.0% qoq saar). It should be noted, however, that private consumption, business investment and exports were negatively distorted by idiosyncratic weaknesses in the automobiles sector, as producers had to adjust to the Worldwide Harmonised Light Vehicle Test (WLTP) standards.

Equities

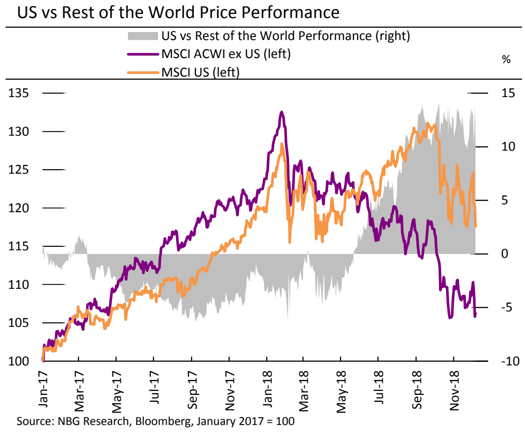
- **Global equity markets declined strongly in the past week, with the initial optimism following the Trump/Xi meeting replaced by investor skepticism on whether trade negotiations between the US and China would reach a positive outcome.** Risk appetite took a hit following news that the CFO of a Chinese telecom equipment company was arrested in Canada and faced extradition to the US (with the charge of violating US sanctions on Iran). Trade tensions, slowing global growth and the gradual reversal of major central banks' accommodation continue to dent investor sentiment, with most major equity markets recording losses year-to-date. Overall, **the MSCI ACWI index declined by 3.5% wow** (-7.6% ytd), as developed markets fell by -3.7% wow (-6.6% ytd) led by US equities, while emerging markets had a less severe reaction (-1.3% wow | -15.3% ytd). The S&P500 declined by -4.6% wow erasing its ytd gains (-1.5% ytd), as investors sought more clarity on the progress of trade negotiations. US cyclical sectors underperformed their defensive peers, while all S&P500 sectors ended the week down, with the exception of utilities (+1.3%) and real estate (+0.3%). In the euro area, the EuroStoxx fell by 3.6% wow, while the exports-oriented German DAX30 underperformed (-4.2%). Concerns regarding Italy eased, as press reports suggested the Italian Government was considering a smaller budget deficit, while Italian equities posted a smaller loss than their euro area peers (FTSE MIB: -2.3% wow). UK's FTSE100 registered losses (-2.9% wow | -11.8% ytd) against the backdrop of the ongoing Brexit uncertainty.

Fixed Income

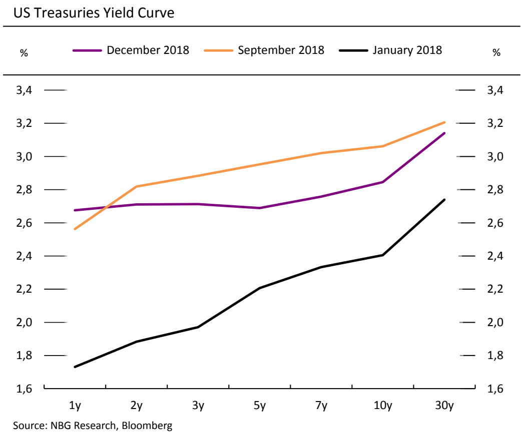
- **Government bond yields mirrored the risk-off sentiment, decreasing across the board in major advanced economies.** Specifically, the US Treasury 10-year yield fell by 14 bps wow to 2.85% (+44 bps ytd), its lowest level since August, while the yield (term) spread between 10 and 2 year UST yields fell intra-week to 12 bps (the lowest since June 2007). Investors' attention shifted to the Treasury yield curve inversion (i.e. when shorter-term bond yields are higher than those of longer-term bonds) at the 5/2-year and 5/3-year terms. Historically, the inversion of the curve at the 10/2-year term has been associated with US recessions after a period of 12 to 18 months. The UK's 10-year government bond yield ended the week down by 10 bps to 1.27% (+8 bps ytd), while the German 10-year Bund yield declined by 6 bps to 0.25% (-18 bps ytd). In contrast, France's 10-year bond yield was stable (+0.4 bps to 0.69%), with the Government cancelling its plans for fuel tax hikes in 2019 due to civil unrest. Euro area periphery 10-year bond spreads over the German Bund were broadly unchanged (Italy: -2 bps to 288 bps, Spain: +1 bp to 120 bps, Portugal: +4 bps to 155 bps). **Corporate bond spreads continued to widen in the past week.** Specifically, euro area HY spreads rose by 18 bps wow to 498 bps, while their US peers rose by 21 bps wow at 450 bps. Euro area investment grade (IG) corporate bond spreads increased by 6 bps wow to 155 bps, in line with US IG spreads (+6 bps wow to 151 bps). Euro area spreads have weakened to levels last witnessed in H1:2016, as the ECB is expected to terminate its net QE purchases. US HY spreads have closely tracked the path of oil prices recently, which have recorded extensive losses since early October (Brent: -27%).

FX and Commodities

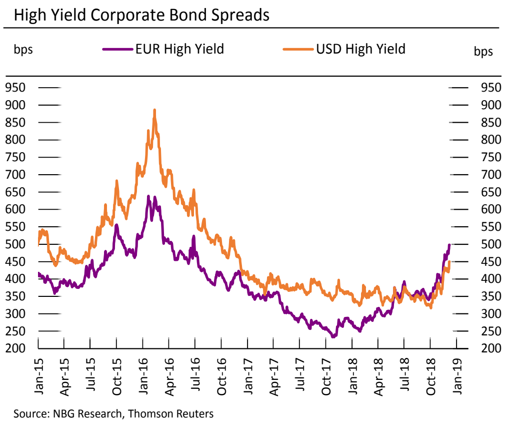
- **In foreign exchange markets, the US dollar weakened on the back of softer-than-expected labor market data and lower bond yields.** Indeed, the USD declined on a weekly basis by 0.5% against the euro to $1.138 and by 0.7% against the Japanese Yen to ¥112.74. The ongoing Brexit uncertainty weighed on the British pound, which weakened by 0.8% wow against the euro to £0.897. On Monday, news broke that PM May would not proceed with the Brexit deal vote (set for December 11), as it was likely the agreement would not be ratified.
- **Oil prices rose underpinned by expectations that OPEC and non-OPEC countries would agree on production cuts.** Indeed, OPEC+ countries reached an accord to decrease production by 1.2 million barrels per day effective from January 2019 for a 6-month period. The WTI rose by 3.3% wow to $52.6/barrel and Brent was up by 3.1% to $ 60.3/barrel. On Monday, oil prices were less sanguine, recording losses (Brent: -2.5% to $58.8/barrel).



Graph 1.



Graph 2.



Graph 3.

Quote of the week: "We have a pretty strong economy -- unemployment pretty low, inflation near our goal -- it's just managing a soft landing, keeping this expansion going for the next few years", **President of the New York Fed John Williams**, December 6th 2018.

NBG Global Portfolio Tactical Asset Allocation (TAA)

- **Equities**: Economic growth is slowing, expectations for 2019 company earnings are high, risking disappointment, and the Fed will continue to move towards restrictive policy territory. As we are near end-cycle, volatility in returns will prevail resulting in lower risk-adjusted returns. The equity market will struggle to go higher near-term, following October's sell-off that was triggered by the Fed's more hawkish stance and amplified by systematic strategies. On the other hand, strong company earnings provide some cushion and equity valuations have normalized relative to year-start (current MSCI DM P/E of 14.5x vs 2003-2018 average of 14.3x), both supportive factors. **We remain broadly neutral tactically relative to a Strategic Asset Allocation (SAA) benchmark of 60-30-10,** which is categorized as a moderate to moderate aggressive portfolio. Intra-class, positioning is in favor of Emerging Markets equities following their steep decline ytd reflecting the stabilization of the USD, trade détente and measures by the Chinese Government in order to stabilize the economy.
- **Government Bonds:** Higher yields (lower prices) due to less aggressive C/Bs, reduced liquidity and stronger core inflation data, albeit safe haven demand could support prices near-term. **Underweight Govies**. Steeper curves, particularly in Bunds. Intra-class, we hold relative positions that can alleviate portfolio losses assuming price increases (e.g. OW USTs vs UW GILTS due to higher coupons).
- **Credit**: We are broadly **underweight in Corporate Bonds** retaining a neutral view intra-class (Investment Grade vs Speculative Grade) and cross-currency (EUR vs USD paper). Quantitative Tightening as the ECB halts net QE purchases in December 2018, deteriorating Debt-Service-Ratios and Quality (BBB issues are 50% of IG indices vs 20% pre-QE) and higher recession risks weigh on spreads and returns. **Cash**: **Overweight position**, as a hedge, as well as a way of being tactical.

Figure1. NBG Global Portfolio TAA Tilts: LEVEL 1

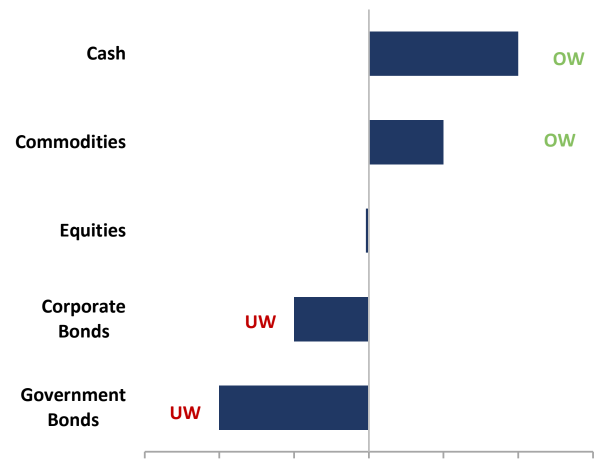


Figure2. NBG Global Portfolio TAA Tilts: LEVEL 2

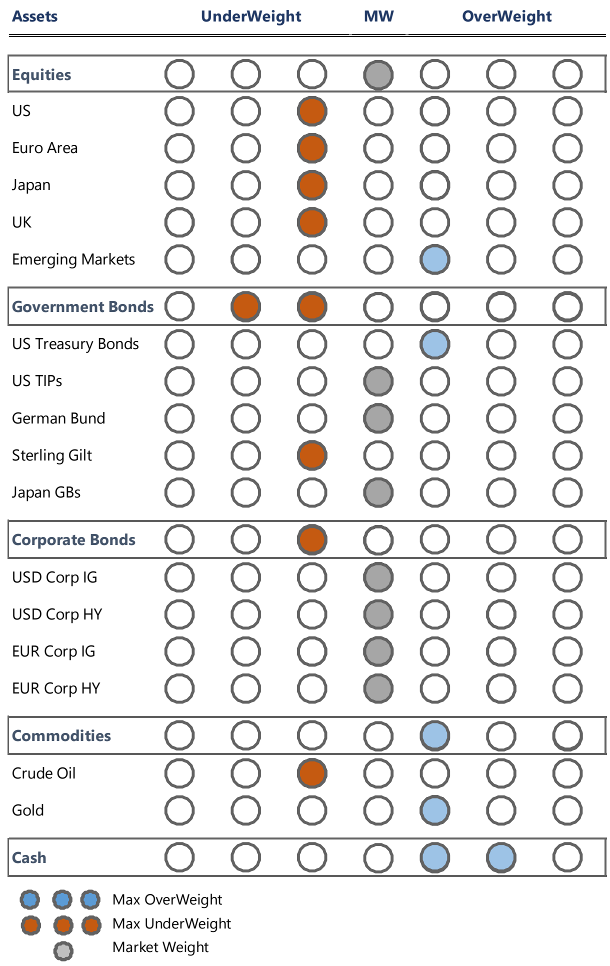
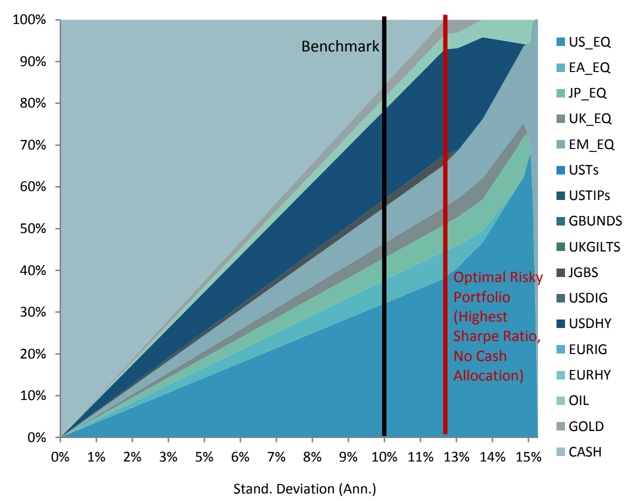


Figure3. Efficient Portfolio Allocation for Various Volatility Levels



(1) Figure1: Green (red) color arrows suggest an increase (decrease) in relative asset class weights over the last week (Tactical Asset Allocation tilits vs our Strategic Asset Allocation portfolio).

(2) Figure2: The orange/light blue circles of the chart displays current asset class and intra-asset class tilts relative to the Strategic Asset Allocation portfolio. Black arrows point to an increase/decrease, if any, relative to previous allocations.

(3) UW|MW|OW: Underweight | Marketweight | Overweight Tactical Asset Allocation (TAA) relative to our Strategic Asset Allocation portfolio.

	US	Euro Area	Japan	UK
Equity Markets	+ Fiscal loosening will support the economy & companies' earnings + Solid EPS growth in 2018 & strong in 2019 + Cash-rich corporates will lead to share buybacks and higher dividends (de-equitization) – Demanding valuations – Peaking profit margins – Protectionism and trade wars – Aggressive Fed in 2019 ● **Neutral/Positive**	+ Still high equity risk premium relative to other regions + Credit conditions gradual turn more favorable + Small fiscal loosening in 2019 – 2019 EPS estimates may turn pessimistic due to plateuning economic growth – 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 + 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	+ Valuations appear rich with term-premium close to 0% + Underlying inflation pressures + The Fed is expected to increase its policy rate towards 1.5% by end-2017 and 2%-2.25% by end-2018 + Balance sheet reduction, albeit well telegraphed may push term premia higher – Global search for yield by non-US investors continues – Safe haven demand ▲ **Higher yields expected**	+ Upside risk in US benchmark yields + Valuations appear excessive compared with long-term fundamentals + ECB exits, albeit slowly, net QE (flow effect) – Political Risks – Fragile growth outlook – Medium-term inflation expectations remain low – 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 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	+ The Fed is expected to increase its policy rate towards 2%-2.25% by end-2018 and by 3% by end-2019 + Tax cuts may boost growth, and interest rates through a more aggressive Fed – Mid-2018 rally probably out of steam – Protectionism and trade Wars ▲ **Long USD against its major counterparts ex-EUR**	+ 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, covered bank bond purchases, Quantitative Easing) ● **Broadly Flat EUR against the USD with upside risks towards $1.20**	+ 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% ▼ **Lower JPY against the USD**	+ Transitions phase negotiations + The BoE is expected to increase short-term policy rates assuming WA deal – Sizeable Current account deficit (-5.5% of GDP) – Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process ● **Slightly higher GBP but with Brexit risk premia working on both directions**

	Turkey	Romania	Bulgaria	Serbia
Equity Markets	+ Attractive valuations − Weak foreign investor appetite for emerging market assets − Persisting domestic financial crisis ▲ **Neutral/Positive**	+ Strong economic activity + Attractive valuations − Weak foreign investor appetite for emerging market assets ▲ **Neutral/Positive**	+ Attractive valuations + Low-yielding domestic debt and deposits − Weak foreign investor appetite for emerging market assets ▲ **Neutral/Positive**	+ Attractive valuations − Weak foreign investor appetite for emerging market assets ▲ **Neutral/Positive**
Domestic Debt	+ Low public debt-to-GDP ratio − Loosening fiscal stance − Stubbornly high inflation − Persisting domestic financial crisis ▼ **Stable to lower yields**	+ Low public debt-to-GDP ratio − Easing fiscal stance − Envisaged tightening in monetary policy ▲ **Stable to higher yields**	+ Very low public debt-to-GDP ratio and large fiscal reserves ▼ **Stable to lower yields**	+ Positive inflation outlook + Policy Coordination Instrument with the IMF + Restored fiscal and public debt sustainability + Acceleration in economic activity − Large public sector borrowing requirements ▼ **Stable to lower yields**
Foreign Debt	+ High foreign debt yields − Sizeable external financing requirements − Weak foreign investor appetite for emerging market assets − Persisting domestic financial crisis ▼ **Stable to narrowing spreads**	− Large external financing requirements − Heightened domestic political uncertainty ▲ **Stable to widening spreads**	+ Solidly-based currency board arrangement, with substantial buffers + Current account surplus − Large external financing requirements ▼ **Stable to narrowing spreads**	+ Ongoing EU membership negotiations + Policy Coordination Instrument with the IMF − Sizable external financing requirements − Reinvigorated progress in structural reforms ▼ **Stable to narrowing spreads**
Foreign Exchange	+ High domestic debt yields − Sizable external financing requirements − Weak foreign investor appetite for emerging market assets − Persisting geopolitical risks and domestic financial crisis − Escalating global trade war ▼ **Weaker to stable TRY against the EUR**	− Large external financing requirements − Heightened domestic political uncertainty ▼ **Weaker to stable RON against the EUR**	+ Currency board arrangement + Large foreign currency reserves and fiscal reserves + Current account surplus − Sizable external financing requirements − Heightened domestic political uncertainty ● **Stable BGN against the EUR**	+ Ongoing EU membership negotiations + Policy Coordination Instrument with the IMF + Large FDIs − Sizable external financing requirements ▲ **Stable to stronger RSD against the EUR**

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Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	Dec 7th	3-month	6-month	12-month	Official Rate (%)	Dec 7th	3-month	6-month	12-month
Germany	0,25	0,60	0,80	1,00	Euro area	0,00	0,00	0,00	0,05
US	2,85	3,10	3,20	3,40	US	2,25	2,50	2,75	3,25
UK	1,27	1,60	1,75	1,96	UK	0,75	0,80	0,90	1,05
Japan	0,06	0,14	0,16	0,17	Japan	-0,10	-0,10	-0,10	-0,10
Currency	Dec 7th	3-month	6-month	12-month		Dec 7th	3-month	6-month	12-month
EUR/USD	1,14	1,16	1,17	1,18	USD/JPY	113	113	111	108
EUR/GBP	0,89	0,86	0,85	0,86	GBP/USD	1,27	1,35	1,37	1,37
EUR/JPY	129	131	130	127					

Forecasts at end of period

Economic Forecasts

United States	2016a	Q1:17a	Q2:17a	Q3:17a	Q4:17a	2017a	Q1:18a	Q2:18a	Q3:18a	Q4:18f	2018f
Real GDP Growth (YoY) (1)	1,6	1,9	2,1	2,3	2,5	2,2	2,6	2,9	3,0	3,1	3,0
Real GDP Growth (QoQ saar) (2)	-	1,8	3,0	2,8	2,3	-	2,2	4,2	3,5	2,4	-
Private Consumption	2,7	1,8	2,9	2,2	3,9	2,5	0,5	3,8	3,6	2,9	2,7
Government Consumption	1,4	-0,8	0,1	-1,0	2,4	-0,1	1,5	2,5	2,6	4,7	1,9
Investment	1,7	9,9	4,3	2,6	6,2	4,8	8,0	6,4	1,4	5,5	5,2
Residential	6,5	11,1	-5,5	-0,5	11,2	3,3	-3,4	-1,4	-2,6	-2,0	-0,2
Non-residential	0,5	9,6	7,3	3,4	4,9	5,3	11,5	8,7	2,5	6,8	6,8
Inventories Contribution	-0,6	-0,9	0,3	1,2	-1,1	0,0	0,3	-1,4	2,7	-0,1	0,1
Net Exports Contribution	-0,3	-0,2	0,0	0,0	-1,2	-0,4	-0,1	1,3	-2,2	-0,2	-0,3
Exports	-0,1	5,0	3,6	3,5	6,6	3,0	3,6	9,3	-4,4	2,7	4,2
Imports	1,9	4,8	2,5	2,8	11,8	4,6	3,0	-0,6	9,2	2,9	4,6
Inflation (3)	1,3	2,5	1,9	1,9	2,1	2,1	2,2	2,7	2,6	2,3	2,5
Euro Area	2016a	Q1:17a	Q2:17a	Q3:17a	Q4:17a	2017a	Q1:18a	Q2:18a	Q3:18a	Q4:18f	2018f
Real GDP Growth (YoY)	1,9	2,1	2,5	2,8	2,7	2,5	2,4	2,2	1,6	1,4	1,9
Real GDP Growth (QoQ saar)	-	2,7	2,8	2,7	2,7	-	1,5	1,7	0,6	1,6	-
Private Consumption	1,9	1,7	1,9	1,7	1,0	1,7	2,1	0,8	0,4	1,7	1,3
Government Consumption	1,8	0,9	1,5	1,8	0,8	1,2	0,1	1,7	0,9	1,3	1,0
Investment	4,0	-2,9	8,6	-1,1	6,3	2,9	0,5	6,3	0,7	3,4	3,0
Inventories Contribution	0,1	-0,4	-0,3	0,1	-0,8	-0,1	0,8	-0,4	1,1	-0,7	0,1
Net Exports Contribution	-0,4	2,6	0,0	1,5	1,5	0,8	-0,6	0,1	-1,1	0,4	0,2
Exports	3,0	7,2	4,2	5,3	8,8	5,4	-2,9	4,2	-0,4	3,2	2,8
Imports	4,2	1,8	4,6	2,2	6,0	4,0	-1,9	4,5	2,0	2,7	2,5
Inflation	0,2	1,8	1,5	1,4	1,4	1,5	1,2	1,7	2,1	1,9	1,7

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

South Eastern Europe Economic Forecasts

Economic Indicators

	2014	2015	2016	2017	2018f	2019f
Real GDP Growth (%)						
Turkey	5,2	6,1	3,2	7,4	3,2	1,0
Romania	3,4	3,9	4,8	7,0	4,2	3,8
Bulgaria	1,3	3,5	3,9	3,8	3,3	3,6
Serbia	-1,6	1,8	3,3	2,0	4,3	4,0
Headline Inflation (eop,%)						
Turkey	8,2	8,8	8,5	11,9	21,0	14,5
Romania	0,8	-0,9	-0,5	3,3	3,9	3,3
Bulgaria	-0,9	-0,4	0,1	2,8	3,3	3,0
Serbia	1,7	1,5	1,6	3,0	2,5	2,8
Current Account Balance (% of GDP)						
Turkey	-4,7	-3,7	-3,8	-5,6	-4,5	-3,0
Romania	-0,7	-1,2	-2,1	-3,2	-4,0	-4,4
Bulgaria	0,1	0,0	2,6	6,5	2,8	0,7
Serbia	-5,6	-3,5	-2,9	-5,3	-4,9	-4,6
Fiscal Balance (% of GDP)						
Turkey	-1,1	-1,0	-1,1	-1,5	-2,0	-2,0
Romania	-1,7	-1,5	-2,4	-2,8	-3,6	-3,9
Bulgaria	-3,7	-2,8	1,6	0,8	0,5	-0,5
Serbia	-6,2	-3,5	-1,2	1,1	0,6	0,4

f: NBG forecasts

Stock Markets (in local currency)

Country - Index	10/12/2018	Last week return (%)	Year-to-Date change (%)	2-year change (%)
Turkey - ISE100	92.227	-2,9	-20,0	21,8
Romania - BET-BK	1.622	-2,3	-1,7	23,4
Bulgaria - SOFIX	593	-1,0	-12,4	2,0
Serbia - BELEX15	741	-0,3	-2,4	3,0

Financial Markets

	10/12/2018	3-month forecast	6-month forecast	12-month forecast
1-m Money Market Rate (%)				
Turkey	24,6	23,5	22,0	20,0
Romania	2,7	3,2	3,0	3,0
Bulgaria(*)	0,0	0,1	0,1	0,2
Serbia	2,7	2,9	3,1	3,5
Currency				
TRY/EUR	6,05	6,30	6,60	6,80
RON/EUR	4,65	4,67	4,68	4,68
BGN/EUR	1,96	1,96	1,96	1,96
RSD/EUR	118,2	117,9	117,6	117,4
Sovereign Eurobond Spread (bps)				
Turkey (USD 2020)(**)	372	340	310	280
Romania (EUR 2024)	127	130	120	110
Bulgaria (EUR 2022)	62	56	45	40
Serbia (USD 2021)(**)	167	150	130	120

(*) Base interest rate (**) Spread over US Treasuries

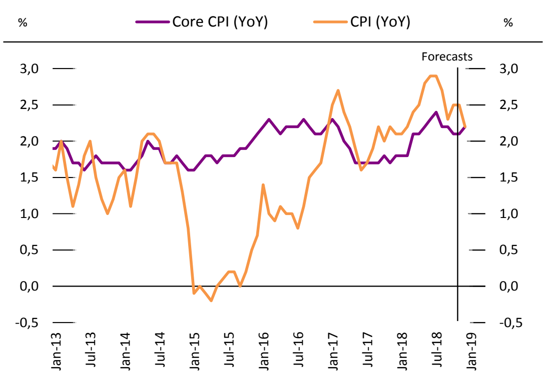
Economic Calendar

The main macro events next week in the US, are retail sales (private consumption represents 70% of US GDP) and inflation data for November. Core CPI is expected at 2.2% yoy in November (2.1% in October).

In the Euro area, attention turns to the ECB meeting on Thursday. The ECB is expected to maintain its forward guidance that policy interest rates will remain at current levels (0% and -0.4%) at least through the summer of 2019.

In China, activity data for November are released on Friday. Retail sales are expected at 8.8% yoy compared with 8.6% yoy in October, while industrial production is expected to remain stable at 5.9% yoy.

US Inflation



Source: NBG Research, Bloomberg

Economic News Calendar for the period: December 4 - December 17, 2018

Tuesday 4

UK		S		A	P
Markit/CIPS UK Construction PMI	November	52.5	+	53.4	53.2

Wednesday 5

US		S		A	P
ADP Employment Change (k)	November	195	-	179	225
ISM non-manufacturing	November	59.0	+	60.7	60.3
UK					
Markit/CIPS UK Services PMI	November	52.5	-	50.4	52.2
EURO AREA					
Retail sales (MoM)	October	0.2%	+	0.3%	-0.5%
Retail sales (YoY)	October	2.0%	-	1.7%	0.3%

Thursday 6

US		S		A	P
Trade balance ($bn)	October	-55.0	-	-55.5	-54.6
Initial Jobless Claims (k)	December 1	225	-	231	235
Continuing Claims (k)	November 24	1690	+	1631	1705
Factory Goods Orders (MoM)	October	-2.0%	-	-2.1%	0.2%

Friday 7

US		S		A	P
Change in Nonfarm Payrolls (k)	November	198	-	155	237
Change in Private Payrolls (k)	November	198	-	161	251
Unemployment rate	November	3.7%		3.7%	3.7%
Underemployment Rate	November	..		7.6%	7.4%
Average Hourly Earnings (MoM)	November	0.3%	-	0.2%	0.1%
Average Hourly Earnings (YoY)	November	3.1%		3.1%	3.1%
Average weekly hours (hrs)	November	34.5		34.4	34.5
Labor Force Participation Rate	November	62.9%		62.9%	62.9%
University of Michigan consumer confidence	December	97.0	+	97.5	97.5
Wholesale trade (MoM)	October	..		-0.2%	0.1%

GERMANY		S		A	P
Industrial Production (sa, MoM)	October	0.3%	-	-0.5%	0.1%
Industrial Production (wda, YoY)	October	2.1%	-	1.6%	0.7%
EURO AREA					
Government expenditure (QoQ)	Q3:18	0.3%	-	0.2%	0.4%
Gross Fixed Capital Formation (QoQ)	Q3:18	0.6%	-	0.2%	1.5%
Household Consumption (QoQ)	Q3:18	0.2%	-	0.1%	0.2%
GDP (QoQ)	Q3:18 F	0.2%		0.2%	0.2%
GDP (YoY)	Q3:18 F	1.7%	-	1.6%	1.7%

Monday 10

JAPAN		S		A	P
GDP (QoQ)	Q3:18 F	-0.5%	-	-0.6%	-0.3%
Private Consumption (QoQ)	Q3:18 F	-0.1%	-	-0.2%	-0.1%
Business Spending (QoQ)	Q3:18 F	-1.8%	-	2.8%	-0.2%
Eco Watchers Current Survey	November	49.5	+	51.0	49.5
Eco Watchers Outlook Survey	November	50.8	+	52.2	50.6
CHINA					
Exports (YoY)	November	9.4%	-	5.4%	15.5%
Imports (YoY)	November	14.0%	-	3.0%	20.8%
CPI (YoY)	November	2.4%	-	2.2%	2.5%
UK					
Industrial Production (MoM)	October	0.1%	-	-0.6%	0.0%
Industrial Production (YoY)	October	-0.1%	-	-0.8%	0.0%
GDP (MoM)	October	0.1%		0.1%	0.0%

Tuesday 11

UK		S		A	P
ILO Unemployment Rate	October	4.1%		..	4.1%
GERMANY					
ZEW survey current situation	December	55.0		..	58.2
ZEW survey expectations	December	-25.0		..	-24.1

Wednesday 12

US		S		A	P
CPI (YoY)	November	2.2%		..	2.5%
Core CPI (YoY)	November	2.2%		..	2.1%
EURO AREA					
Industrial Production (sa, MoM)	October	0.2%		..	-0.3%
Industrial Production (wda, YoY)	October	0.8%		..	0.9%

Thursday 13

US		S		A	P
Initial Jobless Claims (k)	December 8	225		..	231
Continuing Claims (k)	December 1	1650		..	1631
EURO AREA					
ECB announces its intervention rate	December 13	0.00%		..	0.00%
ECB announces its deposit facility rate	December 13	-0.40%		..	-0.40%

Friday 14

US		S		A	P
Retail Sales Advance (MoM)	November	0.1%		..	0.8%
Retail sales ex-autos (MoM)	November	0.2%		..	0.7%
Industrial Production (MoM)	November	0.3%		..	0.1%
JAPAN					
Tankan - large manufacturers current index	Q4:18	18		..	19
Tankan - large manufacturers outlook index	Q4:18	17		..	19
CHINA					
Retail sales (YoY)	November	8.8%		..	8.6%
Industrial production (YoY)	November	5.9%		..	5.9%
EURO AREA					
Markit Eurozone Manufacturing PMI	December	51.8		..	51.8
Markit Eurozone Services PMI	December	53.4		..	53.4
Markit Eurozone Composite PMI	December	52.8		..	52.7

Monday 17

US		S		A	P
Empire Manufacturing	December	20.2		..	20.3
NAHB housing market confidence index	December	61		..	60
Net Long-term TIC Flows ($ bn)	October	..		..	30.8
EURO AREA					
Trade Balance SA (€ bn)	October	..		..	13.4
CHINA					
Aggregate Financing (RMB bn)	November	1350.0		..	728.8
New Yuan Loans (RMB bn)	November	1150.0		..	697.0
Money Supply M0 (YoY)	November	3.0%		..	2.8%
Money Supply M1 (YoY)	November	3.0%		..	2.7%
Money Supply M2 (YoY)	November	8.0%		..	8.0%

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	2633	-4,6	-1,5	-0,1	17,5
Japan	NIKKEI 225	21679	-3,0	-4,8	-3,6	17,2
UK	FTSE 100	6778	-2,9	-11,8	-7,4	-1,8
Canada	S&P/TSX	14795	-2,6	-8,7	-7,6	-2,9
Hong Kong	Hang Seng	26064	-1,7	-12,9	-7,9	14,3
Euro area	EuroStoxx	336	-3,6	-12,8	-13,7	0,1
Germany	DAX 30	10788	-4,2	-16,5	-17,3	-1,8
France	CAC 40	4813	-3,8	-9,4	-10,6	2,5
Italy	FTSE/MIB	18742	-2,3	-14,2	-16,6	3,4
Spain	IBEX-35	8816	-2,9	-12,2	-14,1	-1,6

Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
MSCI Emerging Markets	54258	-1,3	-10,9	-7,4	13,7
MSCI Asia	800	-1,7	-13,3	-10,1	14,5
China	74	-2,5	-17,2	-13,0	21,7
Korea	620	-0,9	-17,2	-16,3	8,6
MSCI Latin America	87250	-0,8	1,8	7,4	19,8
Brazil	291939	-1,5	13,5	18,7	36,7
Mexico	39007	0,6	-16,3	-11,9	-9,5
MSCI Europe	5449	1,2	1,2	4,2	13,3
Russia	1098	2,6	14,9	15,6	14,2
Turkey	1274965	-2,3	-19,4	-13,4	19,3

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	198,2	-2,2	-11,3	-6,7	-8,5
Materials	230,0	-3,2	-18,0	-13,9	1,4
Industrials	228,5	-4,9	-12,7	-10,8	6,0
Consumer Discretionary	232,6	-3,1	-2,9	-0,6	16,7
Consumer Staples	219,9	-2,1	-7,5	-6,5	7,9
Healthcare	239,6	-4,3	5,3	7,1	27,5
Financials	107,4	-5,4	-15,6	-13,9	0,0
IT	220,9	-4,7	0,1	1,1	37,3
Telecoms	64,0	-3,6	-10,0	-8,7	-5,1
Utilities	130,5	1,1	2,6	-1,2	16,5

in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	204,4	-2,3	-9,1	-5,0	-8,9
Materials	221,3	-3,3	-15,3	-12,1	0,3
Industrials	227,2	-5,1	-11,2	-9,8	4,6
Consumer Discretionary	225,6	-3,3	-1,8	0,1	15,5
Consumer Staples	221,7	-2,3	-5,5	-5,1	7,1
Healthcare	237,7	-4,4	6,5	7,9	26,5
Financials	108,0	-5,5	-13,6	-12,6	-1,0
IT	214,4	-4,8	0,5	1,3	36,8
Telecoms	67,1	-3,7	-8,0	-7,4	-6,3
Utilities	134,0	1,0	4,5	0,0	15,4

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	2,85	2,99	2,41	2,36	2,50
Germany	0,25	0,31	0,43	0,29	1,48
Japan	0,06	0,09	0,05	0,06	0,63
UK	1,27	1,36	1,19	1,25	2,26
Greece	4,23	4,27	4,12	4,78	10,25
Ireland	0,91	0,92	0,67	0,48	3,96
Italy	3,13	3,21	2,01	1,67	3,42
Spain	1,45	1,50	1,57	1,41	3,32
Portugal	1,80	1,83	1,94	1,82	5,10

US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average
30-Year FRM[1] (%)	5,1	5,1	4,2	4,2	4,3
vs 30Yr Treasury (bps)	194	179	148	143	102

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	14	20	52	56	166
US Treasuries 10Y/5Y	16	18	20	23	85
Bunds 10Y/2Y	85	91	105	105	132
Bunds 10Y/5Y	55	58	63	68	79

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
EM Inv. Grade (IG)	206	200	138	138	249
EM High yield	555	553	371	376	760
US IG	151	145	98	102	178
US High yield	450	429	358	363	586
Euro area IG	155	149	87	90	159
Euro area High Yield	498	480	272	287	602

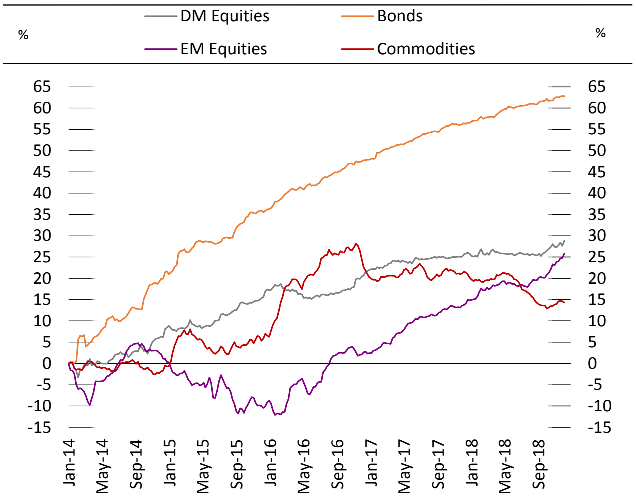
Foreign Exchange & Commodities

Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1,14	0,5	-0,4	-3,4	-5,2
EUR/CHF	1,13	-0,3	-1,5	-3,6	-3,6
EUR/GBP	0,89	0,8	2,8	2,4	0,8
EUR/JPY	128,37	-0,1	-1,0	-3,6	-5,1
EUR/NOK	9,69	-0,6	1,5	-1,1	-1,7
EUR/SEK	10,28	0,0	-0,3	3,0	4,9
EUR/AUD	1,58	1,9	0,6	0,8	2,9
EUR/CAD	1,52	0,7	1,2	0,2	0,4
USD-based cross rates					
USD/CAD	1,33	0,2	1,6	3,6	6,0
USD/AUD	1,39	1,6	1,1	4,3	8,5
USD/JPY	112,74	-0,7	-0,7	-0,3	0,0

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	364	1,9	0,4	-3,2	-4,0
Energy	449	3,3	-11,8	4,2	-3,0
West Texas Oil ($)	53	3,3	-14,7	-7,2	-12,9
Crude brent Oil ($)	60	3,1	-15,5	-3,3	-9,8
Industrial Metals	1233	-0,5	-0,2	-5,9	-14,9
Precious Metals	1479	2,3	1,5	-1,5	-6,2
Gold ($)	1248	2,1	1,8	0,1	-4,2
Silver ($)	15	3,0	0,3	-7,1	-13,7
Baltic Dry Index	1372	11,5	5,2	-18,3	0,4
Baltic Dirty Tanker Index	1167	3,1	5,7	41,8	41,1

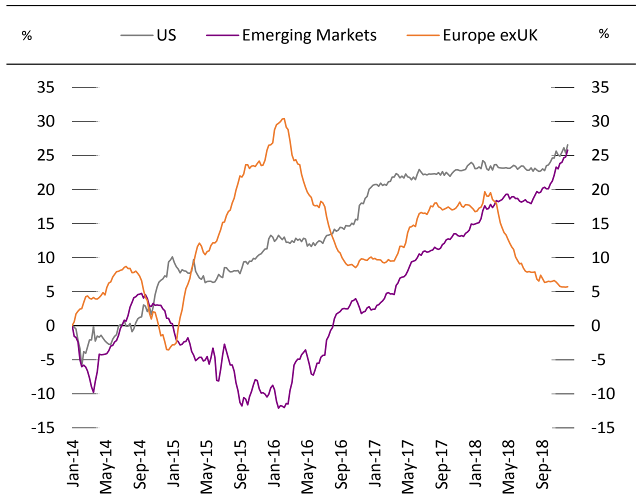
Source: Bloomberg, as of December 7th, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

Global Cross Asset ETFs: Flows as % of AUM



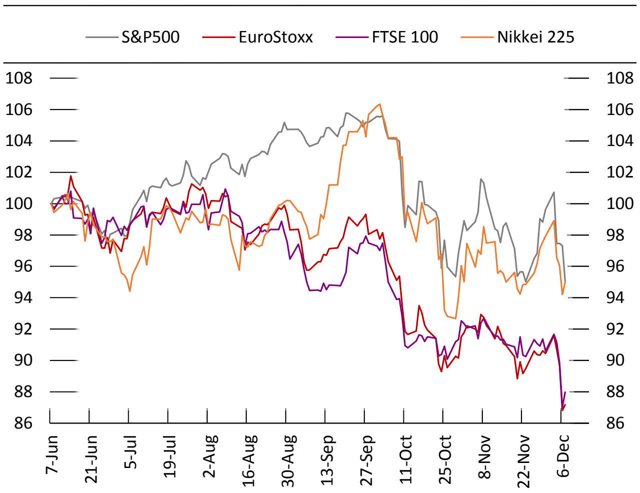
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of December 7th

Equity ETFs: Flows as % of AUM



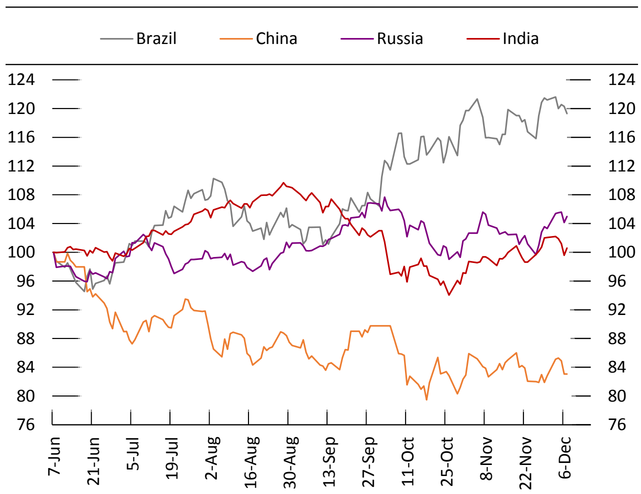
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of December 7th

Equity Market Performance - G4



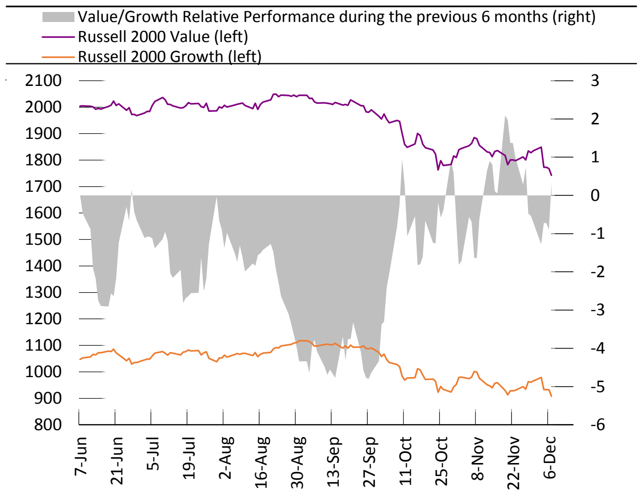
Source: Bloomberg - Data as of December 7th – Rebased @ 100

Equity Market Performance - BRICs



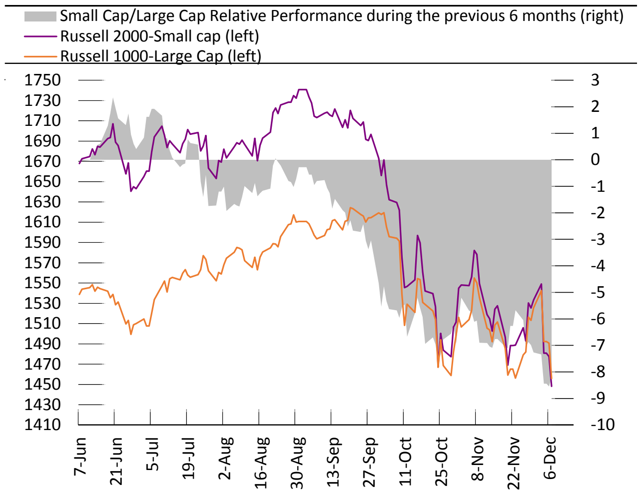
Source: Bloomberg - Data as of December 7th – Rebased @ 100

Russell 2000 Value & Growth Index



Source: Bloomberg, Data as of December 7th

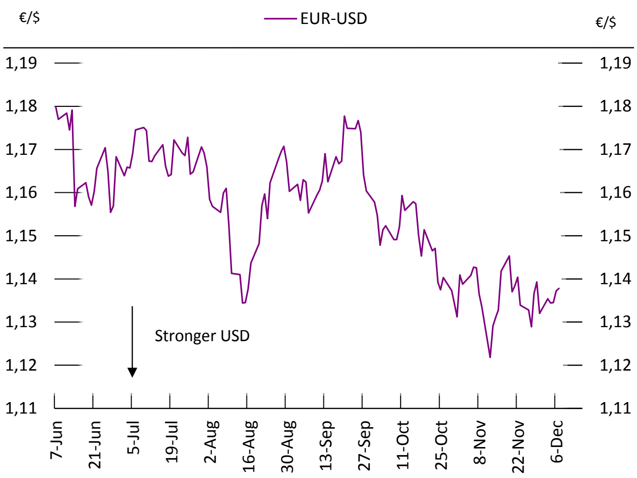
Russell 2000 & Russell 1000 Index



Source: Bloomberg, Data as of December 7th

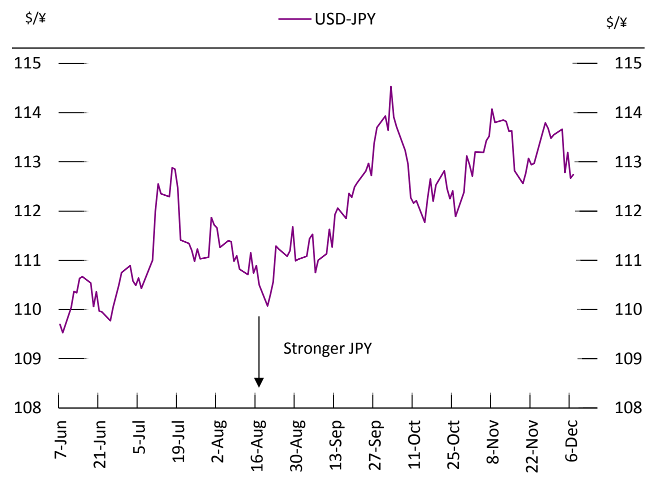
NATIONAL BANK OF GREECE

EUR/USD



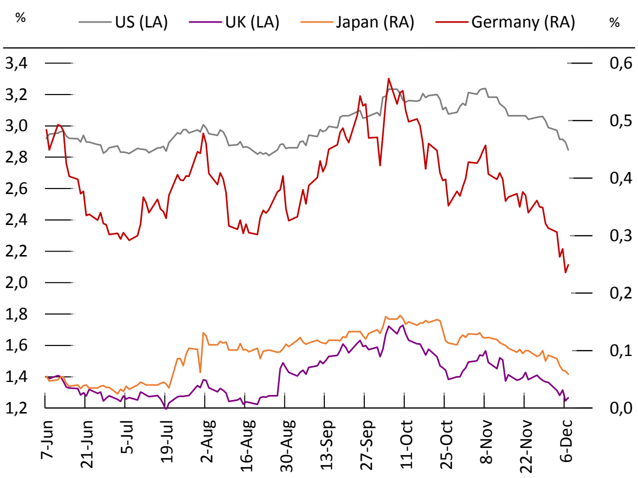
Source: Bloomberg, Data as of December 7th

JPY/USD



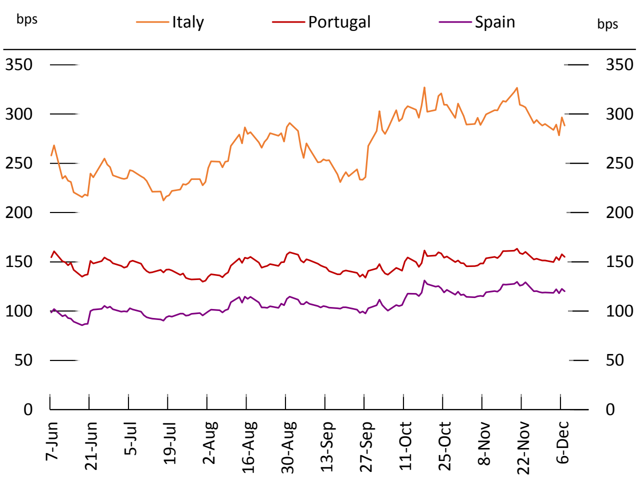
Source: Bloomberg, Data as of December 7th

10- Year Government Bond Yields



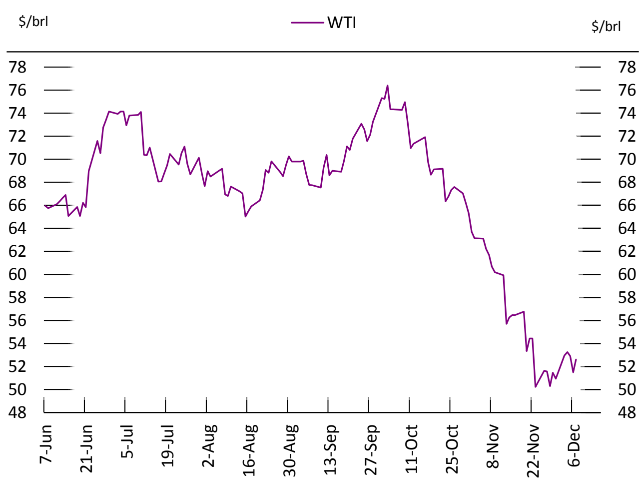
Source: Bloomberg - Data as of December 7th
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



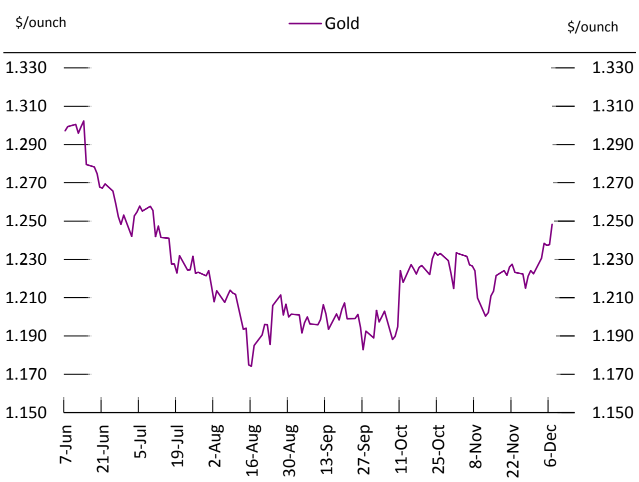
Source: Bloomberg - Data as of December 7th

West Texas Intermediate ($/brl)



Source: Bloomberg, Data as of December 7th

Gold ($/ounch)



Source: Bloomberg, Data as of December 7th

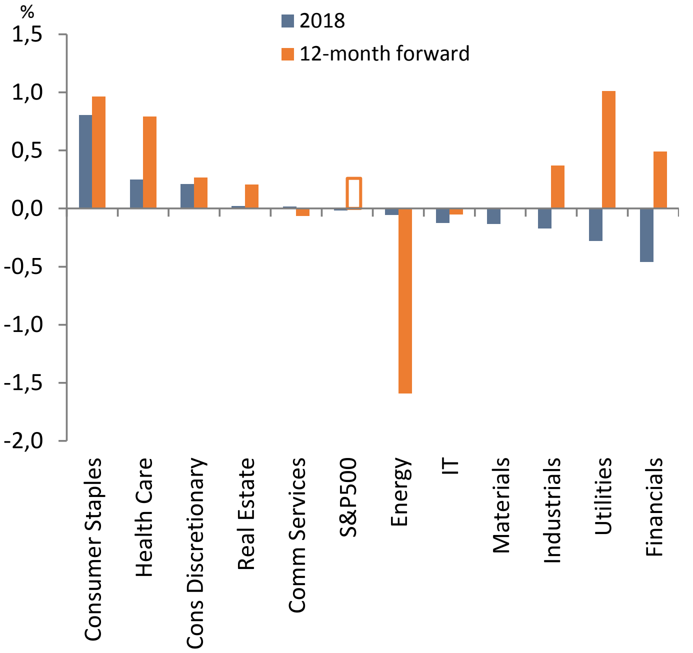
US Sectors Valuation

	Price ($)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	7/12/2018	% Weekly Change	2017	2018	2017	2018	2017	2018	12m fwd	10Yr Avg	2017	2018	12m fwd	10Yr Avg
S&P500	2633	-4,6	11,5	22,4	1,8	2,0	20,6	16,3	15,1	14,6	3,4	3,1	2,9	2,3
Energy	471	-3,1	246,7	107,1	2,9	3,3	34,6	16,1	13,3	20,2	1,8	1,7	1,6	1,8
Materials	323	-5,2	8,0	22,3	1,9	2,3	20,8	14,8	14,0	14,7	2,8	2,0	1,9	2,5
Financials														
Diversified Financials	622	-6,4	8,7	37,0	1,2	1,6	20,4	13,2	12,6	13,9	2,0	1,6	1,5	1,4
Banks	300	-8,2	13,3	26,7	1,8	2,7	16,2	10,7	9,7	12,5	1,5	1,2	1,1	0,9
Insurance	357	-5,8	5,1	26,1	2,0	2,5	16,1	11,6	10,3	10,3	1,4	1,3	1,2	1,0
Real Estate	209	0,3	1,4	6,6	3,6	3,4	17,6	18,6	18,0	17,7	3,2	3,3	3,4	2,7
Industrials														
Capital Goods	588	-6,0	7,3	17,6	2,1	2,3	22,0	15,7	14,4	15,1	5,0	4,5	4,1	3,1
Transportation	719	-7,5	0,8	25,2	1,6	1,9	17,5	14,4	12,7	13,9	4,1	4,1	3,6	3,2
Commercial Services	262	-5,0	-4,6	11,7	1,4	1,5	26,6	23,9	21,9	18,8	4,4	4,4	4,1	3,0
Consumer Discretionary														
Retailing	2039	-4,3	7,4	37,6	0,8	0,8	37,7	28,2	25,1	19,5	12,0	10,7	9,1	5,1
Media	504	-4,1	-11,9	22,5	0,4	0,5	27,5	21,3	19,7	18,5	4,7	3,7	3,2	2,9
Consumer Services	1069	-3,2	13,9	20,3	1,7	2,0	24,2	20,5	19,1	18,4	8,8	10,9	11,8	5,2
Consumer Durables	295	-3,9	-3,6	13,7	1,5	1,7	20,0	16,2	14,5	16,8	3,5	3,3	3,1	3,0
Automobiles and parts	107	-7,6	2,9	-10,0	3,7	4,8	7,5	6,8	6,9	8,8	1,8	1,3	1,2	1,9
IT														
Technology	1066	-4,8	14,0	20,5	1,6	1,9	17,6	13,8	12,7	12,5	5,3	5,8	5,9	3,1
Software & Services	1671	-4,6	16,2	13,3	1,2	1,2	25,9	22,8	20,6	16,0	7,9	7,7	6,8	4,7
Semiconductors	837	-6,8	45,1	30,0	1,6	2,3	17,2	10,9	10,9	16,2	4,8	4,0	3,7	2,9
Consumer Staples														
Food & Staples Retailing	426	-3,7	-2,1	13,6	2,5	1,9	19,5	19,1	18,5	15,4	3,8	4,0	3,8	2,9
Food Beverage & Tobacco	648	-3,3	8,6	10,7	3,0	3,5	20,6	17,8	17,0	16,9	5,1	4,6	4,4	4,8
Household Goods	580	-2,1	4,8	7,7	3,0	2,9	21,2	21,5	20,5	18,1	5,3	6,1	6,1	4,5
Health Care														
Pharmaceuticals	892	-4,1	5,6	13,9	2,0	2,1	16,5	15,4	14,6	14,1	4,6	4,8	4,5	3,3
Healthcare Equipment	1172	-5,3	12,5	18,5	1,0	1,0	20,0	18,6	17,0	14,3	3,5	3,3	3,0	2,4
Communication Services	153	-4,1	0,8	18,2	5,5	5,6	12,2	10,3	10,1	12,7	2,1	1,8	1,7	2,3
Utilities	284	1,3	0,1	8,3	3,7	3,3	17,0	18,1	17,2	14,7	1,8	1,9	1,8	1,5

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 2018 & 12-month Forward EPS

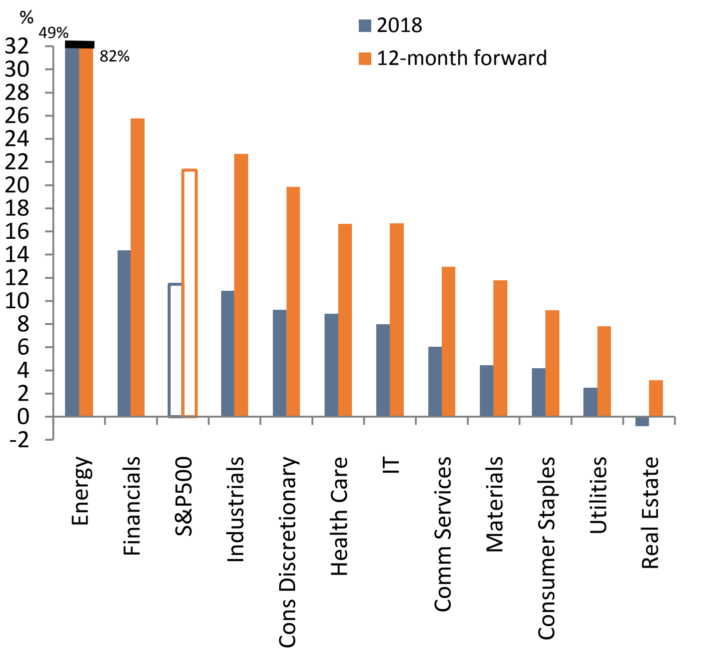
Earnings Revisions indicate 1-month change in 2018 & 12-month Forward EPS



Source: Factset, Data as of December 7th
12-month forward EPS are 6% of 2018 EPS and 94% of 2019 EPS

12-month revisions to 2018 & 12-month Forward EPS

Earnings Revisions indicate 12-month change in 2018 & 12-month Forward EPS



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Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	7/12/2018	% Weekly Change	2017	2018	2017	2018	2017	2018	12m fwd	10Yr Avg	2017	2018	12m fwd	10Yr Avg
EuroStoxx	336	-3,6	18,5	3,0	3,1	3,6	15,9	13,6	12,4	12,9	1,7	1,5	1,4	1,4
Energy	317	-1,8	26,8	33,2	4,6	4,9	14,6	11,1	9,9	11,2	1,2	1,2	1,1	1,2
Materials	367	-5,9	16,4	3,8	2,9	3,8	16,8	13,5	11,8	13,9	1,8	1,5	1,4	1,4
Basic Resources	188	-4,3	70,7	27,7	2,0	3,4	12,5	6,8	7,0	15,8	1,3	0,8	0,8	0,9
Chemicals	920	-3,8	23,3	-2,9	2,7	3,2	16,9	14,7	14,4	14,7	2,6	1,8	1,7	2,1
Financials														
Fin/al Services	405	-2,9	26,4	13,9	2,4	2,9	18,1	14,0	13,4	13,4	1,7	1,4	1,3	1,2
Banks	92	-5,4	66,9	6,1	3,8	5,9	12,9	8,3	7,8	10,4	0,9	0,6	0,6	0,7
Insurance	248	-5,6	-3,4	15,8	4,7	5,7	12,4	9,6	9,0	9,0	1,0	0,9	0,9	0,9
Real Estate	228	-1,9	-0,3	15,5	3,9	4,7	20,3	17,2	16,2	16,6	1,1	1,0	0,9	1,0
Industrial	736	-4,6	11,8	3,8	2,5	2,9	20,4	17,5	15,1	14,8	3,0	2,5	2,4	2,2
Consumer Discretionary														
Media	215	-4,6	11,9	2,0	3,2	4,1	17,8	16,7	15,5	14,9	2,4	2,2	2,1	2,0
Retail	476	-1,3	5,0	8,5	2,4	2,7	22,4	20,6	18,6	18,0	3,2	3,3	3,1	2,9
Automobiles and parts	433	-4,8	21,1	-6,3	3,0	4,6	8,7	6,6	6,1	9,4	1,3	0,9	0,8	1,0
Travel and Leisure	178	-6,3	21,9	-12,0	1,7	2,2	12,2	10,7	10,3	35,2	2,3	1,7	1,5	1,8
Technology	440	-3,6	19,1	1,7	1,4	1,7	22,1	19,3	17,1	17,8	3,8	3,2	3,0	2,8
Consumer Staples														
Food&Beverage	519	-3,9	7,4	6,5	2,8	2,3	23,7	19,9	17,6	17,7	3,0	2,4	2,2	2,6
Household Goods	826	-0,3	11,4	12,8	1,8	2,0	24,8	23,3	21,4	19,4	4,7	4,8	4,4	3,4
Health care	719	-4,2	-5,7	-7,3	2,4	2,5	17,8	17,6	15,7	14,4	2,3	2,1	2,0	2,0
Communication Services	299	-2,5	29,9	-9,2	4,6	4,7	13,5	15,1	13,7	13,2	1,8	1,8	1,8	1,7
Utilities	278	-0,5	2,2	-7,5	5,2	4,9	13,4	15,3	13,7	12,1	1,2	1,4	1,3	1,1

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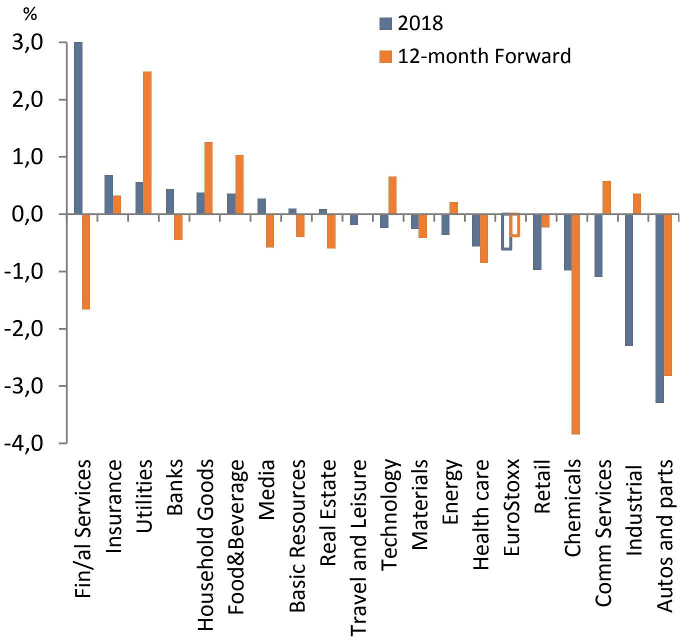

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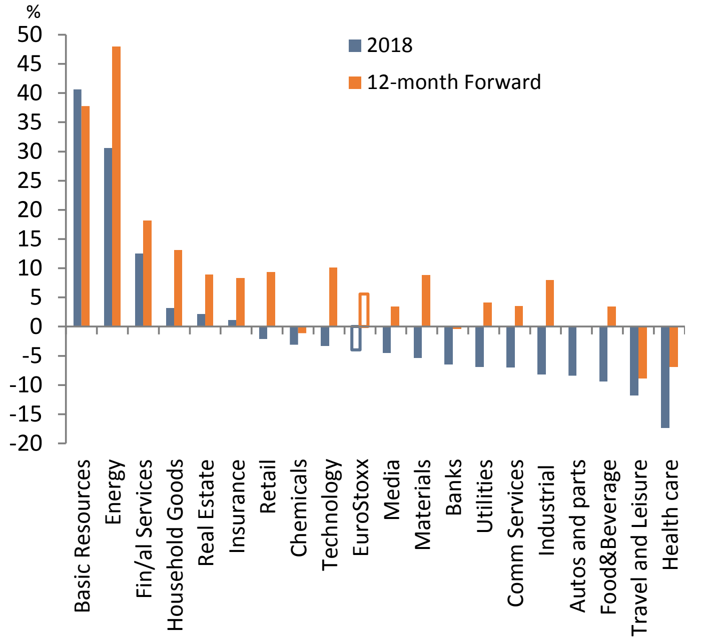

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