Global Markets Roundup

National Bank of Greece | Economic Research Division | September 24, 2019

NATIONAL BANK OF GREECE

The Fed lowered its interest rate for a second consecutive time to 1.75%-2%, albeit maintaining a broadly favorable view for the economic outlook

- The Fed reduced the Federal Funds Rate (FFR) by 25 bps at its meeting on September 18th to the range of 1.75% - 2%, with 3 out of 10 voters dissenting (two in favor of no change and one in favor of a 50 bp cut). The Fed intends to provide support to the US economy as insurance against ongoing risks stemming from the global growth slowdown (see page 2), trade policy uncertainty and geopolitical factors (Brexit).
- Regarding the future path of monetary policy, the Fed sent mixed signals. Specifically, in the post meeting press conference, Chair Powell sounded dovish, arguing in favor of being proactive against downside risks rather than to "hold on to your firepower" for when these risks materialize. In a negative scenario, "a more extensive sequence of rate cuts could be appropriate" than the one envisioned in the Summary of Economic Projections. However, the Federal Open Market Committee (FOMC) appears divided, as by the end of 2019, out of the 17 participants, 7 expect one more reduction in the FFR to a range of 1.5% - 1.75%, 5 anticipate no change and 5 project an increase of 25 bps to a range of 2% - 2.25% (see graph below). The median figure points to an unchanged rate by the end of 2019. Beyond 2019, the median of the FOMC participants' estimates points to an unchanged rate at the end of 2020, one increase by 25 bps to 2% – 2.25% by the end of 2021 and one further rise to 2.25% - 2.5% by end-2022, matching the FOMC's longer-term interest rate estimate (the neutral rate).
- The FOMC's forecasts for real GDP were little changed compared with June (slightly high across the forecasting horizon), pointing to still satisfactory levels and a very gradual deceleration for growth towards its potential rate. Indeed, real GDP growth is projected at 2.2% yoy in Q4:2019 (2.5% yoy in Q4:2018), 2% yoy in Q4:2020, 1.9% yoy in Q4:2021 and 1.8% yoy in Q4:2020. Similarly, inflation (PCE measure) estimates were broadly stable, with the FOMC expecting some under-achievement of the 2% goal in the short term, before reaching the target by the end of 2020 and in 2021. Overall, financial markets' expectations for the future path of the FFR remain more benign compared with the FOMC median projection of circa 50-75 bps (see graph below).
- The Bank of Japan (BoJ) remained unchanged on September 19th with the short-term policy rate at -0.1% and yield target of "around 0%" for the 10-year JGB. At the same time, the BoJ sustained market expectations for an upcoming easing, highlighting enhanced downside risks stemming from overseas economies. The BoJ will examine the respective developments at its October 31st meeting, which will also be accompanied by its quarterly Outlook for Economic Activity and Prices (64% probability is priced in for a reduction of 10 bps in the short-term policy rate in October).
- The Bank of England (BoE), as expected, on September 19th, remained in a "wait-and-see" mode (0.75%), in anticipation of more clarity regarding the form and timing of Brexit. The BoE dismissed recent positive economic news (July's GDP and labor market data) and instead deemed that underlying growth has eased as Brexit uncertainties have become more entrenched and due to slower global growth.

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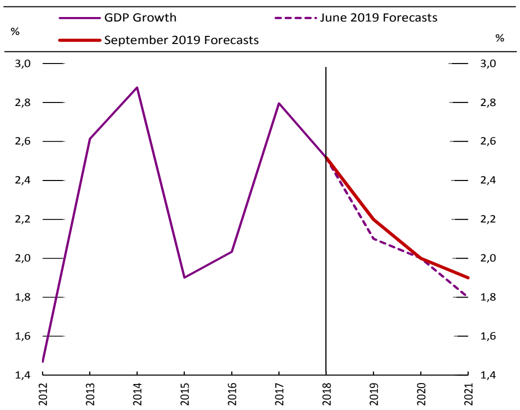
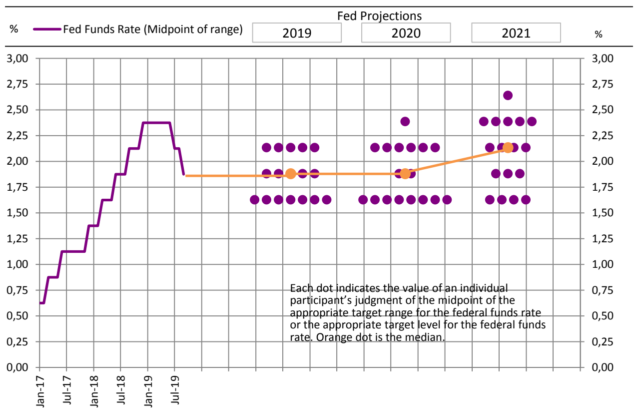
Charts of the week

US Real GDP & Fed Forecasts



Source: NBG Research, Fed, Projections of change in real GDP are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated

Federal Funds Rate Expected Path: Fed Estimates



Source: NBG Research, Bloomberg, Fed

See page 14 for disclosures and analyst certification

US core inflation overshot expectations for a 3rd consecutive month in August

- **Headline CPI growth was 1.7% yoy in August, versus 1.8% yoy in July, mainly due to the volatile gasoline prices**, which declined by 7.1% yoy, versus -3.3% yoy in July. More importantly, the monthly pace of growth for core CPI was stable for a 3rd consecutive month at a strong +0.3% mom (+0.2% mom, on average, so far in 2019), above consensus estimates for +0.2% mom. As a result, the annual pace of growth for core CPI was up by 0.2 pps to 2.4% yoy in August, the highest since September 2008. Although the latest outcome is boosted to some extent by a likely unsustainable +4.3% yoy for medical care services, the robustness was broad based across components. Note that the PCE deflator in July (the Fed's preferred measure for gauging inflationary pressures) stood at a more modest 1.4% yoy and the core figure at 1.6% yoy. According to the Federal Reserve Bank of Cleveland Inflation Nowcasting model, PCE growth is expected at 1.4% yoy in August and its core counterpart at 1.8% yoy.

US consumer spending remains robust

- **US nominal retail sales maintain a solid annual pace of growth of c. +5% yoy.** Specifically, in value terms, the so-called "control group", as it feeds into the calculation for GDP (i.e. excluding autos, gas, food services and building materials), was up by a satisfactory 0.3% mom in August, in line with consensus estimates and following a particularly strong +0.9% mom in July. As a result, annual growth came out at +5.3% yoy in August (+4.9% yoy in July), the strongest pace since May 2018. The outlook for private consumption remains resilient, in view of strong fundamentals (mainly the firm labor market with the unemployment rate at 3.7% and personal disposable income growth, in constant price terms, at 3.0% yoy). Furthermore, consumer confidence remains healthy, with the University of Michigan consumer sentiment indicator at 92.0 in September versus a long-term average of 85.9, even with increasing concerns about the impact of tariffs on the domestic economy (38% of respondents in the survey made references to the negative impact of tariffs, the highest percentage since March 2018). More specifically, those concerns are associated with higher prospects for the unemployment rate and inflation in the year ahead. In the event, households' short-term inflation expectations data (an important input in the Fed's monetary policy decisions) increased modestly, with one-year ahead inflation expectations up by 0.1 pp to 2.8%. On the other hand, longer-term inflation expectations (five to ten years ahead) came out at 2.3%, from 2.6% in July. Overall, GDPNowcast models (Atlanta Fed, New York Fed) point to GDP growth of 1.9% - 2.2% qoq saar in Q3:19 (2.0% - 2.1% yoy), versus +2.0% qoq saar in Q2:19 (2.3% yoy), with private consumption expected at a solid +3.1% qoq saar (+4.7% in Q2:19).

Euro area PMIs disappoint in September

- **Business surveys came out well below expectations in September, sending a signal of a deeper downturn in manufacturing and of the deterioration spreading to the services sector.** Specifically, the euro area composite PMI was down substantially by 1.5 pts to 50.4, undershooting by a wide margin consensus estimates for a slight improvement to 52. Moreover, according to Markit, the more forward-looking indicator of new orders fell below the expansion/contraction threshold of 50.0, to its weakest level since June 2013, further clouding the outlook. On a sectoral level, the manufacturing PMI fell by 1.4 pts to 45.6, a c. 7-year low and remaining in contractionary territory for an 8th consecutive month. Furthermore, the services sector PMI was down by 1.5 pts to 52.0 (consensus: 53.3). The latest outcome was the weakest since December 2014, with the exception of the 51.2 readings recorded in December 2018 and January 2019, which were negatively distorted by the protest disruptions in France at that time. **At country level, the deterioration was also broad based.** Indeed, at the composite level, Germany saw a decline by 2.6 pts to 49.1, France by 1.6 pts to 51.3 and the rest of the euro area by 0.6 pts to 50.3. On a positive note, consumer confidence in the euro area was up by 0.6 pts to -6.5 in September, overshooting consensus estimates for -7.0 and remaining well above its long-term average (since 2001) of -11.5. Nevertheless, it should also be noted that the aforementioned business surveys included some disconcerting details regarding the outlook for the labor market, the constant improvement of which is the main supporting pillar for private consumption. In the event, the employment component in the composite PMI was at its lowest since January 2015, with the rate of job creation easing for a 3rd consecutive month. Recall that employment growth in the euro area was +0.9% qoq saar in Q2:19, a level that despite being sufficient to sustain the downward path for the unemployment rate (7.5% in July, an 11-year low and -0.6 pps yoy), represented a deceleration compared with its average pace since 2015 (+1.4% qoq saar). Overall, the latest readings suggest that euro area GDP growth in Q3:19 will struggle to match the already subdued +0.8% qoq saar (1.2% yoy) in Q2:19.

Chinese activity data undershot expectations in August

- **The latest high frequency activity data came out well below consensus estimates.** Specifically, retail sales (in value terms) was 7.5% yoy in August, contrary to expectations for a pick-up (consensus for 7.9% yoy), following the sharp deceleration in the previous month (7.6% in July, -2.2 pps compared with June | 8.2% yoy on average so far in 2019). It should also be noted, however, that a significant part of the weakness in the past two months was in the volatile automobiles sales (-8.1% yoy versus -2.6% yoy in July and +17.2% yoy in June), a development which could be linked to disruptions caused by the implementation of new car emission rules. In the event, excluding automobile sales, the annual growth of retail sales growth has been relatively more stable in recent months, to c. 8.5% - 9.1% yoy (9.0% yoy in August). **More worryingly, the weaker impetus for both domestic and external demand (the latter in view of the global growth slowdown and international trade tensions) continues to feed through to a deceleration for industrial production**, which came out at 4.4% yoy in August, compared with 4.5% yoy in July, the weakest outcome since 2002 and well below consensus expectations for 5.2% yoy (average of +5.7% yoy so far in 2019). Finally, fixed asset investment decelerated modestly by 0.2 pps to 5.5% yoy (consensus for an unchanged outcome), even with infrastructure investment growth accelerating by 0.4 pps to 4.2% yoy, on the back of policy support. In the event, the issuance by local governments of "special bonds" (i.e. bonds for financing certain types of infrastructure projects) remains strong, amounting to RMB 0.32 tn in August and to RMB 1.95 tn cumulatively from January to August 2019, c. twice the respective level in 2018 (January – August 2018, cumulatively). Overall, consensus estimates for GDP growth in Q3:19 stand at 6.1% yoy (6.2% yoy in Q2:19), with the latest data suggesting risks for a weaker performance (6.0% yoy).

Equities

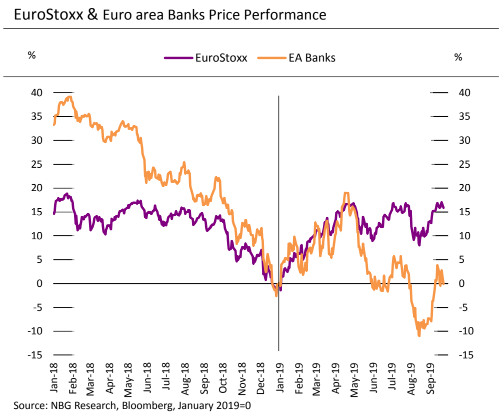
- **The global equity market rally since late-August paused in the past week (MSCI World: -0.4% wow | +5% since August 23rd) in view of geopolitical concerns (Middle East) and ahead of US – China trade talks resuming.** Developed markets (-0.4% wow | +16.6% ytd) and their emerging peers (-0.5% wow | +5.7% ytd) performed similarly. In the US, the S&P500 decreased by 0.5% wow (+19.4% ytd), with Automobiles (-3.8% wow) and Industrials (-1.5% wow) underperforming. On the other side of the Atlantic, the EuroStoxx was broadly flat in the past week (Energy overperformed, up by 4.5% wow on the back of higher oil prices), but declined by 1.0% on Monday September 23rd (+15.9% ytd) on account of disappointing PMIs. In Japan, the Nikkei 225 rose slightly by 0.4% wow (+10.3% ytd).

Fixed Income

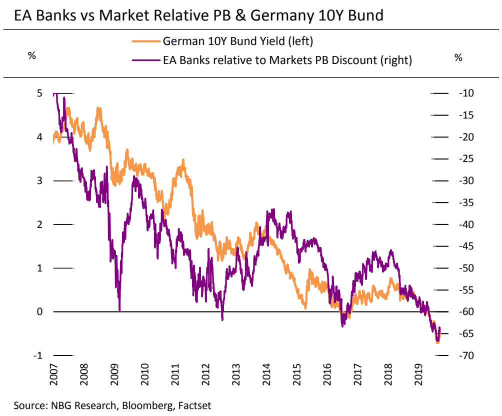
- **Government bond yields were down in the past week, with rising geopolitical risks in the Middle East and weak economic data in the euro area and China, which gave rise to concerns that the global growth slowdown is set to continue.** Specifically, the US Treasury 10-year yield fell by 18 bps wow to 1.72% and its 2-year equivalent by 12 bps to 1.69%. Note that reaction to the Fed was largely muted (UST 10-year yield: stable to 1.80% on September 18th and +3 bps to 1.76% for its 2-year counterpart) as the overall takeout from the meeting was close to expectations. UK 10-year Gilt yields declined by 13 bps to 0.63%, while in Germany, 10-year yields decreased by 7 bps in the past week and by a further 6 bps on Monday, to -0.58%. The weak economic data for the euro area released on Monday (PMIs) resulted in 10-year yields also falling sharply in Italy (-9 bps to 0.83%), Spain (-9 bps to 0.15%) and Portugal (-8 bps to 0.17%). **Corporate bond spreads recorded modest changes in the past week.** US HY spreads declined by 2 bps to 381 bps, while their euro area counterparts were up by 7 bps to 343 bps (further +4 bps on Monday to 347 bps). In the IG spectrum, US investment grade spreads were down by 2 bps to 119 bps and EUR spreads rose by 2 bps to 110 bps.

FX and Commodities

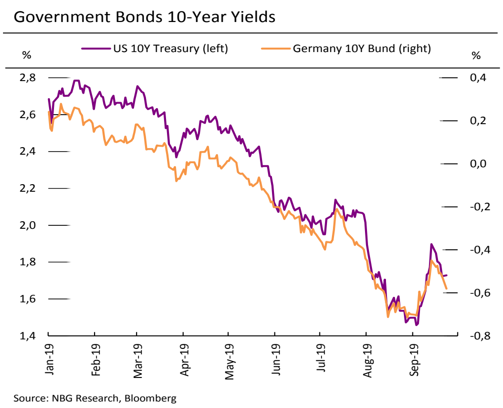
- **In foreign exchange markets, the euro lost ground against the USD due to economic data in the euro area underperforming those in the US.** Specifically, the euro was down by 0.5% in the past week and by a further 0.2% on Monday to $1.099. The Japanese Yen was up by 0.5% wow against the US Dollar to ¥107.57 and by 1.0% wow against the euro to ¥118.45 in the past week, mainly due to the Bank of Japan's inaction (contrary to the recent easing of monetary policy in the US and the euro area). Finally, the British Pound continues to demonstrate volatility linked to investors' perceptions (or/and speculation) regarding the prospects of Brexit (in particular, regarding its eventual form and timing). Overall, the British Pound was up by 0.7% in the past week (in nominal effective exchange terms), followed by a decline of 0.5% on Monday.
- **In commodities, oil prices rose in the past week, in view of concerns for supply disruptions, stemming from heightened geopolitical tensions in the Middle East.** Overall, Brent was up by 6.6% wow to $64.6/bbl, due to the +12.8% recorded in the start of the week (the largest daily increase since 1991), following the attacks on two major oil facilities in Saudi Arabia. Saudi officials initially stated the damage would halt more than half of current production (5.7 mb/d), but thereafter some reassurances were provided for a timely restoration of the facilities, thus easing supply concerns. Similarly, the WTI increased by 5.9% wow to $58.1/bbl (+14.7% on Monday September 16th).



Graph 1.



Graph 2.



Graph 3.

Quotes of the week: "If the economy does turn down, then a more extensive sequence of rate cuts could be appropriate… it's better to be proactive in adjusting policy…it can be a mistake to try to hold onto your firepower until a downturn gains momentum", **Fed Chair, Jerome Powell, September 18th 2019.**

NBG Global Portfolio Tactical Asset Allocation (TAA)

- **Equities**: With global growth risks rising amid an escalation of trade war, we return market-weight **to a Strategic Asset Allocation (SAA) benchmark of 60-30-10,** which is categorized as a moderate to moderate aggressive portfolio with AR of 7% and STDEV of 10% based on 15-year history, until we have a more clear view on trade developments in the following month (US/Mexico @ June 10, US/China next tranche of tariffs @ end June/early July). Equity valuations are back close to end-July highs, with the MSCI DM P/E ratio at 15.9x vs a 15-y average of 14.1x. Forward EPS estimates, so far, appear immune, albeit we expect them to head south in the following weeks as growth slow-downs. Intra-class, we closed our EM trade as US-China trade war tail risks has re-emerged recently (May 5th) creating uncertainty and hurting the relative trade.
- **Government Bonds:** For the first time in many years, higher yields (lower prices) do not form our baseline scenario. There is an increasing probability that the Fed will proceed with interest rate cuts in order to combat recession risks. UST yields may have peaked for this cycle at 3.25% as long as inflation pressures are modest. German Bunds (at historic lows) and UK Gilts yields, however, have upside assuming euro area growth stabilizes and Brexit negotiations conclude with some form of deal. Overall, **market-weight in Govies.**
- **Credit**: We turned broadly neutral **in Corporate Bonds**. The Fed has adopted a more dovish stance implying interest rate cuts in 2019-2020, a supportive factor for corporate fundamentals. We retain a neutral view intra-class and cross-currency, albeit trade risks are increasing and recessions risks are re-emerges. Moreover, medium-term, deteriorating Debt-Service-Ratios and Quality (BBB issues are 50% of IG indices vs 20% pre-QE) and the eventual turn of economic cycle will weigh on spreads and returns.

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

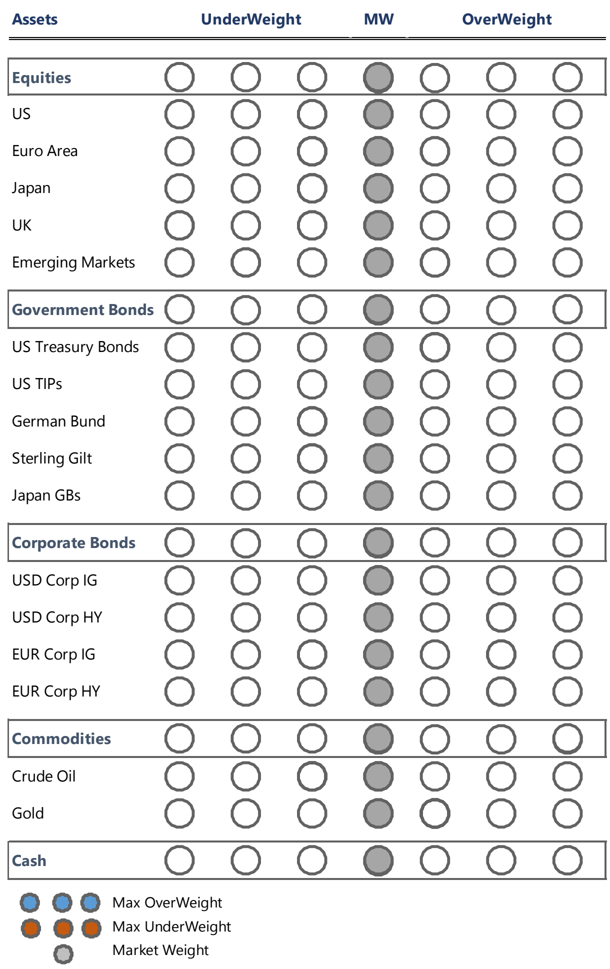


Figure1. **NBG Global Portfolio TAA Tilts: LEVEL 1**

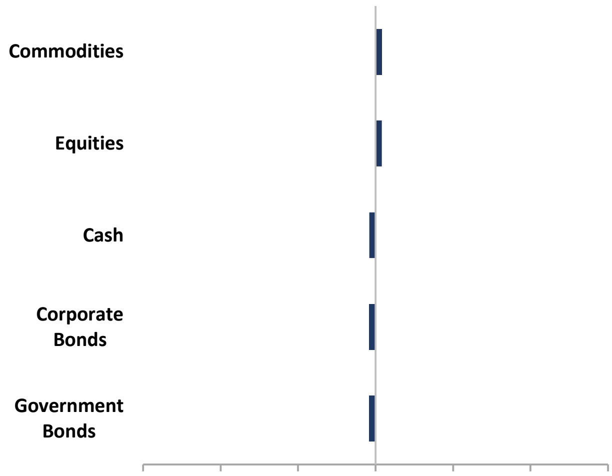
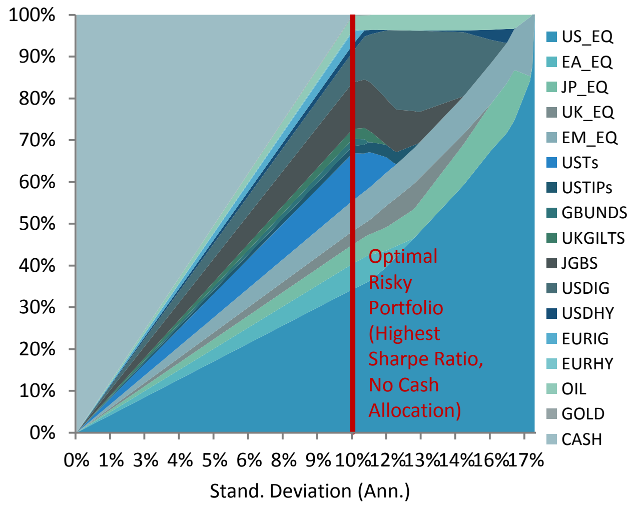


Figure3. **Efficient Portfolio Allocation for Various Volatility Levels**



(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 + 2019 EPS growth expectations have stabilized + Cash-rich corporates will lead to share buybacks and higher dividends (de-equitization) – Peaking profit margins – Protectionism and trade wars ● **Neutral/Positive**	+ 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 if Fed seek makeup strategies – Global search for yield by non-US investors continues – Safe haven demand – Fed is expected to cut rates in H2:2019 ▲ **Slightly higher yields expected**	+ Valuations appear excessive compared with long-term fundamentals – Political Risks – Fragile growth outlook – Medium-term inflation expectations remain low – ECB could restart QE – 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	+ Safe-haven demand – Fed is expected to cut rates in H2:2019 – Mid-2018 rally probably out of steam ● **Broadly Flat USD against the EUR with upside risks towards $1.17**	+ Reduced short-term tail risks + Higher core bond yields + Current account surplus – Sluggish growth – Deflation concerns – The ECB's monetary policy to remain extra loose (Targeted-LTROs, ABSs, Quantitative Easing) ● **Broadly Flat EUR against the USD with upside risks towards $1.17**	+ Safe haven demand + More balanced economic growth recovery (long-term) + Inflation is bottoming out – Additional Quantitative Easing by the Bank of Japan if inflation does not approach 2% ▲ **Slightly higher JPY**	+ Transitions phase negotiations + The BoE is expected to increase short-term policy rates assuming WA deal – Sizeable Current account deficit – Elevated Policy uncertainty to remain due to the outcome of the Referendum and the negotiating process ▲ **Higher GBP expected but with Brexit risk premia working on both directions**

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

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Interest Rates & Foreign Exchange Forecasts

10-Yr Gov. Bond Yield (%)	September 20th	3-month	6-month	12-month	Official Rate (%)	September 20th	3-month	6-month	12-month
Germany	-0,52	-0,50	-0,40	-0,30	Euro area	0,00	0,00	0,00	0,00
US	1,72	1,80	1,90	2,00	US	2,00	2,00	1,75	1,50
UK	0,63	0,65	0,70	0,79	UK	0,75	0,70	0,70	0,70
Japan	-0,21	-0,23	-0,20	-0,17	Japan	-0,10	-0,14	-0,14	-0,14

Currency	September 20th	3-month	6-month	12-month		September 20th	3-month	6-month	12-month
EUR/USD	1,10	1,13	1,15	1,15	USD/JPY	108	106	104	103
EUR/GBP	0,88	0,91	0,90	0,89	GBP/USD	1,25	1,25	1,28	1,29
EUR/JPY	118	119	119	118					

Forecasts at end of period

Economic Forecasts

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

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

	2015	2016	2017	2018	2019f	2020f
Real GDP Growth (%)						
Turkey	6,1	3,2	7,5	2,8	0,4	3,5
Romania	3,9	4,8	7,0	4,1	4,2	3,6
Bulgaria	3,5	3,9	3,8	3,1	3,8	3,3
Serbia	1,8	3,3	2,0	4,3	3,6	3,8
Headline Inflation (eop,%)						
Turkey	8,8	8,5	11,9	20,3	14,2	11,0
Romania	-0,9	-0,5	3,3	3,3	4,0	3,5
Bulgaria	-0,4	0,1	2,8	2,7	2,9	2,7
Serbia	1,5	1,6	3,0	2,0	1,8	2,0
Current Account Balance (% of GDP)						
Turkey	-3,7	-3,8	-5,5	-3,5	-0,5	-2,0
Romania	-1,2	-2,1	-3,2	-4,5	-5,5	-5,7
Bulgaria	0,0	2,6	3,1	4,6	4,0	3,0
Serbia	-3,5	-2,9	-5,3	-5,2	-5,0	-4,5
Fiscal Balance (% of GDP)						
Turkey	-1,0	-1,1	-1,5	-1,9	-2,6	-2,4
Romania	-1,5	-2,4	-2,8	-2,9	-3,6	-3,8
Bulgaria	-2,8	1,6	0,8	0,1	-2,1	-0,5
Serbia	-3,5	-1,2	1,1	0,6	-0,5	-0,4

f: NBG forecasts

Stock Markets (in local currency)

Country - Index	23/9/2019	Last week return (%)	Year-to-Date change (%)	2-year change (%)
Turkey - ISE100	100.021	-2,5	10,6	-3,9
Romania - BET-BK	1.772	2,2	21,7	7,5
Bulgaria - SOFIX	573	-1,2	-3,6	-15,6
Serbia - BELEX15	754	-0,5	-1,0	4,0

Financial Markets

	23/9/2019	3-month forecast	6-month forecast	12-month forecast
1-m Money Market Rate (%)				
Turkey	16,5	16,0	15,0	12,5
Romania	2,8	3,0	3,0	3,0
Bulgaria(*)	0,0	0,0	0,0	0,1
Serbia	1,7	2,0	2,2	2,3
Currency				
TRY/EUR	6,28	6,72	6,90	7,35
RON/EUR	4,75	4,80	4,82	4,85
BGN/EUR	1,96	1,96	1,96	1,96
RSD/EUR	117,5	116,5	116,0	115,0
Sovereign Eurobond Spread (bps)				
Turkey (USD 2025)(**)	462	500	450	400
Romania (EUR 2024)	97	110	105	100
Bulgaria (EUR 2022)	49	55	50	40
Serbia (EUR 2029)	165	165	160	155

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

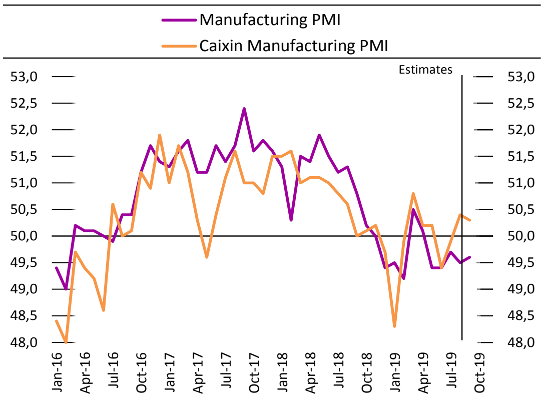
Economic Calendar

In the US, the final estimate of GDP growth in the 2nd quarter of the year is released on Thursday, and is expected stable compared with the previous estimate at 2.0% qoq saar (3.1% qoq saar in Q1:19).

In the Euro area, attention turns to ECB's data on bank lending that will be released on September 26th, followed by the unemployment rate report for August (current: 7.5%).

In China, focus turns on September's business surveys with official and Caixin's Manufacturing PMI due on September 30th. Recall that PMIs were mixed in August. Official manufacturing PMI came at 49.5, standing below the expansion/contraction threshold of 50.0 for a 4th consecutive month. In contrast, the Caixin/Markit manufacturing PMI was up by 0.5 pts to 50.4 in August.

China PMIs



Source: NBG Research, Bloomberg

Economic News Calendar for the period: September 17 - September 30, 2019

Tuesday 17

		S		A	P
US					
Industrial Production (MoM)	August	0.2%	+	0.6%	-0.1%
NAHB housing market confidence index	September	66	+	68	67
Net Long-term TIC Flows ($ bn)	July	..		84.3	100.6
GERMANY					
ZEW survey current situation	September	-15.0	-	-19.9	-13.5
ZEW survey expectations	September	-38.0	+	-22.5	-44.1

Wednesday 18

		S		A	P
US					
Building permits (k)	August	1250	+	1364	1215
Housing starts (k)	August	1300	+	1419	1317
Fed announces its intervention rate	September 18	2.00%		2.00%	2.25%
UK					
CPI (YoY)	August	1.9%	-	1.7%	2.1%
CPI Core (YoY)	August	1.8%	-	1.5%	1.9%
JAPAN					
Exports YoY	August	-10.0%	+	-8.2%	-1.5%
Imports YoY	August	-10.7%	-	-12.0%	-1.2%

Thursday 19

		S		A	P
US					
Philadelphia Fed Business Outlook	September	10.5	+	12.0	16.8
Initial Jobless Claims (k)	September 14	231	+	211	206
Continuing Claims (k)	September 7	1672	+	1661	1674
Existing home sales (mn)	August	5.38	+	5.49	5.42
UK					
Retail sales Ex Auto MoM	August	-0.3%		-0.3%	0.4%
BoE announces its intervention rate	September 19	0.75%		0.75%	0.75%
JAPAN					
Bank of Japan announces its intervention rate	September 19	-0.10%		-0.10%	-0.10%

Friday 20

		S		A	P
JAPAN					
CPI (YoY)	August	0.3%		0.3%	0.5%
Core CPI (YoY) - ex. Fresh Food	August	0.5%		0.5%	0.6%
Core CPI (YoY) - ex. Fresh Food and Energy	August	0.5%	+	0.6%	0.6%
EURO AREA					
Consumer Confidence Indicator	September	-7.0	+	-6.5	-7.1

Monday 23

		S		A	P
US					
Markit US Manufacturing PMI	September	50.4	+	51.0	50.3
EURO AREA					
Markit Eurozone Manufacturing PMI	September	47.3	-	45.6	47.0
Markit Eurozone Services PMI	September	53.3	-	52.0	53.5
Markit Eurozone Composite PMI	September	52.0	-	50.4	51.9

Tuesday 24

		S	A	P
US				
S&P Case/Shiller house price index 20 (YoY)	July	2.10%	..	2.13%
Conference board consumer confidence	September	133.0	..	135.1
JAPAN				
Manufacturing PMI	September	..	..	49.3
GERMANY				
IFO- Business Climate Indicator	September	94.5	..	94.3
IFO-Expectations	September	92.0	..	91.3
IFO- Current Assesment	September	96.9	..	97.4

Wednesday 25

		S	A	P
US				
New home sales (k)	August	656	..	635

Thursday 26

		S	A	P
US				
GDP (QoQ, annualized)	Q4:19 F	2.0%	..	2.0%
Personal consumption (QoQ, annualized)	Q4:19 F	4.7%	..	4.7%
Initial Jobless Claims (k)	September 21	211	..	208
Continuing Claims (k)	September 14	1666	..	1661
Pending home sales (MoM)	August	1.0%	..	-2.5%
EURO AREA				
M3 money supply (YoY)	August	5.1%	..	5.2%

Friday 27

		S	A	P
US				
Personal income (MoM)	August	0.4%	..	0.1%
Personal spending (MoM)	August	0.3%	..	0.6%
EURO AREA				
ECB publishes its Economic bulletin				
Business Climate Indicator	September	0.12	..	0.11
Economic Confidence	September	103.0	..	103.1

Monday 30

		S	A	P
UK				
GDP (QoQ)	Q4:19 F	..	..	-0.2%
GDP (YoY)	Q4:19 F	..	..	1.2%
JAPAN				
Retail sales (MoM)	August	..	..	-2.3%
Retail sales (YoY)	August	..	..	-2.0%
Industrial Production (MoM)	August	..	..	1.3%
Industrial Production (YoY)	August	..	..	0.7%
EURO AREA				
Unemployment Rate	August	..	..	7.5%
CHINA				
Caixin PMI Manufacturing	September	50.3	..	50.4
PMI manufacturing	September	49.6	..	49.5

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 (%)	Emerging Markets	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
US	S&P 500	2992	-0,5	19,4	2,1	19,3	MSCI Emerging Markets	57313	-0,1	7,3	-0,8	-2,6
Japan	NIKKEI 225	22079	0,4	10,3	-6,7	8,7	MSCI Asia	842	-0,3	7,4	-3,1	-5,5
UK	FTSE 100	7345	-0,3	9,2	-0,3	1,0	China	78	-1,9	9,7	-1,6	-8,4
Canada	S&P/TSX	16900	1,3	18,0	4,2	9,8	Korea	646	2,2	6,9	-7,3	-11,7
Hong Kong	Hang Seng	26436	-3,4	2,3	-3,8	-6,0	MSCI Latin America	94956	1,3	9,9	10,6	10,8
Euro area	EuroStoxx	385	0,1	17,1	1,1	0,5	Brazil	336711	1,2	16,5	29,1	30,3
Germany	DAX 30	12468	0,0	18,1	1,1	-0,8	Mexico	40255	1,8	4,0	-12,0	-15,0
France	CAC 40	5691	0,6	20,3	4,4	8,6	MSCI Europe	5947	0,2	12,0	10,6	15,0
Italy	FTSE/MIB	22123	-0,3	20,7	3,4	-1,0	Russia	1256	0,7	18,2	16,9	37,8
Spain	IBEX-35	9179	0,4	7,5	-4,2	-10,8	Turkey	1361404	-3,2	8,7	5,7	-7,1

World Market Sectors (MSCI Indices)

in US Dollar terms	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)	in local currency	Current Level	1-week change (%)	Year-to-Date change (%)	1-Year change (%)	2-year change (%)
Energy	194,1	2,1	6,2	-16,0	-6,5	Energy	202,0	2,2	6,8	-14,1	-2,8
Materials	255,1	-1,1	12,1	-5,5	-3,0	Materials	248,1	-0,9	13,2	-2,9	1,9
Industrials	260,2	-1,1	18,3	-2,4	4,7	Industrials	259,3	-1,0	19,1	-1,3	7,1
Consumer Discretionary	262,8	-1,9	17,8	0,3	17,9	Consumer Discretionary	254,8	-1,8	18,2	0,9	19,6
Consumer Staples	243,8	-0,5	16,7	7,2	6,7	Consumer Staples	247,1	-0,4	17,6	9,2	10,0
Healthcare	250,5	1,2	9,0	-0,7	10,4	Healthcare	249,2	1,3	9,4	0,3	12,3
Financials	117,1	-0,9	13,6	-5,4	-2,1	Financials	118,7	-0,7	14,4	-3,6	1,7
IT	273,6	-0,6	28,5	6,2	34,3	IT	265,5	-0,6	28,7	6,5	35,0
Telecoms	73,6	-0,8	19,3	9,8	3,7	Telecoms	77,1	-0,7	19,5	11,1	6,5
Utilities	146,6	1,7	16,4	15,6	12,1	Utilities	151,7	1,9	17,4	17,6	15,3

Bond Markets (%)

10-Year Government Bond Yields	Current	Last week	Year Start	One Year Back	10-year average
US	1,72	1,90	2,69	3,06	2,44
Germany	-0,52	-0,45	0,24	0,47	1,22
Japan	-0,21	-0,15	0,00	0,12	0,52
UK	0,63	0,76	1,28	1,59	2,06
Greece	1,35	1,59	4,40	4,07	10,09
Ireland	0,03	0,07	0,90	0,96	3,59
Italy	0,92	0,88	2,74	2,88	3,26
Spain	0,24	0,30	1,42	1,51	3,06
Portugal	0,25	0,32	1,72	1,88	4,84

US Mortgage Market (1. Fixed-rate Mortgage)	Current	Last week	Year Start	One Year Back	10-year average
30-Year FRM[1] (%)	4,0	4,0	4,8	4,9	4,2
vs 30Yr Treasury (bps)	185	164	183	168	112

Government Bond Yield Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
US Treasuries 10Y/2Y	4	10	20	26	151
US Treasuries 10Y/5Y	12	15	17	11	78
Bunds 10Y/2Y	20	26	85	100	123
Bunds 10Y/5Y	19	25	55	58	76

Corporate Bond Spreads (in bps)	Current	Last week	Year Start	One Year Back	10-year average
EM Inv. Grade (IG)	158	153	213	166	216
EM High yield	563	556	586	493	656
US IG	119	121	159	113	153
US High yield	381	383	533	325	510
Euro area IG	110	108	154	114	142
Euro area High Yield	343	336	506	344	500

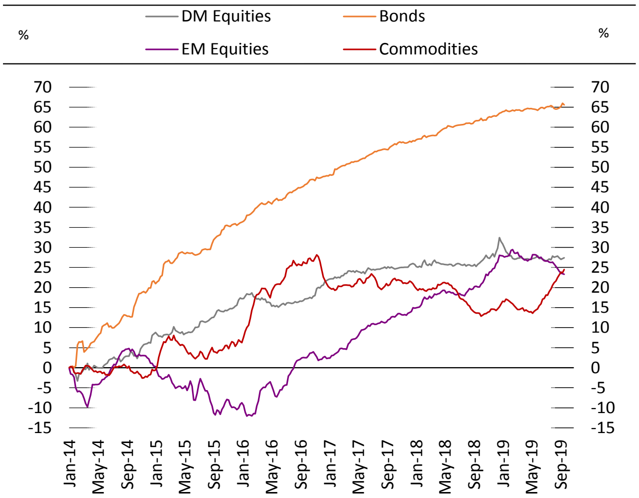
Foreign Exchange & Commodities

Foreign Exchange	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Euro-based cross rates					
EUR/USD	1,10	-0,5	-0,6	-6,4	-3,9
EUR/CHF	1,09	-0,4	0,3	-3,3	-3,2
EUR/GBP	0,88	-0,3	-3,4	-0,5	-1,8
EUR/JPY	118,45	-1,0	0,2	-10,6	-5,8
EUR/NOK	9,98	0,3	0,7	4,0	0,7
EUR/SEK	10,71	0,6	0,4	3,7	5,5
EUR/AUD	1,63	1,2	-0,4	0,8	0,1
EUR/CAD	1,46	-0,7	-0,8	-3,8	-6,5
USD-based cross rates					
USD/CAD	1,33	-0,2	-0,2	2,8	-2,8
USD/AUD	1,48	1,7	0,2	7,8	4,2
USD/JPY	107,57	-0,5	0,9	-4,4	-1,9

Commodities	Current	1-week change (%)	1-month change (%)	1-Year change (%)	Year-to-Date change (%)
Agricultural	319	-0,2	1,3	-9,3	-8,7
Energy	475	5,8	6,5	-13,8	23,9
West Texas Oil ($)	58	5,9	4,2	-18,0	27,9
Crude brent Oil ($)	65	6,6	7,2	-17,6	21,5
Industrial Metals	1217	-1,7	2,1	-2,3	2,5
Precious Metals	1780	1,1	0,4	24,3	17,1
Gold ($)	1517	1,9	0,9	25,7	18,3
Silver ($)	18	3,2	5,1	25,7	16,1
Baltic Dry Index	2131	-7,8	3,4	52,7	67,7
Baltic Dirty Tanker Index	828	16,9	25,6	6,2	-33,9

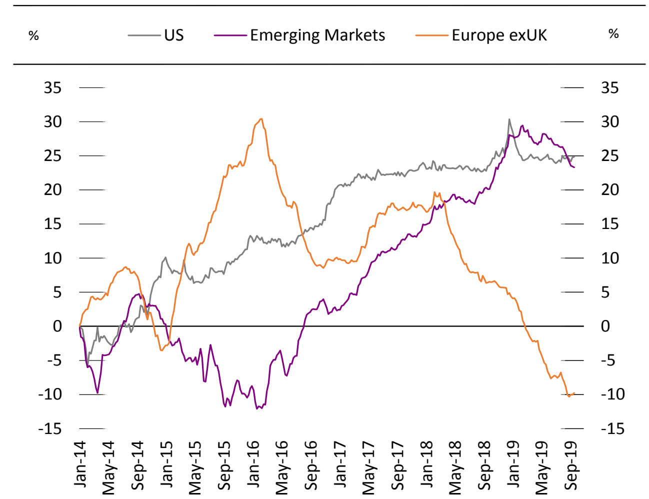
Source: Bloomberg, as of September 20th, S&P/Goldman Sachs Indices for Agricultural, Energy, Industrial & Precious Metals, BofA/ML Indices for Corporate Bond Spreads

Global Cross Asset ETFs: Flows as % of AUM



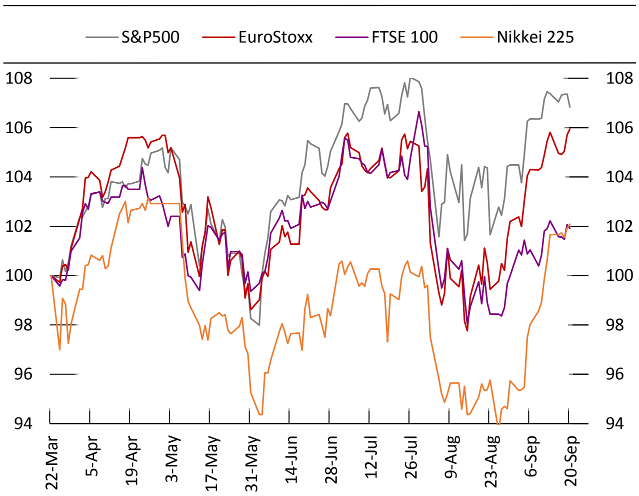
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of September 20th

Equity ETFs: Flows as % of AUM



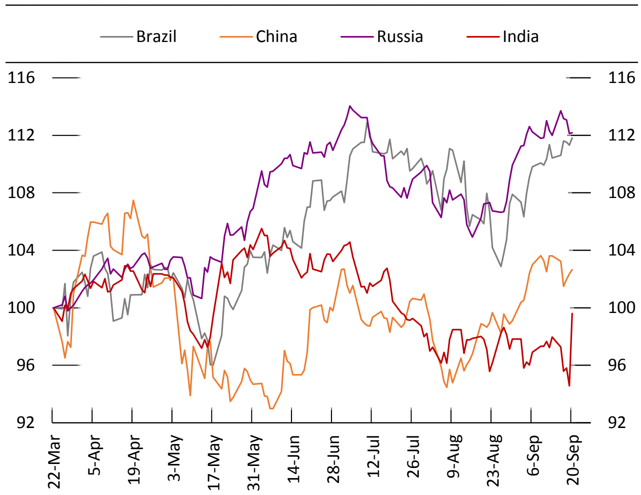
Source: Bloomberg, NBG estimates, Cumulative flows since January 2014, AUM stands for Assets Under Management, Data as of September 20th

Equity Market Performance - G4



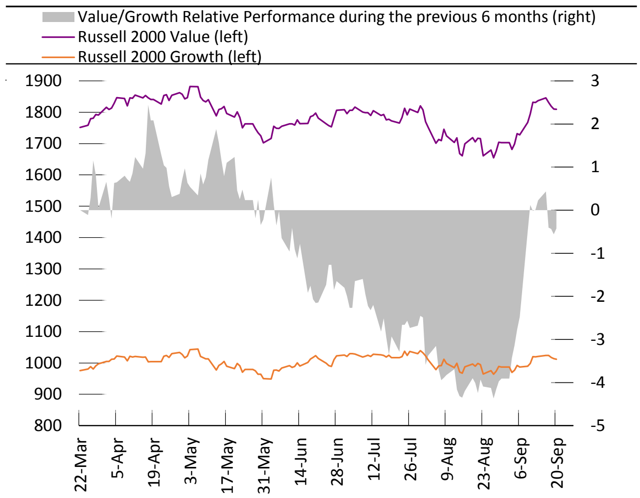
Source: Bloomberg - Data as of September 20th – Rebased @ 100

Equity Market Performance - BRICs



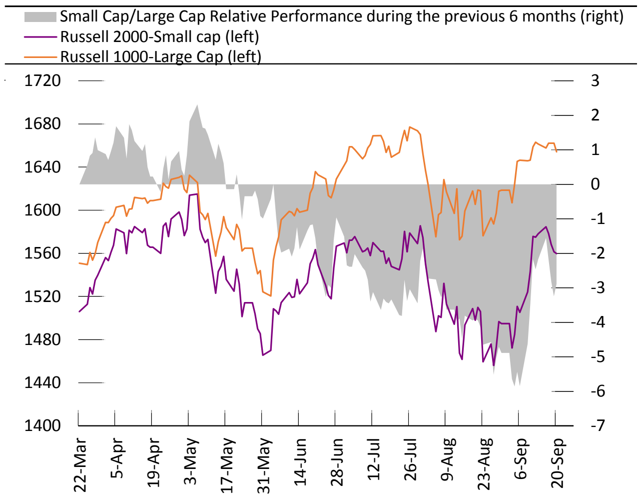
Source: Bloomberg - Data as of September 20th – Rebased @ 100

Russell 2000 Value & Growth Index



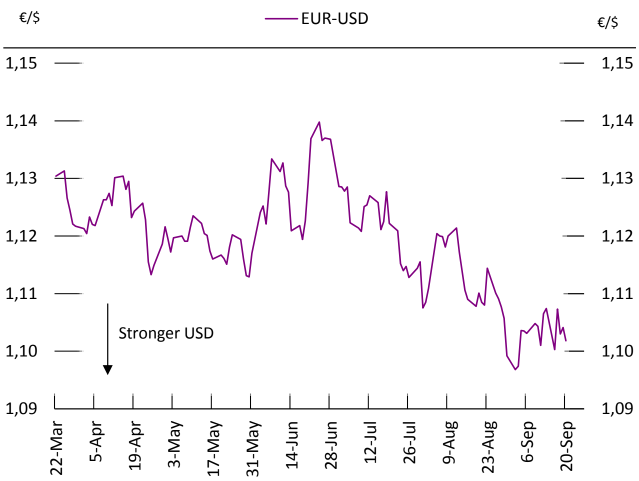
Source: Bloomberg, Data as of September 20th

Russell 2000 & Russell 1000 Index



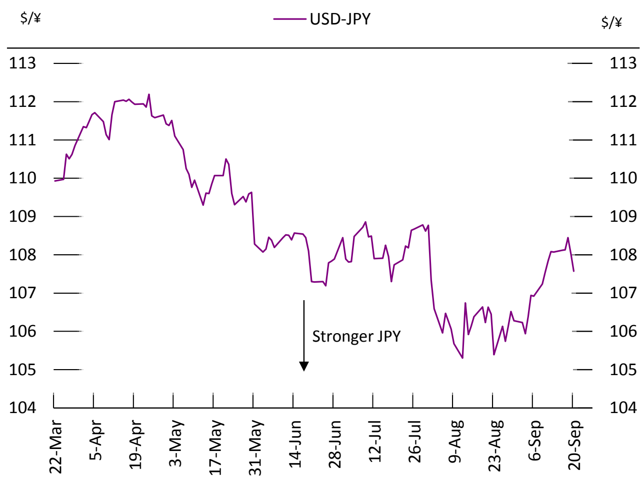
Source: Bloomberg, Data as of September 20th

EUR/USD



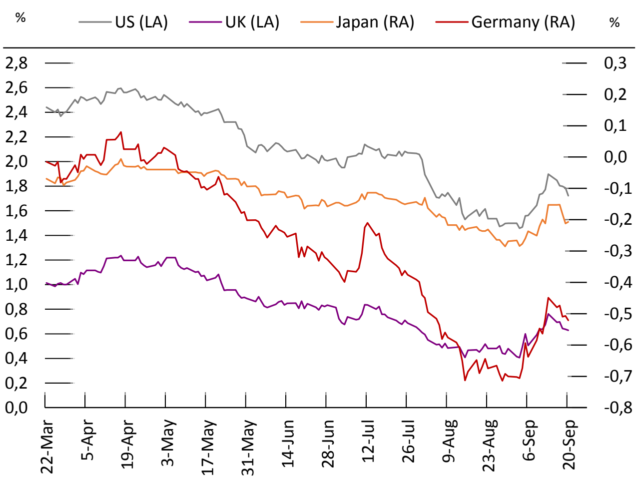
Source: Bloomberg, Data as of September 20th

JPY/USD



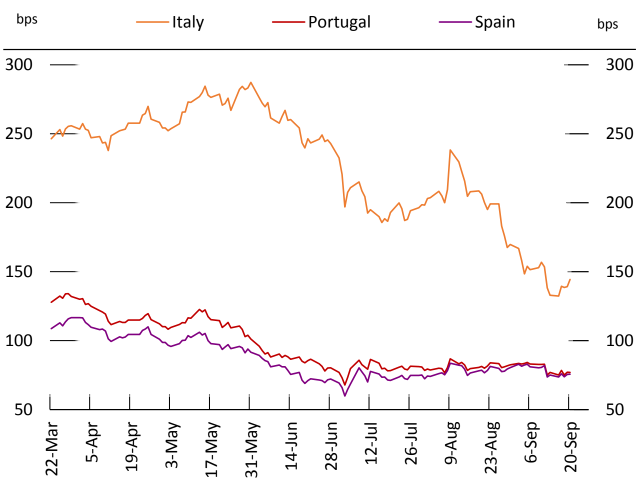
Source: Bloomberg, Data as of September 20th

10- Year Government Bond Yields



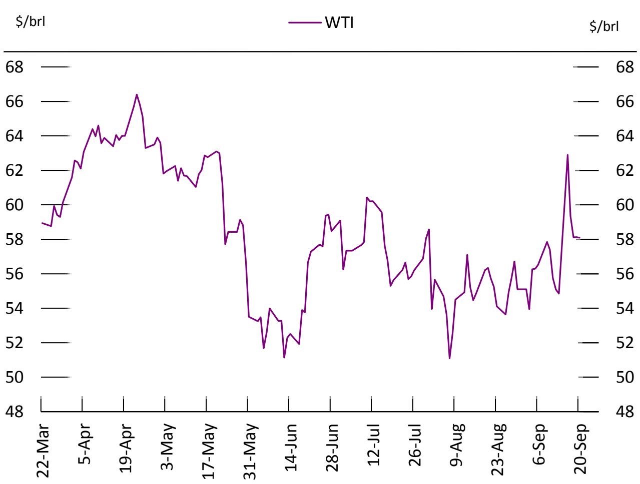
Source: Bloomberg - Data as of September 20th
LA:Left Axis RA:Right Axis

10- Year Government Bond Spreads



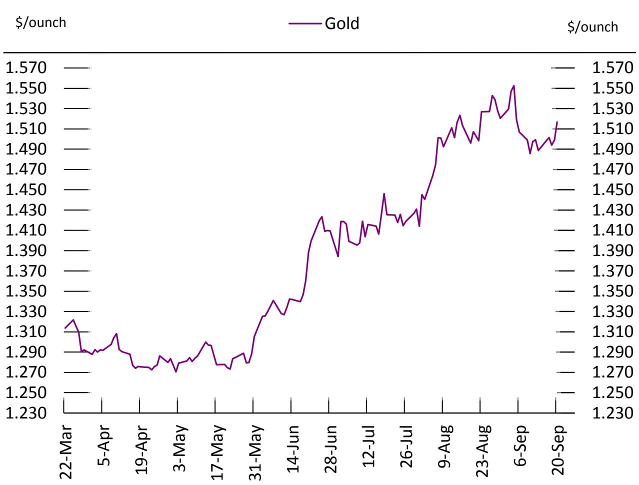
Source: Bloomberg - Data as of September 20th

West Texas Intermediate ($/brl)



Source: Bloomberg, Data as of September 20th

Gold ($/ounch)



Source: Bloomberg, Data as of September 20th

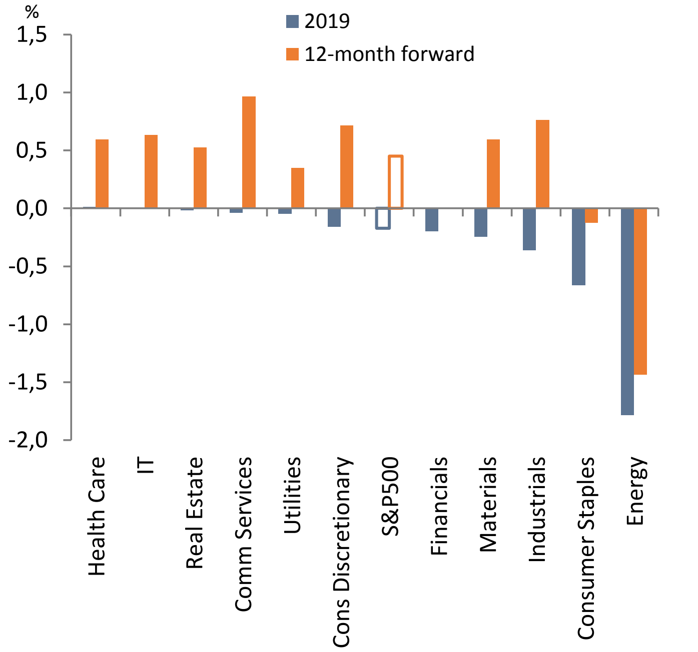
US Sectors Valuation

	Price ($)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/9/2019	% Weekly Change	2018	2019	2018	2019	2018	2019	12m fwd	10Yr Avg	2018	2019	12m fwd	10Yr Avg
S&P500	2992	-0,5	18,0	5,4	2,0	1,9	17,4	18,2	17,0	14,9	3,2	3,3	3,2	2,5
Energy	452	1,0	64,4	-5,1	3,2	3,8	19,9	19,3	16,7	19,5	1,8	1,5	1,5	1,8
Materials	366	-0,9	23,5	-14,8	1,9	2,1	16,7	19,2	17,4	14,6	2,6	2,4	2,3	2,5
Financials														
Diversified Financials	686	-1,4	27,8	5,9	1,3	1,6	16,0	14,7	14,0	13,8	1,9	1,7	1,6	1,5
Banks	332	-1,2	24,6	11,1	2,2	2,9	13,0	10,8	10,6	11,5	1,4	1,2	1,2	1,0
Insurance	436	0,4	33,6	7,2	2,2	2,0	12,2	12,6	12,1	10,7	1,4	1,5	1,4	1,1
Real Estate	243	2,1	5,8	3,4	3,8	3,1	16,7	21,0	20,2	18,2	3,1	3,9	4,0	2,9
Industrials														
Capital Goods	689	-1,1	15,3	-1,5	2,0	2,0	19,1	19,1	16,5	15,4	4,7	4,9	4,5	3,3
Transportation	757	-3,6	25,0	9,8	1,8	2,0	14,0	13,8	12,9	13,7	3,6	4,1	3,8	3,3
Commercial Services	337	1,4	16,7	8,6	1,5	1,4	22,8	27,1	25,4	19,5	4,1	5,5	5,3	3,3
Consumer Discretionary														
Retailing	2369	-2,4	22,4	22,0	0,8	0,8	31,1	30,4	27,3	20,6	10,2	11,8	10,3	5,8
Media	606	-1,3	18,7	12,1	0,4	0,4	23,6	24,0	21,3	19,4	4,1	3,7	3,3	3,1
Consumer Services	1278	-1,1	17,2	9,8	1,9	1,9	20,6	22,9	21,1	18,9	8,9	16,0	15,0	6,1
Consumer Durables	332	-1,5	14,3	-1,8	1,6	1,6	16,8	17,6	16,5	16,9	3,2	3,5	3,2	3,1
Automobiles and parts	116	-3,8	-5,4	-3,4	3,7	4,1	7,8	7,2	6,9	8,6	1,6	1,3	1,2	1,7
IT														
Technology	1290	-1,1	16,9	1,7	1,8	1,7	15,1	17,0	15,9	12,5	5,2	7,5	7,5	3,4
Software & Services	2110	0,1	14,0	10,6	1,3	1,1	22,5	25,7	23,7	16,7	6,8	8,5	7,6	5,0
Semiconductors	1058	-2,8	16,1	-4,8	1,9	2,1	14,8	16,2	15,6	14,0	4,3	4,7	4,4	3,0
Communication Services	171	-1,0	17,7	8,6	1,4	1,3	19,1	19,6	18,0	17,0	3,4	3,1	2,9	2,8
Consumer Staples														
Food & Staples Retailing	478	-1,1	12,1	2,0	2,1	1,8	17,4	21,3	20,7	15,8	3,6	4,5	4,3	3,0
Food Beverage & Tobacco	672	-0,7	12,5	-2,7	3,3	3,5	18,3	18,6	17,6	17,3	5,1	4,8	4,6	4,9
Household Goods	731	0,0	9,9	4,2	3,1	2,4	19,3	25,4	24,2	18,8	5,4	8,9	8,8	4,8
Health Care														
Pharmaceuticals	880	1,3	8,3	11,4	2,2	2,3	15,2	14,3	13,7	14,3	4,2	4,9	4,5	3,4
Healthcare Equipment	1243	0,6	13,1	15,5	1,1	1,1	18,0	18,2	16,9	14,9	3,3	3,2	3,0	2,5
Utilities	324	2,2	5,2	3,7	3,9	3,1	16,4	20,6	19,9	15,3	1,7	2,2	2,1	1,6

Source Factset, Blue box indicates a value more than +2standard devation from average, light blue a value more than +1standard devation from average. Orange box indicates a value less than -2standard devation from average, light orange a value less than -1standard devation from average

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

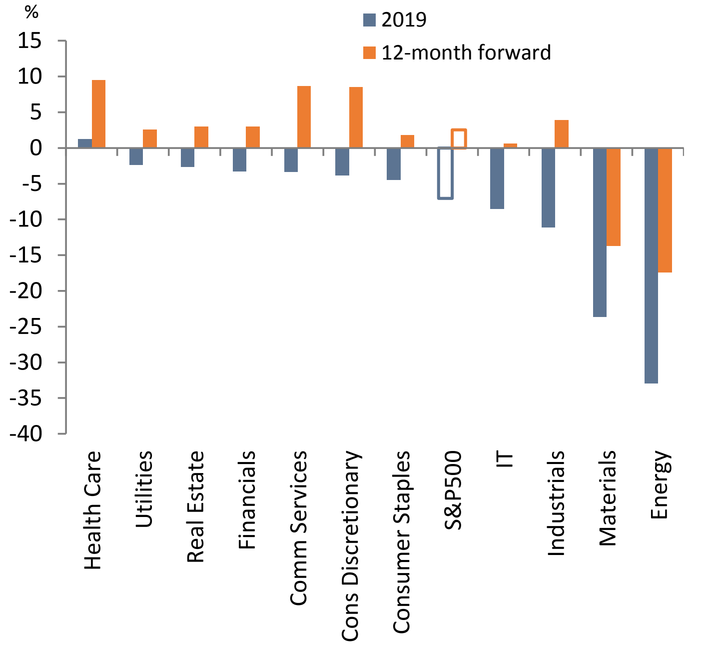
Earnings Revisions indicate 1-month change in 2019 & 12-month Forward EPS



Source: Factset, Data as of September 20th
12-month forward EPS are 28% of 2019 EPS and 72% of 2020 EPS

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

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



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12-month forward EPS are 28% of 2019 EPS and 72% of 2020 EPS

Euro Area Sectors Valuation

	Price (€)		EPS Growth (%)		Dividend Yield (%)		P/E Ratio				P/BV Ratio			
	20/9/2019	% Weekly Change	2018	2019	2018	2019	2018	2019	12m fwd	10Yr Avg	2018	2019	12m fwd	10Yr Avg
EuroStoxx	385	0,1	7,2	-3,6	3,2	3,3	14,8	15,4	14,4	13,1	1,6	1,6	1,6	1,4
Energy	331	4,5	7,3	15,7	4,8	4,9	13,6	12,5	11,3	11,4	1,2	1,2	1,2	1,2
Materials	464	-0,8	10,0	8,1	3,1	3,3	15,3	14,9	13,9	14,1	1,7	1,8	1,7	1,4
Basic Resources	179	-5,6	-4,3	-34,2	2,2	3,7	12,7	12,9	10,3	13,7	1,2	0,7	0,7	0,9
Chemicals	1094	-0,5	5,1	-21,7	2,8	2,8	16,0	20,4	18,9	14,9	2,4	2,0	1,9	2,2
Financials														
Fin/al Services	483	0,7	15,4	-1,6	2,5	2,5	15,9	17,0	16,3	14,0	1,7	1,6	1,8	1,3
Banks	89	-1,0	12,4	-8,3	4,1	6,2	11,5	8,3	8,1	10,2	0,9	0,6	0,6	0,7
Insurance	288	0,8	14,2	9,7	5,0	5,3	10,8	10,3	10,0	9,2	1,0	1,0	1,0	0,9
Real Estate	229	2,9	8,5	5,1	4,2	4,7	18,6	17,4	16,8	16,9	1,0	1,0	0,9	1,0
Industrial	876	-1,5	12,3	5,4	2,6	2,6	18,1	18,2	16,6	15,0	2,8	2,9	2,8	2,3
Consumer Discretionary														
Media	229	0,2	0,5	10,3	3,8	3,8	17,7	16,4	15,5	15,4	2,3	2,3	2,2	2,0
Retail	533	-1,0	10,8	6,4	2,7	2,9	20,3	21,3	19,7	18,3	2,7	3,3	3,2	2,7
Automobiles and parts	469	-1,6	4,6	-21,0	3,3	4,1	8,2	8,1	7,4	9,1	1,2	0,9	0,8	1,0
Travel and Leisure	182	-0,9	2,1	-28,4	1,7	2,3	12,0	13,2	11,4	16,3	2,0	1,7	1,6	1,8
Technology	553	0,4	2,7	2,8	1,6	1,4	21,5	23,3	20,8	18,1	3,5	3,7	3,5	2,9
Communication Services	299	1,8	-3,1	-8,6	4,9	4,9	13,7	15,2	14,2	13,4	1,7	1,8	1,8	1,7
Consumer Staples														
Food&Beverage	654	0,5	15,4	8,8	2,9	2,0	20,6	21,3	20,6	18,3	2,9	3,0	2,8	2,6
Household Goods	1027	-1,1	7,5	12,9	1,9	1,7	23,1	26,9	25,2	20,3	4,3	5,5	5,1	3,6
Health care	812	1,6	5,0	-1,7	2,5	2,4	17,0	17,9	16,7	14,9	2,1	2,1	2,1	2,1
Utilities	341	2,2	-4,4	9,4	5,2	4,5	14,1	16,6	15,4	12,5	1,2	1,6	1,5	1,1

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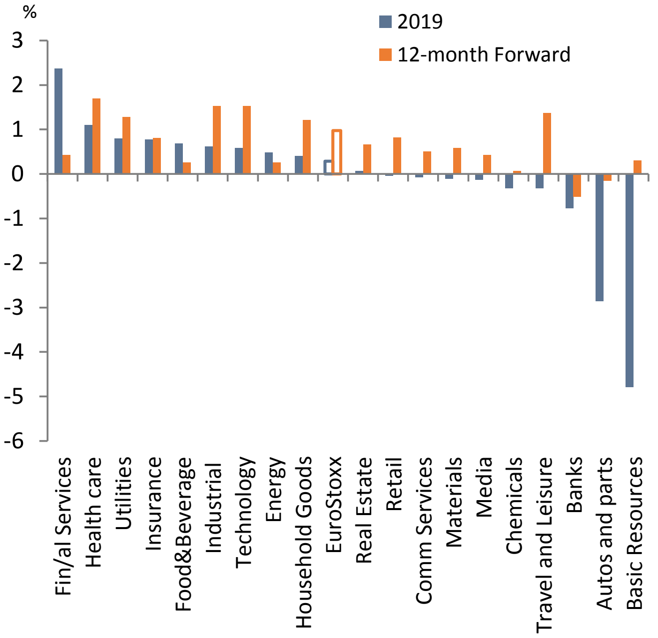

Source: Factset, Data as of September 20th
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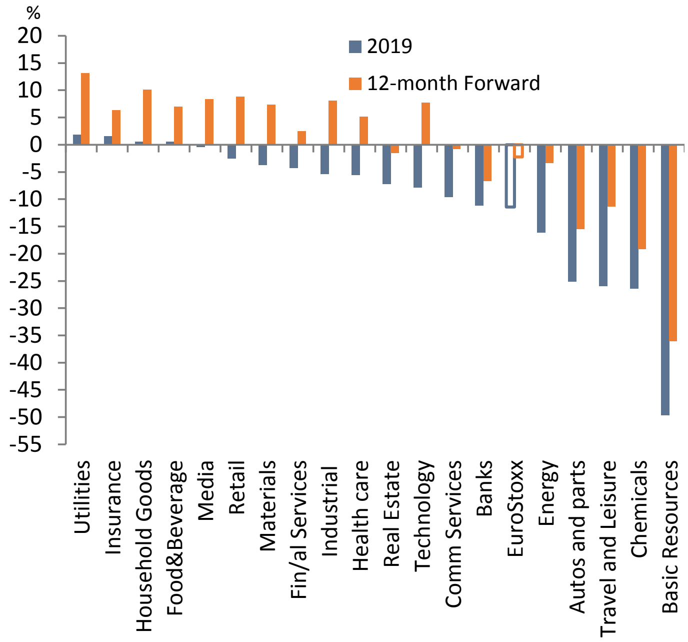
12-month revisions to 2019 & 12-month Forward EPS

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



Source: Factset, Data as of September 20th
12-month forward EPS are 28% of 2019 EPS and 72% of 2020 EPS

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