Global Markets Roundup

National Bank of Greece | Economic Research Division | November 06, 2018

NATIONAL BANK OF GREECE

Risk appetite improves, on the back of earnings growth and easing trade tensions, ahead of the US mid-terms

- US labor market conditions improved further in October, with stronger-than-expected job growth (+250k vs 12-month average of 211k | cons: +200k), the unemployment rate stable at a multi-decade low (3.7%), and wage growth accelerating (up by 0.3 pps to 3.1% yoy, the highest since April 2009).
- Economic growth may ease from here (based on weaker business surveys and slowing GDP), but remains sufficient for further labor market gains. To contain an overshooting of the labor market, financial conditions may need to tighten further, and growth to slow. In the event, policymakers could remain calm regarding the tightening in financial conditions since the last FOMC meeting (September 25-26).
- The Fed is expected to remain on hold at its meeting on November 7-8, in view of stable inflation data (core PCE unchanged for a 5th consecutive month at 2.0% yoy in September), and to resume rate increases in December. Recall that the Fed currently expects its policy rate at 3.00% - 3.25% by end-2019, implying 4 more hikes from current levels (2.00% - 2.25%). After better-than-expected labor market data, investors assign a 20% chance to that scenario, up 6 pps from a week earlier.
- Regarding the US mid-term elections (November 6), consensus expects the Democrats to gain control of the House of Representatives, while Republicans are set to retain their Senate majority. In the event of a split Congress, the US administration could face increased opposition to its policy agenda (e.g. trade). Chances of further fiscal stimulus would rise if Republicans retained full control of the Congress, while the healthcare reform, seeking to reduce prices paid for drugs, would be a reasonable policy expectation under a Democratic party victory in both chambers. Overall, regulation-sensitive sectors (e.g. high tax companies or healthcare firms) may react strongly to either outcome.
- The European Banking Authority's stress tests, which covered 48 banks (70% of EU banking sector assets), suggested enhanced resiliency compared with a similar exercise in 2016. The test did not apply a pass/fail threshold, but its results will be among the inputs of the Supervisory Review and Evaluation Process (SREP) and for setting Pillar-2 Guidance. The adverse scenario (which imposed negative growth and real estate prices shocks) indicated a 395 bp decline for banks' fully loaded common equity tier 1 (CET1) capital ratio from 14% at end-2017 to 10.1% at end-2020. Intra-bank CET1 level dispersion was significant (6.3% - 34%), with two UK banks (Barclays, Lloyds) and one Italian lender (BPM) recording the lowest performance (<7% FL CET1). European banks declined on Monday (-0.9%), while their Italian peers came under further pressure (-1.6%).
- Global equity markets rebounded in the past week (MSCI ACWI: +3.1% | -4.5% ytd), as EM stocks rallied (+6.1% wow) to their strongest pace in 2½ years, due to strengthening risk appetite and a broadly unchanged USD. Despite soft economic data (ex-US), equities rose across the board as investors focused on strong corporate earnings, ahead of the US mid-terms. Risk appetite in European and Asian markets was supported by reports pointing to an improved prospect for a US/China trade agreement (even preliminary) by the G20 Summit. However, White House advisor Kudlow played down that prospect on Friday (S&P 500: -0.6% on Friday).

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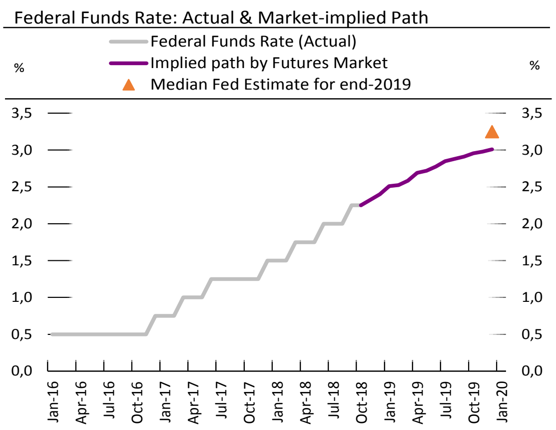
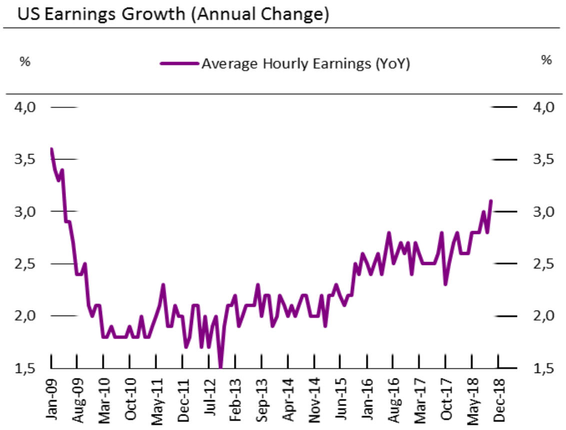
Charts of the week



Source: NBG Research, Bloomberg



Source: NBG Research, Bloomberg

See page 14 for disclosures and analyst certification

Euro area core inflation remains range bound

- **Both headline and core inflation were in line with consensus estimates in October.** Specifically, the flash estimate for CPI was up by 0.1 pp, to 2.2% yoy, the highest since December 2012. More importantly, core CPI growth was 1.1% yoy in October, versus 0.9% yoy previously. The acceleration was anticipated, due to base effects. Recall that in October 2017, tuition fees in Italy and insurance costs in Germany witnessed a large decline, dragging down the annual growth of overall CPI until September 2018. Overall, core CPI growth has persistently hovered in the range of 0.8% – 1.2% yoy since April 2017 and stands at 1.0% yoy, on average, so far in 2018, similar to 2017. Thus, it appears that underlying price pressures have yet to benefit from the continuing improvement in the labor market. Recall that the unemployment rate in the euro area stood at 8.1% in September, the lowest since November 2008, having declined by 0.8 pps compared with a year ago.

The Bank of England (BoE) maintained unchanged its economic outlook and monetary policy stance

- **The BoE maintained its policy rate at 0.75% and the QE target at £435bn, as expected, while altering only modestly its forecasts for GDP and inflation.** Indeed, the BoE's projections for GDP growth, published in its November Inflation Report (IR), were broadly stable compared with the August IR, at 1.5% yoy for 2018 (Q4) and at 1.7% yoy for 2019, 2020 and 2021 (Q4). Note that these projections do not incorporate the recent fiscal measures (see below), with the BoE citing that it will assess their implications at the next meeting on December 20th. BOE CPI estimates were revised up modestly for 2018 (Q4 average | +0.2 pps to 2.5%), mainly due to: i) higher oil prices; and ii) a slightly more enduring pass-through of higher import prices to CPI inflation due to the depreciation of the British Pound following the Brexit referendum**.** CPI estimates for 2019 and 2020 (Q4 average) were not changed significantly, both at 2.1% yoy, while the BoE expects inflation to fully return to the target of 2.0% yoy in 2021. GDP and CPI forecasts are conditioned on a market path for interest rates (based on 15 working-day averages of forward rates up to a cut-off date of October 24th) that prices-in three hikes of 25 bps each, to 1.50% by end-2021, a slightly faster pace compared with August (at that time, markets penciled one hike less of 25 bps, to 1.25% by 2021).

The UK fiscal balance outperforms previous plans, while the respective windfall will be spent to support GDP in 2019

- **According to the Autumn Statement, the path for fiscal consolidation is little changed compared with the Spring Statement (March 2018).** Indeed, estimates from the Office for Budget Responsibility (OBR), compared with the previous forecast, point to a virtually unchanged fiscal position at the end of fiscal year 2022/23 (i.e. April 2022 to March 2023), with the structural deficit at 0.9% of GDP (at fiscal year 2023/24, the end of the forecast period, it is expected at 0.8% of GDP | actual outturn of 1.9% of GDP in fiscal year 2017/2018). Looking past the, *prima facie*, stable medium-term fiscal path, note that the OBR now estimates a significantly lower budget deficit in the current fiscal year (2018/2019) compared with previous plans, down by £11.9 bn or circa 0.6% of GDP, due to higher-than-expected tax receipts and lower-than-anticipated public spending. According to recently announced measures by the Government, that amount will be poured back into the economy during fiscal year 2019/2020, *inter alia*, through tax deductions and higher public spending, with the subsequent boost to GDP estimated at c. 0.4%. In the event, the OBR upgraded its forecast for UK GDP growth in 2019 to 1.6% yoy compared with 1.2% yoy previously (and 1.3% yoy in 2018), while the forecasts for 2020 to 2023 were little changed (1.5% yoy, on average, broadly in line with its estimate of potential GDP growth). As a result of the anticipated stronger path for GDP, public sector debt (net) is now projected to decline to 75.0% of GDP by fiscal year 2022/2023 (and further to 74.1% by fiscal year 2023/2024), compared with 85.0% in fiscal year 2017/2018, thus lower compared with the March projections (77.9% of GDP in fiscal year 2022/2023). Finally, the OBR continues to expect the Government to overperform versus its fiscal mandate of a structural deficit (net borrowing) of below 2% of GDP in fiscal year 2020/21 (it expects a deficit of 1.3% of GDP). Thus, some room for fiscal maneuver remains, in the event of an unfavorable outcome in Brexit negotiations (all of the aforementioned projections are based on the assumption of a smooth Brexit).

The Bank of Japan remained on hold

- **The BoJ maintained its policy stance unchanged, as expected (short-term policy rate: -0.1%, yield target of "around zero per cent" for the 10Yr Japanese Government Bond).** Its forecast for GDP growth was revised down slightly compared with previous projections (July 31st) for fiscal year 2018 (i.e. April 1st 2018 – March 31st 2019), by 0.1 pps to 1.4% yoy (stable at 0.8% for fiscal years 2019 and 2020). Moreover, the BoJ now sees downside risks to the outlook for the current fiscal year (versus balanced previously), highlighting those stemming from abroad (*inter alia*, trade tensions and the potential negative impact of US monetary policy normalization on emerging economies). The outlook for inflation was also decreased slightly (-0.1 pp for annual growth, throughout the forecast period). Specifically, CPI (excluding fresh food) is expected at 1.4% yoy in fiscal year 2018. For fiscal years 2019 and 2020, it is expected at 1.9% yoy and 2.0% yoy, respectively (1.4% yoy and 1.5% yoy, respectively, excluding the effects of the consumption tax hike from 8% to 10% – scheduled for October 2019). Overall, an exit in the near future from the current accommodative monetary policy stance continues to appear unlikely, although, it is worth noting that the BoJ has recently started referring to potential medium-term risks in the financial system, due, *inter alia*, to the low-for-long interest rates.

China: PMIs suggest some further loss of momentum

- **PMIs entered Q4:18 on a soft note.** Specifically, the official manufacturing PMI was down by 0.6 pts to 50.2, the lowest since July 2016 and below consensus estimates for 50.6. The deterioration was broad based across components, albeit the sub-indices that are closely related to international trade continue to underperform. Indeed, the new export orders component fell by 1.1 pt to 46.9, the lowest since January 2016 and the imports component by 0.9 pts to 47.6, the lowest since February 2016. Further clouding the outlook, the official non-manufacturing PMI (which mainly covers services sectors) was also down, by 1.0 pt, to a 14-month low of 53.9 (consensus: 54.6). Overall, consensus expects GDP growth of 6.4% yoy in Q4:18, compared with 6.5% yoy in Q3:18 and 6.8% yoy, on average, in H1:18.

Equities

- **Global equity markets recorded substantial gains in the past week, as valuations became more appealing following the recent sell-off, and investor sentiment was supported by some optimism for a potential de-escalation in the US – China "trade war" front.** Overall, the MSCI World index ended the week up by 3.1% (-4.5% ytd), with emerging markets (+6.1% wow | -14.0% ytd) overperforming their developed markets peers (+2.8% wow | -3.2% ytd). The S&P500 rose by 2.4% wow, with Autos (+7.7% wow), Materials (+6.1% wow) and Banks (+4.8% wow) leading the increase. Meanwhile, the US Q3:18 earnings season continues on a positive note. Indeed, out of the 378 companies that have reported results, so far, circa 78% have exceeded analyst estimates. Note that analyst expectations for EPS growth in Q3:18 stand at +24.8% yoy, a similar pace of growth compared with Q2:18 and Q1:18. However, out of the 70 companies in S&P500 that have issued EPS guidance for Q4:18, 46 (66% of total) have issued negative guidance. Overall, EPS growth is expected to slow in the following quarters, to 15% yoy in Q4:18 and 6.0% yoy in Q1:19, as the tax-cut effect fades. For full year 2019, EPS growth is expected at +9.2% yoy, compared with +10.4% yoy in the beginning of the earnings season. On the other side of the Atlantic, the EuroStoxx increased by 3.0% wow (-7.7% ytd), with the Autos sector (relatively more sensitive to international trade conditions) overperforming (+5.9% wow). Banks also posted solid gains (+4.5% wow), in view of higher government bond yields. Finally, in Japan, the Nikkei 225 index rose by a strong +5.0% wow (-2.3% ytd), further supported by a weaker Yen.

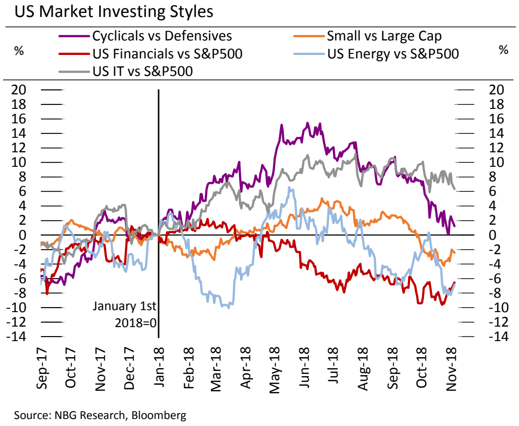
Fixed Income

- **Government bond yields in major advanced economies increased in the past week, as "safe haven" demand retreated.** Specifically, US Treasury 10-year yields rose by 14 bps to 3.21% and the 2-year yield by 10 bps wow to 2.91%, with strong data regarding wages growth in the US (October labor market report) adding to the upside pressure. In the UK, 10-year government bond yields were up by 11 bps wow to 1.49%, while in Germany, 10-Year Bund yields ended the week higher by 8 bps to 0.43%. The Italian 10-year yield spread over the Bund eased in the past week (-20 bps to 289 bps), on the back of improved risk appetite by investors. **Corporate bond spreads in the high yield (HY) spectrum narrowed in the past week, due to risk-on mode by investors.** Specifically, US HY spreads declined by 13 bps to 372 bps and their euro area counterparts by 12 bps wow to 402 bps. In the investment grade spectrum, both US and euro area spreads were broadly stable at 124 bps and 127 bps, respectively.

FX and Commodities

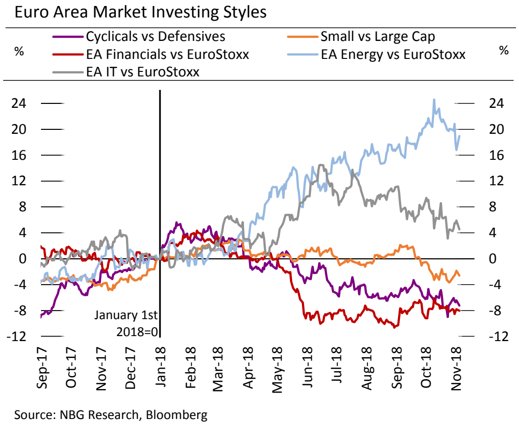
- **In foreign exchange markets, the British Pound rose, supported by positive news regarding Brexit negotiations.** Specifically, the British pound gained 1.2% wow against the euro and a further 0.4% on Monday to €/0.875. Against the US dollar, it rose by 1.1% wow and by a further 0.5% on Monday, to $1.304. Meanwhile, the Japanese Yen declined in the past week, as safe haven demand weakened. Indeed, the Japanese Yen was down by 1.2% wow against the US Dollar to ¥113.20 and by 0.9% wow against the euro to ¥128.85. Finally, the euro was broadly stable on a weekly basis against the US Dollar, at $1.139.

In commodities, oil prices fell for a 4th consecutive week, despite the imposition of sanctions from the US on Iranian oil exports (effective as of November 5th), as the latter had already been priced-in. Moreover, the US granted exemptions to eight countries, which are major importers of Iranian oil (they will be able to continue importing Iranian oil temporarily, without the US imposing sanctions on them). A further build-up of US oil inventories, for a 6th consecutive week (+3.2 million barrels to 426 million barrels for the week ending October 26th), combined with the active oil rig count in the US standing at the highest level since March 2015 (874), also added to the downside pressure on oil prices. Overall, Brent declined by 6.8% wow to $72.0/barrel and WTI by 6.6% wow to $63.1/barrel (both down by circa 17% since early-October).



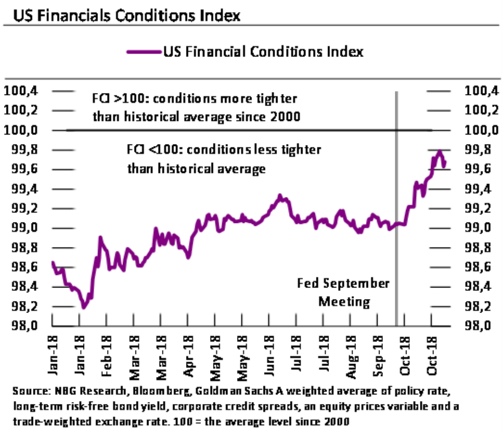
Source: NBG Research, Bloomberg

Graph 1.



Source: NBG Research, Bloomberg

Graph 2.



Source: NBG Research, Bloomberg, Goldman Sachs A weighted average of policy rate, long-term risk-free bond yield, corporate credit spreads, an equity prices variable and a trade-weighted exchange rate. 100 = the average level since 2000

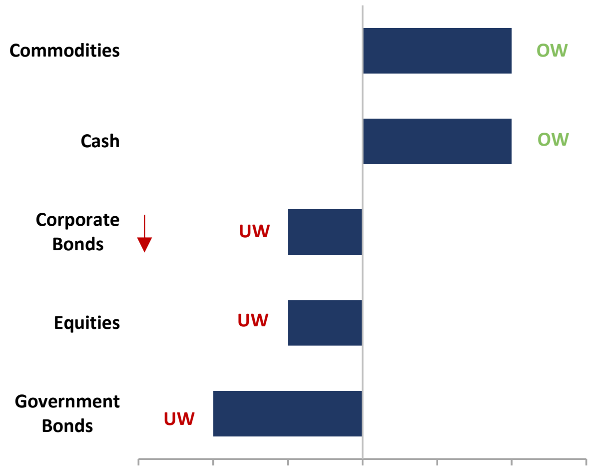
Graph 3.

Quote of the week: "If there's goodwill and agreement, at least personal agreement between the two Presidents of the two biggest economies [US and China], we'll move forward after it and try to work with the Chinese on [trade deal] details…it will still be a long, tough process"**, Director of the National Economic Council of the United States, Larry Kudlow**, November 2nd 2018.

NBG Global Portfolio Tactical Asset Allocation (TAA)

- **Equities**: We turn slightly underweight relative to a Strategic Asset Allocation (SAA) benchmark of 60-30-10 (moderate to moderate aggressive portfolio). GDP growth and corporate earnings are strong (particularly in the US) albeit peaking. Trade concerns and the peak of central bank (C/B) liquidity weighs. Volatility in returns will prevail in the rest of 2018 resulting in lower risk-adjusted returns. We have closed (June) our O/W position in euro area banks recording losses as Italian concerns and low-for-longer interest rates by the ECB reduced our confidence in this trade.
- **Government Bonds:** Higher yields due to less aggressive C/Bs, reduced liquidity and stronger inflation data, albeit safe haven demand could support prices near-term. **Underweight Govies**. Steeper curves, particularly in Bunds.
- **Credit**: we are broadly Neutral in Corporate Bonds.
- **Cash: Overweight position**, as a hedge, as well as a way of being tactical. 2018 is less likely to be as "risk on" as 2017.

Figure1. **NBG Global Portfolio TAA Tilts: LEVEL 1**



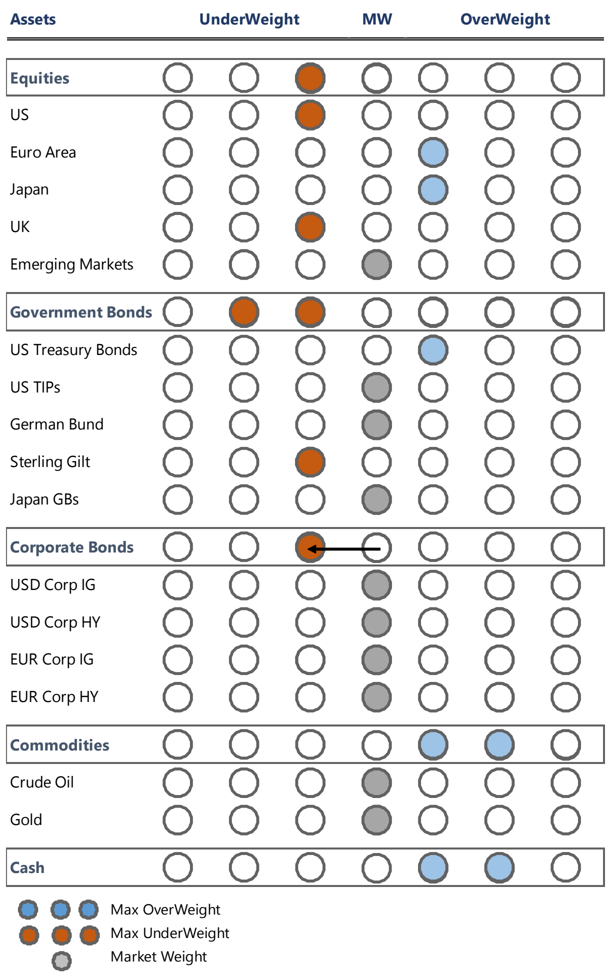
NBG Research - Main Equity Sector Calls

US Sector	Position	View/Comment
Banks	OW	Rising rates from low levels and low deposit betas will support interest margins. Less regulation also positive. Valuations (relative to the market) still attractive.
Energy	Neutral	OPEC's deal extension until end of 2018 has supported oil prices. However, US oil production is increasing (at 2015 high levels) and expected RoE for Energy firms remains low. Light positioning and sizeable underperformance (2017) may present a buying opportunity. Oil backwardation a positive for the sector.
Defensives/ Cyclicals	Neutral	We turn Neutral Defensives amid elevated volatility and favorable relative valuations. Underweight Consumer Discretionary (Cyclicals) as the sector is a major underperfomer during Fed hiking cycles and has high wage expenses.

EA Sector	Position	View/Comment
Energy	Neutral	OPEC's deal extension until end of 2018 has supported oil prices. However, US oil production is increasing (at 2015 high levels) and expected RoE for Energy firms remains low. Light positioning and sizeable underperformance (2017) may present a buying opportunity, thus we upgrade to neutral our position.
Defensives/ Cyclicals	Neutral	We turn Neutral Defensives amid elevated volatility and favorable relative valuations. Underweight Consumer Discretionary (Cyclicals) as the sector is a major underperfomer during Fed hiking cycles and has high wage expenses.

*Including Technology and Industrials
**Including Healthcare, Utilities, Telecoms

Figure2. **NBG Global Portfolio TAA Tilts: LEVEL 2**



(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 relative to our Strategic Asset Allocation portfolio.

	US	Euro Area	Japan	UK
Equity Markets	+ Likely fiscal loosening will support the economy & companies' earnings + Solid EPS growth in H2:2017 & 2018 + 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 2018 **Neutral/Positive**	+ Still high equity risk premium, albeit declining + Credit conditions gradual turn more favorable + Small fiscal loosening - EPS estimates may turn pessimistic due to higher EUR and plateuning economic growth - Strong Euro in NEER terms (2017 vs 2016) - Political uncertainty (Spain, Italy) could re-emerge **Neutral**	+ Still aggressive QE and "yield-curve" targeting by the BoJ + Upward revisions in corporate earnings - Strong domestic recovery in H1:2017 will continue - Signs of policy fatigue regarding structural reforms and fiscal discipline - Strong appetite for foreign assets - If sustained, JPY appreciation hurts exporters companies **Neutral**	+ 65% of FTSE100 revenues from abroad + Undemanding valuations in relative terms + High UK exposure to the commodities sector assuming the oil rally continues - 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 - Political Risk - Fragile growth outlook - Medium-term inflation expectations remain low - Only slow ECB exit from accommodative monetary policy **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 Referendum and the negotiating process + Rich valuations + Inflation overshooting due to GBP weakness feeds through inflation expectations + The BoE is expected to increase policy rates to 0.50% - Slowing economic growth post-Brexit **Higher yields expected**
Foreign Exchange	+ The Fed is expected to increase its policy rate towards 1.5% in 2017 and 2%-2.25% by end-2018 + Tax cuts may boost growth, and interest rates through a more aggressive Fed - Mid-2014 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 to retain rates at current levels - Slowing economic growth post-Brexit - Sizeable Current account deficit (-5.5% of GDP) - Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process **Flat GBP against the USD with upside risks short term**

	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 (%)	Nov 2nd	3-month	6-month	12-month	Official Rate (%)	Nov 2nd	3-month	6-month	12-month
Germany	0,43	0,70	0,90	1,10	Euro area	0,00	0,00	0,00	0,00
US	3,21	3,10	3,20	3,40	US	2,25	2,50	2,75	3,00
UK	1,49	1,53	1,64	1,81	UK	0,75	0,75	0,80	1,05
Japan	0,13	0,12	0,14	0,15	Japan	-0,10	-0,10	-0,10	-0,10
Currency	Nov 2nd	3-month	6-month	12-month		Nov 2nd	3-month	6-month	12-month
EUR/USD	1,14	1,17	1,18	1,21	USD/JPY	113	111	110	109
EUR/GBP	0,88	0,87	0,87	0,88	GBP/USD	1,30	1,35	1,36	1,38
EUR/JPY	129	130	130	132					

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	3,0	3,0
Real GDP Growth (QoQ saar) (2)	-	1,8	3,0	2,8	2,3	-	2,2	4,2	3,5	2,3	-
Private Consumption	2,7	1,8	2,9	2,2	3,9	2,5	0,5	3,8	4,0	2,5	2,7
Government Consumption	1,4	-0,8	0,1	-1,0	2,4	-0,1	1,5	2,5	3,3	4,7	1,9
Investment	1,7	9,9	4,3	2,6	6,2	4,8	8,0	6,4	-0,3	5,2	5,2
Residential	6,5	11,1	-5,5	-0,5	11,2	3,3	-3,4	-1,4	-4,0	0,7	0,0
Non-residential	0,5	9,6	7,3	3,4	4,9	5,3	11,5	8,7	0,8	5,8	6,7
Inventories Contribution	-0,6	-0,9	0,3	1,2	-1,1	0,0	0,3	-1,4	2,4	-0,1	0,1
Net Exports Contribution	-0,3	-0,2	0,0	0,0	-1,2	-0,4	-0,1	1,3	-2,1	0,0	-0,3
Exports	-0,1	5,0	3,6	3,5	6,6	3,0	3,6	9,3	-3,5	3,9	4,3
Imports	1,9	4,8	2,5	2,8	11,8	4,6	3,0	-0,6	9,1	3,1	4,6
Inflation (3)	1,3	2,5	1,9	1,9	2,1	2,1	2,2	2,7	2,6	2,4	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	1,7	1,7	2,0
Real GDP Growth (QoQ saar)	-	2,7	2,8	2,7	2,7	-	1,6	1,8	0,6	1,8	-
Private Consumption	1,9	1,7	1,9	1,7	1,0	1,7	2,2	0,8	1,5	1,4	1,4
Government Consumption	1,8	0,9	1,5	1,8	0,8	1,2	0,3	1,5	2,5	0,8	1,2
Investment	4,0	-2,9	8,6	-1,1	6,3	2,9	0,3	5,9	2,6	2,6	3,2
Inventories Contribution	0,1	-0,4	-0,3	0,1	-0,8	-0,1	0,9	-0,1	0,1	0,1	0,2
Net Exports Contribution	-0,4	2,6	0,0	1,5	1,5	0,8	-0,6	0,0	-0,2	0,2	0,1
Exports	3,0	7,2	4,2	5,3	8,8	5,4	-2,9	4,2	1,9	2,7	2,6
Imports	4,2	1,8	4,6	2,2	6,0	4,0	-1,8	4,8	2,6	2,5	2,5
Inflation	0,2	1,8	1,5	1,4	1,4	1,5	1,2	1,7	2,1	2,1	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	3,6	3,4
Serbia	-1,8	0,8	2,8	1,9	4,3	4,0
Headline Inflation (eop,%)						
Turkey	8,2	8,8	8,5	11,9	25,0	16,5
Romania	0,8	-0,9	-0,5	3,3	3,7	3,4
Bulgaria	-0,9	-0,4	0,1	2,8	2,7	2,6
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	-5,4	-3,4
Romania	-0,7	-1,2	-2,1	-3,2	-3,7	-4,5
Bulgaria	0,1	0,0	2,6	6,5	3,8	2,1
Serbia	-6,0	-3,7	-3,1	-5,7	-5,4	-5,2
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	0,9	0,5	-0,5
Serbia	-6,6	-3,7	-1,3	1,2	0,6	0,4

f: NBG forecasts

Stock Markets (in local currency)

Country - Index	5/11/2018	Last week return (%)	Year-to-Date change (%)	2-year change (%)
Turkey - ISE100	95.948	6,0	-16,8	29,2
Romania - BET-BK	1.607	0,8	-2,7	24,6
Bulgaria - SOFIX	597	-0,9	-11,9	12,5
Serbia - BELEX15	741	0,6	-2,5	11,0

Financial Markets

Financial Markets	5/11/2018	3-month forecast	6-month forecast	12-month forecast
1-m Money Market Rate (%)				
Turkey	25,5	25,0	22,0	20,0
Romania	3,2	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	6,06	6,45	6,60	6,80
RON/EUR	4,66	4,67	4,68	4,68
BGN/EUR	1,96	1,96	1,96	1,96
RSD/EUR	118,3	117,9	117,6	117,4
Sovereign Eurobond Spread (in bps)				
Turkey (USD 2020)(**)	351	340	310	280
Romania (EUR 2024)	108	130	120	110
Bulgaria (EUR 2022)	47	44	42	40
Serbia (USD 2021)(*)	143	132	126	120

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

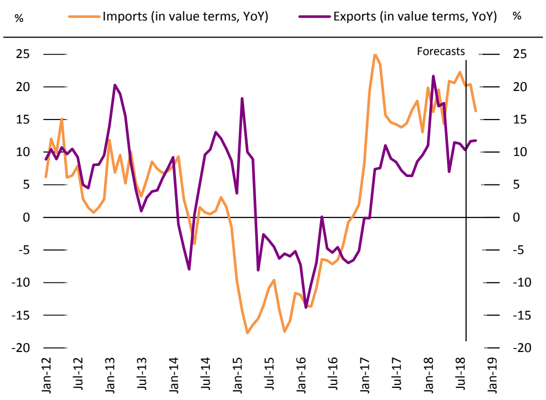
Economic Calendar

The main macro event next week in the US, is the Fed meeting on Thursday. Fed is expected to remain on hold (federal funds rate at 2.25%), albeit they remain well on track to hike in December following, *inter alia*, solid labor market data.

In the euro area, markets will focus on retail sales data for September. Retail sales are estimated to have increased on a monthly basis (+0.1% mom, compared with -0.2% mom in August).

In China, external trade data for October are released on Thursday. Exports are expected to moderate in October, amid lingering US-China trade tensions (11.7% yoy in October compared with 14.5% in the previous month).

Chinese Exports vs Imports (3-month moving average)



Source: NBG Research, Bloomberg

Economic News Calendar for the period: October 30 - November 12, 2018

Tuesday 30

		S		A	P
US					
S&P Case/Shiller house price index 20 (YoY)	August	5.80%	-	5.49%	5.90%
Conference board consumer confidence	October	135.9	+	137.9	135.3
JAPAN					
Jobless Rate	September	2.4%	+	2.3%	2.4%
EURO AREA					
Economic confidence indicator	October	110.0	-	109.8	110.9
Business Climate Indicator	October	1.16	-	1.01	1.21
GDP (QoQ)	Q3:18	0.4%	-	0.2%	0.4%
GDP (YoY)	Q3:18	1.8%	-	1.7%	2.1%

Wednesday 31

		S		A	P
US					
ADP Employment Change (k)	October	187	+	227	218
Employment Cost Index (QoQ)	Q3:18	0.7%	+	0.8%	0.6%
JAPAN					
Industrial Production (MoM)	September	-0.3%	-	-1.1%	0.2%
Industrial Production (YoY)	September	-2.1%	-	-2.9%	0.2%
Bank of Japan announces its intervention rate	October 31	-0.10%		-0.10%	-0.10%
EURO AREA					
Unemployment Rate	September	8.1%		8.1%	8.1%
CPI Estimate (YoY)	October	2.2%		2.2%	2.1%
Core CPI (YoY)	October	1.1%		1.1%	0.9%
CHINA					
PMI manufacturing	October	50.6	-	50.2	50.8

Thursday 1

		S		A	P
US					
Nonfarm Productivity (QoQ, annualized)	Q3:18	2.1%	+	2.2%	3.0%
Unit labor costs (QoQ, annualized)	Q3:18	1.0%	+	1.2%	-1.0%
Initial Jobless Claims (k)	October 27	212	-	214	216
Continuing Claims (k)	October 20	1640	+	1631	1638
Construction spending (MoM)	September	0.0%		0.0%	0.8%
ISM Manufacturing	October	59.0	-	57.7	59.8
UK					
Markit UK PMI Manufacturing SA	October	53.0	-	51.1	53.6
BoE announces its intervention rate	November 1	0.75%		0.75%	0.75%
BoE Asset Purchase Target (£bn)	November	375		375	375
Bank of England Inflation Report					
Nationwide House Px NSA (YoY)	October	1.9%	-	1.6%	2.0%
CHINA					
Caixin PMI Manufacturing	October	50.0	+	50.1	50.0

Friday 2

		S		A	P
US					
Trade balance ($bn)	September	-53.6	-	-54.0	-53.3
Change in Nonfarm Payrolls (k)	October	200	+	250	118
Change in Private Payrolls (k)	October	195	+	246	121
Unemployment rate	October	3.7%		3.7%	3.7%
Underemployment Rate	October	..		7.4%	7.5%
Average Hourly Earnings (MoM)	October	0.2%		0.2%	0.3%
Average Hourly Earnings (YoY)	October	3.1%		3.1%	2.8%
Average weekly hours (hrs)	October	34.5		34.5	34.4
Labor Force Participation Rate	October	62.7%	+	62.9%	62.7%
Factory Goods Orders (MoM)	September	0.5%	+	0.7%	2.6%
UK					
Markit/CIPS UK Construction PMI	October	52.0	+	53.2	52.1

Monday 5

		S		A	P
US					
ISM non-manufacturing	October	59.0	+	60.3	61.6
UK					
Markit/CIPS UK Services PMI	October	53.3	-	52.2	53.9

Tuesday 6

		S	A	P

Wednesday 7

		S	A	P
GERMANY				
Industrial Production (sa, MoM)	September	0.1%	..	-0.3%
Industrial Production (wda, YoY)	September	0.5%	..	-0.1%
EURO AREA				
Retail sales (MoM)	September	0.1%	..	-0.2%
Retail sales (YoY)	September	0.9%	..	1.8%
JAPAN				
Leading Index	September	103.9	..	104.5
Coincident Index	September	114.6	..	116.7

Thursday 8

		S	A	P
US				
Initial Jobless Claims (k)	November 3	214	..	214
Continuing Claims (k)	October 27	1635	..	1631
Fed announces its intervention rate	November 8	2.25%	..	2.25%
JAPAN				
Eco Watchers Current Survey	October	48.7	..	48.6
Eco Watchers Outlook Survey	October	50.3	..	51.3
EURO AREA				
ECB publishes its Economic bulletin				
CHINA				
Exports (YoY)	October	11.7%	..	14.5%
Imports (YoY)	October	14.7%	..	14.3%

Friday 9

		S	A	P
US				
University of Michigan consumer confidence	November	97.9	..	98.6
Wholesale trade (MoM)	September	..	..	0.8%
UK				
Industrial Production (MoM)	September	-0.1%	..	0.2%
Industrial Production (YoY)	September	0.4%	..	1.3%
GDP (QoQ)	Q3:18	0.6%	..	0.4%
GDP (YoY)	Q3:18	1.5%	..	1.2%
Private Consumption (QoQ)	Q3:18	0.5%	..	0.4%
Government Spending (QoQ)	Q3:18	0.4%	..	-0.4%
Gross Fixed Capital Formation (QoQ)	Q3:18	0.3%	..	-0.5%
CHINA				
CPI (YoY)	October	2.5%	..	2.5%

Monday 12

		S	A	P

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	2723	2,4	1,8	5,6	29,8
Japan	NIKKEI 225	22244	5,0	-2,3	-1,3	29,8
UK	FTSE 100	7094	2,2	-7,7	-6,1	3,6
Canada	S&P/TSX	15119	1,6	-6,7	-5,6	3,6
Hong Kong	Hang Seng	26486	7,2	-11,5	-7,1	16,1
Euro area	EuroStoxx	356	3,0	-7,7	-11,0	10,8
Germany	DAX 30	11519	2,8	-10,8	-14,3	11,1
France	CAC 40	5102	2,7	-4,0	-7,4	15,6
Italy	FTSE/MIB	19390	3,8	-11,3	-15,9	17,7
Spain	IBEX-35	8993	3,0	-10,5	-14,0	1,3

Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
MSCI Emerging Markets	55181	5,4	-9,4	-8,5	14,5
MSCI Asia	814	6,0	-11,8	-11,4	15,5
China	75	7,8	-15,7	-13,3	22,8
Korea	636	4,1	-15,1	-18,4	13,1
MSCI Latin America	89334	2,1	4,2	6,6	18,6
Brazil	293627	3,3	14,1	17,1	31,9
Mexico	42195	-0,2	-9,4	-7,6	-5,2
MSCI Europe	5321	3,9	-1,2	0,9	19,3
Russia	1075	4,0	12,5	16,6	24,3
Turkey	1286790	4,5	-18,7	-18,0	18,3

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	210,4	1,2	-5,9	-1,5	5,7
Materials	246,7	5,9	-12,1	-9,2	15,6
Industrials	239,1	3,0	-8,6	-6,1	18,4
Consumer Discretionary	242,8	4,1	1,4	6,9	29,1
Consumer Staples	222,5	1,5	-6,4	-1,3	4,6
Healthcare	239,2	2,6	5,1	7,4	26,7
Financials	113,4	4,3	-10,9	-8,1	21,0
IT	236,1	1,8	7,0	7,7	49,5
Telecoms	63,4	1,7	-10,9	-6,6	-4,8
Utilities	124,7	-0,1	-1,9	-5,4	7,9

in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	216,0	1,0	-3,9	-0,6	4,8
Materials	236,9	5,8	-9,3	-7,8	16,2
Industrials	237,8	3,2	-7,1	-5,4	19,4
Consumer Discretionary	235,6	4,3	2,5	7,3	30,1
Consumer Staples	224,2	1,5	-4,4	-0,4	5,0
Healthcare	237,3	2,6	6,4	7,9	27,1
Financials	113,9	4,2	-8,9	-7,1	21,0
IT	229,1	1,8	7,4	7,9	50,1
Telecoms	66,2	1,8	-9,2	-6,0	-4,3
Utilities	128,0	-0,2	-0,2	-4,7	7,8

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	3,21	3,08	2,41	2,35	2,51
Germany	0,43	0,35	0,43	0,37	1,51
Japan	0,13	0,11	0,05	0,06	0,64
UK	1,49	1,38	1,19	1,26	2,29
Greece	4,30	4,30	4,12	5,09	10,26
Ireland	1,00	0,94	0,67	0,59	3,99
Italy	3,32	3,44	2,01	1,79	3,43
Spain	1,57	1,57	1,57	1,48	3,34
Portugal	1,88	1,91	1,94	2,10	5,12

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)	166	180	148	139	101

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	31	27	52	74	168
US Treasuries 10Y/5Y	18	17	20	35	85
Bunds 10Y/2Y	104	98	105	112	132
Bunds 10Y/5Y	60	57	63	72	79

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
EM Inv. Grade (IG)	177	177	138	144	255
EM High yield	498	499	371	388	780
US IG	124	123	98	102	183
US High yield	372	385	358	352	599
Euro area IG	127	128	87	87	162
Euro area High Yield	402	414	272	238	618

Foreign Exchange & Commodities

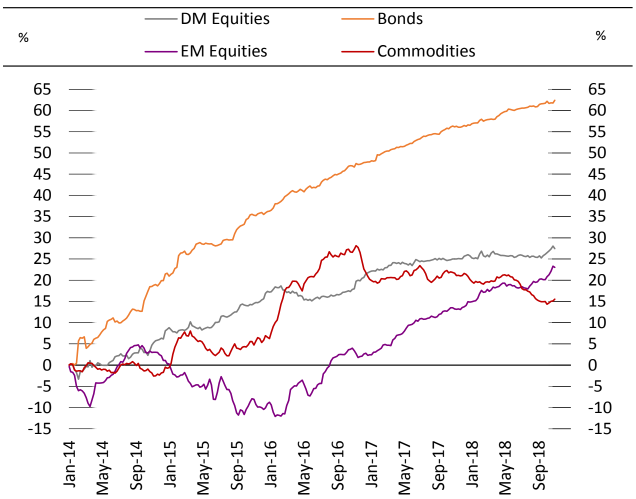
Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1,14	-0,1	-0,8	-2,3	-5,1
EUR/CHF	1,14	0,5	0,3	-1,9	-2,3
EUR/GBP	0,88	-1,2	-1,0	-1,6	-1,1
EUR/JPY	128,85	0,9	-2,0	-3,1	-4,7
EUR/NOK	9,53	0,1	0,9	0,5	-3,3
EUR/SEK	10,32	-0,9	-0,7	5,4	5,3
EUR/AUD	1,58	-1,5	-2,0	4,8	3,2
EUR/CAD	1,49	-0,1	1,0	-0,1	-1,1
USD-based cross rates					
USD/CAD	1,31	0,1	1,9	2,3	4,3
USD/AUD	1,39	-1,5	-1,3	7,1	8,5
USD/JPY	113,20	1,2	-1,2	-0,8	0,5

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	365	0,9	2,5	-5,0	-4,0
Energy	513	-5,8	-14,8	21,4	10,8
West Texas Oil ($)	63	-6,6	-17,4	15,8	4,5
Crude brent Oil ($)	72	-6,8	-16,4	18,7	7,7
Industrial Metals	1253	0,0	-4,5	-10,3	-13,5
Precious Metals	1464	-0,1	2,5	-5,3	-7,2
Gold ($)	1233	0,0	3,0	-3,4	-5,4
Silver ($)	15	0,4	0,8	-13,8	-12,9
Baltic Dry Index	1457	-4,1	-7,4	-1,7	6,7
Baltic Dirty Tanker Index	1143	0,2	41,5	33,7	38,2

Source: Bloomberg, as of November 2nd, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

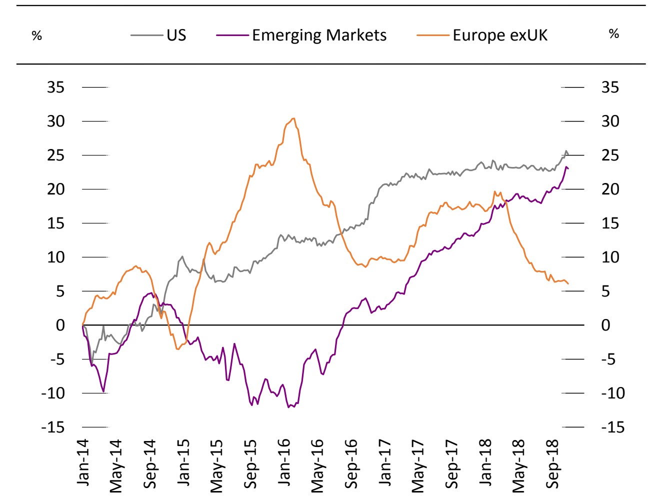
NATIONAL BANK OF GREECE

Global Cross Asset ETFs: Flows as % of AUM



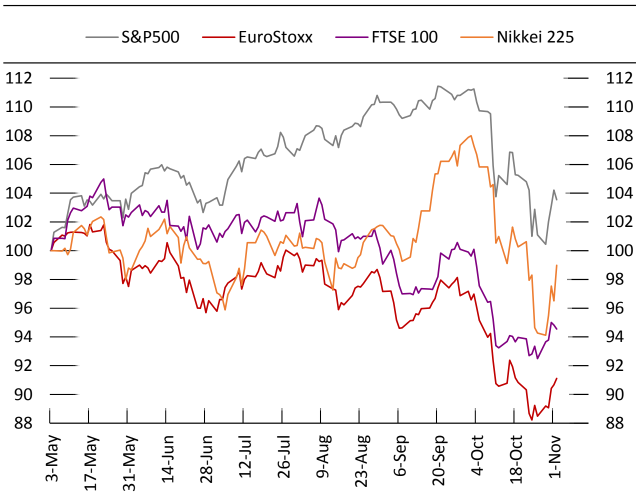
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of November 2nd

Equity ETFs: Flows as % of AUM



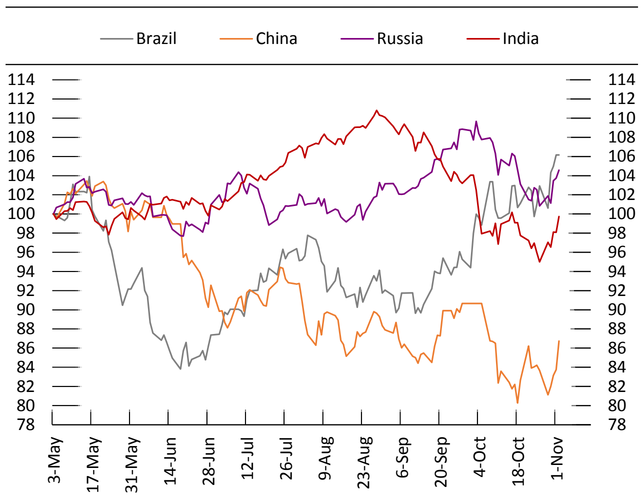
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of November 2nd

Equity Market Performance - G4



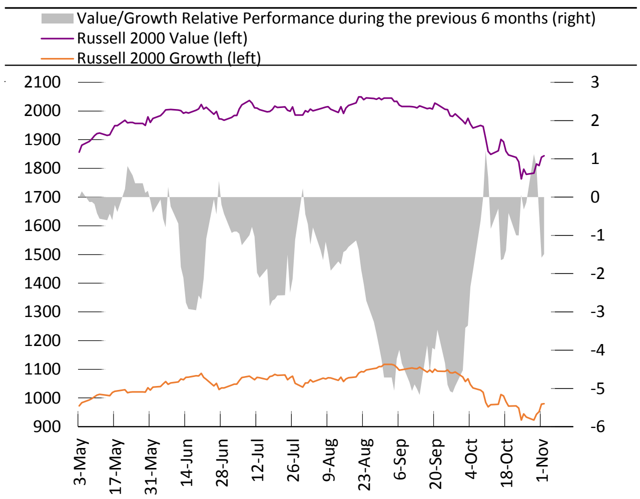
Source: Bloomberg - Data as of November 2nd – Rebased @ 100

Equity Market Performance - BRICs



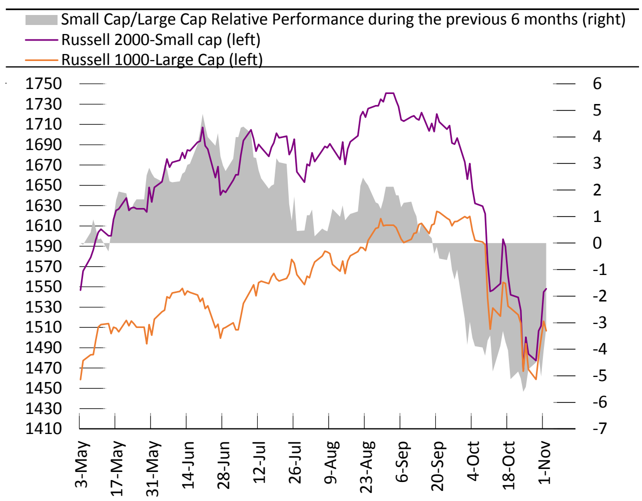
Source: Bloomberg - Data as of November 2nd – Rebased @ 100

Russell 2000 Value & Growth Index



Source: Bloomberg, Data as of November 2nd

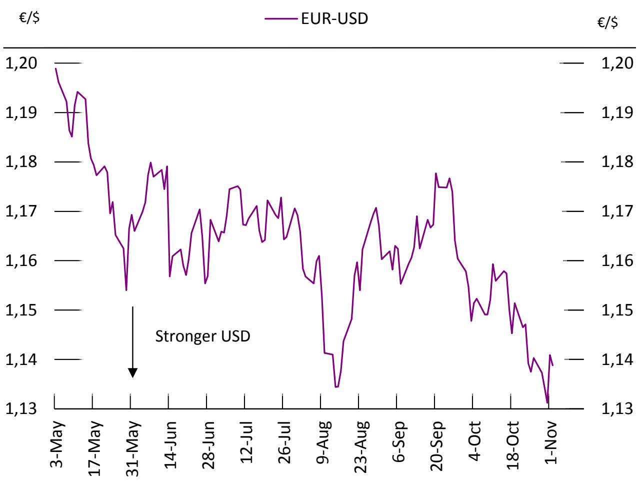
Russell 2000 & Russell 1000 Index



Source: Bloomberg, Data as of November 2nd

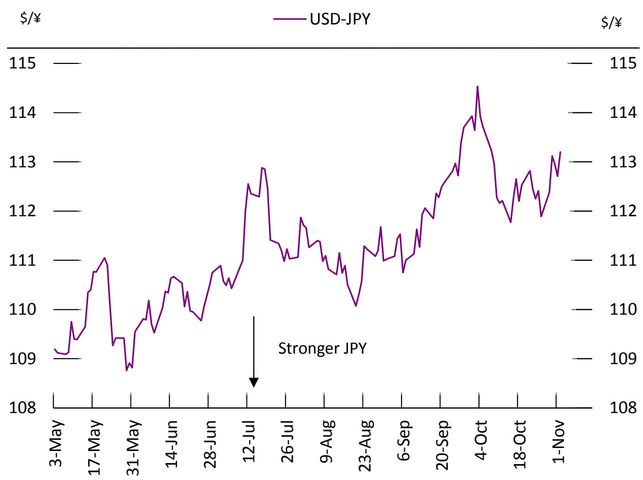
NATIONAL BANK OF GREECE

EUR/USD



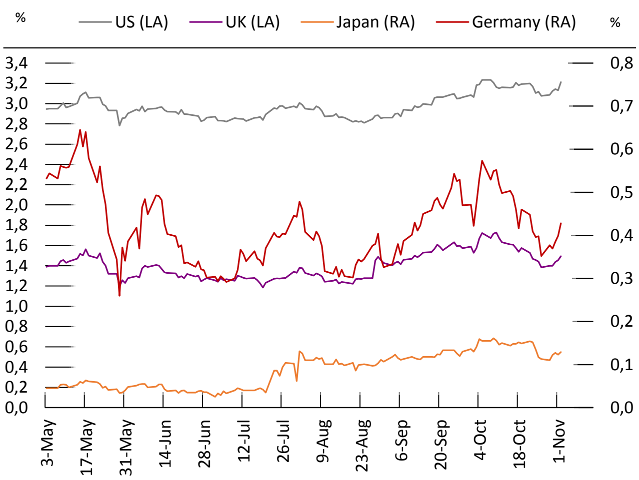
Source: Bloomberg, Data as of November 2nd

JPY/USD



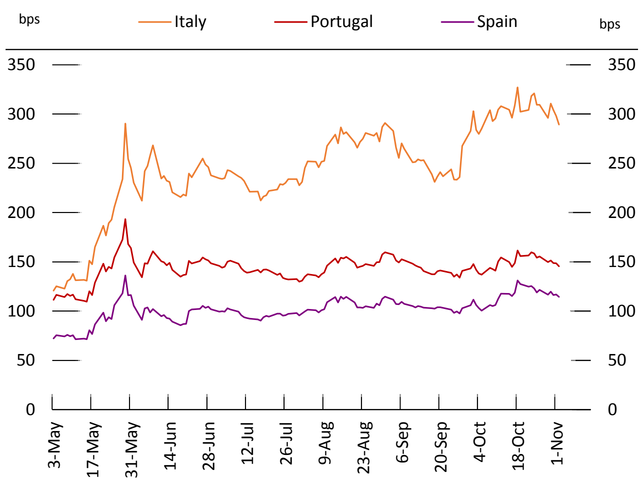
Source: Bloomberg, Data as of November 2nd

10- Year Government Bond Yields



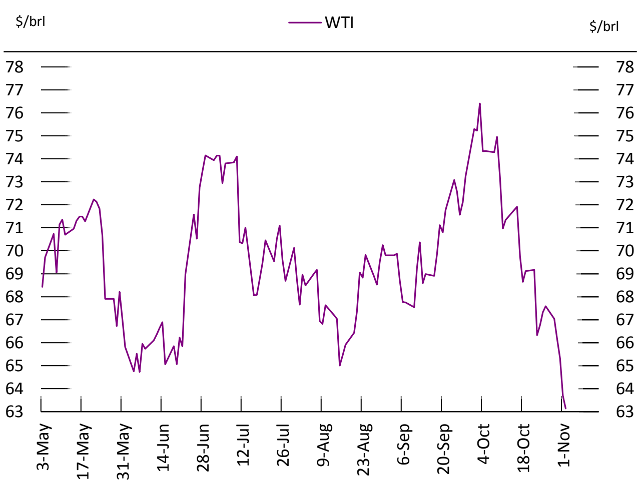
Source: Bloomberg - Data as of November 2nd
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



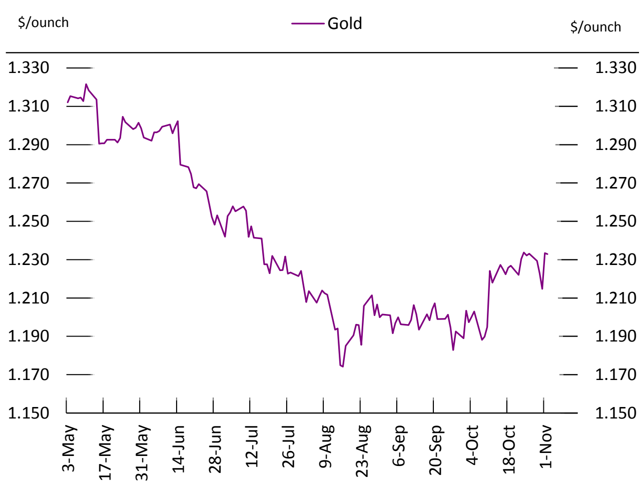
Source: Bloomberg - Data as of November 2nd

West Texas Intermediate ($/brl)



Source: Bloomberg, Data as of November 2nd

Gold ($/ounch)



Source: Bloomberg, Data as of November 2nd

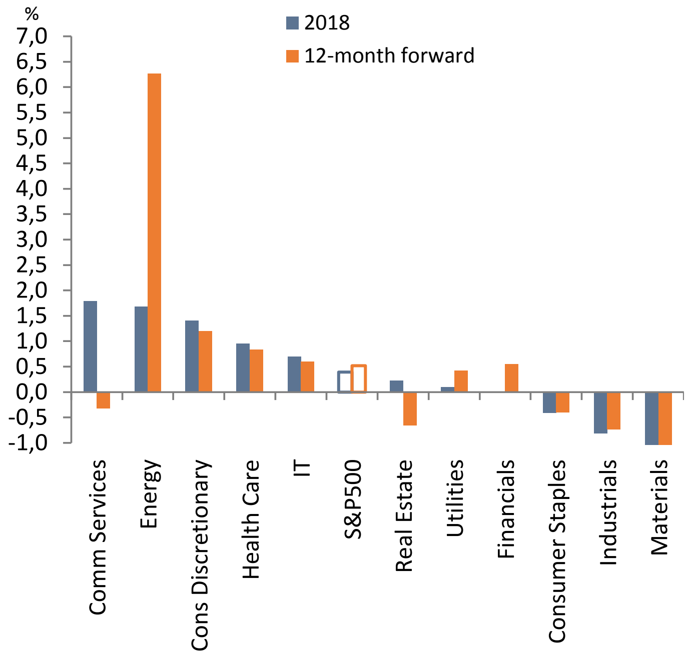
US Sectors Valuation

	Price ($)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	2/11/2018	% Weekly Change	2017	2018	2017	2018	2017	2018	12m fwd	10Yr Avg	2017	2018	12m fwd	10Yr Avg
S&P500	2723	2,4	11,5	22,2	1,8	2,0	20,5	16,9	15,7	14,6	3,4	3,2	3,0	2,3
Energy	501	1,7	253,1	105,2	2,9	3,1	34,7	17,3	14,2	20,2	1,8	1,8	1,7	1,8
Materials	338	6,1	8,0	23,4	1,9	2,2	20,8	15,3	14,5	14,6	2,8	2,4	2,3	2,5
Financials														
Diversified Financials	649	4,4	8,7	36,3	1,2	1,6	20,4	13,8	13,3	13,8	2,0	1,7	1,6	1,4
Banks	322	4,8	13,3	26,6	1,8	2,5	16,2	11,5	10,5	12,5	1,5	1,3	1,2	0,9
Insurance	370	3,6	5,1	29,6	2,0	2,4	16,1	11,7	10,7	10,3	1,4	1,3	1,2	1,0
Real Estate	197	1,4	1,4	6,6	3,6	3,6	17,6	17,5	17,0	17,6	3,2	3,1	3,2	2,7
Industrials														
Capital Goods	622	2,0	7,1	17,8	2,1	2,2	22,1	16,6	15,3	15,0	5,0	4,8	4,4	3,0
Transportation	739	4,1	0,8	24,7	1,6	1,8	17,5	14,8	13,4	13,9	4,1	4,2	3,7	3,2
Commercial Services	264	3,6	-3,5	12,2	1,4	1,5	25,9	23,3	21,6	19,0	4,2	4,1	3,9	3,1
Consumer Discretionary														
Retailing	2149	2,8	7,4	37,3	0,8	0,8	37,7	29,8	26,7	19,3	12,0	11,0	9,5	5,0
Media	531	1,9	-11,9	22,6	0,4	0,4	27,5	22,4	20,7	18,4	4,7	4,0	3,5	2,9
Consumer Services	1063	5,4	13,9	19,4	1,7	2,1	24,2	20,5	19,1	18,3	8,8	11,0	11,9	5,1
Consumer Durables	315	7,0	-3,6	13,5	1,5	1,6	20,0	17,3	15,6	16,8	3,5	3,2	3,0	3,0
Automobiles and parts	115	7,7	2,9	-10,8	3,7	4,5	7,5	7,4	7,3	8,8	1,8	1,4	1,3	1,9
IT														
Technology	1234	-1,2	14,0	20,3	1,6	1,7	17,6	16,1	14,8	12,4	5,3	6,7	6,9	3,0
Software & Services	1697	0,7	16,2	12,9	1,2	1,2	25,7	23,1	21,1	15,8	7,8	7,9	7,0	4,6
Semiconductors	911	5,8	45,2	30,6	1,6	2,1	17,1	11,8	11,6	16,3	4,8	4,1	3,9	2,8
Consumer Staples														
Food & Staples Retailing	445	3,9	-2,1	11,8	2,5	1,8	19,5	20,3	19,7	15,3	3,8	4,3	4,1	2,9
Food Beverage & Tobacco	663	1,3	8,8	11,0	3,1	3,4	20,6	18,1	17,3	16,9	5,1	4,7	4,6	4,8
Household Goods	565	3,7	4,8	7,6	3,0	2,9	21,2	20,9	20,1	18,0	5,3	6,0	6,0	4,5
Health Care														
Pharmaceuticals	872	1,7	5,6	13,6	2,0	2,1	16,5	15,1	14,4	14,0	4,6	4,7	4,3	3,2
Healthcare Equipment	1172	2,7	12,2	17,3	1,0	1,0	19,9	18,7	17,3	14,1	3,5	3,5	3,2	2,4
Communication Services	154	3,6	0,8	18,0	5,5	5,6	12,2	10,4	10,2	12,7	2,1	1,8	1,7	2,3
Utilities	270	-0,6	0,1	8,4	3,7	3,5	17,0	17,1	16,5	14,6	1,8	1,8	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

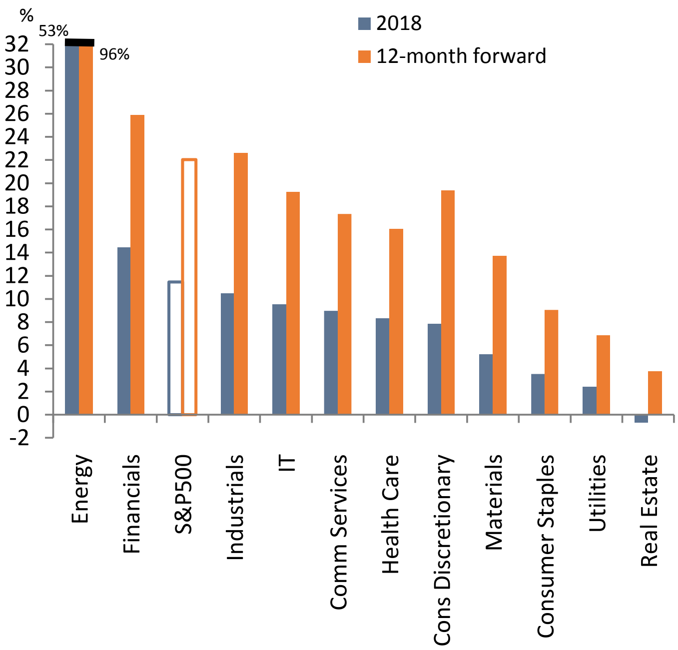
Earnings Revisions indicate 1-month change in 2018 & 12-month Forward EPS



Source: Factset, Data as of November 2nd
12-month forward EPS are 16% of 2018 EPS and 84% 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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NATIONAL BANK OF GREECE

Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	2/11/2018	% Weekly Change	2017	2018	2017	2018	2017	2018	12m fwd	10Yr Avg	2017	2018	12m fwd	10Yr Avg
EuroStoxx	356	3,0	18,6	4,3	3,1	3,4	15,9	14,2	13,0	12,9	1,7	1,6	1,5	1,4
Energy	334	0,2	26,8	34,0	4,6	4,7	14,6	11,7	10,4	11,2	1,2	1,2	1,2	1,2
Materials	398	3,2	16,4	4,1	2,9	3,5	16,8	14,6	12,9	13,9	1,8	1,6	1,5	1,4
Basic Resources	231	3,5	70,7	31,2	2,0	2,7	12,5	8,2	8,4	15,7	1,3	1,0	0,9	0,9
Chemicals	996	2,0	23,4	-0,3	2,7	2,9	16,9	15,4	14,8	14,6	2,6	2,4	2,3	2,1
Financials														
Fin/al Services	423	3,0	26,4	10,7	2,4	2,8	18,1	15,1	13,8	13,3	1,7	1,5	1,4	1,2
Banks	100	4,5	66,9	5,4	3,8	5,4	12,9	9,1	8,5	10,3	0,9	0,7	0,7	0,7
Insurance	264	2,9	-3,4	15,7	4,7	5,3	12,4	10,2	9,7	9,0	1,0	1,0	1,0	0,9
Real Estate	230	-0,3	-0,3	15,5	3,9	4,7	20,3	17,4	16,3	16,5	1,1	1,0	0,9	1,0
Industrial	796	2,4	11,8	6,4	2,5	2,7	20,4	18,5	16,3	14,7	3,0	2,7	2,6	2,1
Consumer Discretionary														
Media	225	1,8	11,9	1,4	3,2	4,1	17,8	17,5	16,2	14,8	2,4	2,3	2,2	1,9
Retail	483	4,9	5,0	9,1	2,4	2,7	22,4	20,8	18,9	17,9	3,2	3,4	3,1	2,8
Automobiles and parts	483	5,9	21,1	-3,3	3,0	4,2	8,7	7,2	6,6	9,2	1,3	1,0	0,9	1,0
Travel and Leisure	190	4,5	21,9	-11,5	1,7	2,0	12,2	11,3	11,0	35,1	2,3	1,8	1,7	1,8
Technology	476	4,3	19,1	2,0	1,4	1,6	22,1	20,8	18,6	17,7	3,8	3,4	3,2	2,8
Consumer Staples														
Food&Beverage	527	1,4	7,4	6,4	2,8	2,3	23,7	20,2	18,0	17,6	3,0	2,4	2,3	2,6
Household Goods	847	2,9	11,8	10,6	1,8	2,0	24,8	24,3	22,6	19,5	4,7	5,0	4,6	3,3
Health care	771	3,8	-5,7	-5,9	2,4	2,4	17,8	18,5	16,7	14,3	2,3	2,3	2,2	2,0
Communication Services	285	3,7	29,9	-7,9	4,6	5,0	13,5	14,2	13,1	13,1	1,8	1,8	1,7	1,7
Utilities	268	1,0	2,5	-7,1	5,2	5,1	13,4	14,6	13,4	12,0	1,2	1,3	1,3	1,1

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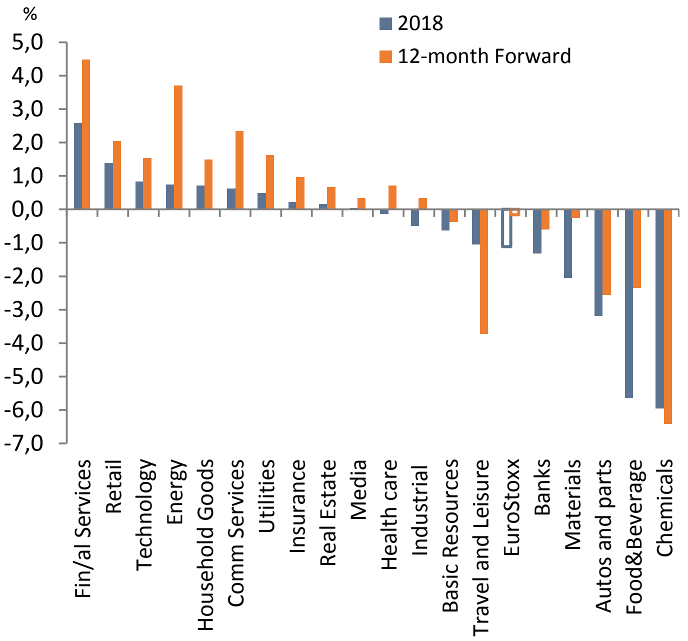

Source: Factset, Data as of November 2nd
12-month forward EPS are 16% of 2018 EPS and 84% of 2019 EPS

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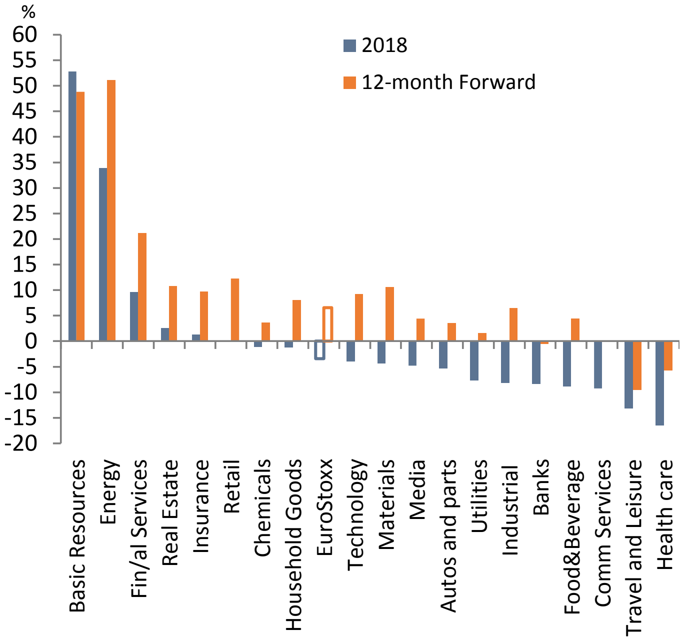

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