

US Equity Strategy

Market Update, Key Company Themes and Trends based on Textual Analysis of 25,000+ Transcripts

The market has staged a strong run so far this year (+12%) led by Cyclical and has reversed most of 4Q weakness (in-line with our view, see [2019 Outlook](#)). Equity valuation is less compelling than it was at the turn of this year (forward PE has rerated by ~2 turns to 16.5x, in-line with historical average). However, equity positioning is still relatively light across discretionary and systematic portfolios (~30th percentile) while retail saw outflows until late Feb. This implies most investors have not participated in this V-shaped recovery other than corporates and insiders who were accelerating purchases into the sell-off. Buyback activity remains elevated and so far in-line with 2018 which was a record year (see [Buyback report](#)). While the market is increasingly pricing-in a US/China trade deal, based on our discussion with investors, many still remain on the sideline waiting for a confirmation (given multiple false-positives thus far) before repositioning their portfolios. The Fed is signaling a more accommodative stance and China fiscal policy is turning more supportive. This backdrop should continue to favor risky assets and help reaccelerate the global business cycle. As noted in our [Global Style Investing](#) report, our fast moving business cycle indicator is suggesting a bottoming in US activity while the EM cycle indicator is already recovering. For these reasons, **the upside equity pain-trade should continue. We reiterate our S&P 500 price target of 3,000, and maintain our pro-cyclical sector stance** (Tech, Industrials, C. Disc, Energy), see [Cyclicals over Low Vol Defensives](#).

Investor response to 4Q earnings was better than feared. Given very low equity leverage/positioning at start of the reporting season, stocks delivered strong gains despite soft earnings delivery and lukewarm guidance — a contrast to prior quarters when companies delivered strong beats but investors were unfazed, see Figure 37. S&P 500 companies delivered record average 1-day excess return drift of 0.7% post-announcement (Figure 1) and outperformed both DM and EM peers (+7.5% since Jan 10th, vs. MSCI Europe +5.9%, MSCI Japan +3.9%, and MSCI EM 6.3%, see Figure 20). Equity performance was positive despite negative revisions to 2019 EPS (growth declined to 4% vs. 8% 3-months ago) on lower margin outlook. In our view, the expected margin compression is less related to late-cycle dynamics (i.e. falling demand, rising input costs, declining pricing power), but more driven by tariff related drags, poor trading environment for Financials, and certain company/industry specific factors that could ultimately prove to be temporary (e.g. Commodities, Semis, Apple, Facebook, Real Estate, etc.). The current environment is turning more reflationary and should be broadly supportive for margins in the coming quarters given expanding labor market, easing financing conditions, rising commodities prices, and lower USD. This should drive **above-trend revenue growth of 4-5% and roughly flat margins, which combined with strong buyback activity supports our view for 6-7% EPS growth for this year.** This stands in contrast to 2015/2016 earnings recession (when EPS compressed by -3%) that many are comparing the current environment to. We expect the trade-sensitive sectors that have seen sharp revisions (Tech, Industrials, Energy/Materials, see Figure 17) to deliver strong upside surprises given our ongoing assumption of a trade deal and/or stable to lower USD.

Key company themes and trends based on textual analysis of 25,000+ corporate transcripts. We deployed text mining tools to analyze earnings transcripts, conference calls and Q&A sessions for S&P 500 companies. Of particular interest was the recent 4Q18 corporate and investor commentary related to tariff impact, input costs, and

See page 20 for analyst certification and important disclosures.

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Figure 1: Record Excess Avg 1Day Return

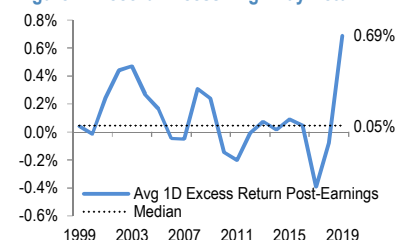


Figure 2: Key Topics Trend since 2012

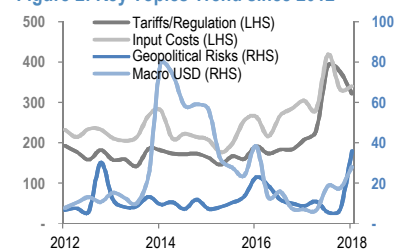


Figure 3: Tariff Discussion by Sector

| Sector | Scaled per Million Words for Universe | | | | |
|--------------------|---------------------------------------|------------|------------|------------|------------|
| | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Industrials | 375 | 403 | 849 | 726 | 819 |
| Discretionary | 422 | 388 | 698 | 673 | 584 |
| Staples | 510 | 450 | 526 | 641 | 568 |
| Materials | 331 | 645 | 731 | 653 | 549 |
| S&P 500 | 208 | 230 | 391 | 377 | 322 |
| Utilities | 116 | 126 | 155 | 137 | 267 |
| Technology | 132 | 130 | 318 | 382 | 257 |
| Health Care | 85 | 145 | 253 | 203 | 185 |
| Energy | 124 | 137 | 202 | 166 | 109 |
| Real Estate | 95 | 164 | 197 | 146 | 81 |
| Financials | 46 | 62 | 97 | 62 | 49 |
| Communication | 36 | 32 | 29 | 30 | 34 |

Source: J.P. Morgan US Equity Strategy

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investment spending activities. Below are key takeaways:

- Tariffs remain a key concern for US corporates though there has been a noticeable tick down in focus during Q&A sessions suggesting investors are now better versed on this risk.** At the industry level, there has been an uptick among Tech Hardware, Household & Personal Products, Retailing, Capital Goods, and Autos, see Figure 4. On the contrary, Materials, Food & Beverage, and Consumer Durables have seen a noticeable decline. Within Tech, there was a divergence with Hardware companies seeing an uptick (e.g., Apple) while Semis have seen a downtick in the latest quarter. In regards to supply chain, companies are not committing significant capital for shifting production capacity at this point (e.g., MMM noted no significant impact to supply chain from tariffs, TMO has plans to address supply chain if tariffs are made permanent). Instead, they are managing tariffs by raising prices where possible, idling and shifting production to geographies unaffected by tariffs, and/or passing cost to suppliers (e.g. ANET passing along costs to customers until required supply chain changes are made, A shifted US based demand to facilities in the US, HPE diversified supply chain ahead of tariffs with contingencies in place for a potential third tariff hike, MMM is raising prices to combat tariff and raw material cost increases). **If a trade deal materializes, it will remove uncertainty and could be a source of positive revisions since this catalyst is mostly not in consensus numbers.** US Multinationals, which saw largest negative revisions in recent months, are best positioned if China were to increase US imports of Basic Commodities, Industrials, and Tech goods. See Figure 52 for sector and companies most often discussing trade tariffs during reporting season.
- Input costs are a concern for trade sensitive industries; local producers are benefiting from lower commodity prices (i.e. Staples).** While input costs remain a key topic for US corporates in aggregate, the fears transitioned from passing down commodity related inflation (e.g., transportation, energy prices, raw materials) to trade and tariff related costs. For instance, there was a noticeable pick-up in discussion by companies that are impacted by ongoing trade tariffs (e.g. Autos, Retailing, Commercial and Professional Services), see Figure 5. However, after a sharp decline in crude (~40% in 4Q) and more broadly S&P GSCI (~20%), local producers received some relief (e.g. Food Retail, Food & Beverage, and Household Products, Figure 6). With commodity prices rising sharply YTD, input cost concerns could resurface in the coming quarters, especially for Staples.
- Contrary to popular investor narrative, fewer S&P 500 companies are highlighting rising wages as a risk.** Labor intensive industries (typically less specialized workers) remain concerned about the tightening labor market (see Figure 63, Discretionary and Real Estate at cycle highs). On the other hand, sectors that employ a more skilled workforce (Technology, Healthcare, Financials) less frequently discussed labor and wages in company reports. Since the latter makes up ~60% of S&P 500 market cap (and growing), the expanding labor market should be a net positive for S&P 500 profits through rising demand/revenue, which should more than offset wage pressures at this point in the cycle.
- Discussions of geopolitical risks picked-up in 4Q reaching the highest levels observed in 5 years.** At the sector level, there was a pick-up in Energy, Tech Hardware, Banks, and Transportation companies highlighting geopolitical risks. In particular, Energy companies discussed the negative impacts of geopolitics on oil supply and demand sentiment (e.g. SLB, COP, XOM) and some delays in regulatory approvals driven by the government shutdown (e.g. VLO, HFC). Further, Tech Hardware highlighted the increased complexity/uncertainty produced by the current state of geopolitics (e.g. Brexit, US-China, political unrest in parts of EM, etc.) and its potential for an adverse impact in the early parts of 2019 (e.g. CSCO, WDC, JNPR). Banks acknowledged still high geopolitical risks impacting the global economic growth outlook and reduced client activity (e.g. FITB, BAC, C).

Figure 4: Tariffs Trends for S&P 500 Industries

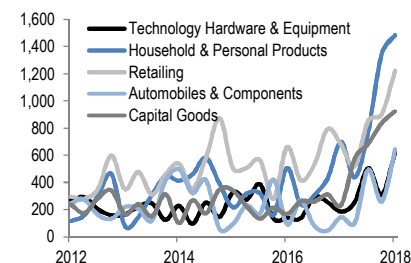


Figure 5: Input Costs a Key Concern for Autos

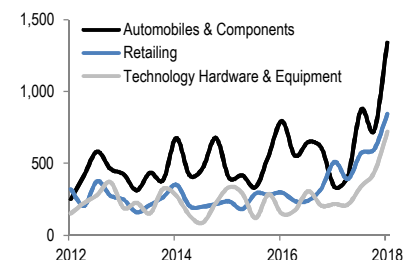


Figure 6: Staples Seeing Some Relief in Costs

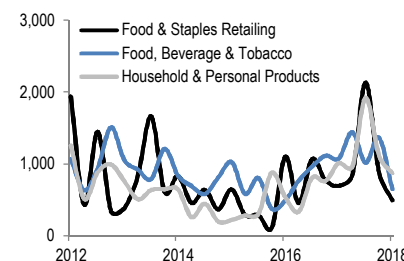


Figure 7: Geopolitical Sensitive Industries

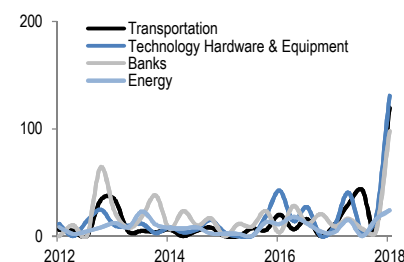
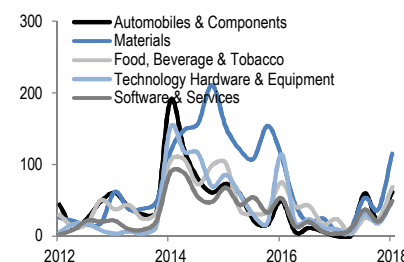


Figure 8: Corporates Most Discussing USD



Source: J.P. Morgan US Equity Strategy and Quantitative Research

Transportation highlighted rising geopolitical risks but companies were generally positive on demand (e.g. CSX, NSC, UAL, CHRW).

- **US Dollar discussion picked-up for Industrials, Materials, Staples and Technology.** For Autos, commentary was generally negative with the expectation of further currency headwinds through 2019 (e.g. GM, HOG, BWA) with similar commentary framing the discussion for Materials (e.g. APD, DWD) and Food & Beverage (e.g. KHC, KO). Within Tech, Hardware & Equipment continue to flag currency headwinds in EM markets (e.g. HPE, NTAP, CSCO, MSI). While Software companies flagged currency headwinds, they mentioned that demand remains steady (e.g. AKAM, WU, CTS). We estimate that every ~2% decline in USD TWI is ~1% upside for S&P 500 EPS. If USD dollar were to stabilize or begin a structural decline, this multi-year drag for US Multinationals could become a tailwind.

Capital Spending and Shareholder Return should remain robust. The deceleration in EPS growth (from ~10% ex Tax Act growth to 6-7% this year) is not material to create a negative feedback loop for corporate spending. In fact, the latest GDP report supports this view with investments in equipment growing by 7% and IP by 13% during 4Q even as corporates faced elevated market volatility and policy uncertainty. Also, US corporates remain flush with profits as net income margin has steadily risen over the cycle to a record high of ~12% (vs. 9.3% seen at prior cycle peak in 2007). While corporates should continue to reinvest at a robust pace in capex and R&D (S&P 500 already reinvests ~50% of operating cash flow, see below), we believe corporates will remain partial to buybacks given the strong profitability and excess cash.

- **Corporate buyback activity was robust throughout 2018, a trend that is likely to continue this year.** In-line with our view, 2018 turned out to be a record year for buyback announcements (\$939b) and executions (~\$820b). The existing buyback authorization balance has risen to ~\$650b, see Figure 11. **New buyback announcements remain strong YTD at \$187b** (in-line with 2018, which was a record year) **and we expect another \$600b+ of buybacks for remainder of 2019.** This should drive EPS growth of ~2.5% and will remain a significant technical support for US equities. As shown in Figure 13, the buyback theme is unique to the US with equity supply shrinking to levels last seen in late 1990s, while equity supply for Rest of the World is hovering near record level due net issuance. Despite growing pipeline for IPOs and secondary offerings, we expect buyback demand for shares to remain multiples of new issuance supply.
- **Total shareholder return should surpass record \$1.3 trillion seen in 2018 (\$818b buybacks and \$482b dividends).** Despite record shareholder return last year, corporates still have excess capital with cash balance near record at ~\$1.6tn (ex-Financials) with still low payout ratio of ~75% (adjusted for cash repatriation). Therefore, there is room for further upside to our buyback estimates if companies increase gross payout ratios (as a point of reference, the payout ratio averaged ~90% prior to Tax Act and reached ~100% at the peak of last business cycle). For now, we expect capital return to remain predominantly funded by operating cash flow and excess cash rather than debt-funded, which peaked at ~34% in 2017 before declining recently to ~14%. Also, corporates could further accelerate buyback executions if there is any sign of political traction on regulating shareholder return. We are not surprised buyback growth (~50% y/y) has surpassed capex (+15%) and R&D (+6) growth rates given new investment opportunities are more limited compared to relatively abundant capital for large-caps. For S&P 500 investment spending history see Figure 49.
- **Companies reinvested ~50% of cash flow back into Capex (~\$710b) and R&D (~\$350b).** We expect companies to continue reinvesting at a strong pace driven by revenue growth and tightening capacity utilization, rising commodity prices, and

Figure 9: Investment Activity as of 4Q18

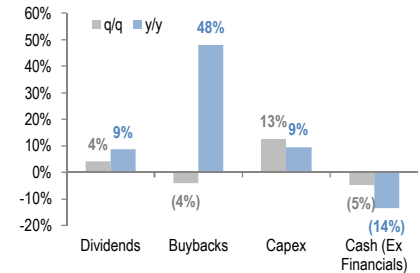


Figure 10: Buyback Announcements YTD

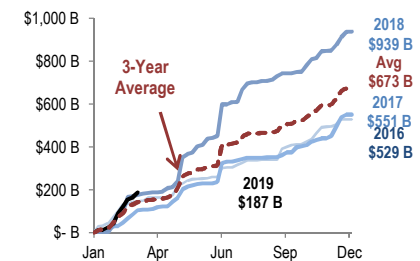


Figure 11: Approved Buyback Authorizations

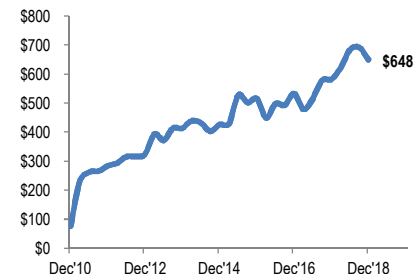


Figure 12: Sources of Funds for Buybacks

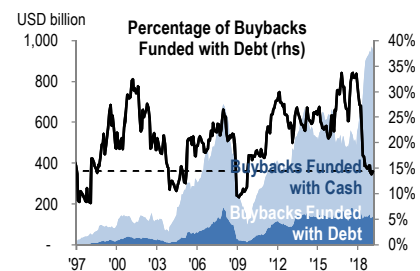
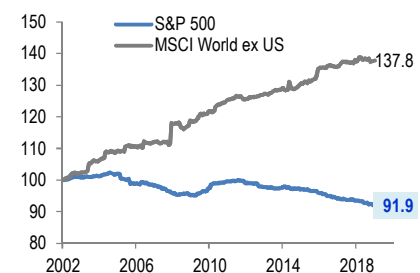


Figure 13: Shrinking Equity Supply US vs. RoW



Source: J.P. Morgan US Equity Strategy and Quantitative Research

robust tech spending cycle (data centers, cloud, big data & AI, etc.). A trade resolution could trigger additional investment as it will remove policy uncertainty and could create incremental demand for US exports over multiple years (e.g. semis). During 2018, Technology companies invested the most in capex (+27% y/y to \$81b) followed by Financials (+26%), Energy (+24%), Telecom (24%), and Materials (23%). Capex growth was subdued for Staples (+1%), Utilities (+3%), and Industrials (+5%) given lower growth and smaller tax benefit. Also, US companies have also been reinvesting via R&D, which is a growing source of investment as US industries are undergoing a structural shift from durable goods to services. Based on reported data for ~160 S&P 500 companies, R&D spending was ~\$350b in 2018. **S&P 500 companies reinvested well over \$1 trillion (capex + R&D) in 2018, which is likely severely understated given R&D is expensed and not always reported.** At the sector level, Healthcare companies in particular have been ramping up R&D spending (e.g. JNJ, ABT, A, ZTS, RGN).

4Q Earnings Summary — the breadth and magnitude of earnings beats and surprises was lower this quarter vs. recent history. Only 53% of S&P 500 companies beat on revenues (vs 70% seen during last four quarters) and 60% beat on net income (vs. average of 76%). As for revenue surprise, it was -0.2% ex-financials (vs. +1.2% in recent quarters) and net income surprise was +1.8% (vs. +5.6%). While revenue growth continued at an above trend rate of 5%, it was lower than the average 9% seen in recent quarters. This was largely due to a deceleration in revenue growth led by Commodities (e.g., E&P, Oil & Gas, Chemicals, Metals) and trade-sensitive Multinationals (e.g., Tech Hardware, Semis, Machinery). Margin compression was a larger driver of earnings growth deceleration than slower revenue growth in the quarter with net income margin compressing by ~100bp q/q.

Figure 14: Above-Trend Sales Growth to Continue...

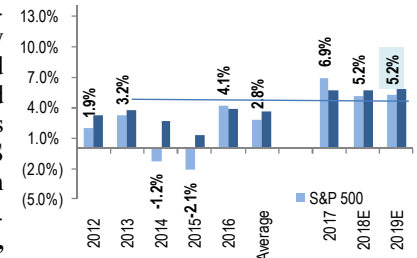


Figure 15: ...However, Consensus is expecting some Margin Pressure

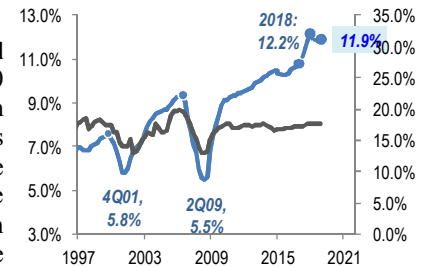


Figure 16: EPS Estimates are Low – Negative for 1Q and Flat for 2Q

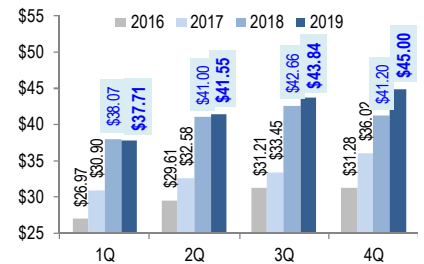


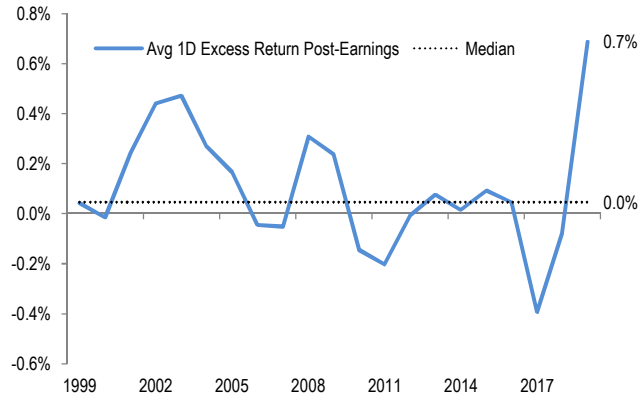
Figure 17: Δ in 2019 EPS Estimate since Jan 1

| | 2019 EPS Growth | | |
|--------------------|-----------------|-------------|--------------|
| | 01/2019 | Current | Delta |
| Discretionary | 9% | 8% | -1.4% |
| Staples | 5% | 2% | -2.6% |
| Energy | 11% | -11% | -21.9% |
| Financials | 10% | 9% | -0.4% |
| Healthcare | 7% | 6% | -1.6% |
| Industrials | 11% | 9% | -1.9% |
| Materials | 6% | -1% | -7.3% |
| Real Estate | 5% | 4% | -1.3% |
| Technology | 4% | 0% | -3.7% |
| Communication Svcs | 7% | 4% | -2.8% |
| Utilities | 5% | 4% | -0.4% |
| S&P 500 | 7.3% | 4.0% | -3.3% |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

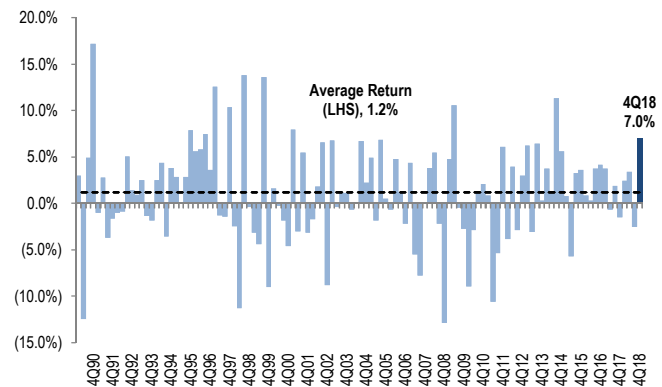
Strong Gains despite Lackluster Earnings Delivery and Lukewarm Guidance

Figure 18: Despite Low Beats, It Was Better Than Expected



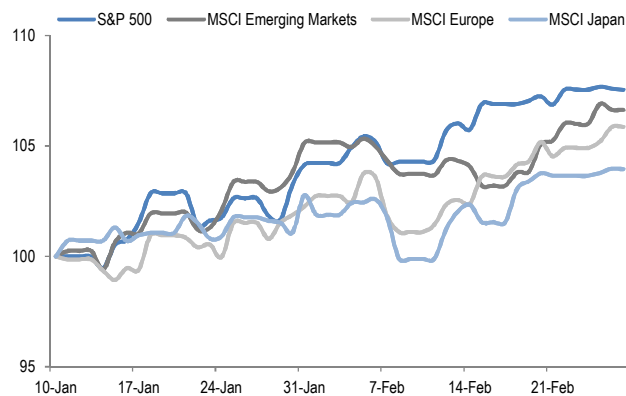
Source: J.P. Morgan US Equity Strategy, Thomson IBES

Figure 19: S&P 500 Performance during Earnings Season Since 1990



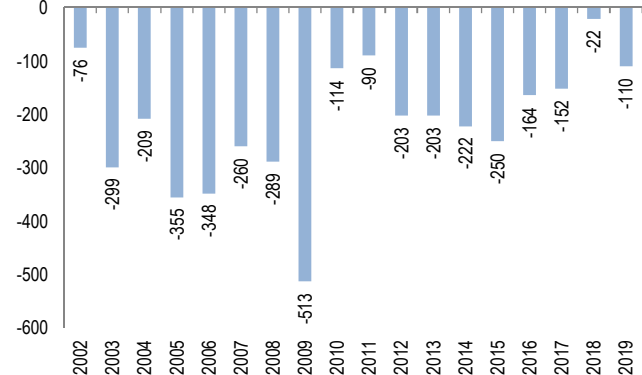
Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 20: 4Q Earnings Season Performance
S&P 500 vs. DM and EM Peers



Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 21: Net Guidance Negative but Better Than History
Positives vs Negatives



Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 22: Consensus Revised down 2019 Sales Growth by -0.8%

Current Estimates vs. Jan 1, 2019

| | 4Q18 Sales Growth | | | 2019 Sales Growth | | |
|--------------------|-------------------|-------------|--------------|-------------------|-------------|--------------|
| | 01/2019 | Current | Delta | 01/2019 | Current | Delta |
| Discretionary | 4.2% | 5.2% | 1.0% | 5.9% | 4.9% | -1.0% |
| Staples | 1.8% | 1.6% | -0.2% | 3.2% | 3.4% | 0.2% |
| Energy | 16.8% | 11.8% | -5.0% | 5.8% | -0.9% | -6.7% |
| Financials | 3.8% | -4.0% | -7.8% | 2.5% | 4.8% | 2.3% |
| Healthcare | 6.7% | 8.7% | 2.0% | 12.3% | 12.0% | -0.3% |
| Industrials | 5.9% | 6.3% | 0.4% | 4.8% | 4.0% | -0.8% |
| Materials | 10.2% | 7.6% | -2.6% | 7.3% | 4.9% | -2.4% |
| Real Estate | 10.7% | 12.4% | 1.7% | 4.3% | 3.9% | -0.4% |
| Technology | 3.9% | 1.4% | -2.5% | 2.8% | 1.3% | -1.5% |
| Communication Svcs | 13.1% | 13.1% | 0.0% | 9.9% | 9.8% | -0.1% |
| Utilities | -2.9% | -0.3% | 2.6% | 3.4% | 4.0% | 0.6% |
| S&P 500 | 6.3% | 5.1% | -1.2% | 6.0% | 5.2% | -0.8% |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

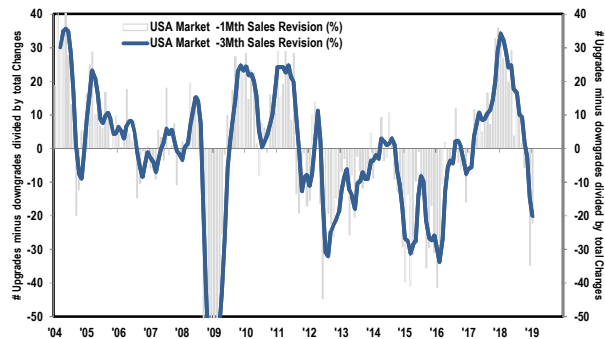
Figure 23: Consensus Revised down 2019 EPS by -3.3%

Current Estimates vs. Jan 1, 2019

| | 4Q18 EPS Growth | | | 2019 EPS Growth | | |
|--------------------|-----------------|--------------|-------------|-----------------|-------------|--------------|
| | 01/2019 | Current | Delta | 01/2019 | Current | Delta |
| Discretionary | 13% | 17% | 3.7% | 9% | 8% | -1.4% |
| Staples | 3% | 5% | 1.9% | 5% | 2% | -2.6% |
| Energy | 65% | 82% | 16.3% | 11% | -11% | -21.9% |
| Financials | 23% | 16% | -6.9% | 10% | 9% | -0.4% |
| Healthcare | 11% | 13% | 2.0% | 7% | 6% | -1.6% |
| Industrials | 25% | 27% | 2.4% | 11% | 9% | -1.9% |
| Materials | 6% | 4% | -2.0% | 6% | -1% | -7.3% |
| Real Estate | 7% | 6% | -0.7% | 5% | 4% | -1.3% |
| Technology | 12% | 10% | -1.7% | 4% | 0% | -3.7% |
| Communication Svcs | 17% | 26% | 8.9% | 7% | 4% | -2.8% |
| Utilities | -10% | -10% | 0.1% | 5% | 4% | -0.4% |
| S&P 500 | 15.8% | 16.7% | 0.9% | 7.3% | 4.0% | -3.3% |

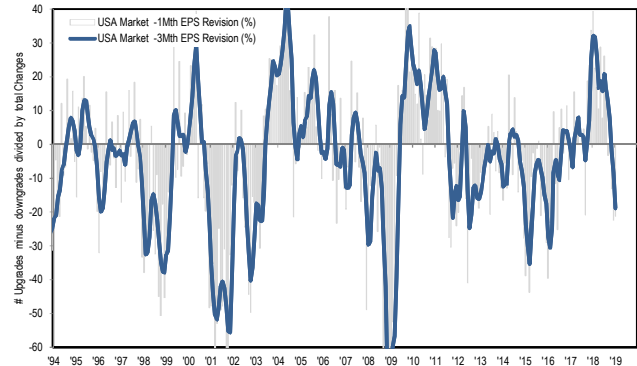
Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 24: Net Analyst Sales Revisions (Upgrade less Downgrades)



Source: J.P. Morgan US Equity Strategy, Thomson IBES

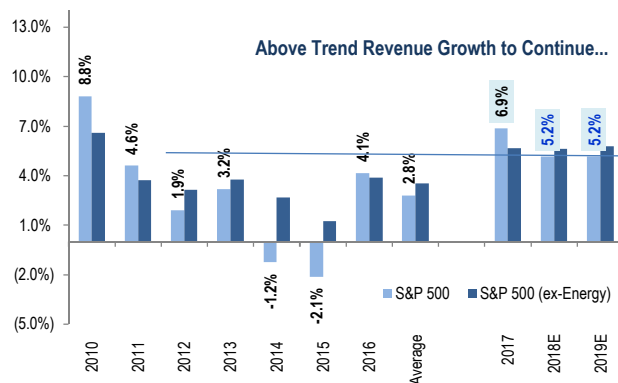
Figure 25: Net Analyst EPS Revisions (Upgrade less Downgrades)



Source: J.P. Morgan US Equity Strategy, Thomson

Figure 26: Above Trend Revenue Growth to Continue in 2019

S&P 500 Current Constituents



Source: J.P. Morgan US Equity Strategy, FactSet

Figure 27: 2019 Sales Growth Contribution

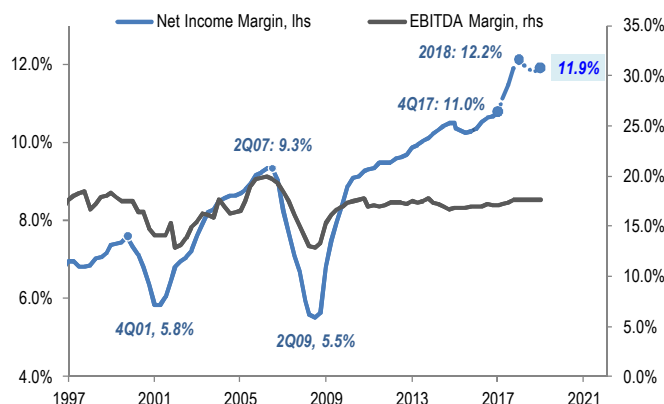
Actual and Estimates

| | S&P 500 Sales | | | | Sales Contribution | | |
|--------------------|-----------------|-----------------|-----------------|-------------|--------------------|-------------|-----------------|
| | 2017 | 2018E | 2019E | % of Total | Sales Δ (\$) | % Chg | to Sales Growth |
| Energy | \$930 | \$1,081 | \$1,071 | 8.7% | (\$10) | -0.9% | -2% |
| Materials | \$312 | \$364 | \$382 | 3.1% | \$18 | 4.9% | 3% |
| Industrials | \$1,298 | \$1,405 | \$1,462 | 11.9% | \$57 | 4.0% | 9% |
| Discretionary | \$1,446 | \$1,554 | \$1,630 | 13.3% | \$76 | 4.9% | 13% |
| Staples | \$1,462 | \$1,516 | \$1,567 | 12.7% | \$51 | 3.4% | 8% |
| HealthCare | \$1,797 | \$1,938 | \$2,171 | 17.7% | \$233 | 12.0% | 39% |
| Financials | \$1,402 | \$1,440 | \$1,509 | 12.3% | \$69 | 4.8% | 11% |
| Technology | \$1,122 | \$1,226 | \$1,242 | 10.1% | \$16 | 1.3% | 3% |
| Communication Svc | \$747 | \$836 | \$918 | 7.5% | \$82 | 9.8% | 14% |
| Utilities | \$323 | \$331 | \$344 | 2.8% | \$13 | 4.0% | 2% |
| Real Estate | \$94 | \$106 | \$110 | 0.9% | \$4 | 3.9% | 1% |
| S&P 500 | \$10,839 | \$11,691 | \$12,295 | 100% | \$604 | 5.2% | 100% |
| Ex-Energy | \$9,909 | \$10,610 | \$11,224 | 91% | \$614 | 5.8% | 102% |

Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

Figure 28: Margins Should be Better than Expected in 2019

S&P 500 Actual and Projected



Source: J.P. Morgan US Equity Strategy and Global Quantitative Research

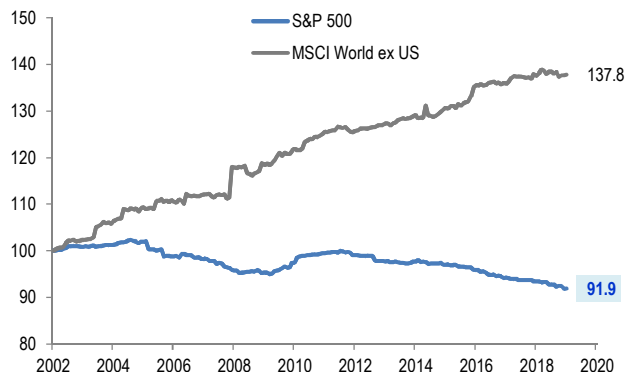
Figure 29: Margin Expectations by Sector

S&P 500 Actual and Projected

| | Market Cap | | NI Margin (Avg Last 4Qs) | | |
|--------------------|------------------|-------------|--------------------------|--------------|---------------|
| | \$'s in billions | % of Total | 2018 | 2019 | Delta |
| Energy | \$1,265 | 5% | 7.0% | 6.3% | -0.7% |
| Materials | \$622 | 3% | 10.7% | 10.1% | -0.6% |
| Industrials | \$2,384 | 10% | 9.8% | 10.1% | 0.3% |
| Discretionary | \$2,535 | 11% | 7.5% | 7.5% | 0.0% |
| Staples | \$1,926 | 8% | 6.9% | 6.7% | -0.2% |
| HealthCare | \$3,532 | 15% | 10.8% | 10.2% | -0.6% |
| Financials | \$2,810 | 12% | 19.8% | 20.0% | 0.2% |
| Technology | \$4,943 | 21% | 23.4% | 21.9% | -1.5% |
| Communication Svcs | \$2,600 | 11% | 16.3% | 15.4% | -0.9% |
| Utilities | \$762 | 3% | 12.6% | 12.9% | 0.3% |
| Real Estate | \$712 | 3% | 19.0% | 14.9% | -4.1% |
| S&P 500 | \$23,380 | 100% | 12.2% | 11.8% | -0.43% |
| Ex-Energy | \$22,115 | 95% | 12.7% | 12.3% | -0.43% |

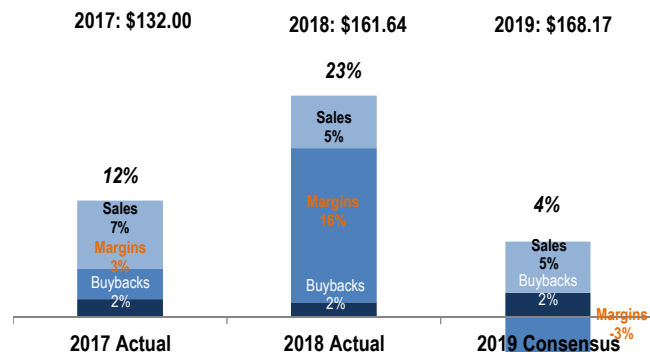
Source: J.P. Morgan US Equity Strategy and Global Quantitative Research

Figure 30: US Supply Pictures Constructive relative to Rest of World
S&P 500



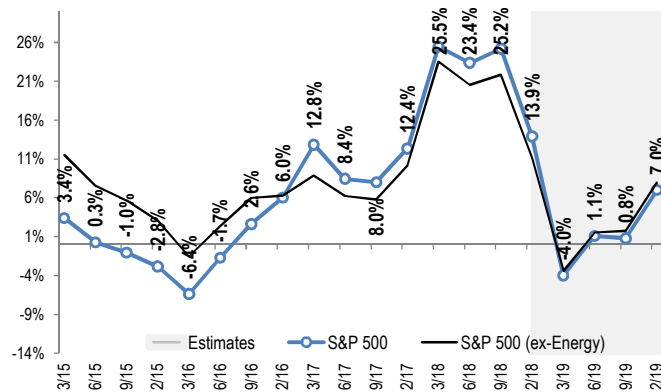
Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 31: Drivers of Earnings Growth (2017A, 2018-2019E)



Source: J.P. Morgan US Equity Strategy

Figure 32: Quarterly Net Income Growth
Bottom-up Aggregate



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, FactSet

Figure 33: 2019 Earnings Contribution

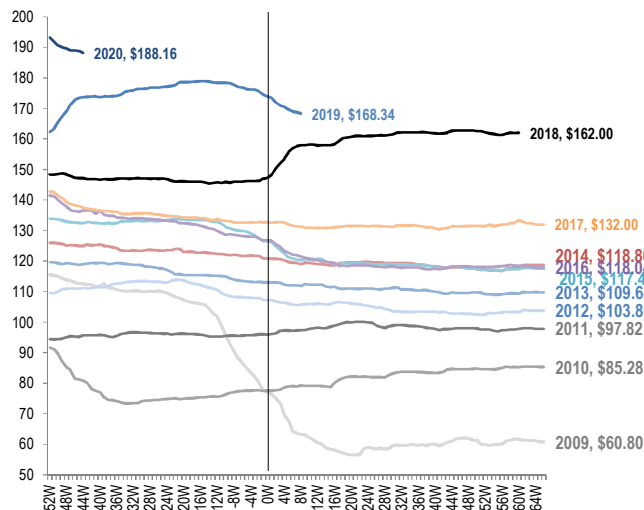
Tech and Energy Expected to Drive the Slowdown, which could be Temporary

| S&P 500 Earnings | | | | Earnings Contribution | | |
|--------------------|----------------|----------------|----------------|-----------------------|-----------------|--------------------------|
| | 2017 | 2018E | 2019E | % of Total | Net Inc. Δ (\$) | % Chg to Earnings Growth |
| Energy | \$37 | \$76 | \$67 | 4.8% | (\$9) | -11.3% |
| Materials | \$28 | \$39 | \$39 | 2.7% | (\$0) | -0.8% |
| Industrials | \$113 | \$136 | \$146 | 10.4% | \$10 | 7.1% |
| Discretionary | \$98 | \$116 | \$122 | 8.6% | \$6 | 4.9% |
| Staples | \$97 | \$105 | \$105 | 7.5% | \$1 | 0.8% |
| HealthCare | \$184 | \$210 | \$222 | 15.8% | \$12 | 5.7% |
| Financials | \$198 | \$241 | \$250 | 17.8% | \$9 | 3.9% |
| Technology | \$239 | \$287 | \$273 | 19.3% | (\$14) | -5.0% |
| Communications | \$105 | \$136 | \$142 | 10.1% | \$5 | 3.9% |
| Utilities | \$37 | \$40 | \$43 | 3.1% | \$3 | 6.4% |
| Real Estate | \$19 | \$20 | \$16 | 1.2% | (\$4) | -18.5% |
| S&P 500 | \$1,137 | \$1,387 | \$1,409 | 100% | \$22 | 1.6% |
| Ex-Energy | \$1,100 | \$1,311 | \$1,341 | 95% | \$31 | 2.3% |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 34: S&P 500 Consensus EPS

Since 2009, 1Yr Before and After



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 35: S&P 500 Price, EPS, and PE over the Cycle

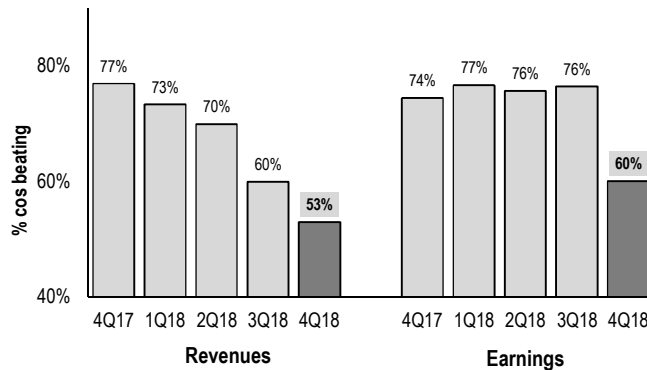
IBES Actual and Estimates

| As of | S&P 500 Index | | S&P 500 EPS | | P/E — Contraction/Expansion | | |
|---------------|---------------|------|-------------|----------|-----------------------------|-------|-----------------------|
| | Level | % | YoY Growth | EPS | P/E | Δ | Contraction/Expansion |
| Peak 2007 | 1,565 | 10% | 4.6% | \$92.15 | 17.0x | 0.9x | Contraction |
| 2008 | 903 | -42% | -32.9% | \$61.85 | 14.6x | -2.4x | Contraction |
| 2009 | 1,115 | 23% | 0.3% | \$62.02 | 18.0x | 3.4x | Expansion |
| 2010 | 1,258 | 13% | 37.8% | \$85.49 | 14.7x | -3.3x | Contraction |
| 2011 | 1,258 | 0% | 14.4% | \$97.84 | 12.9x | -1.9x | Contraction |
| 2012 | 1,426 | 13% | 6.1% | \$103.76 | 13.7x | 0.9x | Expansion |
| 2013 | 1,848 | 30% | 6.4% | \$110.39 | 16.7x | 3.0x | Expansion |
| 2014 | 2,059 | 11% | 7.6% | \$118.83 | 17.3x | 0.6x | Expansion |
| 2015 | 2,044 | -1% | -0.5% | \$118.20 | 17.3x | 0.0x | Flat |
| 2016 | 2,239 | 10% | 0.7% | \$119.08 | 18.8x | 1.5x | Expansion |
| 2017 | 2,674 | 19% | 10.8% | \$132.00 | 20.3x | 1.5x | Expansion |
| 2018 | 2,507 | -6% | 23.4% | \$162.93 | 15.4x | -4.9x | Contraction |
| 2019 | 2,792 | 11% | 3.2% | \$168.10 | 16.6x | -0.1x | Contraction |
| Δ 2007-19E | 1,227 | 78% | 82% | \$75.95 | -0.4x | | Contraction |
| CAGR 2007-19E | | 4.8% | 5.0% | | | | |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

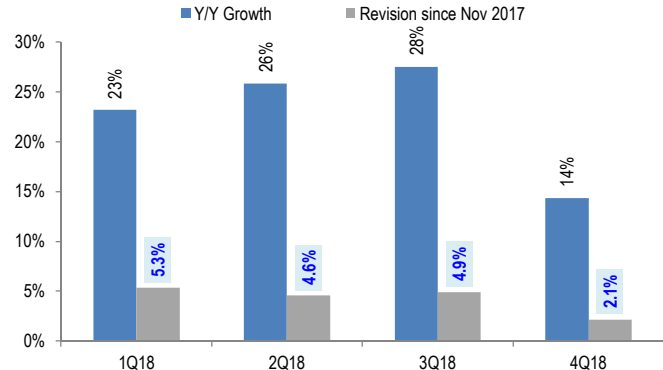
Consensus Assuming Negative Growth for 1Q19 and Flat for 2Q19

Figure 36: Low Revenue and Earnings Beats during 4Q18



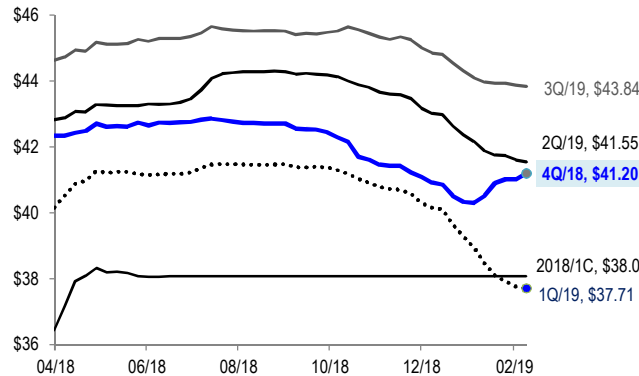
Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 37: 4Q18 Lowest Growth and Surprise Quarter of the Year



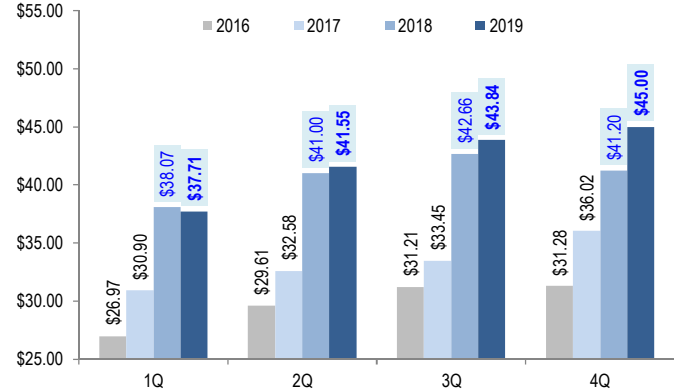
Source: J.P. Morgan US Equity Strategy, Thomson IBES

Figure 38: 1Q19 EPS Lower than 1Q18 – Negative Growth?



Source: J.P. Morgan US Equity Strategy, Thomson IBES

Figure 39: 2019 EPS Growth is 2H Back-loaded



Source: J.P. Morgan US Equity Strategy, Thomson IBES

Figure 40: 4Q18 Earnings Season Scorecard

| | 4Q18 Reporting Season | | | | | % Surprise... | | | | % of Companies Beating... | | | | 4Q18 Blended Growth | | |
|----------------------|-----------------------|----------------|--------------|--------------------|-----------------------|----------------|--------|----------------|-------|---------------------------|------|----------------|------|---------------------|------------------|---------------------|
| | So Far Reported... | | | | | Revenue | | Net Income | | Revenue | | Net Income | | Reported + Est | | |
| | # of Cos Rep | % of Total Cos | % of Cos Rep | Sales Growth (YoY) | Earnings Growth (YoY) | Avg (Last 4Qs) | 4Q18 | Avg (Last 4Qs) | 4Q18 | Avg (Last 4Qs) | 4Q18 | Avg (Last 4Qs) | 4Q18 | Sales Growth (YoY) | Net Income (YoY) | Net Income (Median) |
| S&P 500 | 444 | 500 | 89% | 5.0% | 14.7% | 1.3% | -1.4% | 5.2% | -0.1% | 70% | 53% | 76% | 60% | 4.8% | 14.6% | 10.8% |
| ex-Financials | 380 | 433 | 88% | 6.6% | 15.7% | 1.2% | -0.2% | 5.6% | 1.8% | 71% | 56% | 76% | 63% | 6.3% | 15.4% | 10.4% |
| Cyclicals | 214 | 248 | 86% | 6.0% | 14.0% | 1.4% | -0.3% | 6.0% | 1.2% | 74% | 52% | 79% | 69% | 6.0% | 14.3% | 12.4% |
| Materials | 23 | 24 | 96% | 2.5% | 8.4% | 1.8% | -2.8% | 3.7% | -5.5% | 67% | 26% | 76% | 52% | 7.5% | 13.0% | 10.4% |
| Industrials | 66 | 71 | 93% | 6.4% | 25.2% | 1.5% | 0.9% | 3.0% | 2.4% | 73% | 62% | 72% | 70% | 6.3% | 25.1% | 20.0% |
| Discretionary | 46 | 64 | 72% | 7.0% | 13.3% | 1.1% | 1.1% | 9.0% | 3.5% | 70% | 54% | 74% | 64% | 5.4% | 13.4% | 9.0% |
| Technology | 57 | 67 | 85% | 1.0% | 3.8% | 2.0% | -2.7% | 7.7% | -2.8% | 86% | 53% | 92% | 77% | 1.4% | 4.0% | 10.2% |
| Communication Svcs | 22 | 22 | 100% | 13.1% | 30.4% | 0.8% | 0.1% | 3.9% | 8.1% | 61% | 45% | 79% | 71% | 13.1% | 31.4% | 23.3% |
| Defensives | 107 | 124 | 86% | 5.9% | 7.5% | 0.8% | 1.3% | 5.0% | 1.4% | 66% | 67% | 77% | 63% | 5.0% | 6.7% | 5.4% |
| Staples | 26 | 32 | 81% | 2.6% | 3.0% | 0.8% | -0.2% | 3.7% | 0.7% | 60% | 50% | 73% | 52% | 1.7% | 1.8% | 6.6% |
| Healthcare | 58 | 63 | 92% | 8.7% | 11.7% | 1.1% | 1.9% | 5.2% | 1.7% | 78% | 78% | 86% | 75% | 8.4% | 11.6% | 11.5% |
| Utilities | 23 | 29 | 79% | 2.8% | -6.0% | -0.5% | 3.1% | 7.0% | 0.6% | 46% | 61% | 63% | 46% | 0.4% | -6.3% | -2.6% |
| Other | 123 | 128 | 96% | 1.9% | 24.7% | 1.6% | -7.1% | 3.8% | -3.9% | 67% | 41% | 68% | 43% | 1.7% | 24.6% | 15.9% |
| Energy | 27 | 29 | 93% | 11.5% | 89.7% | 0.9% | -4.1% | 1.3% | 3.0% | 68% | 41% | 58% | 29% | 11.5% | 88.9% | 65.7% |
| REITs | 32 | 32 | 100% | 12.6% | 27.1% | 2.9% | 1.6% | 19.7% | 26.6% | 73% | 59% | 65% | 58% | 12.6% | 26.5% | 11.4% |
| Financials | 64 | 67 | 96% | -6.3% | 9.7% | 2.1% | -10.3% | 3.5% | -8.5% | 63% | 33% | 74% | 42% | -6.2% | 11.1% | 9.5% |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 41: S&P 500, Domestic, Multinational, Europe and China Earnings

Current Constituents

S&P 500

| Sectors | Net Income, 4Q18 Estimate | | | Net Income, 4Q18 Revision | | Net Income, 2019 Estimate | | | Net Income, 2019 Revision | |
|------------------------|---------------------------|------------------|-------------------|---------------------------|----------------------------|---------------------------|--------------------|--------------------|--------------------------------|---------------------------------|
| | 9/30/2018 | 1/10/2019 | Current (Blended) | 9/30/18 to 1/10/19 | 1/10/19 to Today (Blended) | 9/30/2018 | 1/10/2019 | Today | % Revision Pre-Earnings Season | % Rev. Since Earn. Season Start |
| Industrials | \$34,974 | \$33,017 | \$33,796 | (5.6%) | 2.4% | \$146,602 | \$144,107 | \$142,802 | (1.7%) | (0.9%) |
| Health Care | \$51,045 | \$50,659 | \$51,508 | (0.8%) | 1.7% | \$221,181 | \$222,909 | \$222,140 | 0.8% | (0.3%) |
| Information Technology | \$71,919 | \$70,186 | \$68,308 | (2.4%) | (2.7%) | \$258,876 | \$254,655 | \$242,425 | (1.6%) | (4.8%) |
| Communication Services | \$37,369 | \$36,174 | \$38,943 | (3.2%) | 7.7% | \$152,895 | \$148,781 | \$146,477 | (2.7%) | (1.5%) |
| Consumer Discretionary | \$28,264 | \$26,809 | \$27,489 | (5.1%) | 2.5% | \$114,470 | \$112,689 | \$111,624 | (1.6%) | (0.9%) |
| Utilities | \$7,776 | \$7,328 | \$7,278 | (5.8%) | (0.7%) | \$43,353 | \$43,948 | \$43,903 | 1.4% | (0.1%) |
| Financials | \$67,935 | \$65,754 | \$61,112 | (3.2%) | (7.1%) | \$285,477 | \$283,978 | \$277,438 | (0.5%) | (2.3%) |
| Materials | \$9,555 | \$9,095 | \$8,976 | (4.8%) | (1.3%) | \$42,048 | \$42,275 | \$38,895 | 0.5% | (8.0%) |
| Real Estate | \$4,491 | \$4,392 | \$5,619 | (2.2%) | 27.9% | \$17,833 | \$17,225 | \$16,602 | (3.4%) | (3.6%) |
| Consumer Staples | \$24,620 | \$23,658 | \$23,777 | (3.9%) | 0.5% | \$96,777 | \$95,326 | \$93,192 | (1.5%) | (2.2%) |
| Energy | \$20,156 | \$20,716 | \$21,255 | 2.8% | 2.6% | \$93,555 | \$88,126 | \$69,051 | (5.8%) | (21.6%) |
| S&P 500 | \$358,104 | \$347,789 | \$348,058 | (2.9%) | 0.1% | \$1,473,066 | \$1,454,020 | \$1,404,549 | (1.3%) | (3.4%) |

Europe

| Sectors | Net Income, 4Q18 Estimate | | | Net Income, 4Q18 Revision | | Net Income, 2019 Estimate | | | Net Income, 2019 Revision | |
|------------------------|---------------------------|-----------------|-------------------|---------------------------|----------------------------|---------------------------|-----------------|-----------------|--------------------------------|---------------------------------|
| | 9/30/2018 | 1/10/2019 | Current (Blended) | 9/30/18 to 1/10/19 | 1/10/19 to Today (Blended) | 9/30/2018 | 1/10/2019 | Today | % Revision Pre-Earnings Season | % Rev. Since Earn. Season Start |
| Industrials | \$682 | \$702 | \$737 | 2.9% | 5.0% | \$2,761 | \$2,774 | \$2,803 | 0.5% | 1.0% |
| Health Care | \$1,660 | \$1,632 | \$1,672 | (1.7%) | 2.5% | \$6,764 | \$6,521 | \$6,568 | (3.6%) | 0.7% |
| Information Technology | \$1,213 | \$1,186 | \$1,214 | (2.3%) | 2.4% | \$4,962 | \$4,896 | \$4,772 | (1.3%) | (2.5%) |
| Communication Services | \$9,122 | \$9,030 | \$10,275 | (1.0%) | 13.8% | \$37,019 | \$36,310 | \$35,301 | (1.9%) | (2.8%) |
| Consumer Discretionary | \$2,248 | \$2,219 | \$2,288 | (1.3%) | 3.1% | \$10,507 | \$10,329 | \$10,202 | (1.7%) | (1.2%) |
| Utilities | \$255 | \$356 | \$382 | 39.7% | 7.2% | \$1,810 | \$1,807 | \$1,798 | (0.1%) | (0.5%) |
| Financials | \$2,381 | \$2,263 | \$1,968 | (5.0%) | (13.0%) | \$9,911 | \$9,160 | \$8,500 | (7.6%) | (7.2%) |
| Materials | \$3,237 | \$2,997 | \$3,039 | (7.4%) | 1.4% | \$15,980 | \$15,255 | \$13,427 | (4.5%) | (12.0%) |
| Real Estate | \$94 | \$98 | \$110 | 3.9% | 12.5% | \$498 | \$521 | \$522 | 4.6% | 0.2% |
| Consumer Staples | \$3,261 | \$2,991 | \$3,048 | (8.3%) | 1.9% | \$12,561 | \$12,298 | \$12,467 | (2.1%) | 1.4% |
| S&P 500 | \$24,154 | \$23,473 | \$24,732 | (2.8%) | 5.4% | \$102,773 | \$99,870 | \$96,360 | (2.8%) | (3.5%) |

China

| Sectors | Net Income, 4Q18 Estimate | | | Net Income, 4Q18 Revision | | Net Income, 2019 Estimate | | | Net Income, 2019 Revision | |
|------------------------|---------------------------|-----------------|-------------------|---------------------------|----------------------------|---------------------------|------------------|------------------|--------------------------------|---------------------------------|
| | 9/30/2018 | 1/10/2019 | Current (Blended) | 9/30/18 to 1/10/19 | 1/10/19 to Today (Blended) | 9/30/2018 | 1/10/2019 | Today | % Revision Pre-Earnings Season | % Rev. Since Earn. Season Start |
| Industrials | \$3,519 | \$3,656 | \$4,169 | 3.9% | 14.1% | \$14,538 | \$14,562 | \$15,552 | 0.2% | 6.8% |
| Health Care | \$3,123 | \$3,127 | \$3,180 | 0.1% | 1.7% | \$11,920 | \$11,901 | \$11,902 | (0.2%) | 0.0% |
| Information Technology | \$40,422 | \$38,912 | \$36,202 | (3.7%) | (7.0%) | \$133,998 | \$128,921 | \$117,122 | (3.8%) | (9.2%) |
| Consumer Discretionary | \$834 | \$833 | \$713 | (10.8%) | (14.5%) | \$3,992 | \$3,554 | \$3,270 | (11.0%) | (8.0%) |
| Materials | \$441 | \$416 | \$410 | (5.7%) | (1.3%) | \$1,814 | \$1,801 | \$1,801 | (0.7%) | (0.0%) |
| S&P 500 | \$48,440 | \$46,943 | \$44,673 | (3.1%) | (4.8%) | \$166,261 | \$160,738 | \$149,646 | (3.3%) | (6.9%) |

Domestic

| Sectors | Net Income, 4Q18 Estimate | | | Net Income, 4Q18 Revision | | Net Income, 2019 Estimate | | | Net Income, 2019 Revision | |
|------------------------|---------------------------|-----------------|-------------------|---------------------------|----------------------------|---------------------------|------------------|------------------|--------------------------------|---------------------------------|
| | 9/30/2018 | 1/10/2019 | Current (Blended) | 9/30/18 to 1/10/19 | 1/10/19 to Today (Blended) | 9/30/2018 | 1/10/2019 | Today | % Revision Pre-Earnings Season | % Rev. Since Earn. Season Start |
| Industrials | \$1,518 | \$1,532 | \$1,653 | 0.9% | 7.8% | \$6,642 | \$6,693 | \$6,736 | 0.8% | 0.6% |
| Health Care | \$7,044 | \$6,879 | \$4,902 | 0.7% | 6.1% | \$20,763 | \$23,329 | \$23,018 | 12.4% | (1.3%) |
| Information Technology | \$592 | \$592 | \$691 | (0.0%) | 16.6% | \$3,370 | \$3,388 | \$3,400 | 0.5% | 0.4% |
| Communication Services | \$5,083 | \$5,087 | \$5,231 | 0.1% | 2.8% | \$20,947 | \$20,691 | \$20,388 | (1.2%) | (1.5%) |
| Consumer Discretionary | \$1,640 | \$1,608 | \$1,608 | (2.0%) | (0.0%) | \$6,752 | \$6,725 | \$6,688 | (0.4%) | (0.5%) |
| Utilities | \$2,087 | \$1,836 | \$1,846 | (12.0%) | 0.5% | \$12,361 | \$12,526 | \$12,782 | 1.3% | 2.0% |
| Financials | \$18,382 | \$17,934 | \$17,928 | (2.4%) | (0.0%) | \$75,993 | \$75,389 | \$74,202 | (0.8%) | (1.6%) |
| Real Estate | \$168 | \$178 | \$342 | 6.1% | 91.6% | \$853 | \$729 | \$712 | (14.5%) | (2.4%) |
| Consumer Staples | \$2,309 | \$2,251 | \$2,232 | (2.5%) | (0.9%) | \$10,064 | \$10,001 | \$9,776 | (0.6%) | (2.3%) |
| S&P 500 | \$36,366 | \$35,640 | \$36,432 | (2.0%) | 2.2% | \$157,745 | \$159,471 | \$157,702 | 1.1% | (1.1%) |

Multinationals

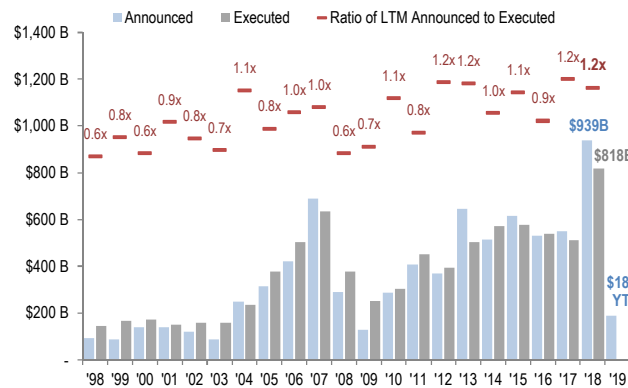
| Sectors | Net Income, 4Q18 Estimate | | | Net Income, 4Q18 Revision | | Net Income, 2019 Estimate | | | Net Income, 2019 Revision | |
|------------------------|---------------------------|-----------------|-------------------|---------------------------|----------------------------|---------------------------|------------------|------------------|--------------------------------|---------------------------------|
| | 9/30/2018 | 1/10/2019 | Current (Blended) | 9/30/18 to 1/10/19 | 1/10/19 to Today (Blended) | 9/30/2018 | 1/10/2019 | Today | % Revision Pre-Earnings Season | % Rev. Since Earn. Season Start |
| Industrials | \$4,865 | \$4,847 | \$4,601 | (0.4%) | (5.1%) | \$19,898 | \$19,884 | \$19,537 | (0.1%) | (1.7%) |
| Health Care | \$7,044 | \$6,879 | \$7,012 | (2.4%) | 1.9% | \$27,977 | \$27,617 | \$27,449 | (1.3%) | (0.6%) |
| Information Technology | \$12,368 | \$11,401 | \$10,911 | (7.8%) | (4.3%) | \$51,076 | \$47,988 | \$45,014 | (6.0%) | (6.2%) |
| Communication Services | \$1,594 | \$1,483 | \$1,499 | (7.0%) | 1.1% | \$5,206 | \$4,923 | \$4,387 | (5.4%) | (10.9%) |
| Consumer Discretionary | \$5,242 | \$4,812 | \$4,835 | (8.2%) | 0.5% | \$22,345 | \$21,256 | \$20,603 | (4.9%) | (3.1%) |
| Utilities | \$251 | \$226 | \$213 | (9.8%) | (5.8%) | \$866 | \$865 | \$868 | (0.0%) | 0.3% |
| Financials | \$2,280 | \$2,211 | \$2,132 | (3.0%) | (3.6%) | \$8,790 | \$8,452 | \$8,148 | (3.8%) | (3.6%) |
| Real Estate | \$834 | \$829 | \$866 | (0.7%) | 4.5% | \$3,233 | \$3,276 | \$3,272 | 1.3% | (0.1%) |
| Consumer Staples | \$9,394 | \$8,851 | \$8,834 | (5.8%) | (0.2%) | \$36,585 | \$36,139 | \$35,661 | (1.2%) | (1.3%) |
| S&P 500 | \$43,872 | \$41,539 | \$40,902 | (5.3%) | (1.5%) | \$175,976 | \$170,400 | \$164,939 | (3.2%) | (3.2%) |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Buybacks to Remain Strong in 2019

Figure 42: Announced vs. Realized Buybacks

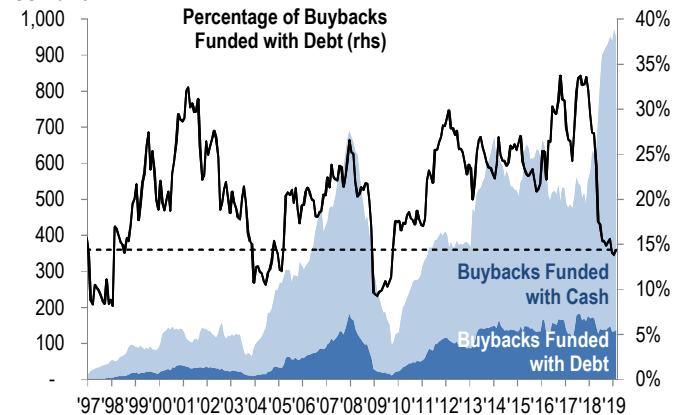
S&P 500 Companies



Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 43: Source of Funding for Buybacks

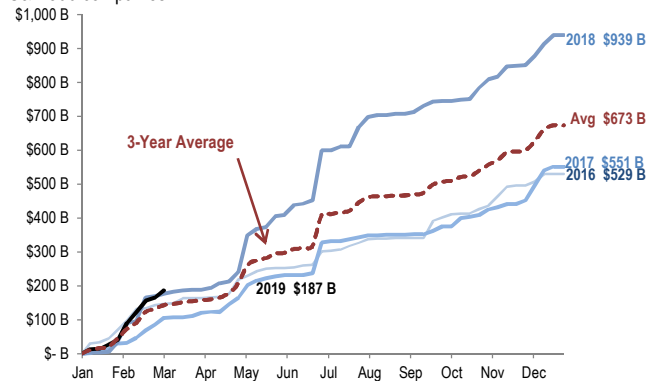
Cash, Debt
USD billion



Source: J.P. Morgan US Equity Strategy and Quantitative Research, Bloomberg

Figure 44: \$ Announced Share Repurchases

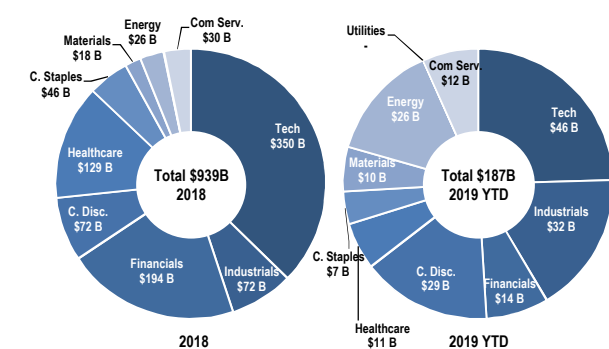
S&P 500 companies



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, Bloomberg

Figure 45: Announced Share Repurchases by Sector

S&P 500



Source: J.P. Morgan US Equity Strategy and Quantitative Research, Bloomberg

Figure 46: Buybacks Y/Y and Q/Q

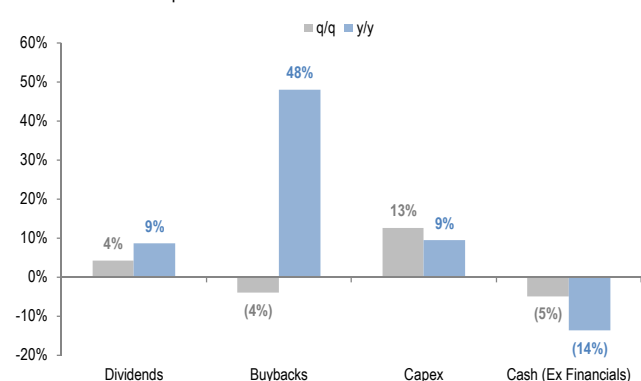
Based on 4Q18 Reported Results

| | Buybacks (for Cos that have reported 4Q18 results) | | | | | % Change | |
|------------------------|--|------------------|------------------|------------------|------------------|-------------|------------|
| | 4Q17 | 1Q18 | 2Q18 | 3Q18 | 4Q18 | QoQ | YoY |
| Health Care | \$8,615 | \$23,636 | \$13,963 | \$10,686 | \$19,135 | 79% | 122% |
| Consumer Discretionary | \$11,760 | \$11,727 | \$15,848 | \$17,052 | \$22,326 | 31% | 90% |
| Industrials | \$10,792 | \$14,913 | \$21,844 | \$14,090 | \$18,460 | 31% | 71% |
| Information Technology | \$33,326 | \$59,534 | \$59,320 | \$80,202 | \$54,186 | (32%) | 63% |
| Energy | \$2,862 | \$6,913 | \$2,431 | \$5,493 | \$4,040 | (26%) | 41% |
| Materials | \$2,066 | \$2,356 | \$1,974 | \$1,853 | \$2,905 | 57% | 41% |
| Financials | \$27,489 | \$24,536 | \$25,794 | \$30,347 | \$33,156 | 9% | 21% |
| Communication Services | \$9,552 | \$7,960 | \$10,711 | \$9,988 | \$9,467 | (5%) | (1%) |
| Consumer Staples | \$9,995 | \$6,708 | \$5,978 | \$9,811 | \$8,635 | (12%) | (14%) |
| S&P 500 | \$116,458 | \$158,284 | \$157,862 | \$179,521 | \$172,310 | (4%) | 48% |

Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, Bloomberg

Figure 47: Investment Spending Activity Q/Q and Y/Y

Based on 4Q18 Reported Results



Source: J.P. Morgan US Equity Strategy and Quantitative Research, Bloomberg

Figure 48: Largest Repurchase Announcements YTD

S&P 500 companies

| Company | Ticker | BB Size USD (mm) | Declared Date |
|----------------------------------|--------|------------------|---------------|
| 1 Chevron Corp | CVX | 25,000 | 1/30/2019 |
| 2 Union Pacific Corp | UNP | 24,235 | 2/7/2019 |
| 3 Cisco Systems Inc | CSCO | 15,000 | 2/13/2019 |
| 4 Home Depot Inc/The | HD | 15,000 | 2/26/2019 |
| 5 Alphabet Inc | GOOGL | 12,500 | 1/1/2019 |
| 6 Oracle Corp | ORCL | 12,000 | 2/12/2019 |
| 7 Visa Inc | V | 8,500 | 1/29/2019 |
| 8 Coca-Cola Co/The | KO | 6,879 | 2/21/2019 |
| 9 Linde PLC | LIN | 6,000 | 1/21/2019 |
| 10 CSX Corp | CSX | 5,000 | 1/16/2019 |
| 11 Lam Research Corp | LRCX | 5,000 | 1/23/2019 |
| 12 Waters Corp | WAT | 4,000 | 1/23/2019 |
| 13 eBay Inc | EBAY | 4,000 | 1/29/2019 |
| 14 Charles Schwab Corp/The | SCHW | 4,000 | 1/30/2019 |
| 15 Marriott International Inc/MD | MAR | 3,026 | 2/15/2019 |
| 16 Ball Corp | BLL | 2,539 | 1/23/2019 |
| 17 Bank of America Corp | BAC | 2,500 | 2/7/2019 |
| 18 Ameriprise Financial Inc | AMP | 2,500 | 2/26/2019 |
| 19 Allergan PLC | AGN | 2,000 | 1/29/2019 |
| 20 HCA Healthcare Inc | HCA | 2,000 | 1/29/2019 |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 49: S&P 500 Buyback Activity

Current Constituents

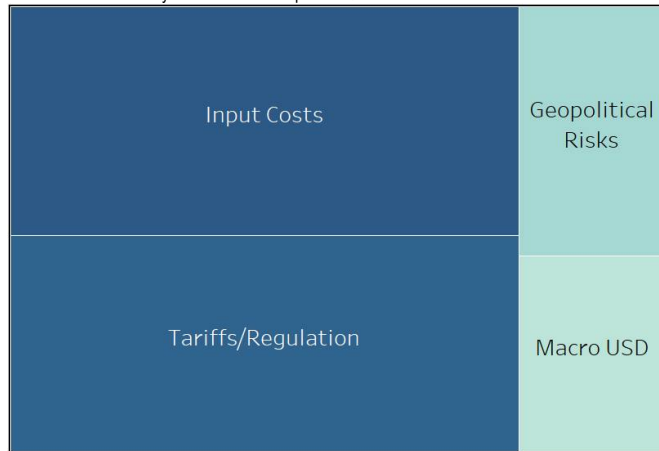
| | S&P 500 Index, Current Constituents | | | | | | | | | | | | | | | LTM |
|--|-------------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 1Q2018 | 2Q2018 | 3Q2018 | 4Q2018 | |
| Gross Stock Buybacks | \$529,934 | \$344,858 | \$278,494 | \$282,498 | \$444,752 | \$382,647 | \$455,459 | \$524,350 | \$562,871 | \$553,076 | \$545,613 | \$197,541 | \$197,358 | \$210,615 | \$212,676 | \$818,189 |
| YoY Change | 29% | -35% | -19% | 1% | 57% | -14% | 19% | 15% | 7% | -2% | -1% | 42% | 60% | 58% | 48% | 51% |
| Less: Equity Issuance | 115,305 | 444,910 | 244,252 | 114,417 | 129,932 | 125,333 | 118,299 | 121,014 | 141,111 | 102,877 | 87,386 | 25,643 | 23,586 | 26,078 | 17,844 | 93,151 |
| Net Buybacks | \$414,629 | -\$100,052 | \$34,242 | \$168,081 | \$314,820 | \$257,314 | \$337,161 | \$403,336 | \$421,760 | \$450,199 | \$458,227 | \$171,898 | \$173,772 | \$184,537 | \$194,832 | \$725,038 |
| YoY Change | | | -134% | 391% | 87% | -18% | 31% | 20% | 5% | 7% | 2% | 58% | 101% | 54% | 56% | -6% |
| Net Buyback Yield | 3.5% | -1.3% | 0.4% | 1.5% | 2.9% | 2.0% | 2.1% | 2.2% | 2.3% | 2.2% | 1.9% | 0.7% | 0.7% | 0.7% | 0.9% | 3.0% |
| Cash Dividend Paid | \$234,449 | \$239,778 | \$213,031 | \$221,074 | \$255,150 | \$288,007 | \$321,356 | \$357,268 | \$405,368 | \$422,238 | \$448,295 | \$117,053 | \$120,551 | \$120,225 | \$124,354 | \$482,182 |
| YoY Change | 14% | 2% | -11% | 4% | 15% | 13% | 12% | 11% | 13% | 4% | 6% | 9% | 10% | 4% | 8% | 8% |
| Total: Gross Buybacks + Dividends | \$764,384 | \$584,636 | \$491,524 | \$503,572 | \$699,902 | \$670,654 | \$776,816 | \$881,618 | \$968,239 | \$975,314 | \$993,908 | \$314,594 | \$317,909 | \$330,840 | \$337,029 | \$1,300,372 |
| Total Shareholder Yield | 6.5% | 7.7% | 5.1% | 4.6% | 6.3% | 5.3% | 4.8% | 4.8% | 5.3% | 4.9% | 4.1% | 1.3% | 1.3% | 1.3% | 1.5% | 5.4% |
| Net Income | \$694,336 | \$553,797 | \$527,731 | \$757,630 | \$867,572 | \$924,478 | \$963,673 | \$1,054,309 | \$1,057,173 | \$1,062,101 | \$1,178,608 | \$343,291 | \$359,959 | \$378,834 | \$364,649 | \$1,446,733 |
| Dividend Payout as % of Net Income | 34% | 43% | 40% | 29% | 29% | 31% | 33% | 34% | 38% | 40% | 38% | 34% | 33% | 32% | 34% | 33% |
| Buybacks as % of Net Income | 76% | 62% | 53% | 37% | 51% | 41% | 47% | 50% | 53% | 52% | 46% | 58% | 55% | 56% | 58% | 57% |
| Total Payout as % of Net Income | 110% | 106% | 93% | 66% | 81% | 73% | 81% | 84% | 92% | 92% | 84% | 92% | 88% | 87% | 92% | 90% |
| Cash flow from Operations | \$1,213,912 | \$1,199,010 | \$1,215,755 | \$1,441,239 | \$1,550,852 | \$1,601,905 | \$1,648,654 | \$1,704,088 | \$1,680,871 | \$1,742,559 | \$1,855,807 | \$503,775 | \$516,448 | \$564,317 | \$550,775 | \$2,135,315 |
| less Capex | \$451,881 | \$489,551 | \$413,015 | \$444,230 | \$529,695 | \$584,842 | \$607,958 | \$663,177 | \$629,697 | \$602,257 | \$617,113 | \$164,094 | \$176,635 | \$176,181 | \$194,045 | \$710,955 |
| YoY Change | 7% | 8% | -16% | 8% | 19% | 10% | 4% | 9% | -5% | -4% | 2% | 21% | 20% | 13% | 8% | 15% |
| Adjusted CFO | \$762,031 | \$709,460 | \$802,740 | \$997,009 | \$1,021,157 | \$1,017,063 | \$1,040,696 | \$1,040,910 | \$1,051,174 | \$1,140,302 | \$1,238,694 | \$339,681 | \$339,813 | \$388,136 | \$356,730 | \$1,424,360 |
| Capex as % of CFO | 37% | 82% | 61% | 51% | 69% | 66% | 37% | 39% | 37% | 35% | 33% | 33% | 34% | 31% | 35% | 33% |

Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, FactSet

Corporate Guidance Based on Textual Analysis

Figure 50: Key Management Topics

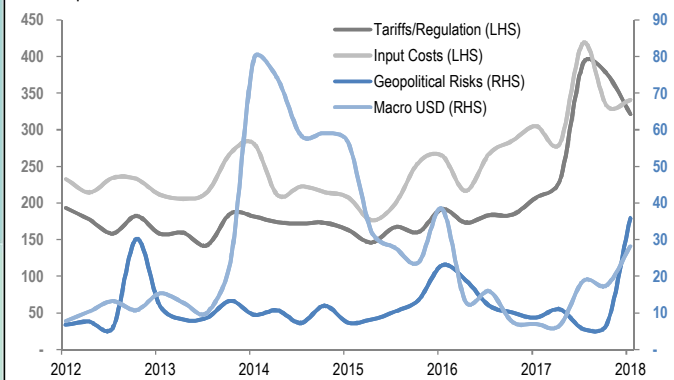
Based on Textual Analysis of Call Transcripts for Q2'18



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 51: Trade and Tariffs Remains in Focus

Scaled per Million Words for Universe, S&P 500



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 52: Geopolitical Risks Discussion

Scaled per Million Words for Universe, Tariffs/Regulation

| Topic | Sector | Overall (Management Discussion + Q&A) | | | | | | | |
|--------------------|--------------------|---------------------------------------|-----------|-----------|----------|-----------|----------|----------|-----------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Geopolitical Risks | Technology | 19 | 16 | 11 | 13 | 17 | 4 | 11 | 61 |
| | Industrials | 15 | 14 | 15 | 16 | 9 | 13 | 8 | 52 |
| | Utilities | 28 | 10 | 21 | - | 12 | 18 | 11 | 51 |
| | Financials | 29 | 11 | 15 | 8 | 14 | 4 | 5 | 45 |
| | S&P 500 | 19 | 12 | 10 | 9 | 11 | 6 | 7 | 36 |
| | Energy | 18 | 12 | 4 | 4 | 15 | - | 16 | 24 |
| | Health Care | 18 | 16 | 7 | 5 | 10 | 6 | 5 | 24 |
| | Materials | 28 | 13 | 12 | 17 | 16 | 6 | 11 | 22 |
| | Communication | 23 | 6 | 5 | 20 | 3 | 12 | 10 | 19 |
| | Staples | 9 | 2 | - | - | - | 2 | - | 18 |
| | Real Estate | 14 | 8 | 7 | - | 4 | 2 | 2 | 18 |
| | Discretionary | 12 | 9 | 9 | 6 | 8 | 2 | 1 | 16 |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 53: Macro USD Discussion

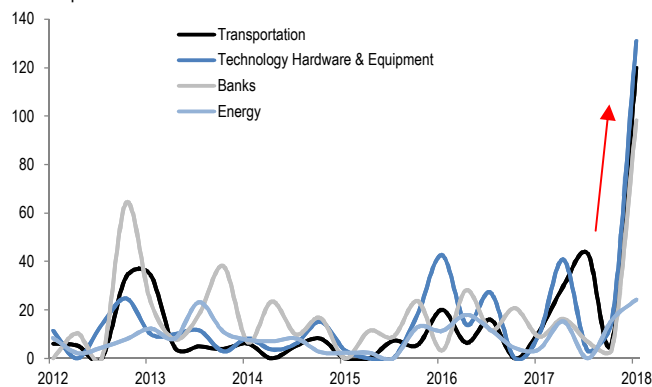
Scaled per Million Words for Universe, Input Costs

| Topic | Sector | Overall (Management Discussion + Q&A) | | | | | | | |
|-----------|--------------------|---------------------------------------|-----------|----------|----------|----------|-----------|-----------|-----------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Macro USD | Materials | 44 | 19 | 25 | 7 | 11 | 53 | 38 | 115 |
| | Staples | 34 | 47 | 20 | 14 | 8 | 33 | 31 | 72 |
| | Technology | 11 | 15 | 7 | 4 | 6 | 26 | 18 | 38 |
| | Discretionary | 17 | 21 | 6 | 13 | 13 | 30 | 31 | 35 |
| | Utilities | - | 3 | 17 | - | 3 | - | 4 | 31 |
| | Communication | 12 | 6 | 3 | 4 | 3 | 15 | 27 | 29 |
| | S&P 500 | 13 | 16 | 7 | 7 | 7 | 19 | 18 | 28 |
| | Real Estate | 4 | 8 | 9 | 7 | 6 | 20 | 15 | 25 |
| | Industrials | 13 | 24 | 7 | 14 | 9 | 10 | 22 | 21 |
| | Health Care | 9 | 13 | 5 | 3 | 5 | 10 | 12 | 14 |
| | Financials | 7 | 10 | 3 | 4 | 3 | 10 | 4 | 10 |
| | Energy | 2 | - | - | - | - | 2 | - | - |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 54: Geopolitical Sensitive Industries

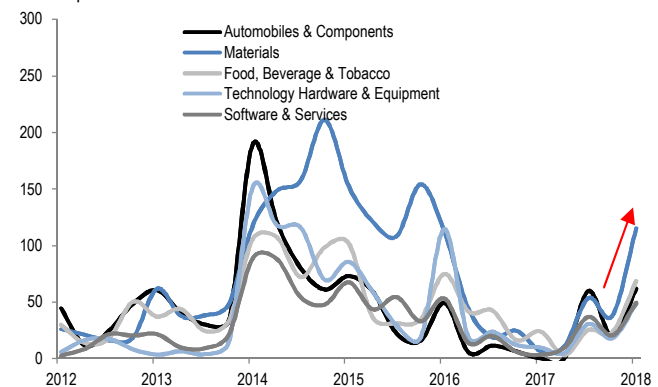
Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 55: Corporates most discussing USD s

Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 56: Tariffs/Regulation Discussion

Scaled per Million Words for Universe, Interest Expense/Funding Costs

| Topic | Sector | Overall (Management Discussion + Q&A) | | | | | | | |
|--------------------|---------------|---------------------------------------|------|------|------|------|------|------|------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Tariffs/Regulation | Industrials | 222 | 287 | 269 | 375 | 403 | 849 | 726 | 819 |
| | Discretionary | 283 | 271 | 342 | 422 | 388 | 698 | 673 | 584 |
| | Staples | 413 | 408 | 413 | 510 | 450 | 526 | 641 | 568 |
| | Materials | 449 | 435 | 523 | 331 | 645 | 731 | 653 | 549 |
| | S&P 500 | 173 | 183 | 184 | 208 | 230 | 391 | 377 | 322 |
| | Utilities | 85 | 159 | 112 | 116 | 126 | 155 | 137 | 267 |
| | Technology | 133 | 129 | 119 | 132 | 130 | 318 | 382 | 257 |
| | Health Care | 105 | 102 | 120 | 85 | 145 | 253 | 203 | 185 |
| | Energy | 162 | 172 | 159 | 124 | 137 | 202 | 166 | 109 |
| | Real Estate | 130 | 128 | 60 | 95 | 164 | 197 | 146 | 81 |
| | Financials | 35 | 46 | 37 | 46 | 62 | 97 | 62 | 49 |
| | Communication | 49 | 29 | 21 | 36 | 32 | 29 | 30 | 34 |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 57: Input Costs Discussion

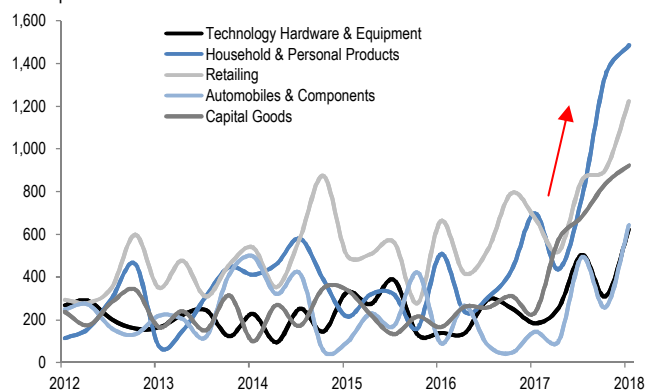
Scaled per Million Words for Universe, Labor/Wage

| Topic | Sector | Overall (Management Discussion + Q&A) | | | | | | | |
|-------------|---------------|---------------------------------------|------|------|------|------|------|------|------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Input Costs | Materials | 768 | 1012 | 1219 | 1144 | 824 | 1480 | 995 | 1767 |
| | Discretionary | 395 | 422 | 475 | 449 | 402 | 719 | 600 | 899 |
| | Staples | 529 | 660 | 731 | 1010 | 1027 | 1053 | 975 | 729 |
| | Industrials | 286 | 401 | 432 | 498 | 538 | 731 | 564 | 607 |
| | S&P 500 | 216 | 267 | 285 | 305 | 281 | 419 | 333 | 341 |
| | Utilities | 95 | 145 | 120 | 73 | 140 | 196 | 152 | 236 |
| | Energy | 361 | 255 | 296 | 354 | 303 | 406 | 271 | 212 |
| | Financials | 104 | 120 | 109 | 103 | 92 | 143 | 115 | 110 |
| | Real Estate | 162 | 167 | 123 | 189 | 210 | 237 | 218 | 105 |
| | Health Care | 66 | 77 | 83 | 74 | 77 | 172 | 106 | 99 |
| | Technology | 47 | 90 | 75 | 83 | 48 | 69 | 39 | 58 |
| | Communication | 32 | 46 | 68 | 28 | 52 | 44 | 47 | 43 |

Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 58: Tariffs Trends for S&P 500 Industries

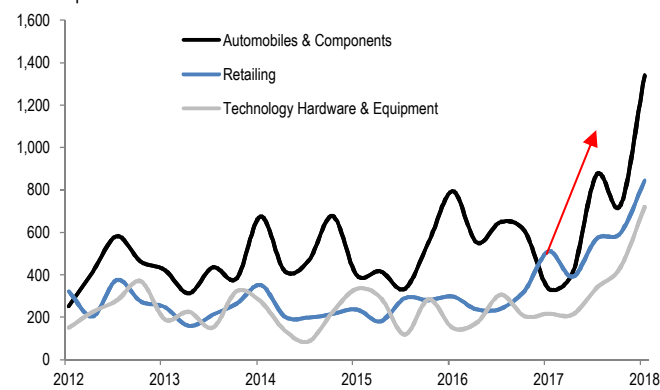
Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 59: Input Costs a Key Concern for Autos

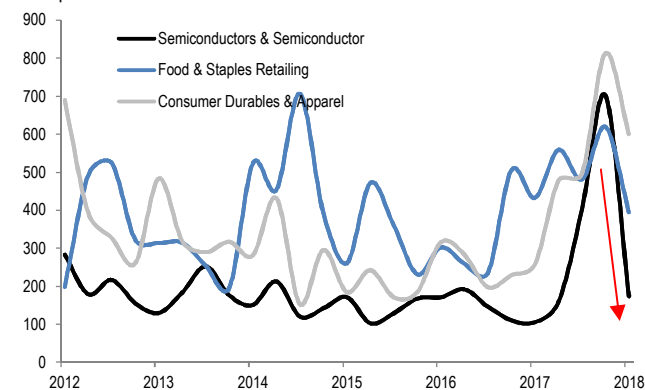
Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 60: Some tariff relief for Semis

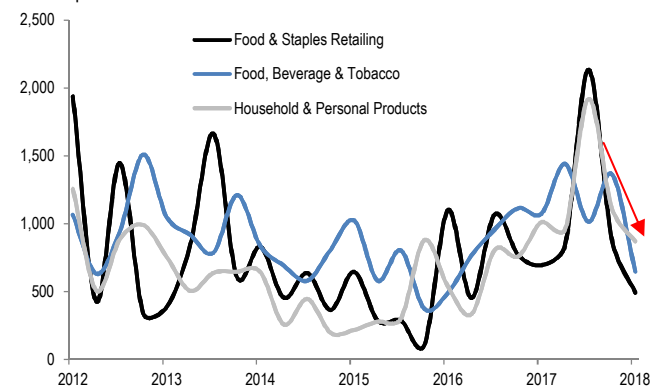
Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 61: Some relief in Input Costs for Staples

Scaled per Million Words for Universe



Source: J.P. Morgan US Equity Strategy & Global Quant Research

Figure 62: Trade Tariff Discussion by Sector and Industries

Scaled per Million Words for Universe



Sector

- Communication
- Discretionary
- Energy
- Financials
- Health Care
- Industrials
- Materials
- Real Estate
- Staples
- Technology
- Utilities

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Appendix I:

Figure 63: Trends in Topics Discussed in Calls Transcripts

S&P 500 Companies, Topic Mentions Per Million

| Topic | Sector | Management Discussion | | | | | | | | Questions and Answers | | | | | | | |
|--------------------------------|--------------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Geopolitical Risks | Materials | 15 | 8 | 13 | 10 | 23 | - | - | - | 36 | 17 | 12 | 20 | 12 | 9 | 18 | 32 |
| | Utilities | 14 | 19 | 17 | - | 24 | - | 7 | 67 | 44 | - | 24 | - | - | 33 | 14 | 38 |
| | Industrials | 19 | 16 | 15 | 21 | 4 | 3 | 6 | 62 | 12 | 13 | 14 | 12 | 12 | 18 | 9 | 44 |
| | Financials | 35 | 12 | 19 | 8 | 12 | 6 | 4 | 54 | 25 | 11 | 13 | 8 | 16 | 3 | 6 | 41 |
| | Technology | 26 | 33 | 8 | 9 | 12 | 3 | 16 | 50 | 15 | 8 | 12 | 15 | 20 | 5 | 8 | 66 |
| | Real Estate | 20 | 14 | 6 | - | - | - | - | 36 | 12 | 6 | 8 | - | 5 | 3 | 4 | 10 |
| | S&P 500 | 20 | 15 | 9 | 8 | 9 | 3 | 5 | 33 | 18 | 10 | 11 | 10 | 12 | 7 | 8 | 37 |
| | Staples | 4 | 5 | - | - | - | 4 | - | 23 | 12 | - | - | - | - | - | - | 15 |
| | Energy | 17 | 5 | - | 10 | 14 | - | - | 17 | 19 | 17 | 8 | - | 16 | - | 28 | 28 |
| | Communication | 27 | 13 | - | - | - | 23 | - | 13 | 21 | 4 | 7 | 25 | 4 | 8 | 14 | 23 |
| | Health Care | 12 | 12 | 7 | 4 | 1 | - | 2 | 12 | 22 | 18 | 6 | 6 | 16 | 10 | 6 | 33 |
| | Discretionary | 15 | 11 | 3 | 3 | 16 | 3 | - | 11 | 11 | 7 | 13 | 9 | 2 | 2 | 2 | 20 |
| Input Costs | Materials | 827 | 1249 | 1228 | 892 | 803 | 1496 | 1075 | 2599 | 730 | 882 | 1214 | 1266 | 838 | 1470 | 947 | 1400 |
| | Discretionary | 491 | 585 | 621 | 432 | 426 | 847 | 586 | 1191 | 336 | 317 | 384 | 463 | 383 | 643 | 611 | 697 |
| | Industrials | 322 | 443 | 396 | 373 | 515 | 875 | 662 | 723 | 263 | 378 | 453 | 577 | 551 | 657 | 498 | 525 |
| | Staples | 586 | 935 | 908 | 995 | 1181 | 1249 | 1158 | 691 | 497 | 407 | 585 | 1029 | 922 | 888 | 869 | 753 |
| | S&P 500 | 237 | 340 | 331 | 276 | 283 | 489 | 371 | 428 | 204 | 228 | 258 | 324 | 280 | 382 | 310 | 290 |
| | Energy | 333 | 193 | 271 | 328 | 241 | 442 | 252 | 171 | 386 | 306 | 316 | 371 | 346 | 379 | 285 | 235 |
| | Financials | 89 | 130 | 109 | 99 | 79 | 95 | 76 | 138 | 113 | 114 | 110 | 107 | 101 | 166 | 136 | 98 |
| | Utilities | 102 | 155 | 154 | 66 | 144 | 262 | 182 | 133 | 88 | 134 | 89 | 80 | 136 | 142 | 122 | 325 |
| | Health Care | 59 | 65 | 107 | 44 | 58 | 100 | 79 | 97 | 70 | 82 | 72 | 96 | 88 | 211 | 119 | 101 |
| | Real Estate | 177 | 128 | 84 | 156 | 93 | 141 | 149 | 95 | 156 | 184 | 148 | 204 | 257 | 267 | 257 | 110 |
| | Technology | 44 | 92 | 96 | 64 | 42 | 56 | 50 | 83 | 49 | 89 | 65 | 95 | 52 | 74 | 33 | 47 |
| | Communication | 18 | - | 104 | 19 | 71 | 81 | 47 | 79 | 38 | 58 | 54 | 30 | 44 | 31 | 47 | 23 |
| Interest Expense/Funding Costs | Utilities | 47 | 45 | 128 | 141 | 90 | 151 | 116 | 289 | 22 | 21 | 40 | 20 | 28 | 25 | 36 | 19 |
| | Financials | 110 | 151 | 124 | 101 | 144 | 213 | 148 | 188 | 62 | 60 | 75 | 58 | 85 | 57 | 92 | 35 |
| | Materials | 10 | 53 | 13 | 20 | 28 | 38 | 35 | 125 | - | - | - | - | 3 | 4 | 9 | 24 |
| | Real Estate | 68 | 7 | 42 | 30 | 33 | 42 | 61 | 95 | 26 | 3 | 4 | 53 | 40 | 13 | 30 | 20 |
| | S&P 500 | 29 | 40 | 36 | 34 | 37 | 58 | 52 | 61 | 12 | 11 | 14 | 17 | 21 | 13 | 27 | 17 |
| | Technology | 9 | 8 | 14 | 18 | 9 | 11 | 22 | 58 | 2 | 4 | 1 | 7 | 9 | 1 | 11 | 2 |
| | Communication | 18 | 13 | 47 | - | 30 | 46 | 35 | 40 | - | 4 | - | - | - | - | 9 | 15 |
| | Energy | 13 | - | - | - | 19 | 35 | 11 | 34 | - | - | 12 | - | 6 | - | - | 9 |
| | Industrials | 29 | 76 | 29 | 7 | 11 | 55 | 18 | 26 | 2 | 3 | 8 | 14 | 16 | 8 | 22 | 16 |
| | Discretionary | 13 | 6 | 9 | 18 | 20 | 15 | 40 | 23 | 8 | 11 | 6 | 13 | 14 | 9 | 33 | 16 |
| | Health Care | - | 6 | - | 2 | 3 | 14 | 46 | 17 | 2 | 3 | - | 5 | 5 | - | 6 | 7 |
| | Staples | - | 38 | 16 | 79 | 57 | 60 | 35 | 11 | - | - | - | 5 | 3 | 20 | 11 | 52 |
| Labor/Wage | Energy | - | 16 | - | 10 | 32 | 35 | 27 | - | 8 | 9 | 12 | 25 | 29 | 30 | 28 | 19 |
| | Real Estate | 89 | 213 | 138 | 67 | 106 | 133 | 162 | 273 | 40 | 44 | 57 | 63 | 53 | 57 | 102 | 95 |
| | Discretionary | 118 | 140 | 165 | 159 | 141 | 135 | 138 | 170 | 79 | 99 | 77 | 142 | 57 | 98 | 96 | 59 |
| | Staples | 54 | 19 | 65 | 31 | 61 | 32 | 74 | 68 | 22 | 30 | 33 | 49 | 44 | 27 | 74 | 30 |
| | S&P 500 | 39 | 51 | 56 | 56 | 50 | 60 | 63 | 60 | 36 | 34 | 37 | 63 | 44 | 46 | 46 | 38 |
| | Industrials | 38 | 38 | 35 | 45 | 44 | 61 | 45 | 58 | 46 | 25 | 59 | 77 | 55 | 96 | 62 | 52 |
| | Communication | 37 | 40 | 47 | 37 | 10 | 23 | 23 | 40 | 21 | 7 | 14 | - | 8 | 8 | 9 | 38 |
| | Financials | 34 | 42 | 58 | 68 | 49 | 70 | 41 | 35 | 25 | 33 | 21 | 37 | 54 | 22 | 30 | 33 |
| | Technology | 25 | 28 | 33 | 57 | 30 | 35 | 62 | 29 | 16 | 18 | 20 | 74 | 38 | 31 | 22 | 33 |
| | Health Care | 10 | 15 | 15 | 13 | 12 | 28 | 33 | 22 | 46 | 27 | 43 | 21 | 39 | 35 | 46 | 14 |
| | Utilities | 34 | - | 17 | 9 | 18 | 30 | 36 | 22 | 29 | 14 | 8 | 10 | 6 | - | 7 | 19 |
| | Materials | 26 | 23 | 64 | 61 | 47 | 84 | 55 | 18 | 39 | 46 | 32 | 139 | 41 | 27 | 27 | 47 |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 64: Trends in Topics Discussed in Calls Transcripts

S&P 500 Companies

| Topic | Sector | Management Discussion | | | | | | | | Questions and Answers | | | | | | | |
|------------------------------------|--------------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|
| | | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Macro USD | Energy | - | - | - | - | - | 6 | - | - | 4 | - | - | - | - | - | - | - |
| | Materials | 92 | 53 | 38 | 10 | 14 | 99 | 85 | 341 | 13 | - | 16 | 5 | 9 | 27 | 9 | 16 |
| | Technology | 22 | 20 | 16 | 5 | 12 | 56 | 40 | 83 | 4 | 13 | 3 | 4 | 3 | 13 | 6 | 18 |
| | Communication | 37 | 27 | 9 | - | 10 | 46 | 70 | 79 | - | - | - | 5 | - | 4 | 9 | - |
| | Staples | 71 | 80 | 36 | 13 | 8 | 64 | 54 | 79 | 12 | 17 | 7 | 16 | 8 | 7 | 17 | 66 |
| | Utilities | - | 6 | 34 | - | 6 | - | 7 | 67 | - | - | - | - | - | - | - | - |
| | Real Estate | - | 7 | 12 | 7 | 7 | 42 | 34 | 59 | 6 | 9 | 8 | 6 | 5 | 13 | 4 | 10 |
| | S&P 500 | 26 | 27 | 14 | 8 | 10 | 37 | 36 | 53 | 5 | 10 | 4 | 6 | 4 | 9 | 6 | 14 |
| | Industrials | 26 | 33 | 7 | 10 | 11 | 21 | 43 | 47 | 4 | 19 | 6 | 17 | 9 | 5 | 8 | 3 |
| | Discretionary | 30 | 28 | 12 | 21 | 18 | 51 | 57 | 45 | 9 | 16 | 2 | 7 | 9 | 18 | 10 | 27 |
| | Health Care | 24 | 35 | 12 | 4 | 12 | 21 | 23 | 15 | 1 | 3 | 1 | 2 | 1 | 4 | 6 | 13 |
| | Financials | 12 | 12 | 2 | 5 | 5 | 12 | 8 | 15 | 4 | 9 | 4 | 4 | 2 | 9 | 1 | 8 |
| Reinvestment (capital expenditure) | Utilities | 535 | 781 | 642 | 723 | 493 | 797 | 764 | 1244 | 714 | 516 | 807 | 769 | 403 | 518 | 748 | 1166 |
| | Energy | 273 | 334 | 375 | 425 | 403 | 519 | 371 | 870 | 338 | 458 | 605 | 476 | 378 | 413 | 368 | 761 |
| | Materials | 398 | 449 | 464 | 656 | 249 | 327 | 417 | 502 | 193 | 305 | 282 | 313 | 204 | 299 | 422 | 309 |
| | Communication | 183 | 281 | 170 | 355 | 303 | 334 | 385 | 477 | 172 | 218 | 217 | 291 | 156 | 395 | 379 | 415 |
| | Industrials | 327 | 402 | 411 | 392 | 327 | 451 | 255 | 321 | 285 | 300 | 325 | 456 | 258 | 311 | 329 | 399 |
| | S&P 500 | 217 | 283 | 262 | 288 | 223 | 299 | 238 | 318 | 184 | 208 | 225 | 269 | 187 | 210 | 234 | 259 |
| | Technology | 142 | 183 | 185 | 152 | 196 | 223 | 182 | 314 | 191 | 204 | 180 | 178 | 207 | 213 | 250 | 240 |
| | Discretionary | 257 | 215 | 252 | 279 | 177 | 212 | 174 | 232 | 138 | 184 | 217 | 294 | 168 | 136 | 172 | 164 |
| | Financials | 129 | 196 | 167 | 182 | 155 | 305 | 142 | 232 | 95 | 86 | 105 | 91 | 120 | 97 | 109 | 98 |
| | Staples | 224 | 188 | 234 | 284 | 178 | 229 | 187 | 215 | 169 | 156 | 167 | 222 | 148 | 206 | 171 | 325 |
| | Health Care | 100 | 174 | 139 | 185 | 143 | 152 | 149 | 210 | 88 | 89 | 83 | 128 | 90 | 61 | 81 | 121 |
| | Real Estate | 191 | 256 | 180 | 364 | 246 | 233 | 223 | 190 | 210 | 234 | 284 | 360 | 246 | 267 | 303 | 254 |
| Shareholder Return | Utilities | 183 | 239 | 342 | 451 | 265 | 283 | 299 | 489 | 125 | 127 | 145 | 180 | 164 | 175 | 237 | 268 |
| | Energy | 68 | 94 | 133 | 241 | 264 | 265 | 269 | 341 | 34 | 91 | 78 | 105 | 119 | 73 | 127 | 179 |
| | Materials | 117 | 152 | 146 | 338 | 127 | 205 | 191 | 269 | 33 | 33 | 36 | 40 | 21 | 36 | 24 | 47 |
| | Financials | 136 | 356 | 158 | 159 | 141 | 332 | 203 | 257 | 50 | 83 | 76 | 68 | 64 | 53 | 82 | 78 |
| | Technology | 82 | 120 | 104 | 200 | 126 | 221 | 96 | 236 | 48 | 46 | 44 | 58 | 43 | 49 | 20 | 37 |
| | S&P 500 | 107 | 159 | 131 | 193 | 139 | 185 | 147 | 172 | 42 | 46 | 51 | 58 | 44 | 40 | 44 | 53 |
| | Real Estate | 129 | 199 | 144 | 141 | 126 | 174 | 223 | 154 | 46 | 47 | 72 | 47 | 51 | 57 | 83 | 85 |
| | Industrials | 115 | 158 | 121 | 195 | 127 | 172 | 108 | 139 | 37 | 36 | 40 | 56 | 38 | 38 | 14 | 29 |
| | Staples | 145 | 103 | 81 | 192 | 197 | 104 | 84 | 136 | 34 | 39 | 23 | 22 | 36 | 24 | 23 | 66 |
| | Health Care | 64 | 88 | 94 | 139 | 100 | 119 | 109 | 109 | 47 | 41 | 56 | 51 | 18 | 14 | 32 | 25 |
| | Discretionary | 129 | 115 | 141 | 194 | 119 | 114 | 126 | 91 | 23 | 11 | 41 | 45 | 30 | 18 | 23 | 27 |
| | Communication | 73 | 134 | 132 | 112 | 81 | 81 | 58 | 53 | 21 | 11 | 7 | 65 | 8 | 12 | 5 | 23 |
| Tariffs/Regulation | Industrials | 239 | 234 | 260 | 245 | 454 | 749 | 609 | 774 | 210 | 315 | 275 | 457 | 375 | 901 | 804 | 851 |
| | Staples | 494 | 569 | 525 | 598 | 528 | 498 | 730 | 691 | 366 | 260 | 321 | 401 | 397 | 550 | 590 | 487 |
| | Discretionary | 328 | 291 | 417 | 385 | 346 | 571 | 636 | 556 | 255 | 257 | 294 | 449 | 419 | 774 | 703 | 603 |
| | Technology | 143 | 122 | 159 | 148 | 112 | 250 | 220 | 393 | 127 | 133 | 98 | 122 | 140 | 347 | 465 | 193 |
| | Materials | 271 | 396 | 433 | 215 | 554 | 600 | 442 | 376 | 563 | 456 | 581 | 387 | 702 | 809 | 780 | 625 |
| | S&P 500 | 171 | 202 | 202 | 203 | 228 | 340 | 333 | 356 | 175 | 173 | 174 | 210 | 231 | 417 | 403 | 302 |
| | Utilities | 68 | 187 | 111 | 94 | 84 | 111 | 153 | 333 | 103 | 127 | 113 | 140 | 164 | 192 | 122 | 210 |
| | Health Care | 102 | 79 | 77 | 109 | 137 | 159 | 128 | 183 | 106 | 112 | 142 | 68 | 150 | 303 | 238 | 186 |
| | Energy | 137 | 193 | 119 | 164 | 134 | 230 | 220 | 153 | 184 | 155 | 191 | 99 | 139 | 181 | 127 | 85 |
| | Real Estate | 61 | 142 | 72 | 59 | 106 | 174 | 176 | 107 | 159 | 121 | 53 | 110 | 187 | 204 | 129 | 70 |
| | Financials | 25 | 51 | 45 | 52 | 83 | 95 | 66 | 49 | 41 | 44 | 32 | 41 | 49 | 99 | 61 | 49 |
| | Communication | 18 | 53 | 28 | 56 | 20 | - | 12 | 40 | 63 | 22 | 18 | 30 | 36 | 39 | 37 | 30 |

Source: J.P. Morgan US Equity Strategy and Quantitative Research

Figure 65: Fundamentals: Sales Growth, Net Income Margin, Earnings Growth, and Valuation

S&P 500 Current Constituents

| | Market Cap | | | Sales Growth | | | | | | | NI MargiNI Margin (Avg Last 4Qs) | | | | Earnings Growth | | | | | | | Valuation — PE | |
|----------------------------|------------------|------------|--------|--------------|---------|---------|---------|---------|-------|-------|----------------------------------|-------|-------|--------|-----------------|---------|---------|---------|---------|--------|--------|----------------|---------|
| | \$'s in billions | % of Total | Rating | 2018/4C | 2019/1C | 2019/2C | 2019/3C | 2019/4C | 2018 | 2019 | 2017 | 2018 | 2019 | Delta | 2018/4C | 2019/1C | 2019/2C | 2019/3C | 2019/4C | 2018 | 2019 | 2018 | 2019 |
| Energy | \$1,265 | 5% | OW | 12% | 1% | -2% | -1% | -1% | 16.3% | -0.9% | 4.0% | 7.0% | 6.3% | -0.7% | 90% | -16% | -7% | -14% | -9% | 103.6% | -11.3% | 16.6x | 18.7x |
| Materials | \$622 | 3% | N | 7% | 4% | 5% | 6% | 4% | 16.5% | 4.9% | 9.0% | 10.7% | 10.1% | -0.6% | 13% | -11% | -3% | 4% | 7% | 38.7% | -0.8% | 15.9x | 16.1x |
| Industrials | \$2,384 | 10% | OW | 6% | 4% | 4% | 4% | 5% | 8.2% | 4.0% | 8.8% | 9.8% | 10.1% | 0.3% | 26% | 2% | 7% | 9% | 10% | 20.7% | 7.1% | 17.1x | 16.0x |
| Discretionary | \$2,535 | 11% | OW | 5% | 4% | 4% | 6% | 6% | 7.5% | 4.9% | 6.8% | 7.5% | 7.5% | 0.0% | 13% | -5% | 4% | 7% | 12% | 17.8% | 4.9% | 21.9x | 20.9x |
| Staples | \$1,926 | 8% | UW | 2% | 3% | 3% | 4% | 4% | 3.7% | 3.4% | 6.6% | 6.9% | 6.7% | -0.2% | 1% | -4% | 0% | 2% | 5% | 7.8% | 0.8% | 18.4x | 18.3x |
| HealthCare | \$3,532 | 15% | UW | 9% | 13% | 12% | 13% | 10% | 7.8% | 12.0% | 10.2% | 10.8% | 10.2% | -0.6% | 11% | 5% | 3% | 5% | 10% | 14.3% | 5.7% | 16.8x | 15.9x |
| Financials | \$2,810 | 12% | N | -6% | 5% | 1% | -1% | 15% | 2.7% | 4.8% | 17.0% | 19.8% | 20.0% | 0.2% | 7% | -2% | 2% | 3% | 15% | 21.6% | 3.9% | 11.7x | 11.2x |
| Technology | \$4,943 | 21% | OW | 1% | -1% | 0% | 1% | 5% | 9.3% | 1.3% | 21.3% | 23.4% | 21.9% | -1.5% | 4% | -11% | -9% | -6% | 4% | 20.1% | -5.0% | 17.2x | 18.1x |
| Communication Svcs | \$2,600 | 11% | N | 13% | 12% | 12% | 9% | 7% | 11.8% | 9.8% | 14.1% | 16.3% | 15.4% | -0.9% | 31% | -5% | 21% | 0% | 2% | 29.7% | 3.9% | 18.4x | 17.7x |
| Utilities | \$762 | 3% | UW | 3% | 5% | 5% | 7% | -1% | 2.3% | 4.0% | 11.8% | 12.6% | 12.9% | 0.3% | -6% | 3% | -2% | 5% | 23% | 9.5% | 6.4% | 18.6x | 17.4x |
| Real Estate | \$712 | 3% | UW | 13% | 4% | 4% | 4% | 3% | 13.4% | 3.9% | 19.9% | 19.0% | 14.9% | -4.1% | 28% | -22% | -10% | -20% | -21% | 8.7% | -18.5% | 35.2x | 43.2x |
| S&P 500 | \$23,380 | 100% | | 4.8% | 5.2% | 4.5% | 4.7% | 6.3% | 7.9% | 5.2% | 10.8% | 12.2% | 11.8% | -0.43% | 13.7% | -3.7% | 1.2% | 1.1% | 7.5% | 22.0% | 1.6% | 16.7x | 16.5x |
| Ex-Energy | \$22,115 | 95% | | 4.2% | 5.6% | 5.1% | 5.4% | 7.0% | 7.1% | 5.8% | 11.5% | 12.7% | 12.3% | -0.43% | 10.9% | -3.1% | 1.7% | 2.1% | 8.5% | 19.2% | 2.3% | 16.8x | 16.4x |
| Energy Equipment & Ser | \$140 | 0.6% | | 3% | 2% | 0% | 2% | 6% | 13.3% | 2.5% | 4.0% | 4.5% | 4.9% | 0.4% | -20% | -7% | -15% | 8% | 69% | 25.8% | 11.7% | 30.4x | 27.2x |
| Oil Gas & Consumable Fi | \$1,125 | 4.8% | | 13% | 0% | -2% | -2% | -2% | 16.6% | -1.3% | 4.0% | 7.3% | 6.5% | -0.9% | 104% | -17% | -7% | -15% | -12% | 112.1% | -12.8% | 15.7x | 18.0x |
| Chemicals | \$469 | 2.0% | | 10% | 6% | 8% | 11% | 5% | 20.7% | 7.6% | 10.2% | 11.5% | 11.4% | -0.1% | 9% | -7% | 5% | 15% | 13% | 36.5% | 6.3% | 17.4x | 16.4x |
| Construction Materials | \$26 | 0.1% | | 8% | 8% | 8% | 9% | 9% | 9.9% | 8.4% | 11.3% | 12.1% | 13.3% | 1.2% | 3% | 1% | 14% | 18% | 32% | 17.5% | 18.7% | 26.0x | 21.9x |
| Containers & Packaging | \$71 | 0.3% | | 5% | 5% | 5% | 6% | 4% | 5.8% | 5.1% | 6.5% | 8.1% | 7.9% | -0.2% | 14% | -4% | 1% | 6% | 4% | 31.2% | 2.4% | 12.5x | 12.2x |
| Metals & Mining | \$56 | 0.2% | | 0% | -4% | -9% | -13% | -5% | 15.8% | -7.9% | 7.2% | 10.5% | 6.4% | -4.1% | 43% | -42% | -52% | -46% | -29% | 68.5% | -43.8% | 10.4x | 18.5x |
| Aerospace & Defense | \$684 | 2.9% | | 10% | 11% | 10% | 10% | 7% | 9.1% | 9.2% | 7.4% | 9.5% | 9.6% | 0.1% | 81% | 6% | 16% | 12% | 8% | 39.4% | 10.5% | 19.4x | 17.5x |
| Building Products | \$67 | 0.3% | | -14% | -13% | -11% | -13% | 4% | 0.8% | -8.8% | 8.8% | 9.1% | 8.7% | -0.4% | -18% | -24% | -14% | -18% | 11% | 4.1% | -12.8% | 14.9x | 17.1x |
| Construction & Engineeri | \$21 | 0.1% | | 7% | -6% | -5% | -3% | 3% | 16.4% | -3.0% | 2.4% | 3.0% | 3.7% | 0.7% | 35% | 87% | 2% | 12% | 19% | 43.0% | 21.4% | 15.5x | 12.8x |
| Electrical Equipment | \$115 | 0.5% | | 6% | 6% | 6% | 6% | 5% | 8.4% | 5.8% | 11.4% | 12.5% | 12.6% | 0.1% | 13% | 9% | 0% | 14% | 4% | 18.8% | 6.6% | 18.1x | 16.9x |
| Industrial Conglomerates | \$356 | 1.5% | | 2% | -5% | -6% | -3% | 1% | 1.2% | -3.3% | 10.7% | 9.4% | 9.9% | 0.5% | -14% | -10% | -8% | 8% | 19% | -10.7% | 2.1% | 18.8x | 18.4x |
| Machinery | \$372 | 1.6% | | 7% | 2% | 4% | 4% | 2% | 14.0% | 3.0% | 9.6% | 10.9% | 11.3% | 0.4% | 10% | 3% | 8% | 5% | 11% | 29.5% | 6.7% | 14.5x | 13.6x |
| Trading Companies & Dis | \$46 | 0.2% | | 12% | 10% | 11% | 11% | 8% | 12.9% | 9.9% | 9.9% | 12.6% | 12.4% | -0.3% | 35% | 5% | 6% | 11% | 9% | 43.6% | 7.7% | 15.0x | 14.0x |
| Commercial Services & S | \$120 | 0.5% | | 3% | 5% | 5% | 5% | 5% | 4.1% | 5.2% | 9.9% | 12.2% | 12.1% | -0.1% | 29% | 5% | 8% | 3% | 2% | 28.1% | 4.5% | 25.4x | 24.3x |
| Professional Services | \$72 | 0.3% | | 3% | 4% | 5% | 6% | 5% | 5.6% | 4.9% | 13.7% | 14.1% | 14.4% | 0.4% | 16% | 0% | 7% | 9% | 14% | 8.0% | 7.7% | 23.3x | 21.6x |
| Air Freight & Logistics | \$167 | 0.7% | | 7% | 5% | 5% | 5% | 5% | 10.2% | 5.2% | 6.3% | 7.4% | 7.1% | -0.3% | 22% | -8% | -2% | 9% | 4% | 28.2% | 0.6% | 13.7x | 13.6x |
| Airlines | \$113 | 0.5% | | 6% | 4% | 6% | 5% | 5% | 6.8% | 5.0% | 7.3% | 7.2% | 8.2% | 1.0% | 32% | 10% | 23% | 23% | 19% | 5.2% | 20.3% | 9.8x | 8.1x |
| Road & Rail | \$251 | 1.1% | | 9% | 6% | 5% | 4% | 5% | 9.2% | 5.0% | 18.1% | 22.8% | 23.1% | 0.3% | 38% | 12% | 5% | 6% | 4% | 37.2% | 6.5% | 19.0x | 17.9x |
| Auto Components | \$35 | 0.1% | | 0% | -5% | 0% | 4% | 5% | -2.7% | 0.9% | 7.9% | 7.1% | 6.9% | -0.2% | -14% | -30% | -6% | 14% | 13% | -12.5% | -2.3% | 12.1x | 12.3x |
| Automobiles | \$96 | 0.4% | | 1% | -4% | -1% | 1% | -1% | 0.0% | -1.1% | 5.8% | 5.1% | 4.9% | -0.1% | -18% | -29% | -4% | 2% | 23% | -13.3% | -3.3% | 6.3x | 6.5x |
| Household Durables | \$86 | 0.4% | | 8% | 1% | -5% | 2% | 2% | 9.9% | -0.1% | 7.7% | 8.6% | 8.0% | -0.6% | 19% | -12% | -9% | -10% | 0% | 22.3% | -7.1% | 10.3x | 11.1x |
| Leisure Products | \$15 | 0.1% | | -9% | -9% | 2% | 6% | 7% | -9.6% | 3.0% | 3.1% | 1.8% | 5.6% | 3.8% | 325% | -14% | -77% | 37% | 63% | -47.1% | 215.5% | 92.6x | 29.4x |
| Textiles Apparel & Luxur | \$215 | 0.9% | | 6% | 4% | 5% | 6% | 7% | 9.1% | 5.6% | 10.1% | 10.3% | 10.3% | 0.0% | 11% | -8% | 11% | 9% | 10% | 10.8% | 5.9% | 23.0x | 21.7x |
| Hotels Restaurants & Lei | \$457 | 2.0% | | 4% | 3% | 5% | 6% | 6% | 2.4% | 5.1% | 13.3% | 14.7% | 14.7% | 0.0% | 2% | -7% | 5% | 7% | 16% | 13.1% | 5.4% | 21.1x | 20.0x |
| Diversified Consumer Se | \$5 | 0.0% | | -5% | -3% | 1% | 0% | 2% | 1.9% | -2.1% | 8.7% | 22.5% | 12.8% | -9.7% | -52% | -27% | 4% | 3% | -3% | 164.6% | -44.2% | 7.0x | 12.5x |
| Distributors | \$25 | 0.1% | | 14% | 10% | 7% | 4% | 4% | 17.6% | 6.3% | 4.9% | 5.0% | 5.1% | 0.1% | 20% | 10% | 9% | 6% | 10% | 20.5% | 8.5% | 16.2x | 15.0x |
| Internet & Direct Marketi | \$936 | 4.0% | | 19% | 15% | 16% | 17% | 17% | 28.2% | 16.7% | 4.3% | 6.5% | 6.9% | 0.4% | 81% | 28% | 18% | 18% | 31% | 96.9% | 23.3% | 53.2x | 43.2x |
| Multiline Retail | \$118 | 0.5% | | 0% | 3% | 3% | 3% | 3% | 3.9% | 3.2% | 4.1% | 4.7% | 4.5% | -0.2% | 7% | 4% | -1% | -1% | -1% | 17.2% | -0.1% | 13.7x | 13.6x |
| Specialty Retail | \$547 | 2.3% | | 3% | 4% | 3% | 4% | 3% | 5.5% | 3.5% | 6.9% | 7.8% | 7.8% | 0.0% | 14% | 3% | 1% | 5% | 3% | 19.4% | 2.9% | 18.4x | 17.9x |
| Food & Staples Retailing | \$509 | 2.2% | | 3% | 3% | 3% | 4% | 4% | 4.5% | 3.3% | 2.7% | 2.8% | 2.7% | -0.1% | -3% | -7% | -2% | 1% | 7% | 8.1% | -0.3% | 19.0x | 19.0x |
| Beverages | \$437 | 1.9% | | -1% | 2% | 3% | 4% | 7% | -1.2% | 4.4% | 16.1% | 17.7% | 16.8% | -0.9% | 14% | -2% | 0% | -1% | -1% | 8.8% | -0.9% | 20.1x | 20.3x |
| Food Products | \$300 | 1.3% | | 2% | 5% | 4% | 5% | 4% | 4.2% | 4.3% | 8.6% | 8.9% | 8.3% | -0.6% | -3% | -10% | -4% | 0% | 4% | 7.2% | -2.4% | 14.4x | 14.8x |
| Tobacco | \$233 | 1.0% | | -6% | -2% | 2% | 4% | 6% | 2.1% | 2.5% | 28.8% | 31.4% | 32.3% | 0.9% | -2% | 0% | 2% | 7% | 11% | 11.2% | 5.3% | 98.3x | 93.4x |
| Household Products | \$381 | 1.6% | | 0% | -1% | 1% | 3% | 3% | 1.9% | 1.4% | 15.6% | 15.8% | 16.1% | 0.3% | 1% | -1% | 6% | 4% | 4% | 3.0% | 3.4% | 16.6x | 16.0x |
| Personal Products | \$65 | 0.3% | | 2% | 1% | 2% | 4% | 5% | 6.1% | 2.9% | 9.0% | 9.9% | 10.3% | 0.4% | 2% | 6% | 3% | 6% | 10% | 16.6% | 6.9% | 399.8x | 373.9x |
| Health Care Equipment & | \$821 | 3.5% | | 7% | 2% | 4% | 6% | 7% | 10.4% | 4.7% | 18.4% | 19.1% | 19.6% | 0.5% | 11% | 2% | 6% | 10% | 11% | 14.6% | 7.4% | 28.6x | 26.6x |
| Health Care Providers & | \$702 | 3.0% | | 10% | 18% | 18% | 17% | 14% | 7.9% | 16.3% | 3.0% | 3.4% | 3.4% | 0.0% | 21% | 15% | 16% | 19% | 19% | 22.0% | 17.4% | 20.5x | 17.5x |
| Health Care Technology | \$18 | 0.1% | | 4% | 7% | 6% | 7% | 8% | 4.4% | 7.0% | 15.7% | 15.3% | 14.9% | -0.4% | 6% | 4% | 3% | 4% | 7% | 1.7% | 4.4% | 1126.0x | 1078.2x |
| Biotechnology | \$584 | 2.5% | | 8% | 5% | 2% | 3% | 1% | 6.3% | 2.8% | 38.0% | 39.1% | 39.4% | 0.3% | 12% | 6% | 2% | 0% | 7% | 9.6% | 3.5% | 19.1x | 18.5x |
| Pharmaceuticals | \$1,161 | 5.0% | | 2% | 1% | -1% | 2% | 2% | 5.0% | 0.9% | 26.5% | 28.5% | 27.9% | -0.5% | 5% | -1% | -5% | -1% | 5% | 12.7% | -1.0% | 12.3x | 12.4x |
| Life Sciences Tools & Ser | \$246 | 1.1% | | 11% | 3% | 4% | 5% | 6% | 17.4% | 4.8% | 17.4% | 17.6% | 18.2% | 0.6% | 11% | 6% | 8% | 8% | 10% | 18.7% | 8.4% | 102.1x | 94.2x |
| Banks | \$1,362 | 5.8% | | 2% | 0% | 2% | 2% | 4% | 3.3% | 2.3% | 22.7% | 27.0% | 27.3% | 0.3% | 18% | 0% | 6% | 2% | 6% | 23.0% | 3.5% | 7.3x | 7.0x |
| Diversified Financial Serv | \$6 | 0.0% | | -53% | 20% | -2% | -13% | 135% | -8.9% | 16.2% | 5.4% | 18.4% | 9.5% | -9.0% | -11% | -18% | -86% | -46% | -555% | 65.7% | -61.4% | 900.4x | 2332.8x |
| Consumer Finance | \$175 | 0.8% | | 10% | 7% | 6% | 6% | 6% | 11.2 | | | | | | | | | | | | | | |

Net Analyst Revisions (% EPS Upgrades less Downgrades) – S&P 500 Sectors

Figure 66: Energy

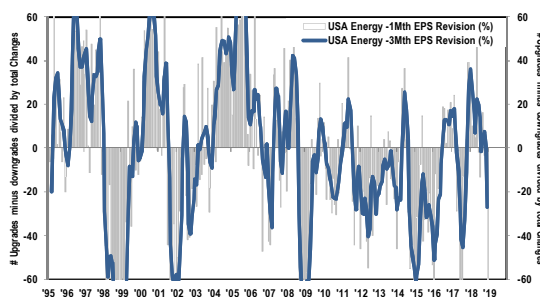


Figure 67: Materials

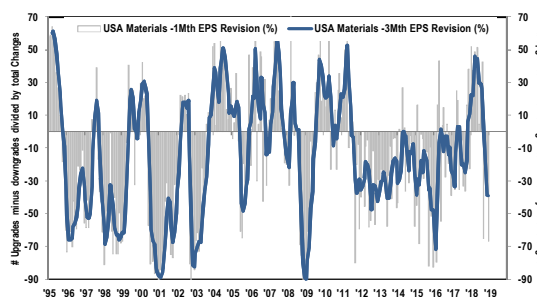


Figure 68: Industrials

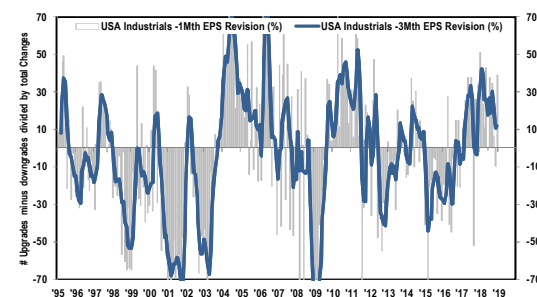


Figure 69: Technology

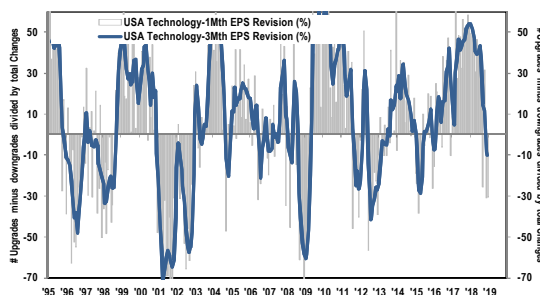


Figure 70: Communication Services

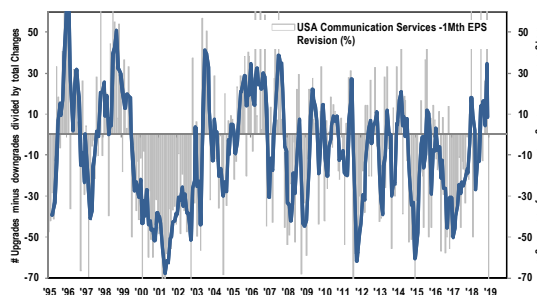


Figure 71: Discretionary

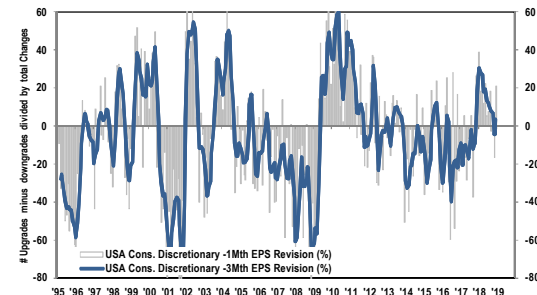


Figure 72: Financials

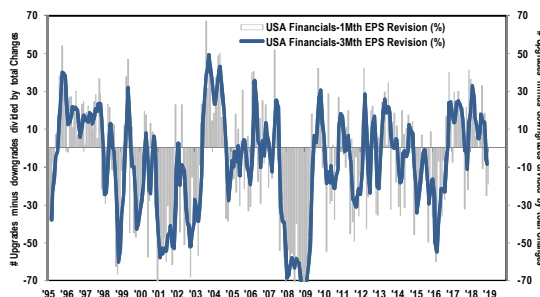


Figure 73: Healthcare

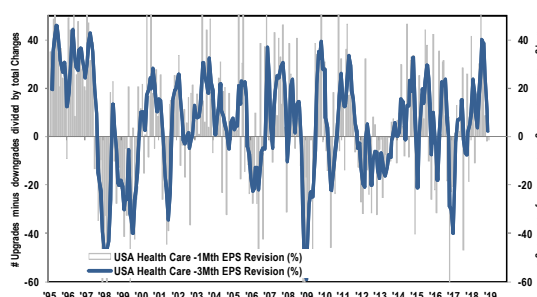
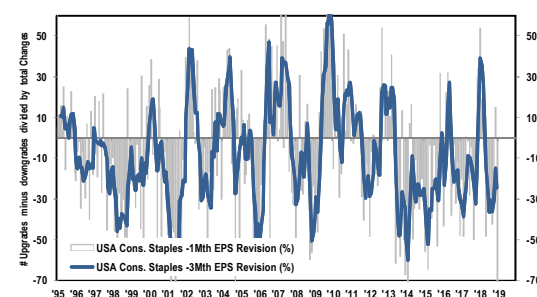


Figure 74: Staples



Source: J.P. Morgan US Equity Strategy and Quantitative Research

Quarterly Earnings Growth– S&P 500 Sectors

Figure 75: Energy

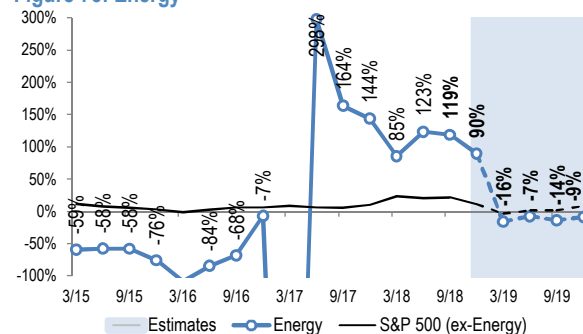


Figure 76: Materials

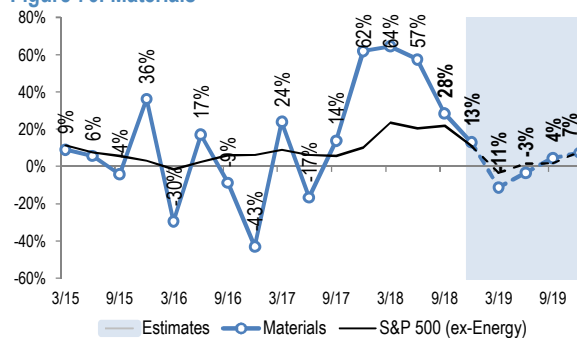


Figure 77: Industrials

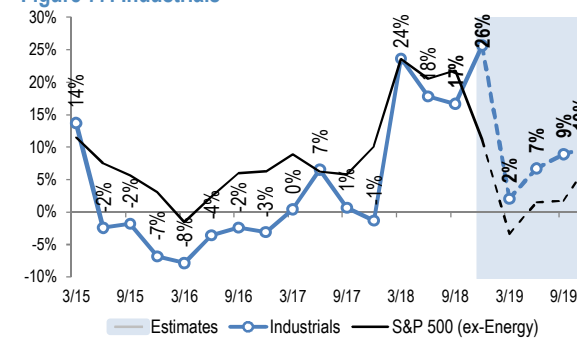


Figure 78: Technology

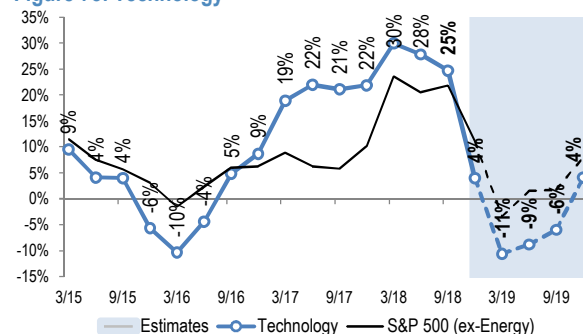


Figure 79: Communication Services

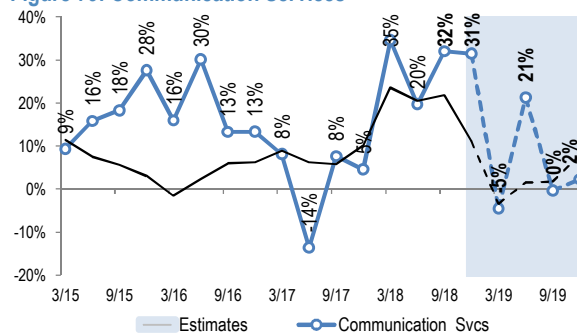


Figure 80: Discretionary

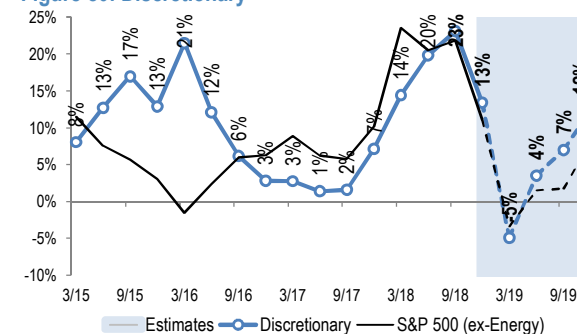


Figure 81: Financials

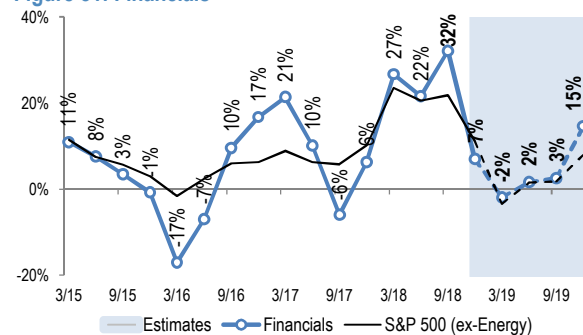


Figure 82: Healthcare

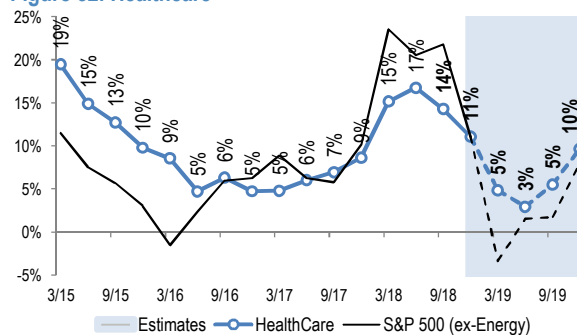
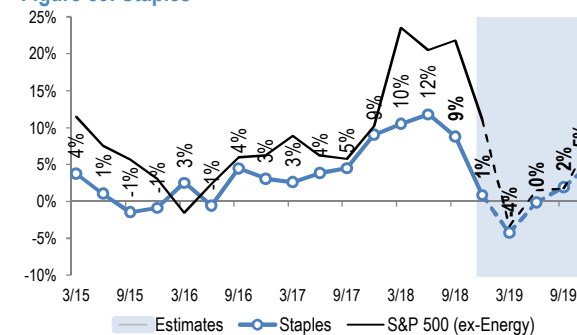


Figure 83: Staples



Source: J.P. Morgan US Equity Strategy and Quantitative Research

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