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High Grade Credit Fundamentals: 2Q19

A Sector-by-Sector Review of Trends in Credit Ratios

US High Grade Strategy and CDS Research

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See page 59 for analyst certification and important disclosures.

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Executive Summary

Credit metrics continued their slow but steady deterioration, based on 2Q19 earnings reports. EBITDA growth slowed while debt growth increased. As a result leverage rose and interest coverage weakened. Cash payouts to shareholders increased. More positively, the recent deterioration in credit metrics is mostly (but not fully) concentrated in single A rated issuers rather than BBB issuers. Also, profit margins remain very strong.

Our key takeaway from the data presented in this report is that the weakening in credit metrics is modest enough that it is not going to be enough to offset the strong technical situation in the market today. However, this weakening in credit metrics is occurring in a solid economic environment. If/when economic growth slows, the deterioration in credit metrics will likely accelerate, and will then be more important for market participants.

In more detail, EBITDA grew by 3.4% y/y for the overall HG market and 1.3% y/y ex-commodities through 2Q19. This is the slowest EBITDA y/y growth rate since 4Q16. On a q/q basis, this was the second consecutive quarter of negative EBITDA growth for both the overall market and ex-commodities. EBITDA declined by 0.7% q/q and by 0.6% q/q ex-commodities. Ex-commodities, this was the largest q/q decline in EBITDA since 1Q13 and the second largest decline post crisis. At the same time, debt growth has picked up to 5.6% y/y from its 8 year low of 2.8% y/y reached in 4Q18. However, this is still lower than the 8.1% y/y average debt growth over the past 5 years.

This has resulted in deterioration in credit ratios, both overall and excluding commodities. Gross leverage increased by 0.2x y/y to 3.0x for the overall HG market (0.2x y/y to 3.1x ex commodities). The deterioration in credit metrics ex Commodities was driven to a significant extent by M&A as well as by weaker trends in Utilities. There were 8 issuers over the past year where debt increased by more than $10bn due to M&A. These issuers accounted for about two-thirds of the y/y debt growth. If these 8 issuers were excluded, leverage would have been flat y/y instead of +0.2x y/y. We are not arguing that one should exclude these issuers in thinking about HG credit metrics, but highlighting that the overall deterioration in leverage y/y has been driven by voluntary decisions by companies rather than market factors. In Utilities, the negative impacts of tax reform on revenue and a high level of capex have led to a notable deterioration in both leverage and coverage, and we expect the metrics to deteriorate further in 2019 before some recovery in 2020.

Across all sectors, the credit metrics of BBB issuers deteriorated less over the past year than for A rated issuers. Also BBB issuers have reduced their payouts to shareholders while A-rated issuers continue to pay a near peak share of their EBITDA out as dividends and share buybacks. This reflects the efforts of BBB companies to delever and avoid downward rating migration.

Exhibit 1: Credit Metrics Summary

	OVERALL GROWTH			EX COMMODITIES			
	q/q change	y/y chg	3yr Range	q/q change	y/y chg	3yr Range	Comment
Revenue	0.1%	3.8%	-4.6% - 9.6%	0.3%	2.4%	1.3% - 5.2%	Revenue growth ex commodities was significantly lower than nominal GDP growth
EBITDA	-0.7%	3.4%	-6.4% - 12.6%	-0.6%	1.3%	1.1% - 7.1%	EBITDA grew at its slowest pace since 4Q16
Debt	1.3%	5.6%	2.8% - 13.5%	1.3%	5.4%	4.1% - 14.4%	Debt growth has picked up in the recent quarters

Source: J.P. Morgan.

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Exhibit 2: Credit Ratios Summary

	OVERALL			EX COMMODITIES			
	2Q19 Level	y/y chg	3yr Range	2Q19 Level	y/y chg	3yr Range	Comment
Profit Margin	29.4%	0.3%	27.4% - 29.5%	29.5%	0.2%	28.1% - 29.6%	Profit Margins are around their post crisis peak
Leverage	3.0x	0.2x	2.9x - 3.0x	3.1x	0.2x	2.7x - 3.1x	Leverage is around its highest level post crisis
Interest Coverage	9.7x	-0.7x	9.7x - 10.7x	9.7x	-0.7x	9.7x - 11.3x	Interest Coverage is at its post crisis low

Source: J.P. Morgan.

Key themes this quarter

- Is deleveraging a real trend in a market where leverage continues to grow? We look at credit metric trends for the most levered companies two years ago
- Credit metric trends of BBB's are better than those of A-rated issuers
- Recent M&A has been a major contributor to the increasing leverage
- Profit margins remain very strong, even with slowing revenue and EBITDA growth
- Utilities continue to report significant deterioration in credit metrics, which are much weaker credit metrics than other sectors.
- Tail risk has declined in terms of leverage but has increased for interest coverage

Is deleveraging a real trend in a market where leverage continues to grow? We look at credit trends for the most levered companies two years ago

Credit metrics have stabilized or improved for issuers that had the highest leverage two years ago. For this section of the discussion, we split the analysis between the top 1/3 and bottom 2/3 issuers based on gross leverage as of 2Q17, and then kept the two categories constant.[1] Gross leverage for the top 33% has declined by 0.1x over the past year and 0.3x over the past two years. On the other hand, the bottom 67% has seen leverage grow by 0.3x over the past two years and 0.2x over the past year. Over the last two years, overall gross leverage has increased by 0.1x so the recent move higher in leverage has been mainly driven by companies which had lower leverage two years ago, while the more levered companies then have delivered modest deleveraging. A similar trend is visible with regards to net leverage, with net leverage about flat over the past two years for the top 33% while it increased by 0.4x for the bottom 67% of issuers.

[1] We exclude the Commodities-related and Utilities sectors from this analysis across ratings as their particularities may distort the broader trends.

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Exhibit 3: The most levered companies 2 years ago have delivered modestly, while the less levered ones have increased leverage

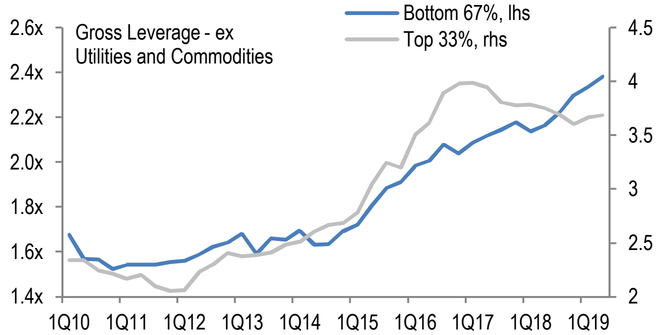
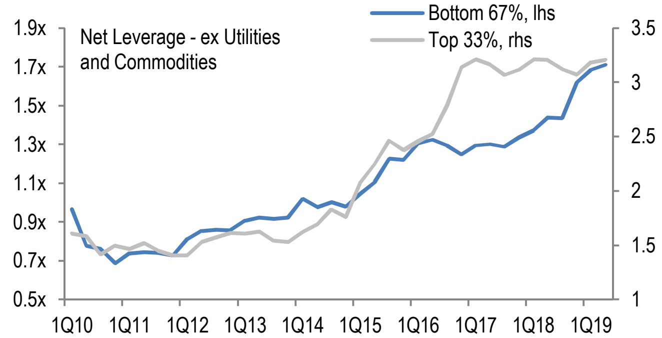


Exhibit 4: A similar trend has occurred in Net leverage

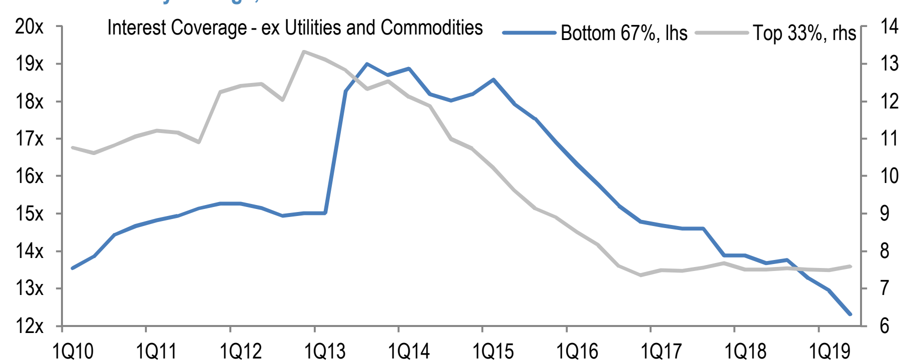


Source: J.P. Morgan

Furthermore, interest coverage ratio trends also show stabilizing trends for the companies that were most levered two years ago. The interest coverage ratio has increased by 0.1x over the past year for the companies in the top 33%. On the other hand, interest coverage ratio has declined by 1.4x over the past year and 2.3x over the past two years for the companies in the bottom 67%.

Despite the recent improvements/stability in credit ratios for the companies that were the most levered two years ago, they continue to have weaker credit metrics compared to the broader market. As of 2Q19, gross leverage for the top 33% was at 3.7x compared to 2.8x for the overall ex-Utilities and commodities universe. Similarly, interest coverage is at 7.6x for the top 33% compared to 10.6x for the overall ex-Utilities and commodities universe. Based on the large differences in credit metrics, there is still considerable room for these issuers to delever further. However, we view this trend as a positive with fundamentally weaker companies shifting to a more balance sheet focused approach.

Exhibit 5: Over the past few quarters, the interest coverage stabilized for the companies that were most levered two years ago, while it has continued to deteriorate for the rest



Source: J.P. Morgan

Credit metrics are weakening more slowly for BBBs than for As?

BBBs issuers have been more focused on their balance sheet relative to A-rated issuers. BBB issuers have posted faster growth in EBITDA than A-rated issuers, yet they have been more cautious than A-rated issuers in raising additional debt, as well as in increasing the cash they pay to shareholders. As a result, credit metrics

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deteriorated at a slower pace for BBB issuers relative to A-rated issuers. This is true for gross leverage as well as interest coverage. However, the difference in trend is more pronounced for interest coverage (see Exhibits 6, 7 and 8 below). We believe that this trend could continue over the coming quarters as higher rated companies tend to have more room on their balance sheet to take advantage of the recent shift to lower in bond yields.

Overall, y/y growth in EBITDA is a little stronger for BBBs than for As (+3.2% for BBBs, +1.4% for As). Additionally, BBB issuers have reduced issuance recently which has resulted in slower debt growth. Debt growth for BBBs over the past year (4.3% y/y) is about half of the debt growth for As (8.2% y/y). The y/y debt growth for BBB, at 4.3% y/y was also significantly slower than the 7% y/y average debt growth over the past 3 years. On the other hand, LTM debt growth for A rated issuers grew more or less in line with the average 8.3% y/y debt growth for these issuers over the past 3 years – i.e., there has been no slowdown.

Gross leverage for BBBs was up 0.1x y/y while it increased by 0.2x for As. Net leverage was more or less similar across ratings, up 0.3x for both BBBs and As. Interest coverage trends were much weaker for As (down 1.3x y/y) compared to BBBs (down 0.7x y/y) as the interest expense growth for As was higher, accompanied by a slow EBITDA growth rate.

Exhibit 6: Gross leverage for A rated issuers is lower than for BBBs, but over the past year A leverage has risen faster and BBB has slowed

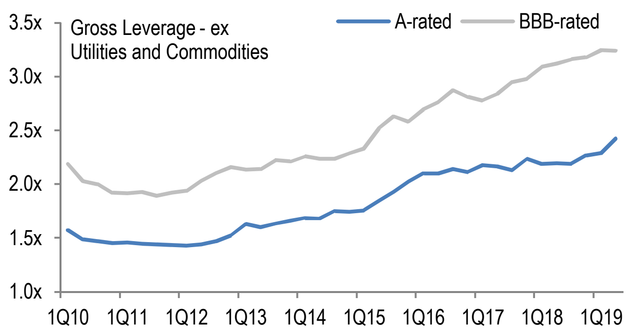
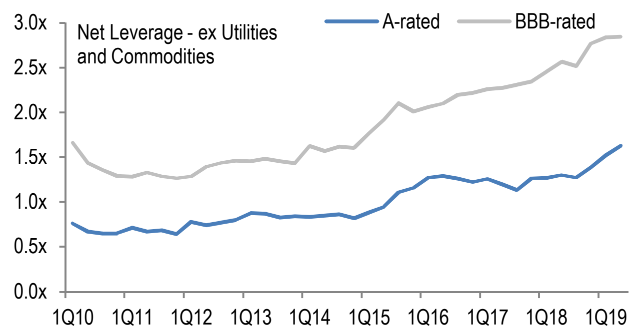


Exhibit 7: Net leverage trends have been similar across the two ratings categories



Source: J.P. Morgan

Finally, BBBs reduced their cash paid to shareholders by 1% y/y while single A issuers increased cash to shareholders by 23%. However, the divergence in trends for cash to shareholders is not as stark on a q/q basis, with BBBs reducing cash to shareholders by 4% q/q and As reducing 1% q/q. Higher EBITDA growth and reduced cash to shareholders have resulted in a 5% y/y decline in the earnings payout ratio (Cash to shareholders/EBITDA) for BBBs. On the other hand, for A rated issuers the earnings payout ratio increased 9% y/y as the increase in cash to shareholder far outpaced the growth in EBITDA. Earnings payout ratio for BBB issuers is at its lowest level since 2011 while the ratio is at its post crisis high for As.

One of the major concerns HG credit investors had in the second half of 2018 was regarding the growth of BBB debt and the deterioration in credit metrics for these issuers. The selloff in 4Q18 has highlighted this concern to various lower rated issuers. As a result, the largest BBB issuers are increasingly focusing on their balance sheets in order to reassure their creditors about their creditworthiness and their High Grade credit rating.

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Exhibit 8: Interest coverage declined at a significantly higher pace for A rated issuers compared to BBB issuers

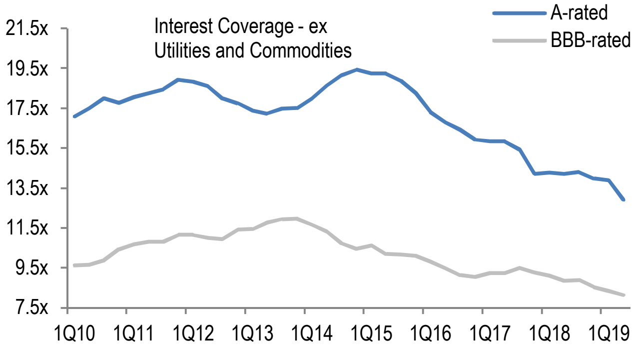
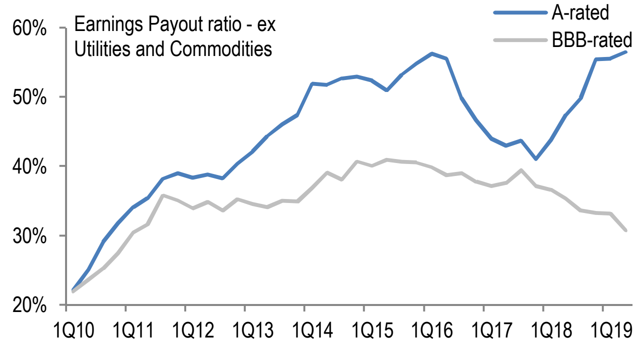


Exhibit 9: A rated issuers are paying a near peak level of EBITDA to shareholders, while BBB issuers have reduced these payouts



Source: J.P. Morgan

The importance of M&A in the deterioration of credit metrics

Over the past 12 months, total debt from the issuers in our sample increased by about $250bn. This was a 5.6% growth in total debt y/y, up from 2.8% in 4Q18 but still below the 8.1% y/y growth on average over the past 5 years. This was the result of large debt increases in some sectors due to M&A. There were 8 issuers that had issued debt for M&A larger than $10bn last year. The total debt of these 8 issuers increased by $159bn over the past year, even after adjusting the historical debt levels for the pro-forma amount of debt of the combined companies. The EBITDA for these issuers combined increased by just $5bn, again using pro-forma levels historically compared to actual 2018, where available. These large debt increases for M&A contributed an estimated 0.2x deterioration in leverage in our overall ex-Commodities leverage figure. In other words, without these eight companies, leverage would have been flat y/y rather than an increase of 0.2x y/y.

Exhibit 10: Leverage would have been stable y/y excluding recent M&A issuance

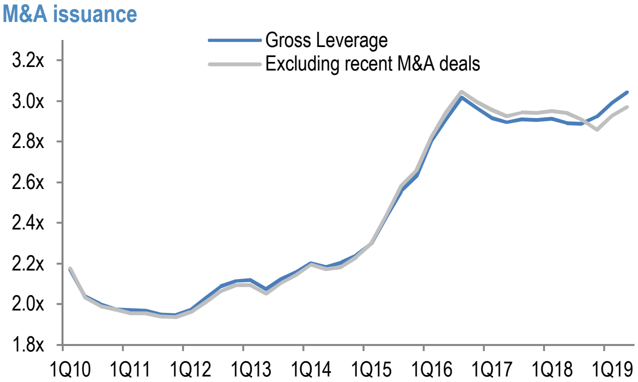
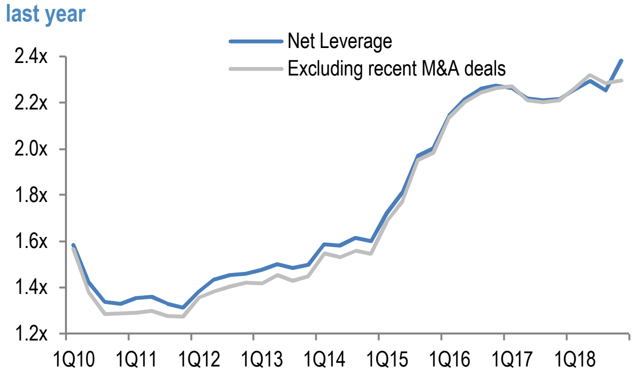


Exhibit 11: Net leverage was also impacted by the large M&A deals last year



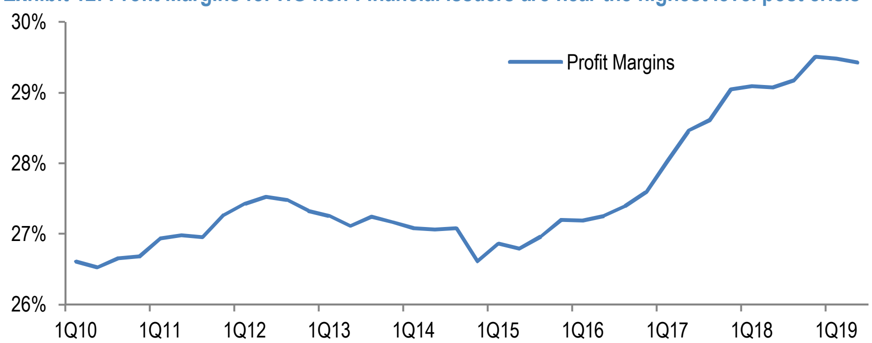
Source: J.P. Morgan

Profit margins remain very strong, even with slowing revenue and EBITDA growth

Leverage is the primary metric that investors look at for most sectors, but it presents an incomplete picture of a company's credit profile. Throughout this report we focus also on interest coverage and profit margins. Over the past few years as leverage and interest coverage have deteriorated profit margins have actually strengthened. Over the year, they are about flat at a strong level. This is a key positive development. It is interesting that it has continued even as labor costs creep higher and the amount of imports subject to tariffs is rising. Companies have been able to raise prices and/or control their costs of production enough to offset these potential headwinds.

Some of this is because of the large amount of M&A which has occurred. Most of the large M&A deals over the past few years are as much or more focused on achieving cost synergies than on expanding the top line. In the subsequent quarters and years after the M&A deals close companies have, in aggregate, been successful in achieving the hoped-for synergies. This has contributed to the consistently strong trend in profit margins.

Exhibit 12: Profit Margins for HG non-Financial issuers are near the highest level post crisis



Source: J.P. Morgan

Utilities are on their own with much weaker credit metrics than other sectors, and deteriorating quickly

Leverage in the Utilities sector has increased from an average of 4.4x at the end of 2Q15 to 5.5x at the end of 2Q19. There has been significant deterioration in leverage over the past four years. More than half of the increase in leverage has occurred over the past year with leverage up more than 0.5x y/y. Over the past four years EBITDA has increased by 8.3% while debt has grown by 35.6%. Interest coverage has also weakened, and is by far the lowest across sectors. It currently stands at 4.5x, down 0.5x over the past year and down 0.9x over the past 4 years. Note that there are 29 Utility companies in our sample with combined debt of $608bn at the end of 2Q19. The debt of these 29 issuers represents about 70% of the JULI Utilities sector debt.

Increasing leverage has been driven by a period of M&A, sustained elevated capital spending programs, and overall negative cash flow ramifications on the industry from tax reform. Prior to tax reform, utilities utilized M&A and elevated capital spending programs to help offset the weak growth environment for the sector, both of which were predominately funded with long-term debt. In addition, overall cash flow for the industry was negatively impacted from tax reform, due to a combination of the lower tax rate and elimination of bonus depreciation. While the cadence of large-scale M&A has tapered off, sustained elevated capex is expected to persist for the industry over the next few years. We expect credit metrics to get worse before they get better, as 2019 is expected to see the full (negative) impact of tax reform being realized in revenue. Total capex for utilities is currently at its highest level (~$110 billion) after increasing by 11% y/y. New issuance peaked in 2017, but was only down marginally in 2018 (<$2 billion). 2019 YTD issuance for the sector is up 18%

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y/y but down 1% y/y for the overall market. Broadly speaking, cash flow for the industry should gradually begin to improve in 2020, as capex investments begin to be recovered through customer bills.

Exhibit 13: Gross Leverage for the utilities sector has increased significantly recently

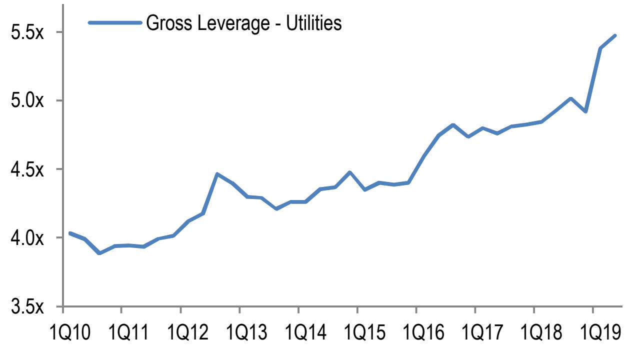
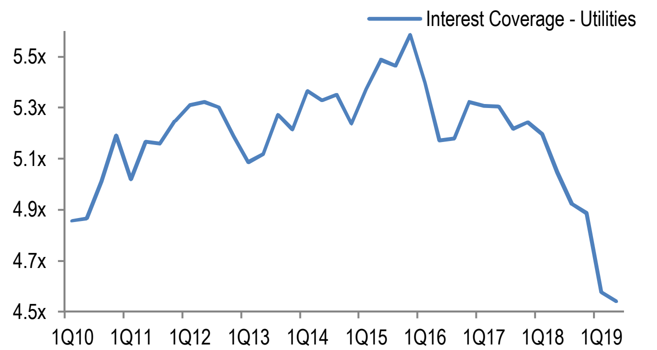


Exhibit 14: Utilities has significantly lower interest coverage compared to other sectors



Source: J.P. Morgan

Tail risk has declined in leverage terms but has increased for coverage ratios

HG credit fundamentals tail risk is a measure of companies at the weaker end of credit metrics. For example, if all companies had leverage of 3x, then that would be a situation of less tail risk as compared to a situation where half of the companies were levered 1x and the remaining half were levered 5x.

Tail risk has been on the rise over the past few years as some companies have taken advantage of the low cost of debt to finance M&A activity and share repurchase programs. Average leverage and interest coverage are near the weakest end of their post-crisis ranges. However, this quarter shows that tail risk has marginally declined when looking at gross leverage while it has increased modestly when looking at interest coverage.

Currently 23% of HG Non-Financials debt is levered less than 2x. This has decreased 5% since 2Q18 (-6% ex-Utilities). On the more levered side, 12% of the debt in our study is levered 5x or more. However, this is flat compared to 2Q18. Most of the issuers levered more than 5x belong to the Utilities sector. Excluding Utilities, only 4 % of debt is currently levered more than 5x, down from 6% in 2Q18. Over the past year, there has been improvement in tail risk for the Technology sector, and deterioration in tail risk in Consumer Products.

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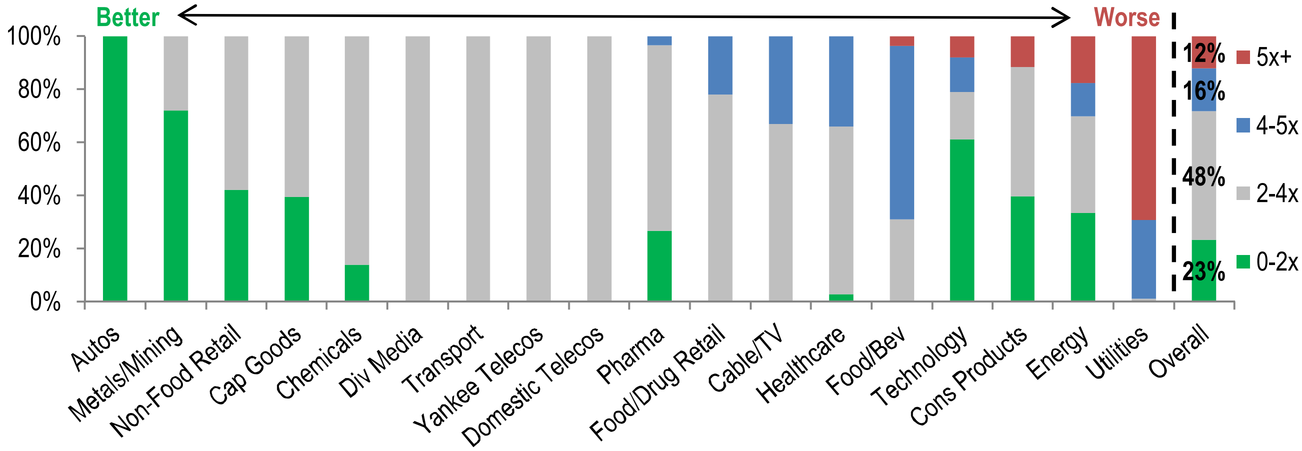
Exhibit 15: Distribution of leverage by sector



Source: J.P. Morgan, Capital IQ

Exhibit 16: Tail risk has reduced overall the past year but quite a few companies with healthy leverage in 2Q18 are moving closer to the tail

Gross Leverage	Better 0-2x	2-4x	4-5x	Worse 5x+
Autos	0%	0%	0%	0%
Metals/Mining	0%	0%	0%	0%
Non-Food Retail	10%	-10%	0%	0%
Cap Goods	-6%	6%	0%	0%
Chemicals	0%	12%	-12%	0%
Div Media	-5%	25%	-20%	0%
Transport	-16%	16%	0%	0%
Yankee Telecos	0%	0%	0%	0%
Domestic Telecos	0%	0%	0%	0%
Pharma	-6%	9%	-3%	0%
Food/Drug Retail	0%	-22%	22%	0%
Cable/TV	0%	0%	0%	0%
Healthcare	-41%	41%	0%	0%
Food/Bev	-9%	2%	37%	-29%
Technology	0%	-13%	13%	0%
Cons Products	-5%	5%	-12%	12%
Energy	-5%	11%	-9%	4%
Utilities	0%	-24%	8%	16%
Overall	**-5%**	**2%**	**3%**	**0%**
Overall ex-Utilities	**-6%**	**5%**	**3%**	**-2%**

Source: J.P. Morgan, Capital IQ. Figures are the change in the percentage of debt in our framework in each leverage range. For each sector the figures sum to 0, except for minor rounding issues.

Tail risk has increased modestly in terms of interest coverage. The increase in tail risk has come along with a reduction in companies with very high coverage ratios. Overall Coverage is below 5x for 18% of the debt (up 5% vs 2Q18). However, the net increase is mainly driven by declining coverage in Utilities. Coverage is below 5x for 9% of the debt (up 1% vs 2Q18) excluding Utilities. Another interesting trend is the decline in coverage ratios for companies that had coverage ratios above 12x in 2Q18. 7% of the debt in our universe has moved from having coverage ratios higher

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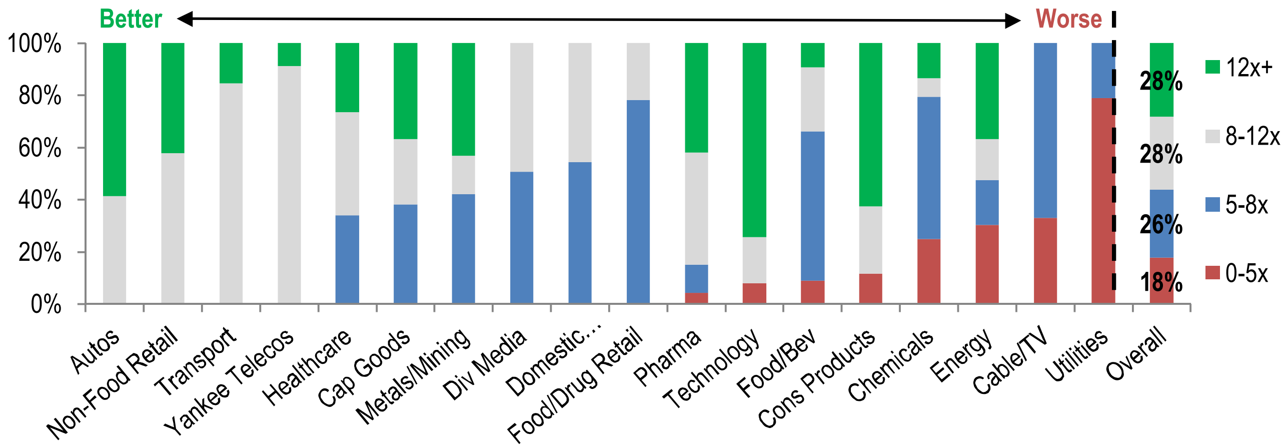
than 12x in 2Q18 to below 8x. Apart from Utilities, Chemicals and Energy saw significant increases in tail risk while Food/Beverages saw an improvement in tail risk over the past year.

Exhibit 17: Distribution of interest coverage by sector



Source: J.P. Morgan, Capital IQ

Exhibit 18: Tail risk has increased in terms of interest coverage

Interest Coverage	Better 12x +	8-12x	5-8x	Worse 0-5x
Autos	0%	0%	0%	0%
Non-Food Retail	10%	-7%	-3%	0%
Transport	-47%	53%	-6%	0%
Yankee Telecos	-35%	35%	0%	0%
Healthcare	-54%	20%	34%	0%
Cap Goods	-2%	2%	-1%	0%
Metals/Mining	-15%	-27%	42%	0%
Div Media	-5%	0%	5%	0%
Domestic Telecos	0%	4%	-4%	0%
Food/Drug Retail	0%	0%	0%	0%
Pharma	5%	-1%	-9%	4%
Technology	0%	0%	0%	0%
Food/Bev	-5%	-1%	25%	-19%
Cons Products	6%	-6%	0%	0%
Chemicals	-25%	-27%	27%	25%
Energy	-3%	4%	-13%	12%
Cable/TV	0%	-67%	67%	0%
Utilities	0%	0%	-35%	35%
Overall	**-6%**	**0%**	**0%**	**5%**
Overall ex-Utilities	**-7%**	**0%**	**5%**	**1%**

Source: J.P. Morgan, Capital IQ. Figures are the change in the percentage of debt in our framework in each interest coverage range. For each sector the figures sum to 0, except for minor rounding issues.

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Detailed Discussion of Credit Metrics

Revenue growth for the period ending 2Q19 has slowed considerably. It is currently at 3.8% LTM y/y which is the weakest since 1.8% y/y growth was reported in 1Q17. Revenue growth fell for the third consecutive quarter from the recent peak of 9.8% in 3Q18. In recent comparison, this figure was 6.1% as of 1Q19 and more than double at 8.2% only two quarters ago. The drop in revenue growth of 2.3% from 6.1% in 1Q19 to 3.8% is the largest quarterly drop since 3Q15 (3.0%). However, this is the tenth consecutive quarter of positive revenue growth since 4Q16, after eight quarters of contraction. Most (14 of the 18) sectors in our analysis reported positive revenue growth. This excludes Consumer Products (-3.6% y/y), Yankee Telecoms (-2.7%), Domestic Telecoms (-1.6%), and Chemicals (-0.4%).

Excluding Commodities, revenue growth was slower at 2.4% y/y, the slowest growth since 4Q16 when revenue increased by 2.1% y/y ex commodities. It is notable that more than half of the revenue growth reported in each of the last six quarters was driven by the recovery in the Commodities-related sectors. The Energy sector reported solid revenue growth of 9.1% y/y, but this is about half of the strong revenue y/y growth of 17.2% last quarter. The Metals and Mining sector reported revenue growth of 2.7% over the same period. This is the lowest this figure has been since the contraction of 5.9% in 1Q17. Revenue growth for Metals and Mining has either remained flat or fell gradually from the peak of 27.1% in 4Q17.

Looking forward at equity analyst consensus estimates, there is an expectation of a further downshift in revenue growth for 3Q19 and modest pickup in 4Q19. For the S&P 500 universe, revenue growth in 2Q was 4.7% (this is versus 2Q18).

Exhibit 19: Revenue growth is expected to decline in 3Q19 and pickup in 4Q19

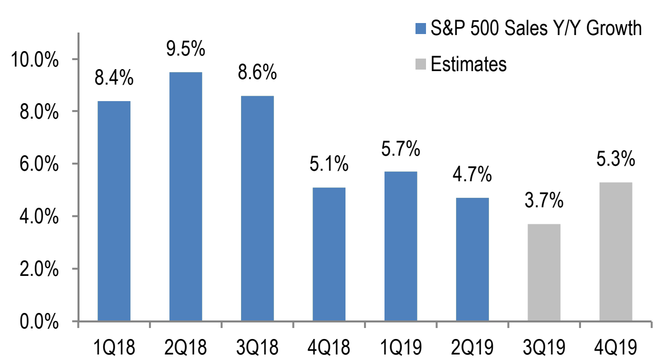
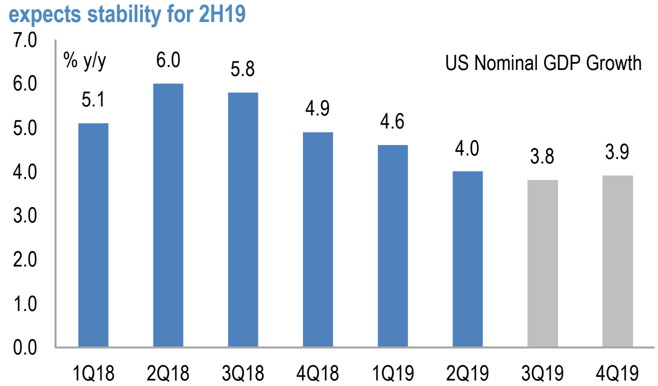


Exhibit 20: US nominal GDP growth has slowed since 2018. JPM expects stability for 2H19



Source: J.P. Morgan, I/B/E/S data from Refinitiv

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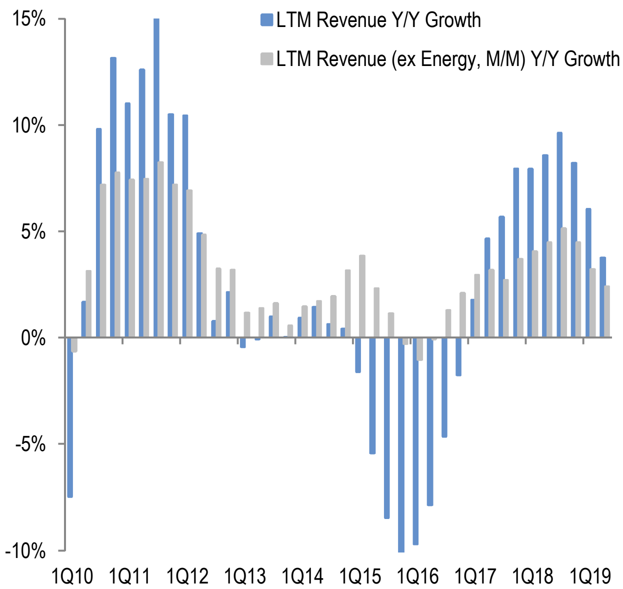
Exhibit 21: Revenue growth was +3.8% y/y and +2.4% ex Energy and Metals and Mining



Source: J.P. Morgan, Capital IQ

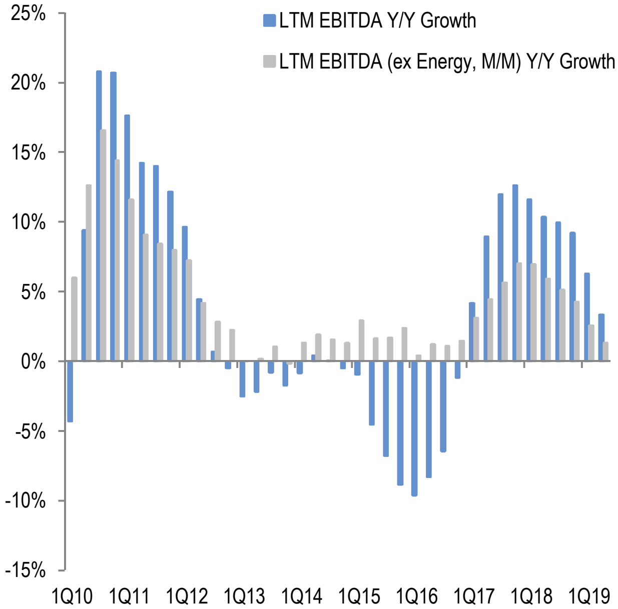
Exhibit 22: Revenue growth was positive across most sectors, led by outperformance in Energy, Diversified Media, and Transportation

	2Q19 change		LTM level
	($mn)	%	($mn)
Consumer Products	-7,104	-3.6%	188,070
Telecoms - Yankees	-7,466	-2.7%	272,463
Telecoms - Domestic	-5,215	-1.6%	325,960
Chemicals	-683	-0.4%	153,138
Automotive	478	0.1%	371,146
Food/Beverages	1,810	0.5%	344,092
Capital Goods	10,583	1.4%	787,691
Utilities	5,341	1.7%	320,826
Food/Drug Retail	6,087	2.0%	303,940
Cable/TV	4,000	2.7%	153,496
Metals/Mining	9,098	2.7%	347,229
Non-Food Retail	27,286	3.0%	951,942
Pharmaceuticals/Medical Products	17,648	3.0%	604,114
Technology	31,893	4.7%	715,705
Healthcare/HMOs	61,214	5.5%	1,177,808
Transportation	11,489	6.0%	203,415
Diversified Media	8,383	6.3%	140,914
Energy	165,157	9.1%	1,979,209
Industrials Total (ex Metals/Mining, Energy)	**165,744**	**2.4%**	**7,014,720**
Industrials Total	**339,998**	**3.8%**	**9,341,158**

Second and third column show the change in 2Q19 vs 2Q18. The fourth column shows the 2Q19 level. Source: J.P. Morgan, Capital IQ

EBITDA rose by 3.4% y/y, which is its slowest rate of growth since the contraction of 1.2% y/y in 4Q16. Annual EBITDA growth has also declined for the fifth consecutive quarter since its recent peak of 12.6% y/y in 4Q17. Ex Commodities, EBITDA grew at 1.3% y/y, which is the slowest growth since 1.1% y/y in 3Q16. This slowdown in EBITDA reflects the modest growth seen in 10 out of 18 sectors in our analysis, which ranged from 0.1% to 6.0% y/y. At the same time, 7 out of 18 sectors reported negative earnings growth. Energy was the only sector that posted double-digit growth of 14.4% y/y. However, this has also gradually slowed from the peak of the recovery in the Energy sector (46.8% y/y growth in 4Q17). The last time Energy had slower growth than 14% was in 1Q17 (4.0%) after the Energy crisis.

Exhibit 23: EBITDA growth has slowed to a low of 3.4% y/y since 4Q16. Ex Commodities, EBITDA growth is even slower at 1.3% y/y



Source: J.P. Morgan, Capital IQ

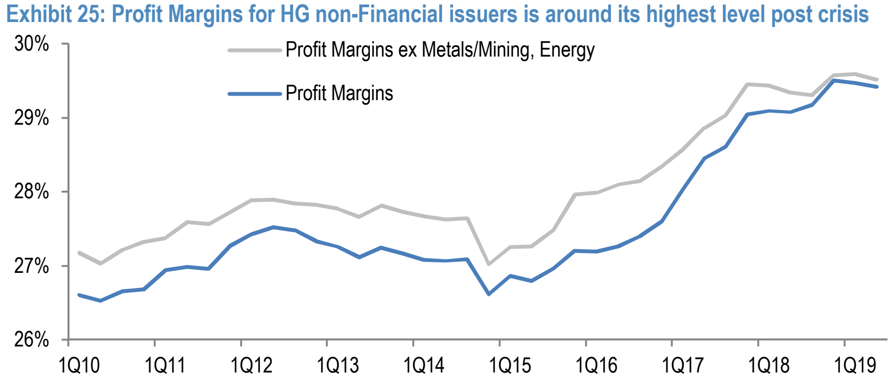
Exhibit 24: EBITDA growth was modest across most sectors over the year, except for Energy, which outperformed with +14.4% y/y

	2Q19 change		LTM level
	($mn)	%	($mn)
Diversified Media	-2,758	-7.8%	32,705
Transportation	-3,018	-7.0%	40,397
Metals/Mining	-4,326	-6.4%	63,036
Capital Goods	-4,790	-3.9%	117,820
Chemicals	-1,156	-3.8%	29,229
Consumer Products	-1,461	-3.1%	44,937
Food/Beverages	-518	-0.5%	107,351
Utilities	58	0.1%	111,991
Non-Food Retail	228	0.3%	73,453
Food/Drug Retail	481	1.6%	29,922
Healthcare/HMOs	2,262	3.3%	71,802
Cable/TV	1,573	3.3%	48,832
Telecoms - Domestic	3,792	3.5%	113,063
Automotive	1,444	3.6%	41,632
Pharmaceuticals/Medical Products	8,036	3.8%	218,431
Technology	9,019	4.1%	226,954
Telecoms - Yankees	5,003	6.0%	89,011
Energy	45,332	14.4%	359,331
Industrials Total (ex Metals/Mining, Energy)	**18,196**	**1.3%**	**1,397,532**
Industrials Total	**59,202**	**3.4%**	**1,819,899**

Second and third column show the change in 2Q19 vs 2Q18. The fourth column shows the 2Q19 level. Source: J.P. Morgan, Capital IQ

Profit Margins (EBITDA/Revenue) increased by 0.3% y/y to 29.4% in 2Q19. This is slightly below its record high of 29.5% in 4Q18 and still a very strong figure. Excluding Commodities, profit margins rose at a slower pace of 0.2% y/y to 29.5%. Profit margins for the Energy sector increased 1.6% over the year to 29.0%. Profit margins increased for 10 out of 18 sectors in our analysis. However, the growth was modest, ranging from 0.2% to 2.3%. The sector with the largest increase in profit margins was Yankee Telecoms, which grew 2.3% y/y to 33.0%. On the other hand, six of the remaining eight sectors reported a small decline in profit margins, ranging between -0.1% to -0.3% y/y. The underperformers were Metals and Mining and Diversified Media, which fell 3.6% y/y to 25.0%.

Exhibit 25: Profit Margins for HG non-Financial issuers is around its highest level post crisis



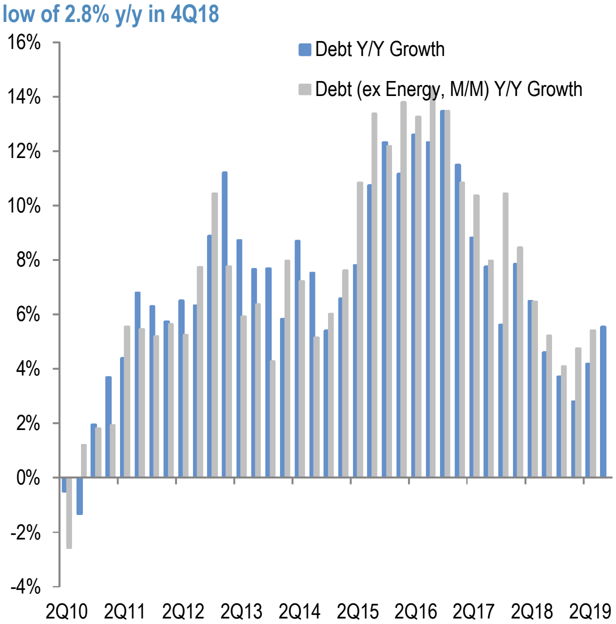
Source: J.P. Morgan, Capital IQ

Debt for the companies in our analysis grew by 5.6% y/y. Debt growth increased from an eight-year low of 2.8% y/y in 4Q18. However, this is still lower than the average debt growth over the past 5 years of 8.2% y/y. The companies in our analysis ended 2Q19 with total debt of $4.8tr. Over the year, debt for the sector grew by

$251bn. Utilities (+$56bn, 10.2% y/y) and Energy (+$45bn, 6.7% y/y) were the largest drivers of the increase in debt outstanding. A significant portion of the debt increase for both these sectors was due to M&A activity. Domestic Telecoms (-$21bn, -6.7% y/y) saw the most notable decline in debt. A-rated issuers saw an 8.2% y/y increase in debt compared to 4.3% y/y/ increase for BBB rated issuers.

The new accounting rule that came into effect this year requires companies to start reporting cost of renting assets used for operations. For companies that are in scope for incorporating the new accounting rule, their debt numbers will increase due to the addition of operating lease cost. This means that the change in accounting standards may cause an "artificial" jump in leverage. To avoid this "artificial" jump, we have made the necessary adjustments on a case by case basis after discussions with the respective JPM sector analysts. The major hurdle in making the adjustment is that not all companies have incorporated the accounting changes so far. Furthermore, for certain sectors, it is challenging to estimate the historical operating lease cost solely based on the data available currently. For this reason we have made the adjustments in two different ways that we believe are best to mitigate the impact based on the data currently available. For issuers with significant retail exposure, where operating leases are a significant line item, and sectors such as Food/Beverage, Capital Goods, Consumer Products and Transportation, we have included the operating lease numbers historically into the calculation to avoid an "artificial" jump in leverage. On the other hand, for most of the remaining sectors we have excluded the operating lease portion of the debt numbers to avoid any "artificial" jumps. We will continue to work on incorporating this change in a more consistent manner across sectors over the course of the next few quarters as more companies start reflecting the operating lease line item in the balance sheet.

Exhibit 26: Debt grew by 5.6% y/y, trending upwards from its 8 year low of 2.8% y/y in 4Q18



Source: J.P. Morgan, Capital IQ

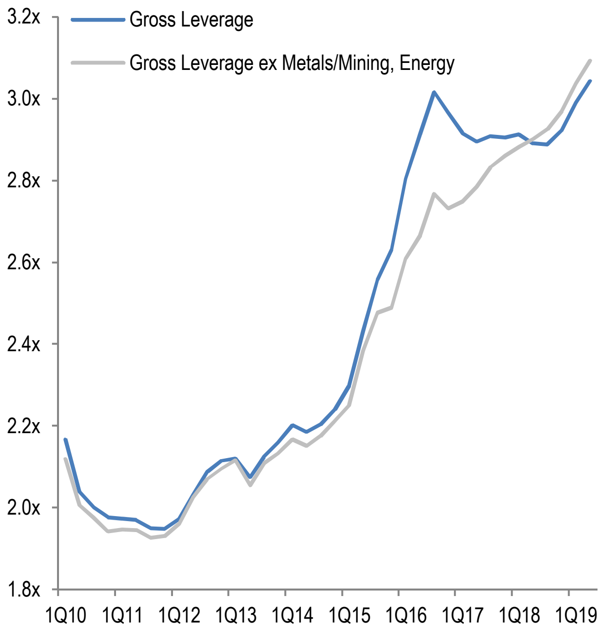
Exhibit 27: Debt growth was mainly driven by M&A activity in a few sectors

	2Q19 change		LTM level
	($mn)	%	($mn)
Telecoms - Domestic	-21,240	-6.7%	295,927
Consumer Products	-6,986	-6.2%	105,503
Diversified Media	-5,901	-5.5%	102,365
Automotive	-755	-1.7%	42,512
Non-Food Retail	-2,404	-1.5%	161,045
Chemicals	45	0.1%	72,007
Pharmaceuticals/Medical Products	1,566	0.3%	466,087
Food/Beverages	4,756	1.1%	433,722
Metals/Mining	1,675	1.9%	92,030
Energy	45,112	6.7%	715,150
Transportation	9,211	7.1%	138,837
Capital Goods	21,260	8.6%	267,924
Technology	35,697	8.9%	437,904
Utilities	56,299	10.2%	607,788
Healthcare/HMOs	27,144	13.3%	231,055
Telecoms - Yankees	33,983	14.1%	274,421
Food/Drug Retail	17,942	14.4%	142,273
Cable/TV	33,392	22.6%	180,919
Industrials Total	**250,796**	**5.6%**	**4,767,468**

Second and third column show the change in 2Q19 vs 2Q18. The fourth column shows the 2Q19 level. Source: J.P. Morgan, Capital IQ

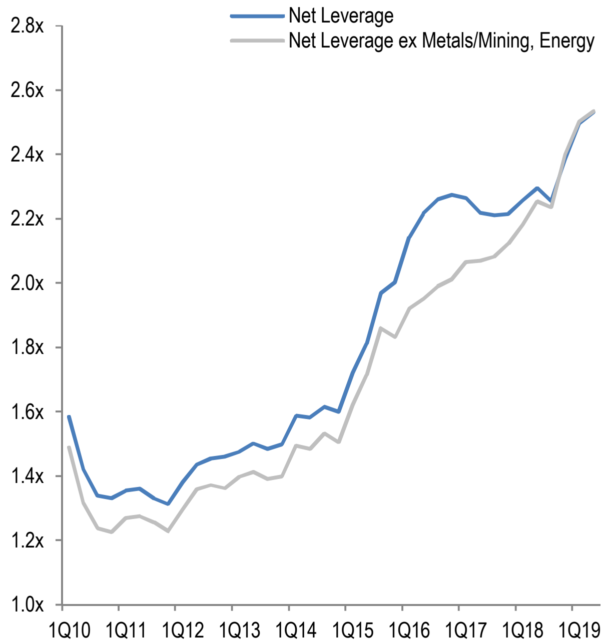
Leverage increased by 0.2x y/y to 3.0x overall and by 0.2x y/y to 3.1x excluding commodities. This is the highest figure for Leverage overall and ex-Commodities in our history. Leverage deteriorated recently with EBITDA growth slowing and debt growth trending upwards. Our methodology is not directly calculated this way, however. Instead, we weigh each company's leverage ratio by its outstanding debt.

Exhibit 28: Debt grew by 5.6% y/y, trending upwards from its 8 year low of 2.8% y/y reached in 4Q18



Source: J.P. Morgan, Capital IQ

Exhibit 29: Net leverage has also risen to a new peak both with and without the commodities sectors



Source: J.P. Morgan, Capital IQ

Net Leverage is 2.5x, up 0.2x y/y. This is the highest figure of net leverage in our framework. Net Leverage is about flat over the past two years for companies that had high leverage two years ago while it increased by 0.4x over the same period for companies that were less levered two years ago.

Interest expense for the companies in our analysis saw an upward trend this quarter with a $16bn (+9.7%) increase y/y and 2.6% increase q/q to $179bn. This is the highest y/y growth since 12.8% seen in 1Q17 and also higher than the 7.4% y/y growth for the past 5 years on average. Out of the 18 sectors in our analysis, interest expense has increased for about 75% of them. This increase is led by the Energy sector, with a $6bn (+22% y/y) increase in interest expense, followed by Utilities (+2.4bn/+10% y/y) and Healthcare (+$2bn/35%), driven in part, by M&A funding. The average coupon of bonds issued YTD was 19bp lower than the average coupon of maturing debt, owing to lower yield environment.

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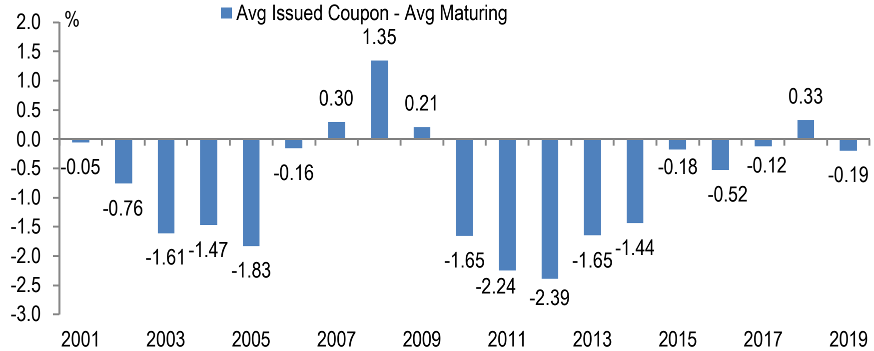
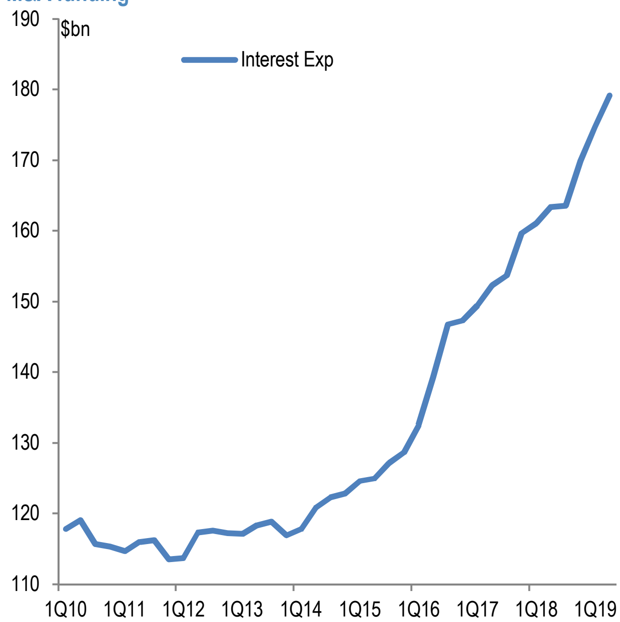
Exhibit 30: YTD, the average coupon on new issues was 19bp lower than the average coupon on maturing debt



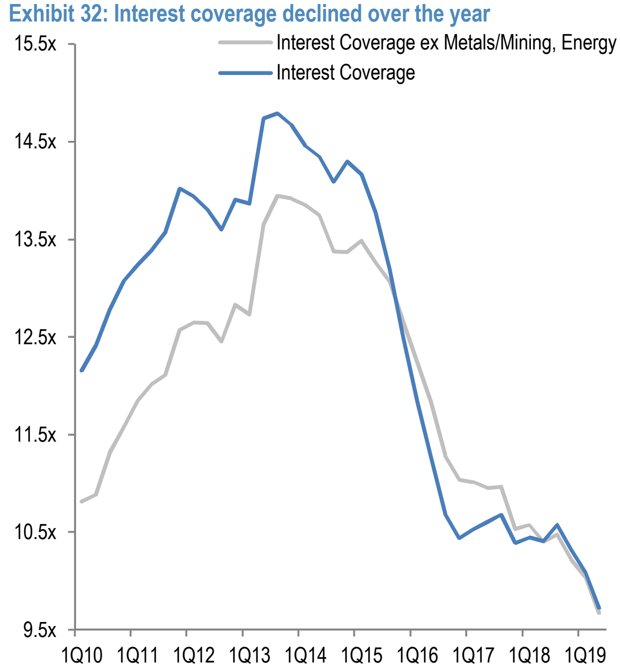
Source: J.P. Morgan

Exhibit 31: Interest expense increased in 2Q19, driven in part by M&A funding



Source: J.P. Morgan, Capital IQ

Exhibit 32: Interest coverage declined over the year



Source: J.P. Morgan, Capital IQ

Interest Coverage declined by 0.7x y/y to 9.7x both overall and excluding commodities. Interest Coverage declined sharply from 2014-2017 and has declined more slowly since. Nevertheless, it is difficult to be concerned overall about the level of interest coverage when it is around 10x for the market. Interest Coverage dropped the most for Chemicals (-3.5x to 7.9x) and for Healthcare (-3.4x to 9.7x) due to M&A related debt financing. By far the lowest interest coverage is in Utilities at 4.5x. However, despite the recent declines, each of these sectors continues to have robust interest coverage.

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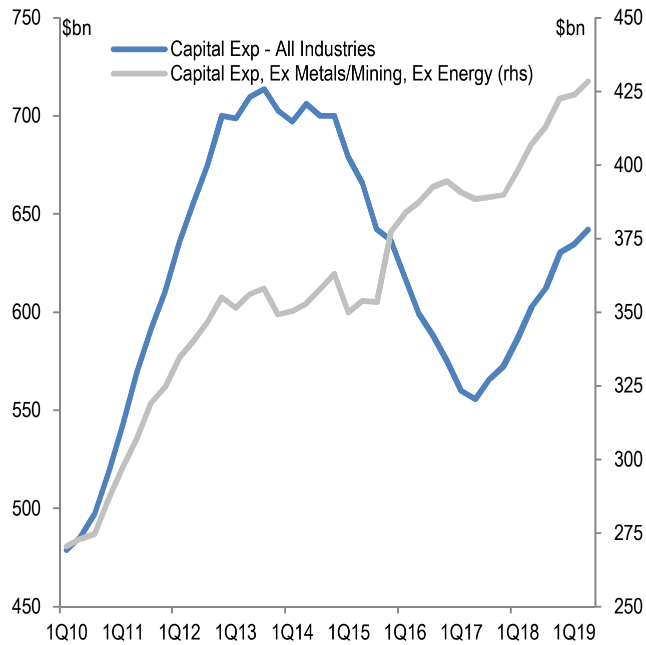
Capital Expenditures increased relatively modestly at 6.5% y/y (+$39bn) to $642bn. Excluding commodities, Capex has increased 5.2% y/y. Capex increased for most of the sectors y/y. The Chemicals sector had highest y/y increase in Capex (48% y/y, $4bn) to $12bn, followed by Metals/Mining sector with 19% y/y (+$4bn) increase in Capex to +$22bn. Meanwhile, the Food/Beverages sector reported 9% y/y decline (-$2bn) in Capex to $16bn, which is the highest decline in y/y Capex among sectors. It is worth noting that there is a divergence in y/y Capex increase trends among A and BBB issues. While Capex increased by 10% y/y (+21bn) to $229bn for A issuers, BBB issuers Capex increased at lower pace of 3% y/y (+9bn) to $294bn.

Exhibit 33: Capex increased by 6.5% y/y overall and 5.2% excluding commodities



Source: J.P. Morgan, Capital IQ

Exhibit 34: Several sectors showed Capex growth

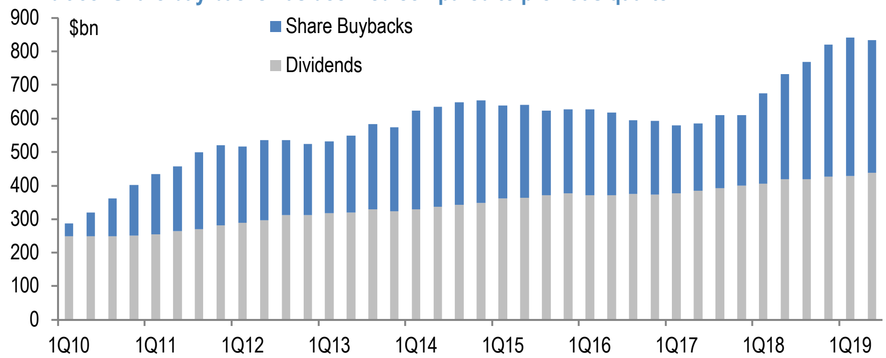
	2Q19 change		LTM level
	($mn)	%	($mn)
Food/Beverages	-1,569	-8.9%	15,970
Consumer Products	-274	-3.6%	7,272
Telecoms - Domestic	-1,378	-3.4%	39,672
Technology	-1,583	-3.3%	46,113
Cable/TV	-407	-2.2%	18,513
Automotive	-377	-1.9%	19,368
Capital Goods	88	0.4%	20,667
Pharmaceuticals/Medical Products	1,900	8.1%	25,426
Energy	14,540	8.2%	191,599
Healthcare/HMOs	721	8.8%	8,942
Transportation	1,912	8.8%	23,590
Non-Food Retail	1,911	9.7%	21,546
Telecoms - Yankees	3,754	10.0%	41,256
Utilities	11,063	10.8%	113,507
Food/Drug Retail	985	11.9%	9,280
Diversified Media	702	14.1%	5,663
Metals/Mining	3,565	19.2%	22,159
Chemicals	3,778	48.3%	11,606
Industrials Total (ex Metals/Mining, Energy)	**21,227**	**5.2%**	**428,390**
Industrials Total	**39,331**	**6.5%**	**642,148**

Second and third column show the change in 2Q19 vs 2Q18. The fourth column shows the 2Q19 level. Source: J.P. Morgan, Capital IQ

Cash to Shareholders paid out over the past four quarters increased 13.4% y/y (+$100bn) to $845bn. The cash to shareholders declined by 1% ($7bn) compared to 1Q19, which was a record high at $853bn. This growth was comprised of share buybacks which increased 26.5% y/y and dividends which increased by 4.5%y/y. However, share buybacks were down 3.7% q/q. By sector Diversified Media had the largest decline in y/y Cash to shareholders growth (-69% y/y, -$10bn) followed by Cable/TV reporting -46% y/y (-$9bn) and Yankee telecoms at -31% y/y (-$6bn). Metals and mining with 101% y/y growth accompanied by Chemical with 44% y/y growth and Technology with 41% y/y growth, reported the highest increases in the Cash to shareholders metric. It is worth noting that Energy sector's cash to shareholders is currently at $113bn which is highest post the Energy crisis.

In addition, the cash to share holder by issuers rating, shows a large divergence. Cash to share holder has increased by 23% y/y for A issuers, while it increased just by 1% y/y for BBB issuers.

Exhibit 35: Share buy backs has declined compared to previous quarter



Source: J.P. Morgan, Capital IQ

Exhibit 36: Cash to Shareholders has declined by 1% compared to previous quarter

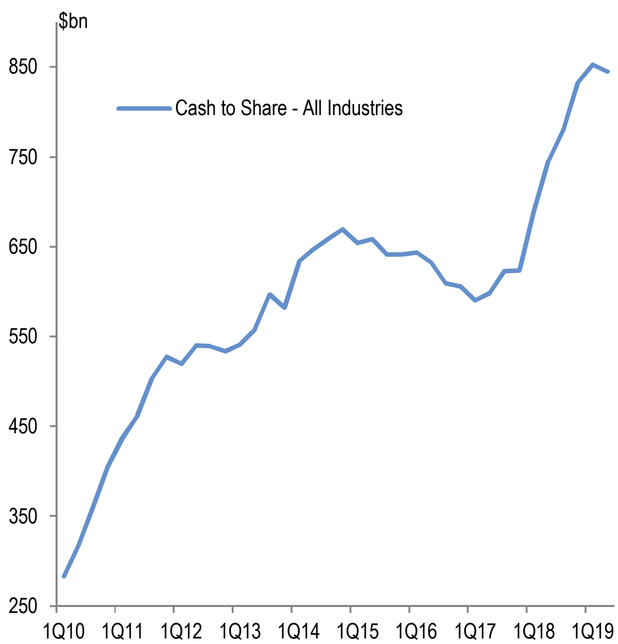
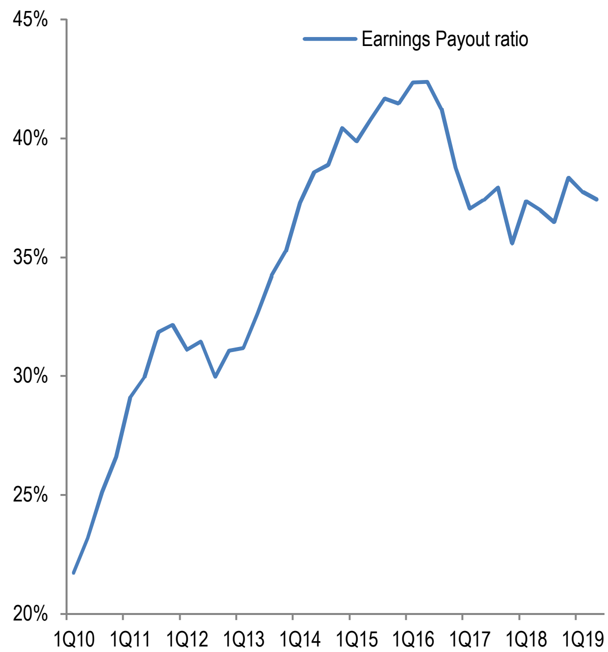


Exhibit 37: The Earnings Payout Ratio has increased just by 1% y/y and is slightly lower than previous quarter



Source: J.P. Morgan, Capital IQ

The **Earnings Payout Ratio** (Cash to Shareholders / EBITDA) increased 1% y/y to 37% in 2Q19. The highest y/y growth in earnings payout ratio was reported for the Metals/Mining sector at a 123% y/y increase, followed by Technology at +62% y/y growth. In addition, Technology has the highest earnings payout ratio at 104%, while Diversified Media has the lowest earning payout ratio of 13% and the highest decline of 63% y/y. Cable/TV has the second highest decline among sectors with 47% y/y decrease in earnings payout ratio.

Automotive

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We maintain our **Overweight** Auto Manufacturing and Fincos, and **Underweight** Auto Suppliers. The automotive sector is likely to continue to face a variety of headwinds, including softness in China and Europe markets, uncertainty around trade/tariffs, and rising investments in electrification/autonomous driving. However, we believe the US light vehicle market, the biggest driver of profitability for domestic automakers, remains healthy, and that balance sheets remain in good shape relative to history and to other HG corporate sectors. Through August, SAAR in 2019 is tracking in line to above industry forecasts in the mid to high 16mm range at 16.9mm, down ~0.5% y/y, while vehicle mix continues to strengthen and ATPs reach record highs, despite rising incentive spending and a YTD recovery in prices at the pump. The continued move lower in interest rates and potential for additional rate cuts this year, should be helpful from a vehicle affordability perspective, (though our enthusiasm over the more dovish FOMC outlook is tempered by broader expectations for slowing growth). The US consumer remains healthy, as measured by historically low unemployment and low levels of household debt, but we are watchful of consumer confidence which deteriorated in August following the most recent round of US-China tariffs (but remains solidly above the 10-year average). Aside from the potential for the domestic market to turn, China and global trade tensions remain areas of concern. In China, demand has been slow to respond to modest stimulus measures introduced by the government, though the second half of 2019 should benefit from easier y/y comps. In Europe, sales are tracking down 2.3% on a YTD basis (through July) but the upcoming change in emissions standards could present challenges from 2020 onward. Continued weakness in steel prices may ease commodity price headwinds if trends persist as automakers reset contracts. From a credit perspective, OEM balance sheets remain broadly healthy, characterized by low pension-adjusted leverage and large cash balances. Stretched lending metrics and the potential for deteriorating residual value trends are areas of concern. Longer term, an evolving industry landscape presents uncertainty.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	General Motors Co	41,611	48%	131	18	15	0.9x	24.4x	14%	13%
2	Ford Motor Co	35,693	41%	146	11	14	1.2x	10.7x	8%	22%
3	Harley-Davidson Inc	3,070	4%	5	1	1	1.4x	17.8x	12%	114%
4	Aptiv PLC	2,425	3%	14	2	5	2.0x	17.0x	16%	40%
5	Magna International Inc	1,493	2%	40	4	3	0.8x	43.0x	10%	52%
	Sector Summary	**86,449**	**100%**	**371**	**42**	**43**	**1.0x**	**18.4x**	**11%**	**18%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	General Motors Co	0%	9%	12%	0.0x	-2.1x	1%	-19%
2	Ford Motor Co	0%	-2%	-10%	-0.1x	0.4x	0%	-4%
3	Harley-Davidson Inc	-4%	-22%	0%	0.3x	-5.1x	-3%	32%
4	Aptiv PLC	3%	1%	11%	0.2x	-1.4x	0%	16%
5	Magna International Inc	-1%	-9%	-22%	-0.1x	-0.5x	-1%	5%
	Sector Summary	**0%**	**4%**	**-2%**	**0.0x**	**-1.2x**	**1%**	**-12%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector remained flat y/y since 2Q17 while EBITDA grew by 4%. EBITDA for the sector has shown a positive growth for the first time since 1Q17 the lowest decline since 2Q17 y/y. EBITDA declined or remained about flat for most of the names in the sector largely driven by weakness in China and Europe but was offset by a huge growth in GM ($1.5bn/9% y/y) and CMI ($816mn/26% y/y).
- Profit margin for that sector declined every quarter in 2018 but is again seeing an upward trend in 2019. It has increased from 10.6% in 2Q18 to 11.1% in 2Q19, and is at the highest level post crisis barring a few quarters.
- Debt declined by 2% y/y compared to an average increase of 9% y/y since 1Q14 with the $1.6bn (-10%y/y) decrease in debt at Ford being a major driver (at the automotive level, as this analysis excludes the FinCo debt).
- Interest Coverage is down 1.2x y/y to 18.4x at its lowest level since 2Q13.
- The earnings payout ratio decreased by 12% y/y to 18% as cash to shareholders declined by $2.5bn (-19% y/y). Cash to shareholders declined by 24% y/y driven solely by GM (-$2.9bn, -56%y/y) after an elevated level of share buybacks in

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2H18. Earnings payout ratio for the sector is at its lowest level since 4Q12 at 18%.

Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1	General Motors Co	41,611	48%
2	Ford Motor Co	35,693	41%
3	Harley-Davidson Inc	3,070	4%
4	Aptiv PLC	2,425	3%
5	Magna International Inc	1,493	2%
6	Cummins Inc	1,137	1%
7	BorgWarner Inc	1,022	1%
	Total	**86,449**	**100%**

Exhibit 2: Revenue

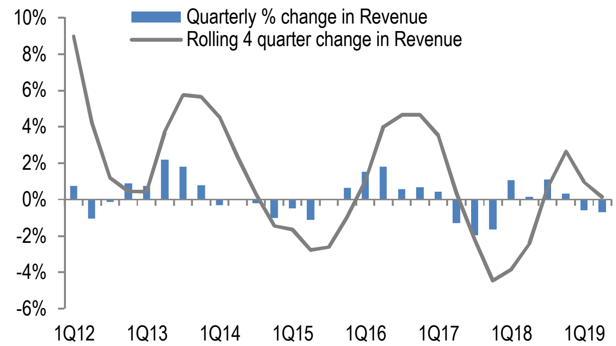


Exhibit 3: EBITDA

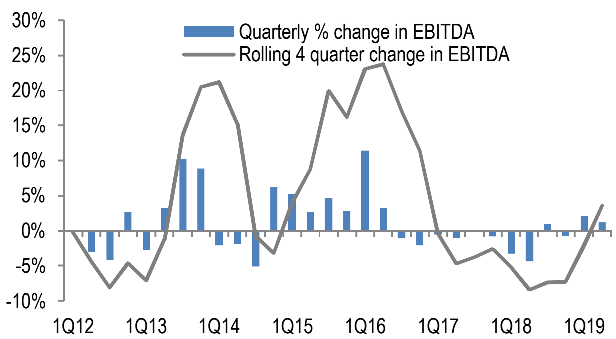


Exhibit 4: Debt

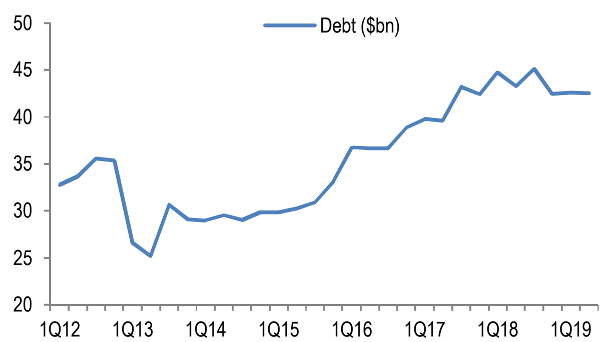


Exhibit 5: Cash to Shareholders

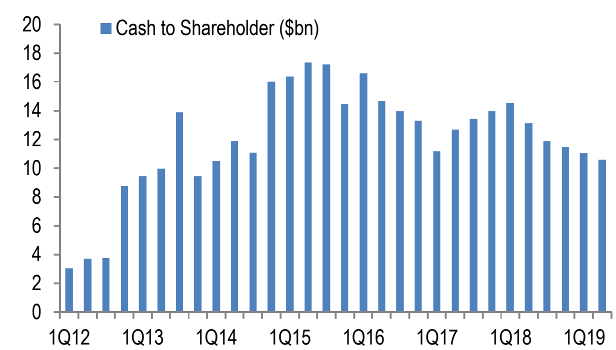


Exhibit 6: Gross and Net Leverage

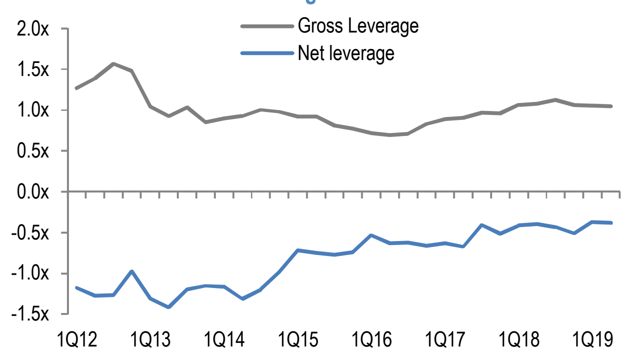


Exhibit 7: Interest Coverage Ratio

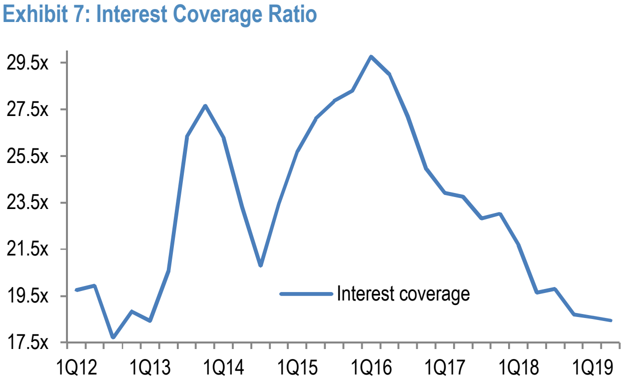
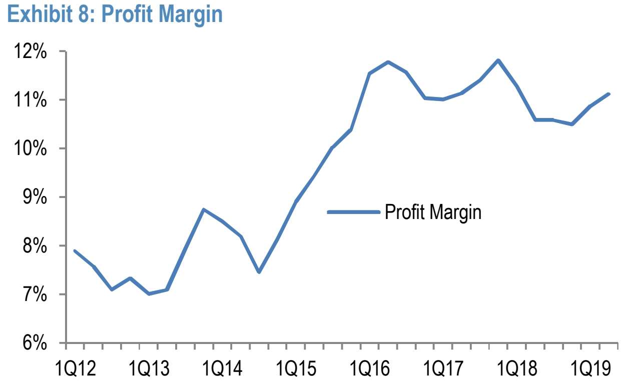


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Cable/Satellite

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We maintain our **Overweight** recommendation on the HG Cable/Satellite subsector following another quarter of solid results in 2Q19. Comcast reported strong results with the company beating expectations on EBITDA, while slightly missing on top-line. Operating results were a bit more mixed, with broadband net additions in-line with expectations and video losses worse than expected. Comcast continues to place value on their video business, but acknowledges they are only targeting profitable video customers. The company updated their guidance for cable EBITDA margin improvement to slightly above 100bps versus prior guidance of up to 100bps. The team also expects capex intensity to improve by at least 100bps versus prior guidance of 50bps. Charter reported a slightly softer quarter or results with financials and subscriber metrics below street expectations. Of particular focus at Charter was the slowdown in the broadband segment, which were largely driven by slower legacy TWC gross additions. We believe fundamentals remain sound in the sector and expect leverage to continue to decline at Comcast, while remaining steady at Charter.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Comcast Corp	81,044	67%	109	32	108	3.3x	7.6x	30%	19%
2	Charter	40,072	33%	45	16	73	4.5x	4.4x	37%	23%
	Sector Summary	**121,116**	**100%**	**153**	**49**	**181**	**3.7x**	**6.7x**	**32%**	**20%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Comcast Corp	2%	3%	43%	0.9x	-2.3x	0%	-10%
2	Charter	5%	4%	2%	-0.1x	-0.2x	0%	-38%
	Sector Summary	**3%**	**3%**	**23%**	**0.6x**	**-1.7x**	**0%**	**-18%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector grew by 3% y/y, lower than the 5 year average growth rate of 7% y/y. Similarly EBITDA grew by 3% y/y, slightly higher than 1Q19 but still around the lowest growth since 2010. Profit Margin for the sector, at 31.8%, has been stable over the past few years and has ranged between 30.7% and 31.9% over the past 5 years.
- Debt for the sector grew by 23% y/y ($33bn) in 2Q19. The large increase in debt was mainly driven by Comcast which issued $27bn of senior unsecured USD bonds to fund the Sky Ltd acquisition which was announced in April 2018 and funded in October 2018. Leverage for the sector increased sharply (+0.6x y/y to 3.7x).
- Interest coverage for the sector declined by 1.7x to 6.7x as EBITDA increased at a much slower pace than interest expense. Interest expense increased by 35% y/y for Comcast compared to EBITDA growth of only 3% y/y. Interest coverage ratio declined significantly for Comcast Corp (-2.3x y/y to 7.6x) while the decline was modest for Charter (-0.2x y/y to 4.4x).
- Earnings Payout ratio for the sector declined by 18% y/y to 20%. Charter has cut down on its share buybacks after a few quarters of aggressive buybacks in 2017. LTM total cash to shareholders at $10.0bn is 46% lower than the $18.8bn in 2Q18, thereby leading to an 18% decline in earnings payout ratio y/y. Cash to shareholders decreased 31% y/y for Comcast resulting in its earnings payout ratio declining by 19% y/y.
- Capex for the sector decreased by 2.0% y/y (-$407mn). Capex growth has been slowing for the sector over the past few quarters. The current capex grow rate of -2.0% y/y is significantly down from the average rate of 10% y/y over the past 5 years.

Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Comcast Corp	81,044	67%
2.	Charter Communications	40,072	33%
	Total	**121,116**	**100%**

Exhibit 2: Revenue

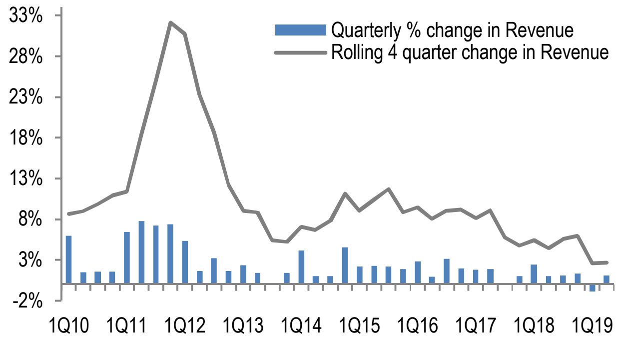


Exhibit 3: EBITDA

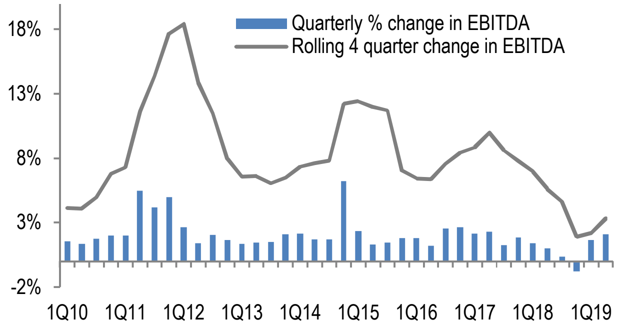


Exhibit 4: Debt

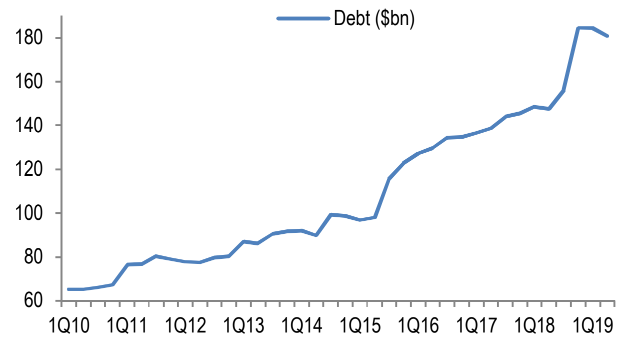


Exhibit 5: Cash to Shareholders

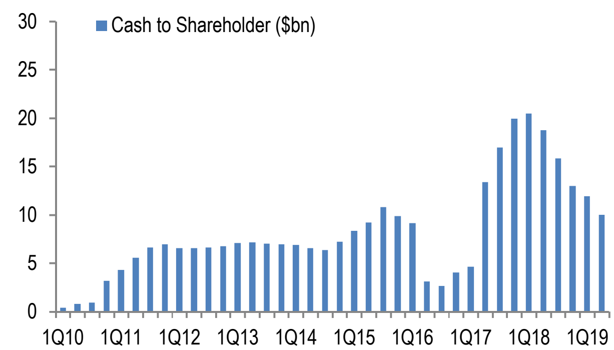


Exhibit 6: Gross and Net Leverage

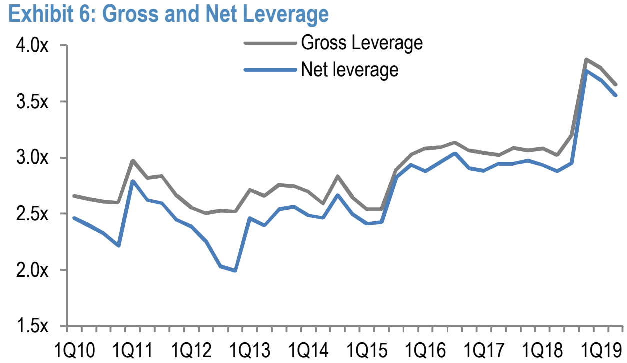


Exhibit 7: Interest Coverage Ratio

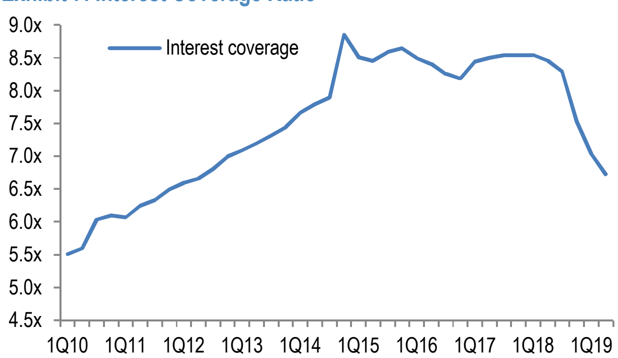
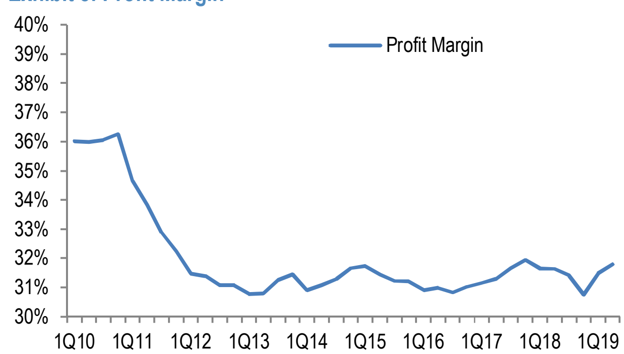


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Capital Goods

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We recently lowered our recommendation for HG Manufacturing to **Underweight** from Neutral. The sector has slightly outperformed the JULI year to date, largely driven by significant (>75bp) spread tightening at GE, the largest constituent in the sector. Though relative value is less rich than historical averages (currently 4bp wide to the JULI), we think this makes sense given the lower ratings quality composition of the sector. We see headwinds beginning to build across the sector, given the global slowdown in economic growth, ongoing trade tensions/tariffs, and decline in interest rates (hurting pension funding levels). These factors in addition to elevated M&A activity and negative rating trends make us more cautious and we think credit profiles are likely to deteriorate over the coming quarters causing underperformance for the sector. We recommend **Neutral** on the HG Aerospace & Defense sector, based on a favorable fundamental outlook and focus on deleveraging following a number of acquisitions in the sector, balanced by rich valuations. The A&D sector trades approximately 34bp tight to the JULI.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	General Electric Co	47,162	21%	111	15	46	2.8x	5.5x	15%	14%
2	United Technologies Corp	30,108	13%	76	14	48	3.4x	9.3x	18%	19%
3	Deere & Co	19,525	9%	35	4	7	1.6x	14.7x	13%	51%
4	Caterpillar Inc	18,930	8%	53	10	8	0.7x	19.9x	20%	63%
5	Siemens AG	17,000	8%	94	10	15	1.3x	7.0x	12%	45%
	Sector Summary	**225,808**	**100%**	**788**	**118**	**268**	**2.3x**	**10.5x**	**16%**	**41%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	General Electric Co	-4%	-12%	-3%	0.2x	0.1x	-1%	-15%
2	United Technologies Corp	21%	26%	63%	0.8x	-0.2x	1%	-1%
3	Deere & Co	8%	10%	5%	-0.1x	1.7x	0%	21%
4	Caterpillar Inc	9%	-3%	-15%	-0.1x	3.4x	-3%	34%
5	Siemens AG	0%	-5%	3%	0.1x	-0.1x	-1%	0%
	Sector Summary	**1%**	**-4%**	**9%**	**0.2x**	**-0.1x**	**0%**	**6%**

Source: J.P. Morgan, Capital IQ

- Revenue increased 1% y/y, a slowdown from 3% growth for 1Q. United Technologies had the highest revenue growth y/y at 21%, due to its acquisition of Rockwell Collins, followed by Caterpillar and Deere up 9% and 8% respectively, while General Electric saw y/y revenue decline of -4% driven by divestiture activity.
- EBITDA decreased 4% y/y, as +26% y/y growth at United Technologies and +10% y/y at Deere were offset by EBITDA declines for the other large issuers. Profit margin remained flat y/y at 16%.
- Debt increased 9% y/y, which was mainly driven by +63% y/y debt increase at United Technologies given its acquisition of Rockwell Collins, partially offset by declines in y/y debt for Caterpillar and General Electric of 15% and 3% respectively. Gross Leverage increased by 0.2x y/y led by United Technologies with leverage up 0.8x.
- Interest coverage ratio declined 0.1x y/y to 10.5x. Caterpillar reported the largest y/y increase in interest coverage of 3.4x.
- The earnings payout ratio increased 6% y/y, mainly driven by +34% and +21% y/y increases in the Earnings Payout Ratios for Caterpillar and Deere respectively, partly offset by a 15% decline for General Electric, which reduced its dividend late last year.

Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	General Electric Co	47,162	21%
2.	United Technologies Corp	30,108	13%
3.	Deere & Co	19,525	9%
4.	Caterpillar Inc	18,930	8%
5.	Siemens AG	17,000	8%
6.	Northrop Grumman Corp	13,937	6%
7.	Lockheed Martin Corp	13,916	6%
8.	Boeing Co	13,122	6%
9.	3M Co	10,992	5%
10.	General Dynamics Corp	8,790	4%
11.	Others	32,326	14%
	Total	**225,808**	**100%**

Exhibit 2: Revenue

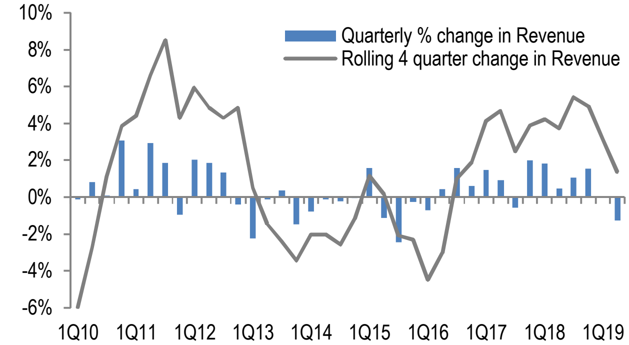


Exhibit 3: EBITDA

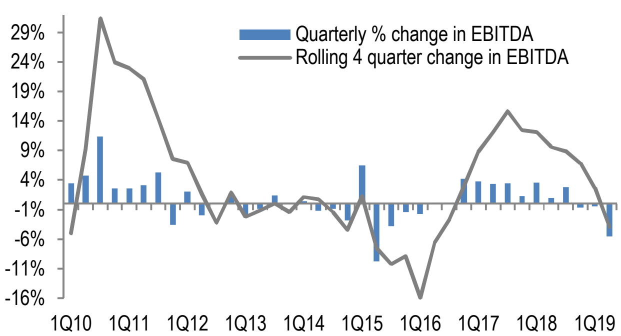


Exhibit 4: Debt

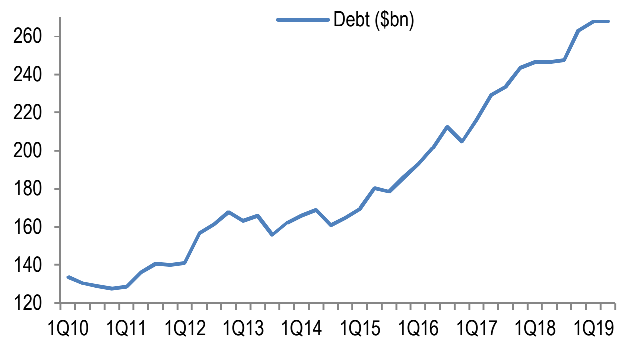


Exhibit 5: Cash to Shareholders

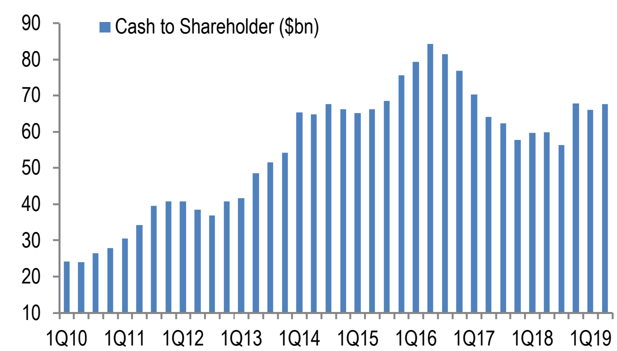


Exhibit 6: Gross and Net Leverage

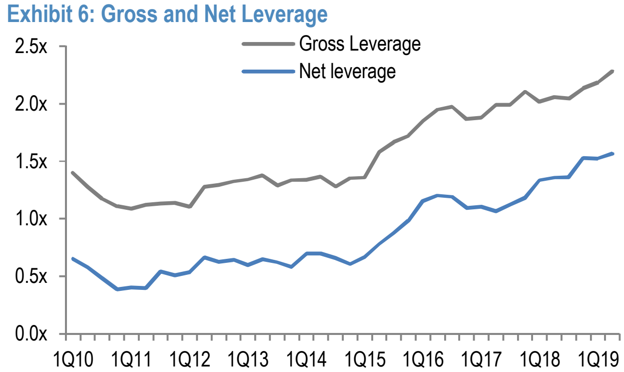


Exhibit 7: Interest Coverage Ratio

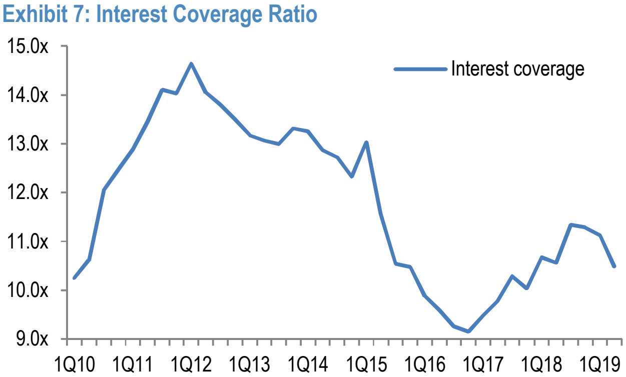
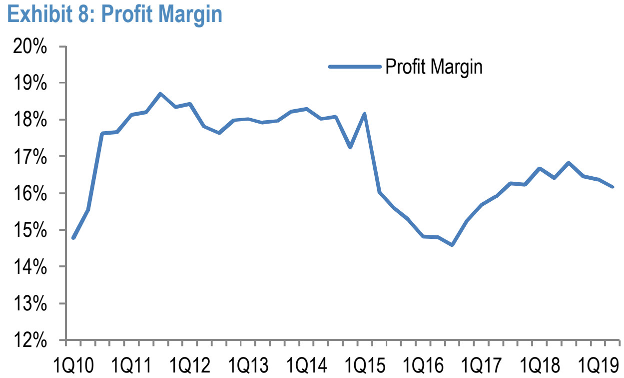


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Chemicals

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We remain **Underweight** Chemicals. Second quarter results saw continued weakness across the specialty and petrochemicals space as well as a number of full year guidance reductions for the most part on the expectation that a 2H19 demand recovery in China and Europe is less likely given the re-escalation of US-China trade tensions. Commodity chemical producers are facing headwinds from a combination of factors including ethylene/polyethylene capacity growth and demand weakness in China and Europe. Specialty chemical names also saw sluggish end market demand in Europe and China (though to a lesser extent than in commodity chemicals), with many aiming to mitigate the impact through cost cuts. In the fertilizer markets, unplanted acres in North America are expected to drive strong demand in the fall application season and 2020, though greater than expected capacity additions in potash and increased phosphate exports from China are potential offsets. Agricultural chemical results may be pressured in the near term if poor fall weather conditions in North America disrupt the fall application season delaying sales further into 2020. We think event risk in the coatings and specialty chemical names bears monitoring with respect to potential future industry consolidation (or de-consolidation) efforts and their derivative effects. More recently we note reports of a potential asset divestiture at DuPont and a potential bid for Axalta assets at PPG. Leverage for the sector has trended upward in recent years, a theme we expect to continue as companies continue to prioritize shareholder returns and pursue inorganic growth opportunities.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Dow Chemical Co/The	14,849	27%	47	8	18	2.2x	7.9x	17%	27%
2	EI Du Pont de Nemours & Co	13,429	25%	22	6	17	2.9x	5.0x	27%	118%
3	Nutrien Ltd.	8,098	15%	20	4	11	2.4x	7.8x	22%	82%
4	LyondellBasell Industries NV	7,399	14%	37	6	10	1.7x	17.2x	16%	58%
5	The Sherwin-Williams Company	6,567	12%	18	3	9	3.3x	8.0x	16%	38%
	Sector Summary	**54,184**	**100%**	**153**	**29**	**72**	**2.6x**	**7.9x**	**20%**	**61%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Dow Chemical Co/The	-3%	-13%	-14%	0.0x	-1.2x	-2%	-18%
2	EI Du Pont de Nemours & Co	0%	7%	28%	0.5x	-11.1x	2%	69%
3	Nutrien Ltd.	7%	33%	-12%	-1.3x	1.6x	4%	18%
4	LyondellBasell Industries NV	-2%	-20%	22%	0.6x	-3.7x	-4%	27%
5	The Sherwin-Williams Company	3%	12%	-9%	-0.7x	0.9x	1%	17%
	Sector Summary	**0%**	**-4%**	**0%**	**-0.1x**	**-3.5x**	**0%**	**19%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector was flat y/y as against an average growth of 6.8% in the past 4 quarters. Stronger revenue growth at Nutrien and Sherwin-Williams was offset by weaker sales across the rest of the sector. LTM EBITDA declined by 4% y/y, most notably for LyondellBasell (-20.3%) and Dow Chemical (-12.7%), both in the commodity chemical space. Profit margin for the sector remained flat y/y

- Debt for the sector remained flat y/y. It was up by 28% for DuPont, as part of the capital structure realignment related to the business separations, and by 22% for LyondellBasell, to fund share repurchases. These increases were offset by declines for Dow (-14%) and Nutrien (-12%). Leverage for the sector declined by 0.1x y/y to 2.6x.

- Interest coverage had a 3.5x decline over the year to 7.9x. This was mainly driven by a 2.5 times increase in interest expense for DuPont (related to capital structure realignment) coupled with lower sector EBITDA.

- The earnings payout ratio increased by 19% y/y to 61%. Cash to Shareholders increased to $18bn, up 44% y/y and 192% q/q largely due to higher buyback activity for the sector. The +$4.2bn y/y increase for DuPont was primarily related to capital structure realignment related to business separations, though the past twelve months have seen a solid pick up in buybacks particularly for LyondellBasell (+$1bn) and Nutrien (+$1bn).

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Dow Chemical Co/The	14,849	27%
2.	EI Du Pont de Nemours & Co	13,429	25%
3.	Nutrien Ltd.	8,098	15%
4.	LyondellBasell Industries NV	7,399	14%
5.	The Sherwin-Williams Company	6,567	12%
6	Eastman Chemical Co	3,841	7%
	Total	**54,184**	**100%**

Exhibit 2: Revenue

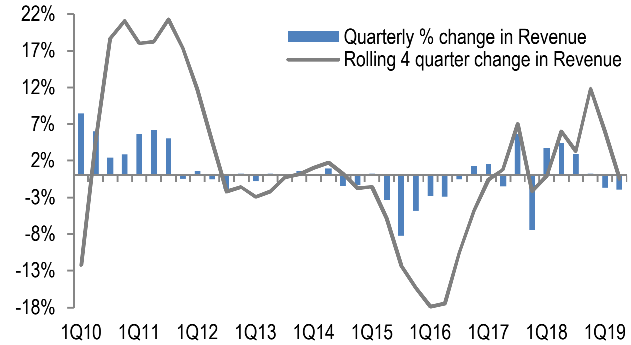


Exhibit 3: EBITDA

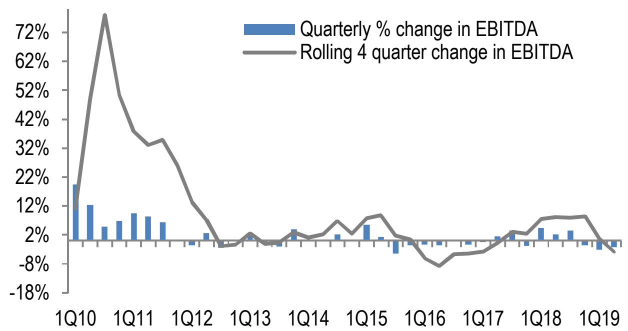


Exhibit 4: Debt

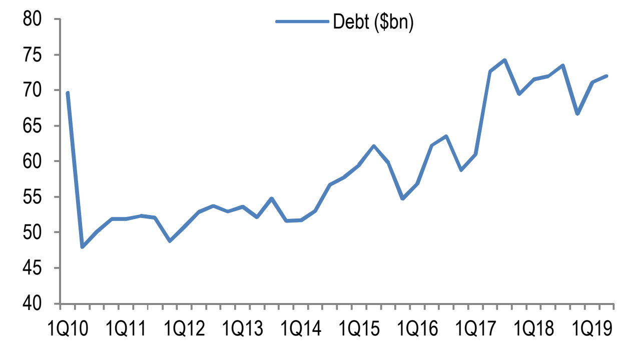


Exhibit 5: Cash to Shareholders

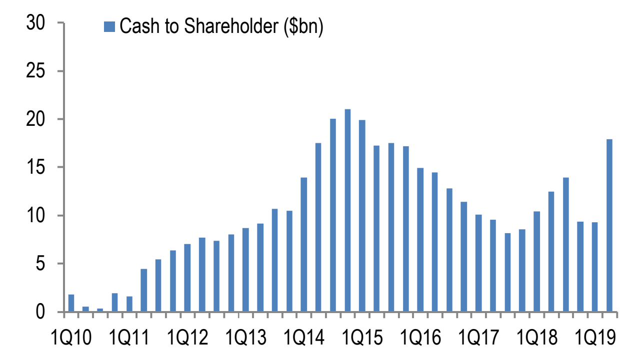


Exhibit 6: Gross and Net Leverage

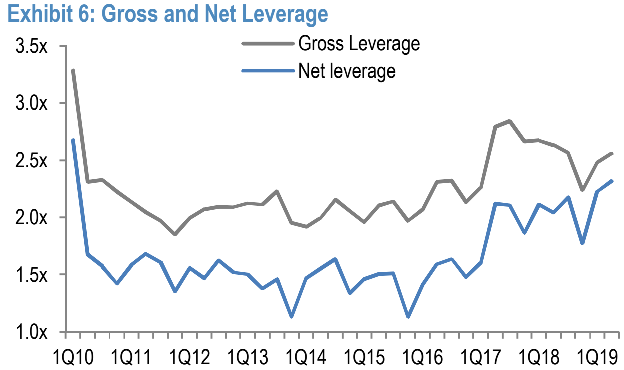


Exhibit 7: Interest Coverage Ratio

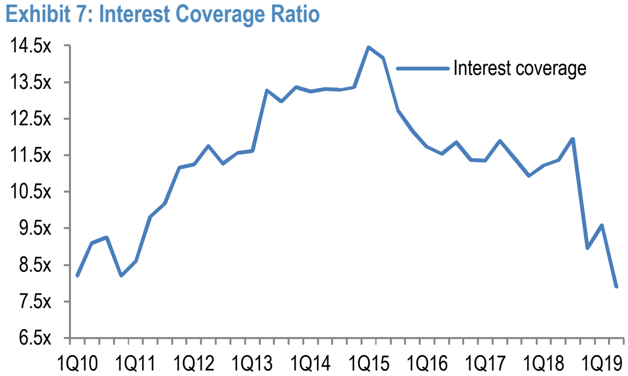
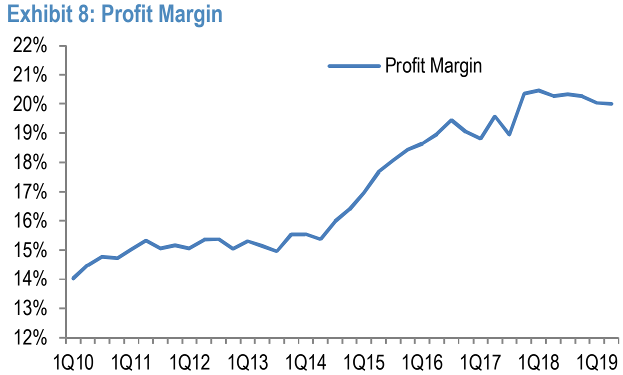


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Consumer Products

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We recommend **Neutral** on the HG Consumer Products sector and expect the sector to perform in line with the overall index. Solid credit fundamentals, with modest leverage, strong cash generation and globally diversified operations, are appropriately reflected in the sector's relatively rich valuations, in our view. Profit margins have been steady, driven by price increases, cost cutting and productivity gains, while freight and raw material costs have been headwinds. HG Consumer Products currently trades 28bp inside the JULI.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Unilever NV	11,229	23%	56	12	34	2.6x	13.9x	23%	69%
2	Procter & Gamble Co/The	10,338	21%	68	17	30	1.8x	33.7x	25%	73%
3	Reckitt Benckiser	10,131	21%	16	5	15	3.2x	9.9x	30%	29%
4	Newell Brands Inc	5,705	12%	8	1	7	5.3x	3.1x	17%	137%
5	Kimberly-Clark Corp	5,160	11%	18	4	8	1.9x	12.3x	24%	48%
	Sector Summary	**48,865**	**100%**	**188**	**45**	**106**	**2.5x**	**15.6x**	**25%**	**64%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Unilever NV	-6%	0%	-5%	-0.1x	-1.5x	1%	-23%
2	Procter & Gamble Co/The	1%	-3%	-4%	0.0x	-1.2x	-1%	-8%
3	Reckitt Benckiser	0%	2%	-1%	-0.1x	1.3x	1%	1%
4	Newell Brands Inc	-33%	-44%	-34%	0.6x	-1.1x	-2%	113%
5	Kimberly-Clark Corp	-1%	1%	1%	0.0x	0.9x	0%	0%
	Sector Summary	**-4%**	**-3%**	**-6%**	**0.0x**	**-0.6x**	**0%**	**5%**

Source: J.P. Morgan, Capital IQ

- Revenue for the Consumer Products sector declined 4% y/y to the lowest level in three years of $188bn. This decrease was driven by the divestures at Newell Brands and Unilever, which recorded declines in revenue of 33% and 6%, respectively. EBITDA for the sector fell by 3% over the same period to $45bn. This was mainly driven by the decline in Procter & Gamble and Newell Brands. Profit Margin remained flat y/y at 25%.
- LTM Debt for the sector fell 6% y/y to $106bn. Most of this decrease was driven by Newell Brands (-34% y/y), followed by Unilever (-5% y/y) and Procter & Gamble (-4% y/y). Newell Brands' debt decrease reflects $3.5bn of tendered bonds during fiscal 2018 as it prioritized debt repayment with asset sale proceeds. New issuance for the sector also fell 9% y/y in 1H19. Gross Leverage for the sector declined remained flat at 2.5x.
- Interest Coverage decreased by 0.6x y/y to 15.6x, around the lowest level since 2Q19. Unilever had the largest interest coverage decrease of 1.5x y/y, followed by Procter & Gamble (-1.2x y/y) and Newell Brands (-1.1x y/y).
- The Earnings Payout Ratio rose 5% over the year to 64%. However, Cash to shareholders decreased 8% y/y as share buybacks fell 19% y/y, partially offset by the dividend increase of 2% y/y. Newell Brands recorded the largest increase of 113% y/y to an Earnings Payout Ratio of 137%, driven by $1.5bn of share repurchases completed in 2H19 with asset sale proceeds.
- Capital expenditures for the sector declined 4% y/y overall as most companies in this sector reduced their capital expenditures. Kimberly-Clark reported the largest capital expenditure growth of 47% y/y as it increased spending related to supply chain improvements as part of its 2018 Global Restructuring Program.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Unilever NV	11,229	23%
2.	Procter & Gamble Co/The	10,338	21%
3	Reckitt Benckiser	10,131	21%
4	Newell Brands Inc	5,705	12%
5	Kimberly-Clark Corp	5,160	11%
6	Colgate-Palmolive Co	3,881	8%
7	Clorox Co	2,421	5%
	Total	**48,865**	**100%**

Exhibit 2: Revenue

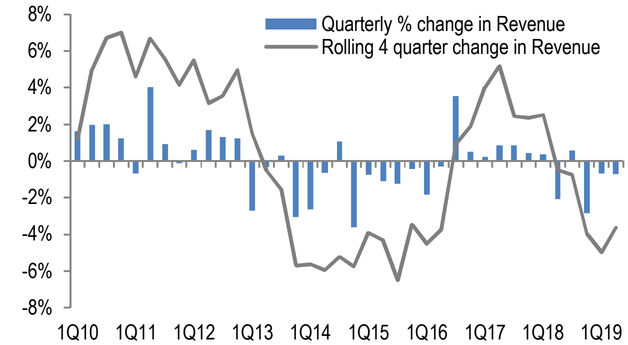


Exhibit 3: EBITDA

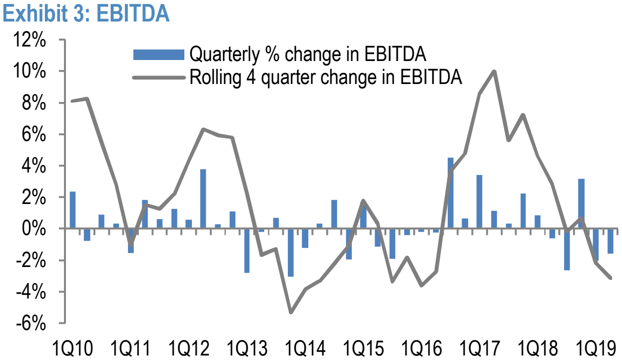


Exhibit 4: Debt

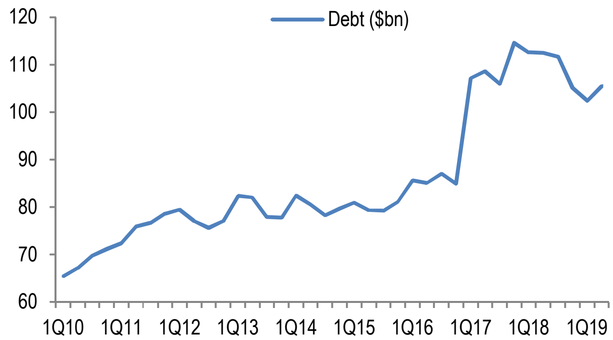


Exhibit 5: Cash to Shareholders

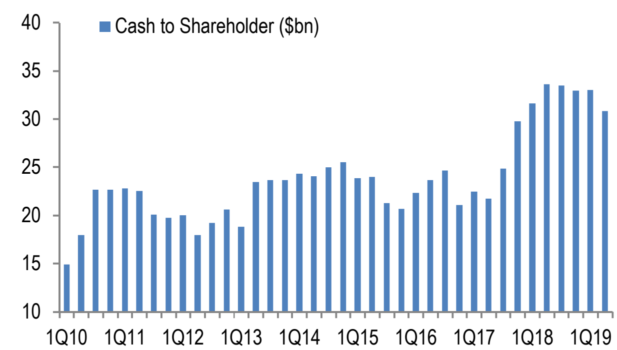


Exhibit 6: Gross and Net Leverage

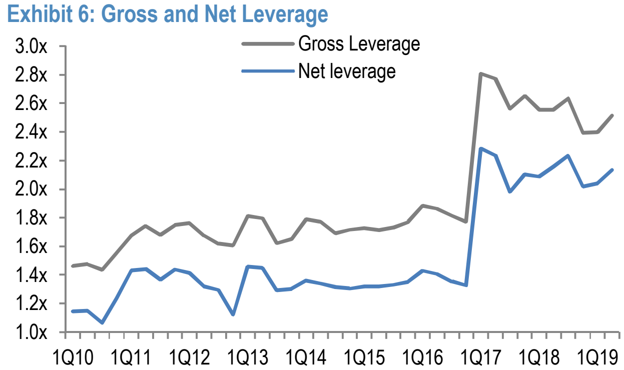


Exhibit 7: Interest Coverage Ratio

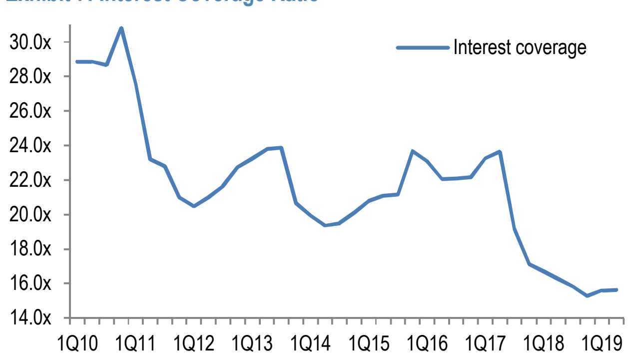
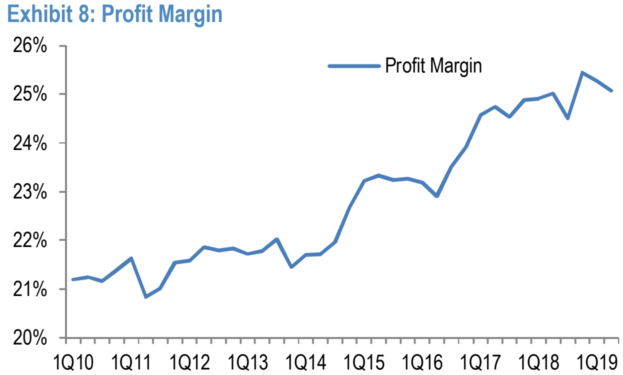


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Diversified Media

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We maintain our **Neutral** recommendation on the diversified media subsector. Fundamentals remained steady in 2Q19 with generally solid earnings across our coverage universe. One earnings performance which stood out was Disney, which underperformed versus expectations in the first quarter including 21st Century Fox as those assets performed poorly in the quarter largely driven by weakness at the movie studio. Away from earnings, CBS and Viacom announced their intentions to merge in a largely expected move, with Viacom CEO Bob Bakish leading the combined companies. We continue to see a focus on content investments and digital platforms across the media subsector and look for M&A to remain a theme in the sector as consolidate remains as the preeminent strategy to combat the pressures facing the industry.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Walt Disney Co/The	29,643	43%	78	18	58	3.2x	9.1x	23%	12%
2	Discovery Communications Inc	14,118	20%	11	5	17	3.5x	6.7x	43%	0%
3	CBS Corp	9,996	14%	15	3	9	3.1x	6.6x	20%	16%
4	Viacom Inc	7,683	11%	13	3	9	3.0x	6.1x	23%	11%
5	Omnicom Group Inc	4,569	7%	15	2	6	2.3x	9.1x	16%	49%
	Sector Summary	**69,220**	**100%**	**141**	**33**	**102**	**3.2x**	**7.9x**	**25%**	**13%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Walt Disney Co/The	10%	-16%	-8%	0.3x	-1.9x	-7%	-41%
2	Discovery Communications Inc	0%	7%	-10%	-0.7x	0.1x	3%	-2%
3	CBS Corp	7%	-1%	-5%	-0.1x	0.0x	-2%	-15%
4	Viacom Inc	1%	3%	-11%	-0.5x	1.0x	1%	0%
5	Omnicom Group Inc	-3%	2%	13%	0.2x	-0.2x	1%	3%
	Sector Summary	**6%**	**-8%**	**-5%**	**0.0x**	**-0.9x**	**-4%**	**-23%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector grew by 6% y/y while EBITDA fell by 8% y/y. The divergence in Revenue and EBITDA trends were driven by the performance of Walt Disney. Revenue increased by 10% for the company while EBITDA declined by 16% due to weaker performance of Fox assets. Profit Margins for the sector declined by 4% to 25%.
- Debt decreased by 5% y/y (-$5.9bn). The decrease in debt was driven by Discovery cutting debt by 8% (-$4.8bn) over the year. On the other hand, the only company in our analysis to see a significant increase in debt was Interpublic Group ($1.7bn, 85% y/y). Leverage for the sector was unchanged at 3.2x.
- Interest coverage for the sector fell by 0.9x y/y to 7.9x, as interest expense (+2% y/y) grew while EBITDA declined over the year (-8% y/y). IPG (+98%, +$88mn) and Disney (+2%, +$42mn) were the main drivers of the increase in interest expense. On the other hand, Viacom (-14%, -$81mn) was the only company where interest expense declined significantly
- Cash to shareholders declined by 69% y/y for the sector. Dividends paid out across the sector were up 3.5% while companies cut down on share buybacks (-96% y/y). Disney was the primary driver of the decline in share buybacks with the company reducing buybacks from $9bn of net repurchases in 2018 to the company net issuing equity in 2Q19.The earnings payout ratio declined by 23% y/y to 13%. This is around the lowest payout ratio for the sector since 2010.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Walt Disney Co/The	29,643	43%
2.	Discovery Communications Inc	14,118	20%
3.	CBS Corp	9,996	14%
4.	Viacom Inc	7,683	11%
5.	Omnicom Group Inc	4,569	7%
6.	Interpublic Group of Cos Inc	3,212	5%
	Total	**69,220**	**100%**

Exhibit 2: Revenue

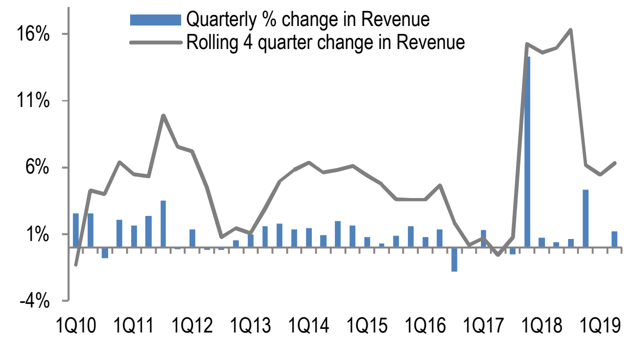


Exhibit 3: EBITDA

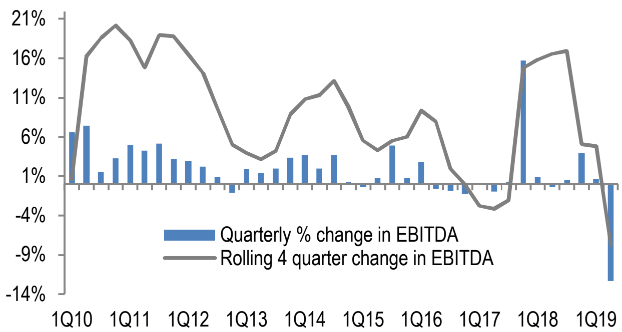


Exhibit 4: Debt

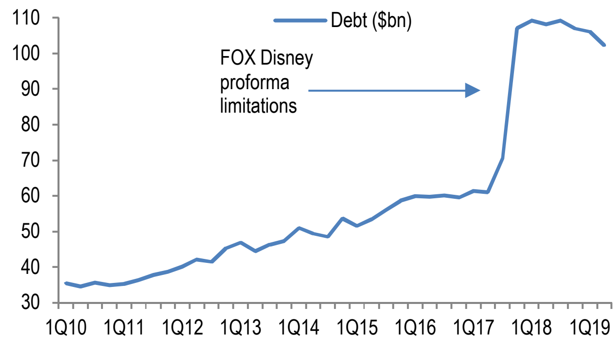


Exhibit 5: Cash to Shareholders

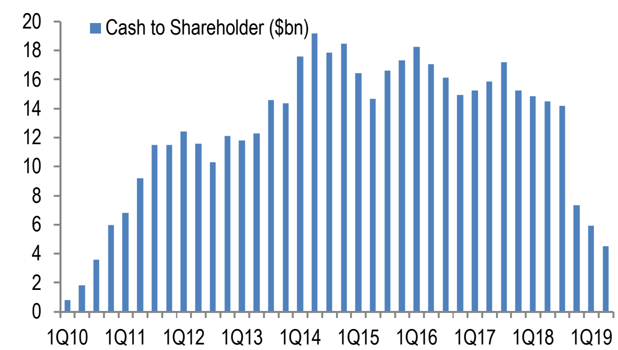


Exhibit 6: Gross and Net Leverage

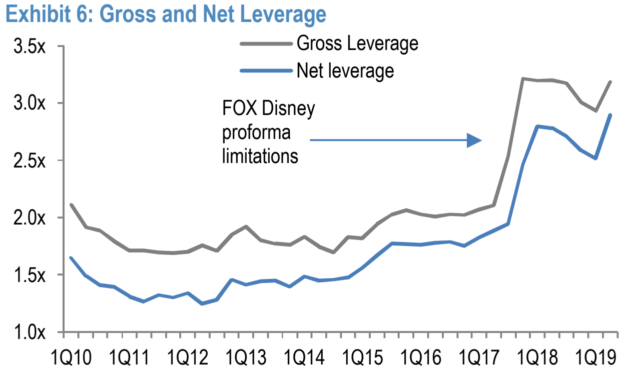


Exhibit 7: Interest Coverage Ratio

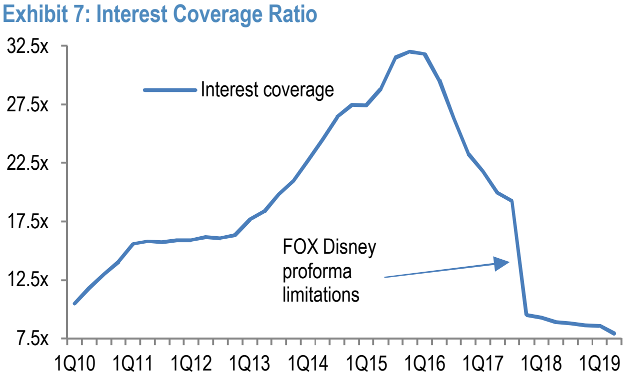
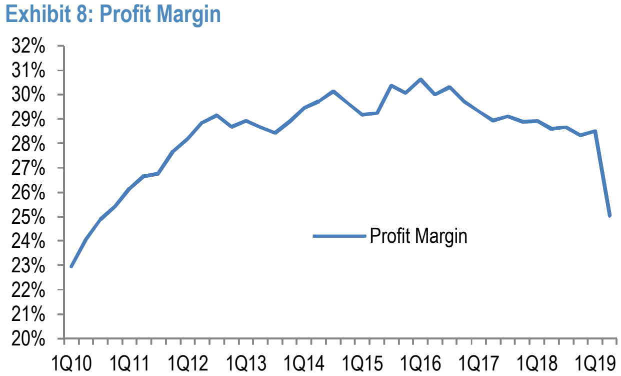


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Energy

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We maintain our **Overweight** rating on the Pipeline, Midstream, MLP sub-sector as we expect volumes across the energy space to be sustained in the near term and grow over the long term Company fundamentals continue to improve on the back of sustained focus on debt reduction and distribution coverage by nearly all members of the sector. We continue to see EBITDA growing on the back of new projects coming on line with increased volumes from higher production, as well as new capacity being added. From a relative value perspective we believe the range bound commodity price environment and the favorable technical picture around lower issuance in 2019 should lead to spread compression. We continue to believe the Midstream space has room to compress towards both E&Ps and the JULI. We think the majority of the issuers in the space are concentrating on achieving a competitive cost of capital and using retained cash as well as accessing various alternative sources of capital, including hybrids, and preferreds to fund growth.

We remain **Neutral** the E&P sub sector following the recent M&A in the space as we think that there has effectively been a floor placed under most E&P spreads. The technicals remain favorable with limited issuance expected over the balance of the year, although we will likely end up above our prior expectations for issuance ex-midstream as we had not assumed such a large M&A debt component. Despite these positives we see limited room for further performance of the E&P sector relative to other sectors in JULI and within the Energy sector. We expect the sector to continue to remain very disciplined with regards to capital spending and living within CF based on most realistic expectations for commodity prices. However, we have seen some companies increase their focus on returning value to shareholders but we still expect overall leverage in the sector to continue to come down with modest shareholder returns.

We remain **Neutral** the Integrated and Refining sub-sectors as spreads remain relatively tight for most names while a few select names appear attractive. Integrated companies continued to benefit from the diversification of their asset bases with upstream and downstream and in most cases chemicals operations. This diversification has paid off as 1 of the 3 sub sectors has been performing well helping to offset weakness in the others. We continue to expect that the impending IMO 2020 will be a positive for the refining sector as well as for the Integrateds refining operations. Shareholder returns remain a focus in the form of high dividends and to a lesser degree share buybacks, but shareholder returns remain in context of current ratings with improved cash flow generation associated with higher commodity prices. We remain **Neutral** the Refining sub-sector as margins are expected to remain ample despite recent weakness and profitability and cash flow have remained resilient.

We remain **Underweight** the Services sub-sector as we see a difficult fundamental outlook on the back of the new found discipline by the producers in the face of range bound commodity prices. We prefer to take risk in other areas of Energy that offer better fundamentals and better risk/reward. We continue to expect the sector to struggle to return to peak margins in the near to intermediate term, but note that the big three services companies remain best positioned to manage through the evolving energy services space.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Energy Transfer Partners LP	37,184	9%	50	11	47	4.5x	4.6x	21%	22%
2	Royal Dutch Shell PLC	31,419	8%	377	59	62	1.1x	8.7x	16%	36%
3	Kinder Morgan Inc/DE	30,718	8%	14	7	36	5.3x	3.6x	48%	25%
4	BP PLC	27,894	7%	293	33	68	2.0x	13.7x	11%	20%
5	Enterprise Products Partners LP	24,141	6%	34	8	27	3.5x	6.8x	22%	46%
	Sector Summary	**397,373**	**100%**	**1,979**	**359**	**715**	**2.8x**	**9.8x**	**29%**	**31%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Energy Transfer Partners LP	51%	48%	40%	-0.3x	-0.5x	0%	-13%
2	Royal Dutch Shell PLC	8%	9%	-23%	-0.4x	-4.1x	0%	10%
3	Kinder Morgan Inc/DE	1%	-2%	-3%	-0.1x	0.0x	-1%	0%
4	BP PLC	9%	9%	12%	0.0x	-4.0x	0%	-4%
5	Enterprise Products Partners LP	2%	37%	6%	-1.0x	1.1x	6%	-7%
	Sector Summary	**9%**	**14%**	**7%**	**-0.1x**	**-0.3x**	**2%**	**1%**

Source: J.P. Morgan, Capital IQ

- Revenue increased by 9% y/y for the sector mainly driven by the y/y increase in energy prices. EBITDA was up 14% y/y. Profit margin increased by 2% y/y to 29% as the growth in EBITDA outpaced the growth in Revenue.
- Debt of the sector was up 7% y/y (+$45bn). The increase in sector debt was in part driven by large increases at MPC (+$13.8bn) and ETP (+$13.4bn) as both the companies increased debt to fund acquisitions. Leverage for the sector declined by 0.1x to 2.8x as debt grew at a slower pace than EBITDA.
- The interest coverage decreased by 0.3x to 9.8x over the year as interest expense continues to grow at a strong pace despite the relative slowdown in EBITDA growth. Interest coverage is down 0.9x compared to its recent peak in 3Q18. Interest expense grew by 22% y/y.
- Cash to shareholders increased by 34% y/y and is currently at its highest level post crisis. However, Earnings Payout ratio increased by 1% to 31% as EBITDA growth for the sector remained strong on a y/y basis.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Energy Transfer Partners LP	37,184	9%
2.	Royal Dutch Shell PLC	31,419	8%
3.	Kinder Morgan Inc/DE	30,718	8%
4.	BP PLC	27,894	7%
5.	Enterprise Products Partners LP	24,141	6%
6.	Williams Companies	17,631	4%
7.	TransCanada Corp	16,609	4%
8.	ConocoPhillips	14,728	4%
9.	Exxon Mobil Corp	14,452	4%
10.	Chevron Corp	13,340	3%
11.	Others	169,257	43%
	Total	**397,373**	**100%**

Exhibit 2: Revenue

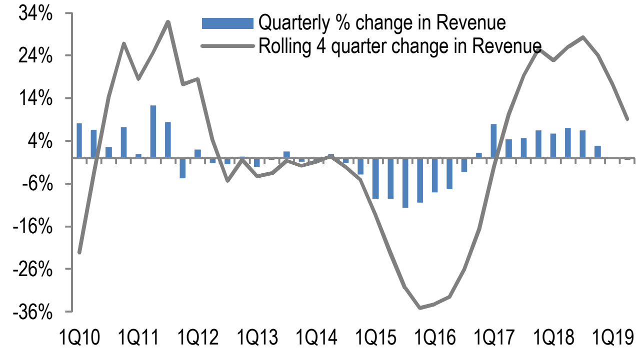


Exhibit 3: EBITDA

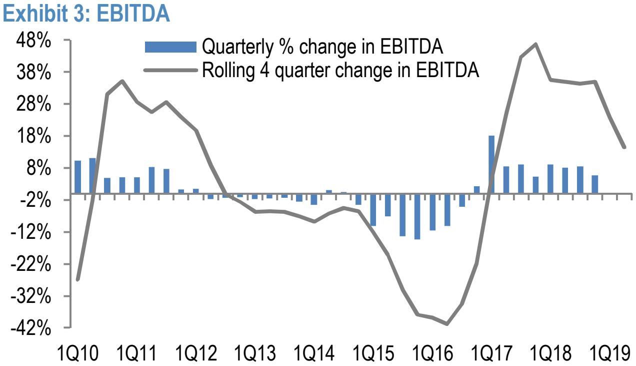


Exhibit 4: Debt

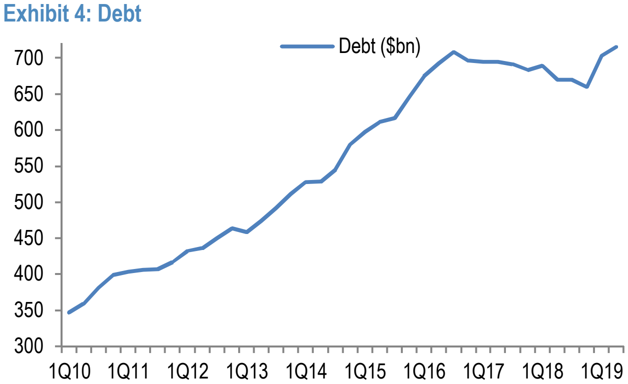


Exhibit 5: Cash to Shareholders

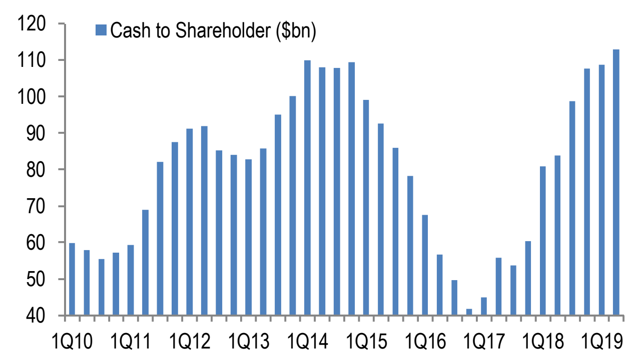


Exhibit 6: Gross and Net Leverage

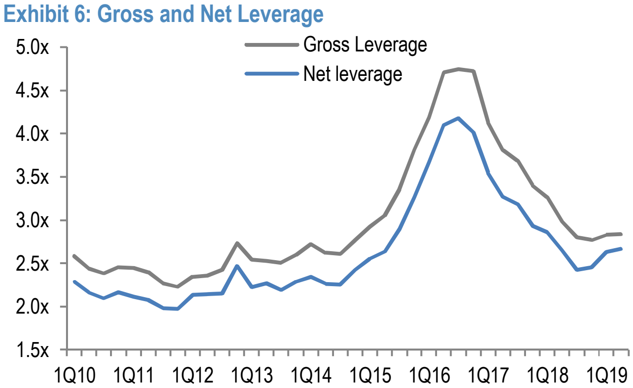


Exhibit 7: Interest Coverage Ratio

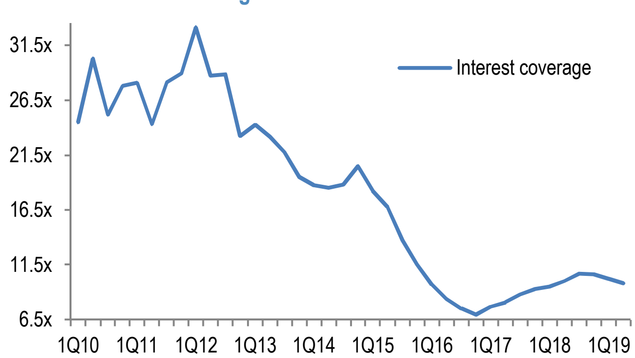
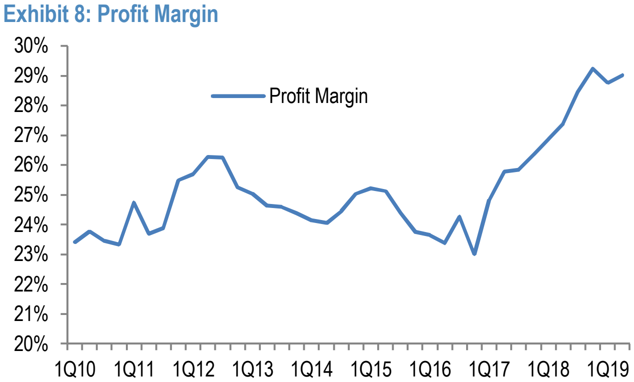


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Food, Beverages and Tobacco

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We recommend **Overweight on the HG Food/Beverage sector**. Following a wave of M&A across the sector the last few years, leverage is elevated and ratings have migrated lower within investment grade. The sector has rallied 29bp YTD vs 25bp of tightening for the JULI ex-EM index, and now trades 9bp wide to the index. We expect post-M&A companies to remain focused on deleveraging towards their stated targets over the next couple of years via debt reduction from cash flows and/or asset sale proceeds. Underlying financial results have been stable with muted revenue growth and modest profit margin expansion driven by cost savings and synergies. We recommend **Overweight on the HG Tobacco sector**. We see the recent underperformance to be overdone and expect Tobacco sector spreads to compress as underlying credit fundamentals are steady and cash flow generation remains strong. The sector currently trades 52bp wide to the JULI.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Anheuser-Busch InBev NV	70,183	28%	54	23	114	5.0x	5.8x	43%	22%
2	British American Tobacco PLC	27,171	11%	31	13	62	4.6x	6.5x	44%	42%
3	PepsiCo Inc	24,100	10%	65	13	33	2.4x	8.1x	21%	58%
4	Altria Group Inc	23,462	9%	19	10	29	3.0x	9.6x	51%	70%
5	The Kraft Heinz Company	22,196	9%	26	6	32	5.0x	4.8x	25%	38%
	Sector Summary	**248,390**	**100%**	**344**	**107**	**434**	**4.3x**	**7.1x**	**36%**	**39%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Anheuser-Busch InBev NV	-4%	4%	-3%	-0.5x	1.3x	4%	-24%
2	British American Tobacco PLC	-6%	-2%	-1%	0.0x	-0.2x	2%	6%
3	PepsiCo Inc	1%	2%	-24%	-0.8x	-1.0x	0%	9%
4	Altria Group Inc	0%	-3%	108%	1.6x	-4.2x	-1%	-2%
5	The Kraft Heinz Company	-2%	-22%	-7%	0.8x	-1.5x	-6%	1%
	Sector Summary	**1%**	**0%**	**1%**	**0.1x**	**-0.4x**	**1%**	**-8%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector grew slightly at 1%, mainly driven by growth at KDP of $6.8bn (+161% y/y) (largely due to its merger), offset by declines at ABIBB (-$2.3bn/-4.2% y/y) and BATSLN (-$2.0bn/-6.1% y/y). EBITDA for the sector was flat y/y, and Profit Margin was up 1% y/y to 36%.
- Debt for the sector was up 1% y/y to $434bn, driven by the M&A transactions that took place in 2018 and 1Q19: Altria issued $16bn for its investments in JUUL Labs & Cronos Group, ConAgra issued $7bn for its acquisition of Pinnacle Foods, and Constellation Brands issued $3bn for its Canopy Growth investment.
- Despite the pickup in financing for M&A activity, Gross Leverage for the sector only increased by 0.1x y/y to 4.3x, slightly below the peak of 4.6x in 4Q16, as companies including ABIBB and PEP reduced debt and leverage.
- Interest Coverage for the sector declined 0.4x y/y to 7.1x, with the largest decrease at Altria Group (-4.2x). Philip Morris International improved its Interest Coverage by 7.8x to a multi-year high of 19.0x.
- The Earnings Payout ratio declined by 8% y/y to 39% as Cash to Shareholders decreased by 11% y/y to $51bn, the lowest level since 3Q17. This was primarily driven by lower Share Buybacks (-$4.7bn/-37% y/y) as companies prioritize deleveraging following the recent wave of M&A activity. Dividends decreased $1.5bn/-3% y/y.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Anheuser-Busch InBev NV	70,183	28%
2.	British American Tobacco PLC	27,171	11%
3.	PepsiCo Inc	24,100	10%
4.	Altria Group Inc	23,462	9%
5.	The Kraft Heinz Company	22,196	9%
6.	Philip Morris International Inc	18,741	8%
7.	Coca-Cola Co/The	12,856	5%
8.	Keurig Dr Pepper	11,444	5%
9.	Constellation Brands	9,762	4%
10.	General Mills Inc	9,060	4%
11.	Others	19,415	8%
	Total	**248,390**	**100%**

Exhibit 2: Revenue

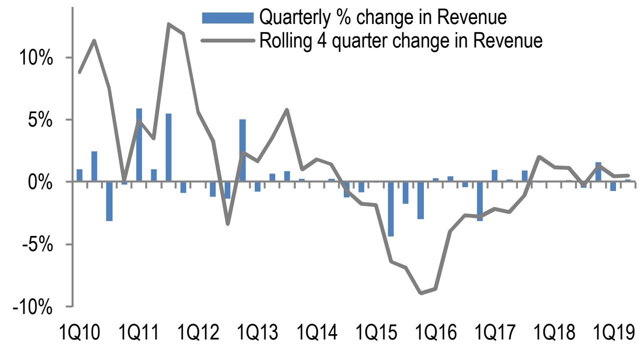


Exhibit 3: EBITDA

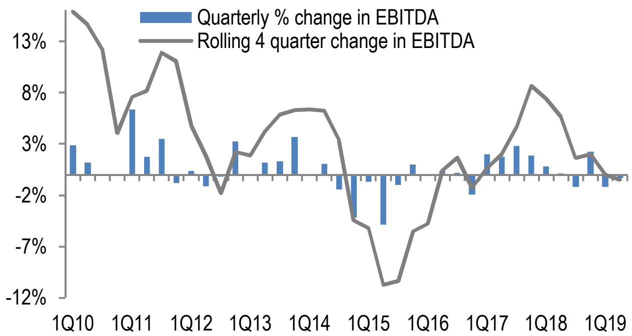


Exhibit 4: Debt

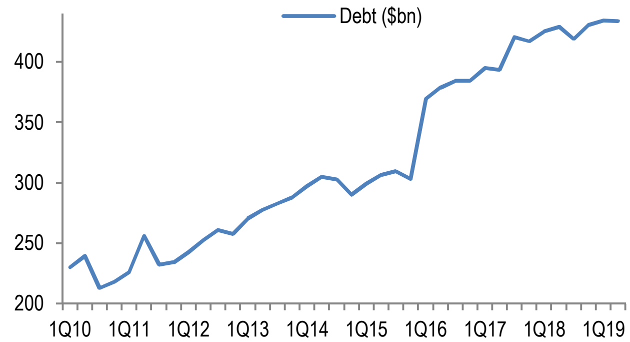


Exhibit 5: Cash to Shareholders

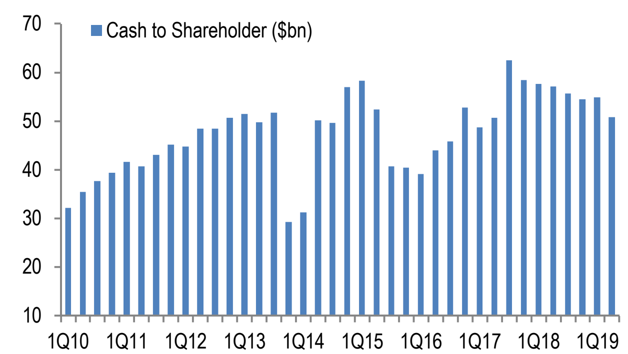


Exhibit 6: Gross and Net Leverage

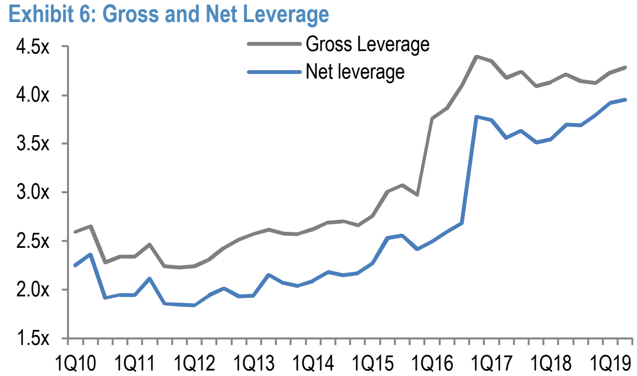


Exhibit 7: Interest Coverage Ratio

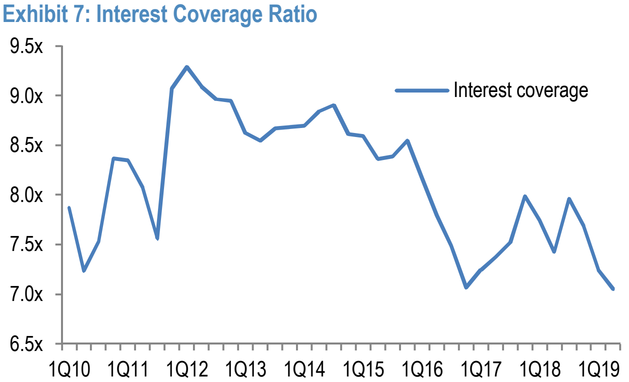
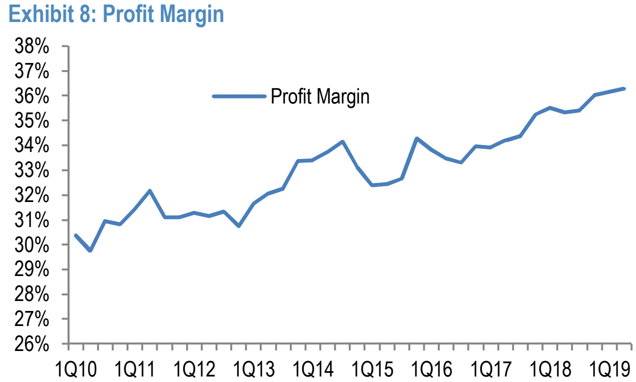


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Food/Drug Retail

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We recommend investors **Overweight the HG Food/Drug Retail sector**. Valuation looks attractive and the sector currently trades 21bp wider than the JULI, which is near the wide end of the 1 year range, and 54bp wider than Non-Food Retail. The sector is solidly BBB following some debt-funded M&A (Walgreens, Kroger) and more aggressive financial policies (McDonald's, Starbucks) over the past few years. Overall revenue trends have been favorable, benefitting from low unemployment and supportive demographic trends. We expect credit profiles and cash flow generation to remain steady, and to hold up relatively well regardless of global economic conditions.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	McDonald's Corp	18,467	37%	21	10	45	3.8x	7.5x	57%	63%
2	Kroger Co/The	11,035	22%	121	5	28	4.6x	6.6x	5%	11%
3	Starbucks Corporation	11,034	22%	26	6	24	3.4x	9.2x	28%	179%
4	Walgreens Boots Alliance Inc	9,652	19%	136	9	45	3.7x	6.8x	9%	66%
	Sector Summary	**50,189**	**100%**	**304**	**30**	**142**	**3.8x**	**7.5x**	**29%**	**73%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	McDonald's Corp	-4%	4%	3%	0.0x	-0.2x	3%	-17%
2	Kroger Co/The	-3%	-3%	28%	1.1x	-0.2x	0%	-38%
3	Starbucks Corporation	8%	10%	39%	0.6x	-2.1x	1%	78%
4	Walgreens Boots Alliance Inc	6%	-3%	10%	0.3x	-0.4x	-1%	1%
	Sector Summary	**2%**	**2%**	**14%**	**0.4x**	**-0.5x**	**1%**	**-1%**

Source: J.P. Morgan, Capital IQ

- Revenue grew 2% y/y to a record high of \$304bn, while EBITDA declined by 2% y/y to \$29bn. The revenue increase of \$6.1bn in the sector was mostly driven by growth at Walgreens of \$8bn, which reflects the contribution from the ~2,000 acquired Rite Aid stores. McDonald's recorded a decline in revenue due to its refranchising efforts, but the company continues to have the highest Profit Margin of 57% compared to 29% for the overall sector.
- Leverage for the sector increased by 0.4x to 3.8x. Debt grew 14% y/y to \$142bn, with increases across all companies.
- Interest coverage was down 0.5x to 7.5x, a record low since at least 1Q00, as interest expense grew 8% y/y to \$6.5bn and EBITDA declined by 2% y/y.
- The Earnings Payout ratio decreased by 1% y/y to 73% while Cash to Shareholders increased 4% y/y for the overall sector. The increase in Cash to Shareholders was largely due to the significant growth in Share Buybacks of \$5.1bn, driven by Starbucks (+230% y/y, +\$6.9bn) as it plans to return \$25bn of cash to shareholders from FY18-FY20. Dividends grew at a steady pace of 8% y/y to \$10.5bn.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	McDonald's Corp	18,467	37%
3.	Kroger Co/The	11,035	22%
4.	Starbucks Corporation	11,034	22%
5.	Walgreens Boots Alliance Inc	9,652	19%
	Total	**50,189**	**100%**

Exhibit 2: Revenue

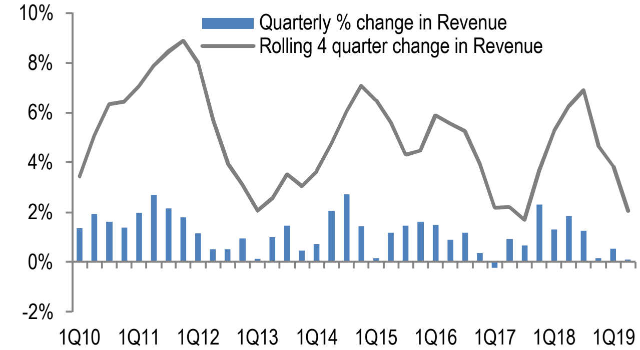


Exhibit 3: EBITDA

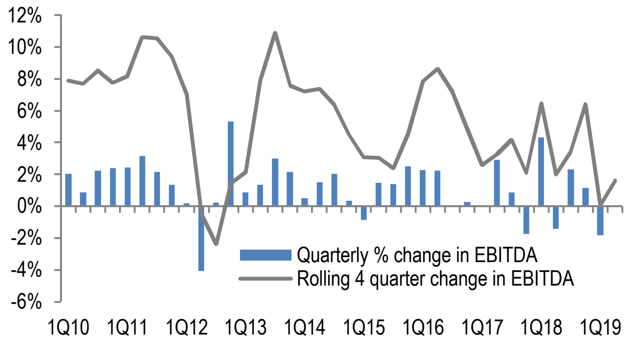


Exhibit 4: Debt

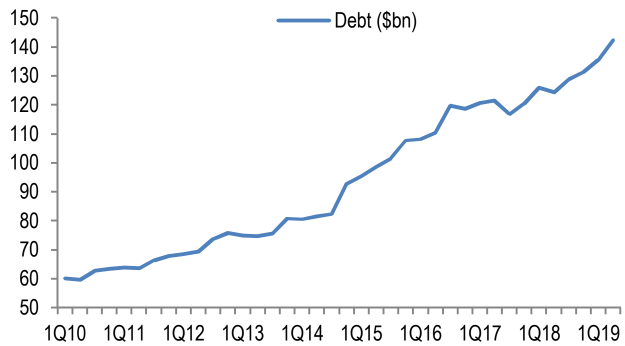


Exhibit 5: Cash to Shareholders

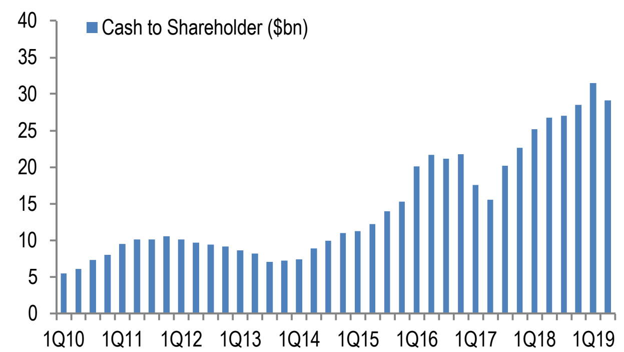


Exhibit 6: Gross and Net Leverage

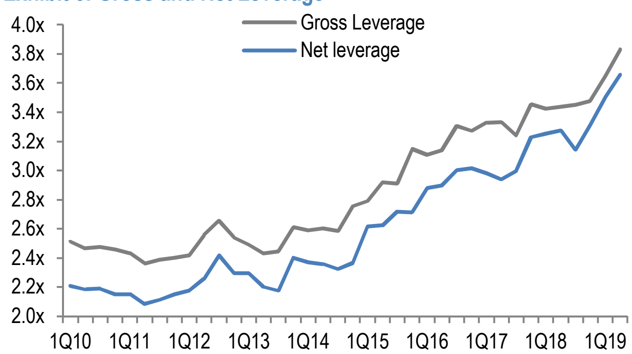


Exhibit 7: Interest Coverage Ratio

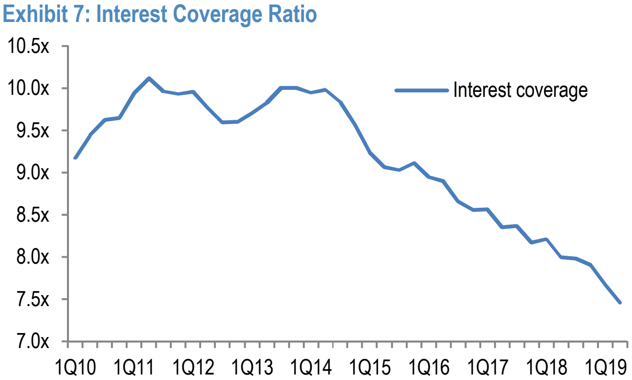
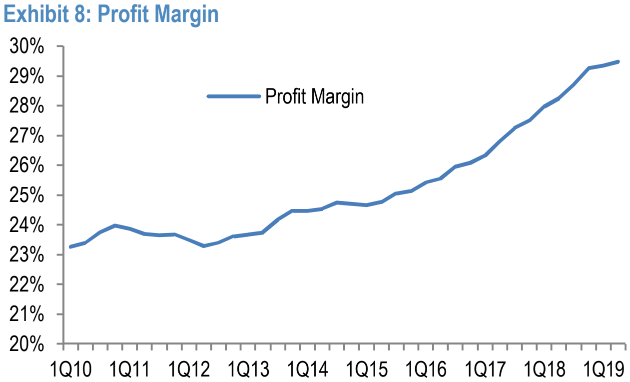


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Healthcare

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We hold an **OW** rating for the Healthcare Services subsector given our expectation for spreads to tighten in the back half of 2019 as the subsector trades at a level we believe is too wide against the broader index given our view of the two large vertical transactions. While uncertainties are expected to persist for Services companies (including the future of Medicare-for-All proposals which are likely to remain in the forefront as we move towards the 2020 Presidential Election) and earlier in 2019 there were some setbacks specific to legacy CVS, most issuers in the subsector continue to report stable operating performance overall and relatively wider spreads continue to support our view. While delevering plans have been delayed slightly given the setbacks, we note that CI and CVS continue with strong commitments to debt reduction, with both making progress towards delevering in recent quarters. On the Distributor side, major questions remain regarding this part of the supply chain which has been put under a microscope due to the President's Blueprint, continued drug pricing trends, and ongoing Opioid litigation. Specifically on Opioids, we have recently become more cautious with the bellwether MDL trial approaching, set to begin in Ohio October 21. At the same time we note this more cautious view, we also note that Distributors represent a generally small percentage of the subsector taken as a whole (less than 10%).

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	CVS Health Corp	56,817	34%	252	17	92	4.7x	6.3x	8%	12%
2	UnitedHealth Group Inc	34,890	21%	236	21	42	2.1x	13.3x	9%	42%
3	Cigna Corp	33,801	20%	151	13	40	3.1x	11.1x	8%	5%
4	Anthem Inc	17,275	10%	97	7	21	2.9x	9.5x	7%	33%
5	CARDINAL HEALTH INC	6,957	4%	146	3	8	2.9x	9.5x	2%	42%
	Sector Summary	**167,194**	**100%**	**1,178**	**72**	**231**	**3.4x**	**9.7x**	**8%**	**23%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	CVS Health Corp	2%	-10%	-2%	0.3x	-6.4x	-1%	-4%
2	UnitedHealth Group Inc	10%	14%	21%	0.1x	-0.9x	0%	10%
3	Cigna Corp	5%	3%	96%	1.5x	-3.5x	0%	-21%
4	Anthem Inc	7%	9%	3%	-0.2x	-0.2x	0%	7%
5	CARDINAL HEALTH INC	6%	-7%	-11%	-0.1x	0.3x	0%	5%
	Sector Summary	**5%**	**3%**	**13%**	**0.5x**	**-3.4x**	**0%**	**-1%**

Source: J.P. Morgan, Capital IQ CVS leverage shown on an adjusted basis for operating leases.

- Revenue for the sector has increased 5% y/y which is the same as the y/y increase in 1Q. UnitedHealth Group Inc, led the y/y revenue increase by +10% y/y growth, followed by Anthem Inc with +7% y/y revenue growth.
- Debt increased by 13% y/y which is 1% higher than debt increase y/y for 1Q (i.e. 12%). The increase was mainly driven by Cigna Corp (96% y/y, +$20bn) as it funded the ESRX transaction in Sep 2018. Meanwhile, profit margin of the sector did not change y/y and is at 8%.
- EBITDA increased 3% y/y, mainly driven by a 14% y/y increase in UnitedHealth Group Inc and a 9% y/y increase in Anthem Inc. Among the largest issuers, CVS Health Corp had the largest decline in y/y EBITDA due to weak operating performance in its legacy business (i.e. -10%).
- Leverage increased by 0.5x y/y to 3.4x, with Cigna Corp reporting the highest y/y increase in leverage (i.e. 1.5x) among large issuers due to the issuance related to the ESRX transaction.
- The earnings payout ratio has decreased 1% y/y to 23%, with Cigna Corp reporting the largest y/y decline in the earnings payout ratio (i.e. -21%).

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	CVS Health Corp	56,817	34%
2.	UnitedHealth Group Inc	34,890	21%
3.	Cigna Corp	33,801	20%
4.	Anthem Inc	17,275	10%
5.	CARDINAL HEALTH INC	6,957	4%
6	Laboratory Corp of America Holdings	5,229	3%
7.	McKesson Corp	4,919	3%
8	Humana Inc	4,413	3%
	Total	**167,194**	**100%**

Exhibit 2: Revenue

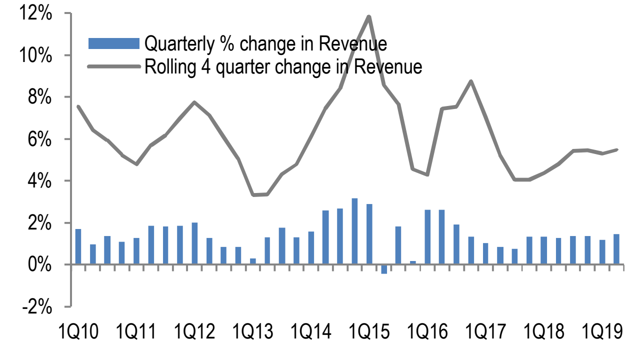


Exhibit 3: EBITDA

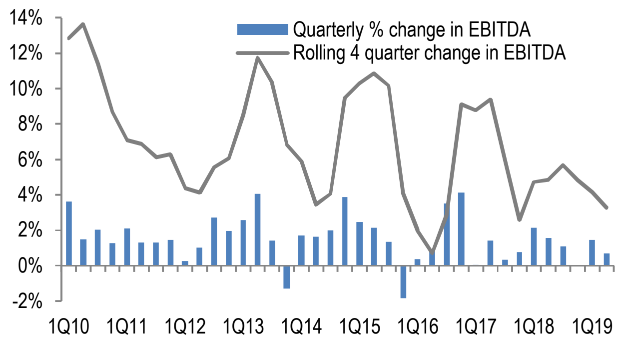


Exhibit 4: Debt

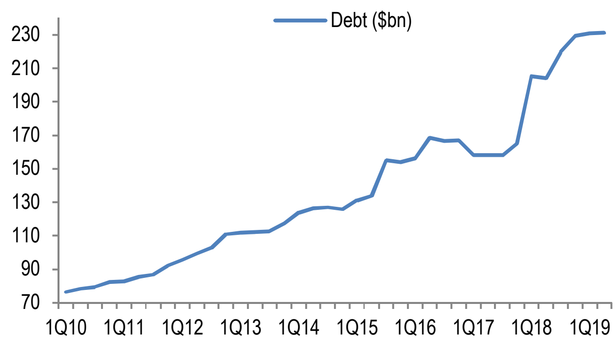


Exhibit 5: Cash to Shareholders

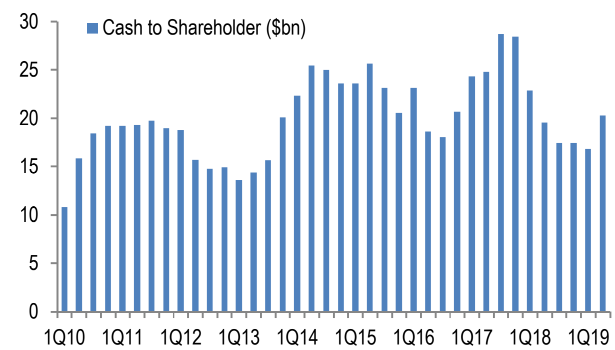


Exhibit 6: Gross and Net Leverage

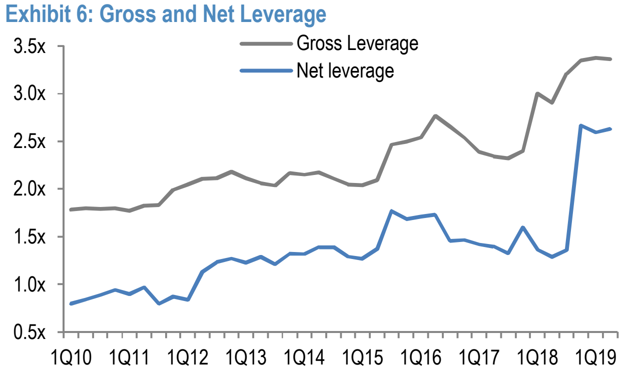


Exhibit 7: Interest Coverage Ratio

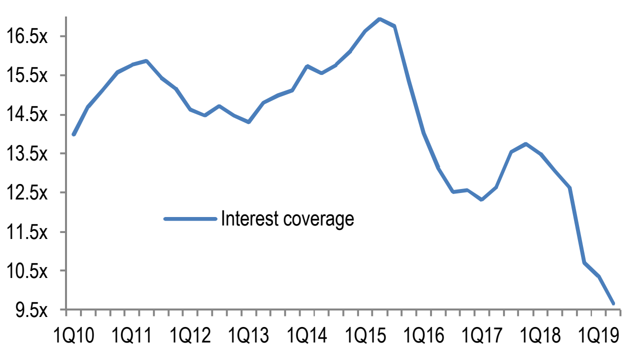
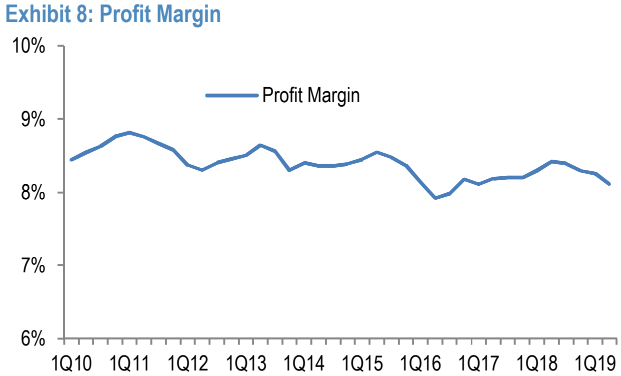


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Metals and Mining

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We remain **Neutral** Metals and Mining. Supply and demand fundamentals for iron ore remain healthy though trends have begun to reverse as the industry works through supply disruptions from earlier in the year and Chinese steel demand growth shows signs of deceleration (our JPM equity counterparts maintained their 2019 iron ore price forecast indicating growth y/y, but revised their 2020 forecast lower). Our JPM commodity strategists continue to project weak base metals global demand growth in 2019 driven by lackluster global PMI readings, though fundamentally more direct government stimulus from the Chinese government or a de-escalation of trade tensions could spur a recovery. Steel fundamentals are weak on prices that remain under pressure despite some easing up on iron ore input costs. We view event risk in the precious metals space as significantly lower following a wave of consolidation that was almost entirely equity funded (the Barrick/Randgold and Newmont/Goldcorp mergers have closed, as has the Barrick/Newmont Nevada JV). We continue to think there is potentially ratings upside for both Newmont and Barrick over time as asset integration risk fades and synergies are realized. Our commodity strategists remain constructive on the medium term outlook for gold given its relative safe haven appeal and late cycle characteristics supported by the re-escalation of the US-China trade war in 2Q19 and dovish central bank policy. On the macro front, our economists modestly lowered their China GDP 2019 and 2020 growth forecast by 0.1% and 0.2% to 6.2% and 5.8% as the impact of new tariff hikes from the most recent escalation in tensions flows through and China implements further moderate stimulus measures to counteract the economic impact. Following years of balance sheet deleveraging, we expect most companies in the sector to adopt increasingly growth-oriented and shareholder friendly capital allocation policies.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Glencore Funding LLC	11,203	28%	218	12	36	3.0x	6.4x	6%	47%
2	Rio Tinto PLC	7,162	18%	41	18	14	0.8x	36.1x	43%	78%
3	BHP Billiton Ltd	6,326	16%	45	22	25	1.1x	20.5x	50%	75%
4	Newmont Goldcorp Corp	5,893	15%	10	4	7	1.9x	10.9x	36%	25%
5	Barrick Gold Corp	5,497	14%	8	3	6	1.8x	7.6x	41%	14%
	Sector Summary	**39,824**	**100%**	**347**	**63**	**92**	**1.8x**	**15.3x**	**30%**	**49%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Glencore Funding LLC	2%	-26%	9%	0.9x	-3.6x	-2%	32%
2	Rio Tinto PLC	2%	-5%	10%	0.1x	4.1x	-3%	33%
3	BHP Billiton Ltd	3%	1%	-7%	-0.1x	6.3x	-1%	43%
4	Newmont Goldcorp Corp	-5%	-7%	0%	0.1x	-2.2x	-1%	14%
5	Barrick Gold Corp	2%	-2%	-9%	-0.1x	-1.1x	-2%	10%
	Sector Summary	**3%**	**-6%**	**2%**	**0.2x**	**0.8x**	**-1%**	**27%**

Source: J.P. Morgan, Capital IQ

- Metals and Mining had another positive growth quarter for revenue with y/y growth of 3%, but the growth was much lower than the average 15% growth seen over the past 2 years. EBITDA for the sector declined by 6% y/y driven largely by weaker base metal prices, resulting in sector profit margin of 30%, down 1% y/y.
- Debt for the sector has continuously declined since 2Q14, but increased for the first time since then by 2% y/y to $92bn. The increase in debt was mainly driven by Glencore due in part to the recognition of lease obligations in accordance with IFRS 16 (9% y/y). The decrease in EBITDA coupled with increased debt increased leverage for the sector by 0.2x to 1.8x.
- Interest coverage for the sector improved by 0.8x y/y to 15.3x, but has decreased q/q from 15.8x. This was mainly driven by a 5% decrease in interest expenses y/y.
- Dividends for the sector increased by 64% y/y (+$9.7bn). Share buybacks have increased by $9.9bn, mainly driven by BHP (+$5.2bn y/y) and Glencore Funding (+$2.6bn y/y). As a result cash to shareholders increased by 101% y/y (+$19.7bn), increasing the earnings payout ratio to 49% (+27% y/y), its highest level since 1Q00 at least.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Glencore Funding LLC	11,203	28%
2.	Rio Tinto PLC	7,162	18%
3.	BHP Billiton Ltd	6,326	16%
4.	Newmont Goldcorp Corp	5,893	15%
5.	Barrick Gold Corp	5,497	14%
6.	Nucor Corp	3,742	9%
	Total	**39,824**	**100%**

Exhibit 2: Revenue

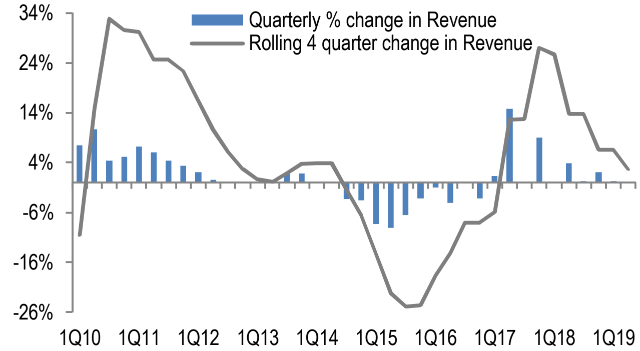


Exhibit 3: EBITDA

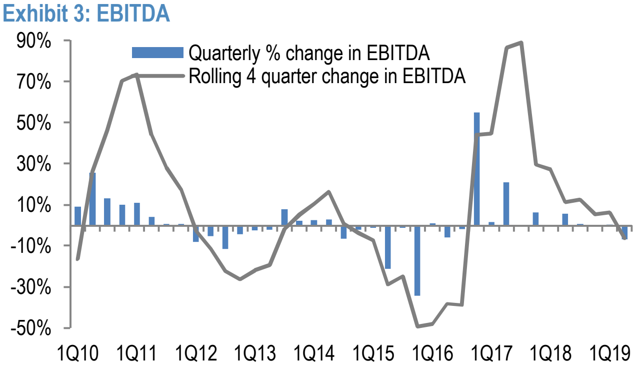


Exhibit 4: Debt

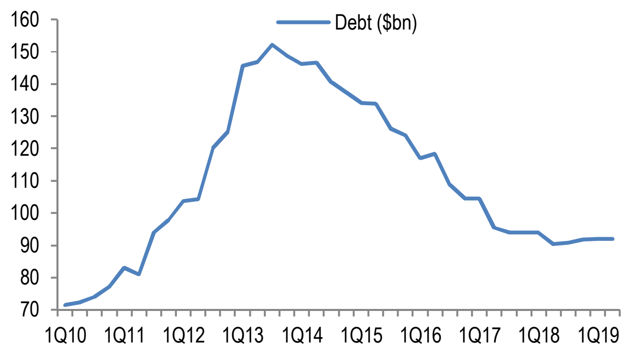


Exhibit 5: Cash to Shareholders

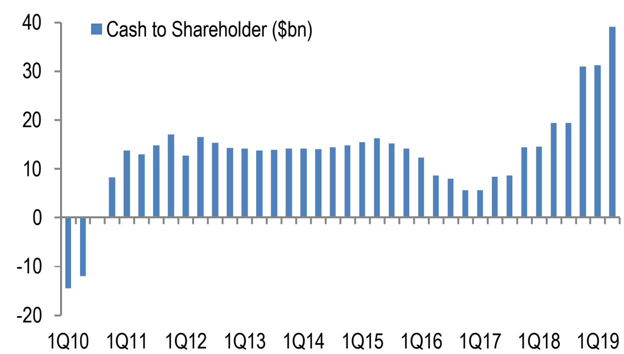


Exhibit 6: Gross and Net Leverage

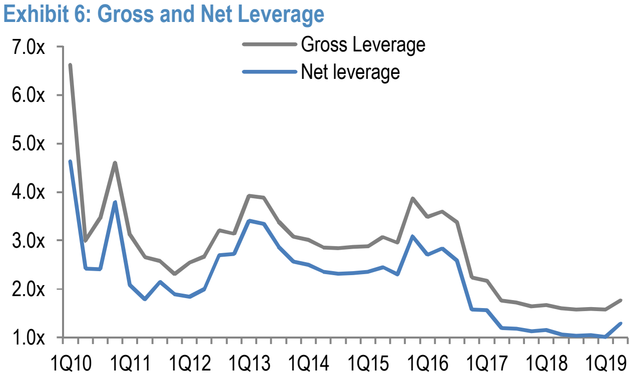


Exhibit 7: Interest Coverage Ratio

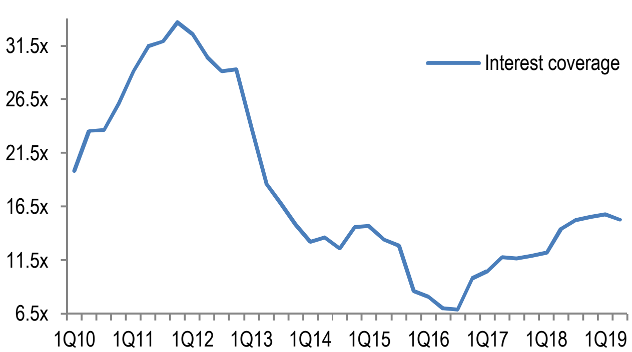
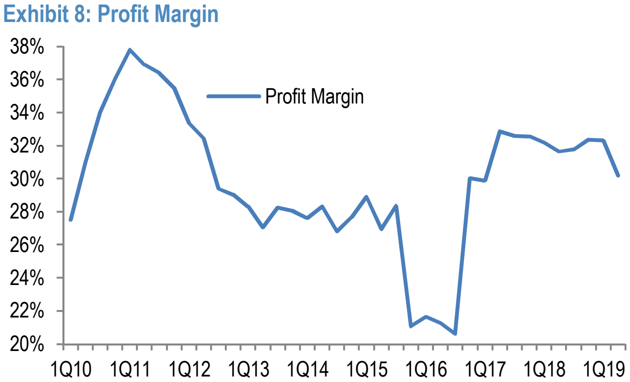


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Non-Food Retail

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We recommend investors **Underweight the HG Non-Food Retail sector** based on rich relative valuation, with the sector currently trading 33bp inside the JULI. Credit fundamentals in the sector remain steady with moderate leverage and rising retail sales, while cost headwinds (freight, tariffs) have hurt profit margins. Financial policy has inched more aggressive for some companies (WMT, LOW) and remains a watch item more broadly. Retailers have been investing a lot of management and capital resources to further develop e-commerce capabilities given the secular shift in consumer shopping habits to online and digital, away from legacy bricks & mortar. The composition of the sector is weighted toward single A issuers with apparel and department stores comprising a much smaller percentage.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Wal-Mart Stores Inc	40,364	40%	518	33	75	2.1x	10.0x	7%	43%
2	Home Depot Inc	28,617	28%	110	18	34	1.8x	13.1x	18%	77%
3	Lowe's Cos Inc	15,261	15%	72	7	22	2.8x	9.4x	11%	68%
4	Target Corp	9,827	10%	77	7	14	1.9x	13.1x	9%	43%
5	Costco Wholesale Corp	4,387	4%	150	6	9	1.3x	26.8x	4%	20%
	Sector Summary	**101,537**	**100%**	**952**	**73**	**161**	**2.1x**	**11.2x**	**11%**	**55%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Wal-Mart Stores Inc	2%	0%	-3%	-0.1x	-1.3x	0%	10%
2	Home Depot Inc	5%	4%	2%	0.0x	0.1x	0%	14%
3	Lowe's Cos Inc	2%	-9%	6%	0.4x	-0.8x	-1%	24%
4	Target Corp	3%	3%	-7%	-0.2x	2.9x	0%	4%
5	Costco Wholesale Corp	7%	4%	1%	0.0x	1.9x	0%	-55%
	Sector Summary	**3%**	**0%**	**-1%**	**0.0x**	**-0.3x**	**0%**	**11%**

Source: J.P. Morgan, Capital IQ

- LTM Revenue for the Non-Food Retail sector grew 3% y/y, as five out of six companies in our analysis recorded growth, while EBITDA remained flat over the same period. Profit Margin for the sector was unchanged for the last three quarters at ~10.5%, and was the lowest level since 3Q12.
- Debt for the sector decreased slightly by 1% y/y to $161bn, while EBITDA was unchanged over the same period. As a result, Gross Leverage for the sector remained steady at 2.1x.
- Interest Coverage fell 0.3x y/y to 11.2x, as modest declines in interest expense for four of the six companies in our analysis was offset by higher interest expense at Target (+25% y/y) and Macy's (+31% y/y).
- The Earnings Payout Ratio grew 11% y/y to 55%, with Cash to Shareholders up 16% y/y. The growth in Cash to Shareholders was driven by a 42% y/y increase at Lowe's, and ~30% y/y increases at both Wal-Mart Stores and Home Depot, due to higher share repurchases across those companies. This was partially offset by a 72% y/y decline at Costco as it had issued a $7/share special dividend in the prior year.

Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Wal-Mart Stores Inc	40,364	40%
2.	Home Depot Inc	28,617	28%
3.	Lowe's Cos Inc	15,261	15%
4.	Target Corp	9,827	10%
5.	Costco Wholesale Corp	4,387	4%
	Total	**101,537**	**100%**

Exhibit 2: Revenue

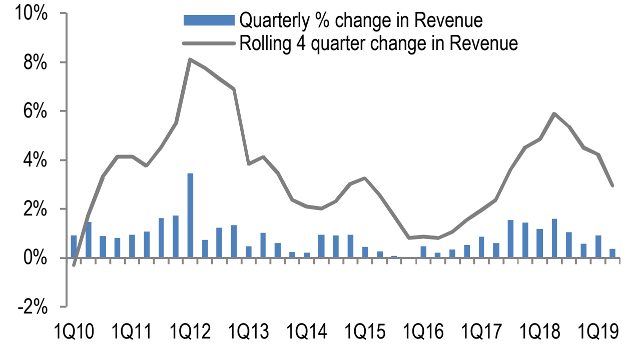


Exhibit 3: EBITDA

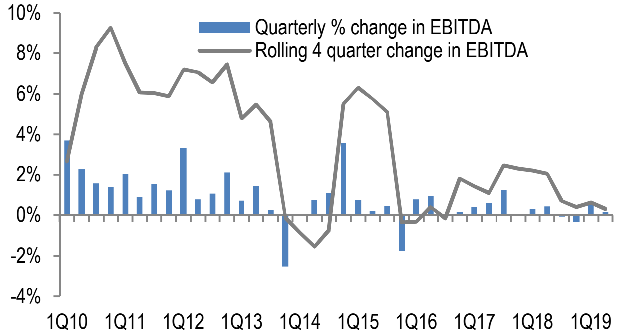


Exhibit 4: Debt

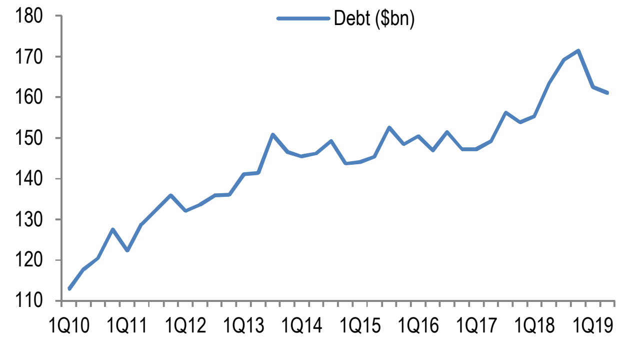


Exhibit 5: Cash to Shareholders

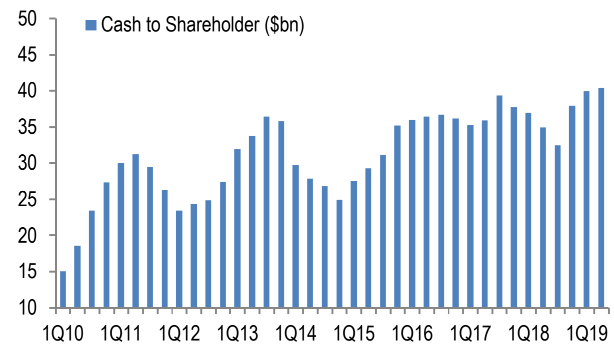


Exhibit 6: Gross and Net Leverage

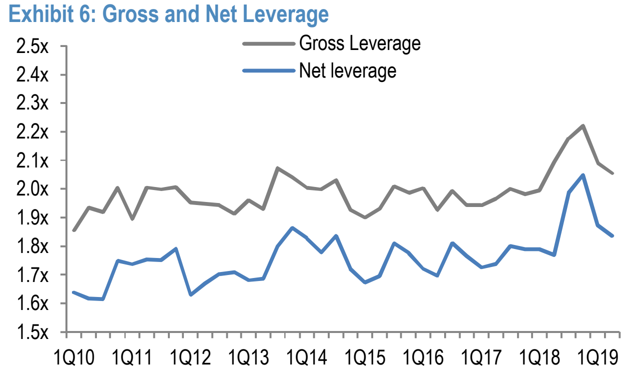


Exhibit 7: Interest Coverage Ratio

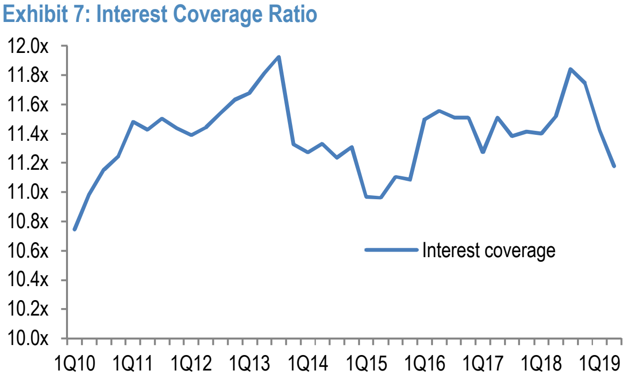
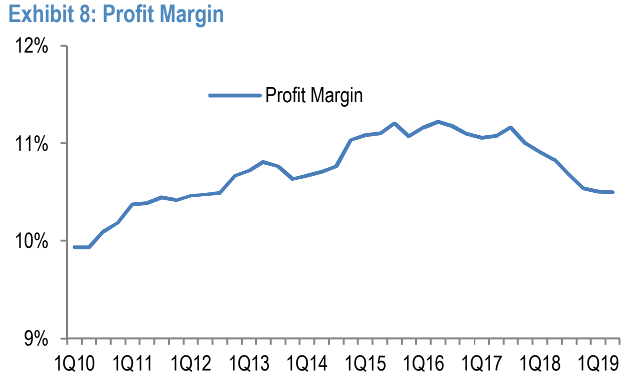


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Pharmaceuticals

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We divide our view of the overall Pharma/Devices space into three subsectors. We hold a **Neutral** view for Biotech and Generics, with fair operating results and valuations being offset by branded pricing trends, uncertainties surrounding biosimilars, continued drug pricing scrutiny out of Washington as we move towards the 2020 Presidential Election, potential for further large M&A and an increase in supply to fund pending M&A. On the Generics side, there has been some level of stabilization following the deal between MYL and PFE's Upjohn unit to merge, though we note the deal still requires regulatory approvals. On the other hand there is still some level of uncertainty for PRGO as we think about its go forward strategy and large potential tax liabilities. Separately, we rate Large-Cap pharma as **Neutral**. We think the space can act as a relative safe haven subsector and see valuations as fair, though names exposed to ongoing opioid litigation like JNJ could see some level of weakness as we head towards the MDL in Ohio this October which limits our view somewhat. We see shareholder returns and tuck-in M&A picking up for these names throughout the back half of the year. Additionally, the continued drug pricing scrutiny and the FDA's focus on increasing the adoption of biosimilars could weigh on the space over time. In Medical Devices we carry an **UW** due largely to current valuations, which are compressed against Large-cap Pharma and at recent tights against the broader market. Looking forward we see companies being willing to utilize financial flexibility to pursue M&A or return cash to shareholders.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Pfizer Inc	33,414	10%	54	23	48	2.1x	15.9x	42%	97%
2	AbbVie Inc	30,156	9%	33	15	38	2.6x	10.1x	45%	66%
3	Gilead Sciences Inc	26,300	8%	22	11	27	2.5x	10.3x	47%	54%
4	Amgen Inc	24,905	7%	24	13	31	2.5x	9.0x	53%	103%
5	Johnson & Johnson	24,620	7%	81	28	30	1.1x	41.3x	34%	62%
	Sector Summary	**334,086**	**100%**	**604**	**218**	**466**	**2.4x**	**14.3x**	**38%**	**56%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Pfizer Inc	1%	2%	17%	0.3x	-1.4x	1%	37%
2	AbbVie Inc	5%	7%	0%	-0.2x	-1.2x	1%	-36%
3	Gilead Sciences Inc	-4%	-14%	-8%	0.2x	-0.4x	-6%	18%
4	Amgen Inc	2%	-3%	-10%	-0.2x	-0.6x	-3%	-44%
5	Johnson & Johnson	1%	3%	-5%	-0.1x	14.5x	1%	21%
	Sector Summary	**3%**	**4%**	**0%**	**-0.1x**	**0.7x**	**1%**	**-3%**

Source: J.P. Morgan, Capital IQ

- Revenue growth for the quarter was 3% y/y while EBITDA grew at a pace of 4% y/y. Profit margin for the sector increased marginally to 38%. Gilead Sciences is an outlier where the revenue and EBITDA decreased significantly reflecting declines in the HCV business dating back to late 2017 while other companies in the sector had an increase in both revenue and EBITDA.
- Leverage for the sector declined by 0.1x to 2.4x. Debt for the sector remained about unchanged y/y. Debt actually decreased for most of the companies in the sector which was offset by an increase in Pfizer (+$6.9bn, 17% y/y).
- Interest coverage rose by 0.7x y/y to 14.3x. Interest expense increased for majority of the companies in the sector resulting in a 5% y/y increase overall. Interest coverage for the sector has picked up slightly after being at its lowest level since 2000 at least in the past quarters.
- Cash to shareholders marginally increased by 1% y/y while EBITDA increased by 4% y/y resulting in a 3% decrease in earnings payout ratio. Cash to shareholder increased 66% y/y (+$8.8bn) for Pfizer which was offset by a 104% decline (-$9.2bn) in Celgene reflecting the pending acquisition by BMY. Dividends increased by 5% y/y, which was above the average 4% decline trend in 2018.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
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2.	AbbVie Inc	30,156	9%
3.	Gilead Sciences Inc	26,300	8%
4.	Amgen Inc	24,905	7%
5.	Johnson & Johnson	24,620	7%
6.	Bristol-Myers Squibb Co	22,256	7%
7.	CELGENE CORP	21,364	6%
8.	Merck & Co Inc	19,670	6%
9.	GlaxoSmithKline PLC	17,596	5%
10.	Abbott Laboratories	17,236	5%
11.	Others	96,569	29%
	Total	**334,086**	**100%**

Exhibit 2: Revenue

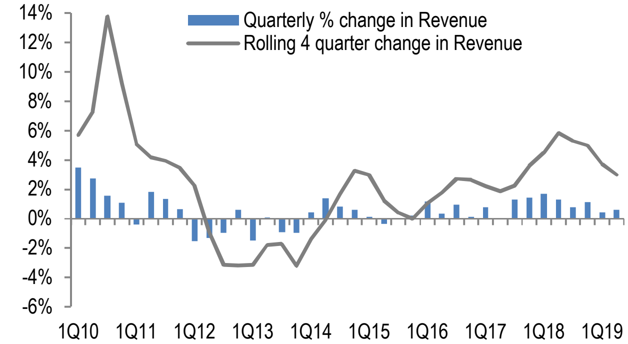


Exhibit 3: EBITDA

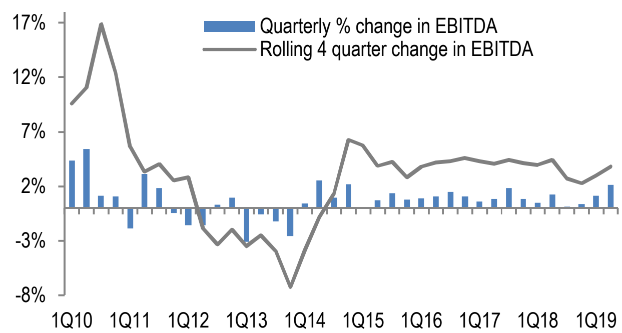


Exhibit 4: Debt

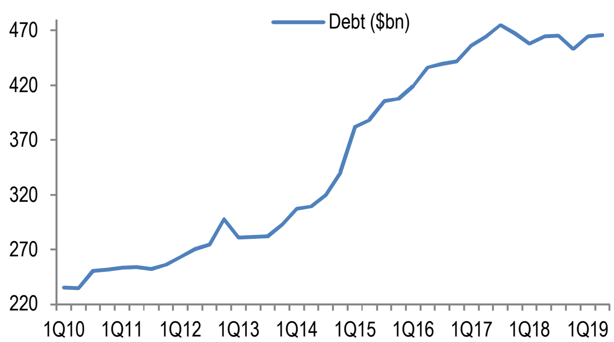


Exhibit 5: Cash to Shareholders

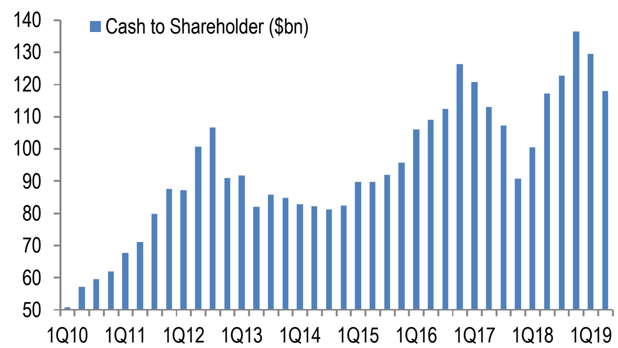


Exhibit 6: Gross and Net Leverage

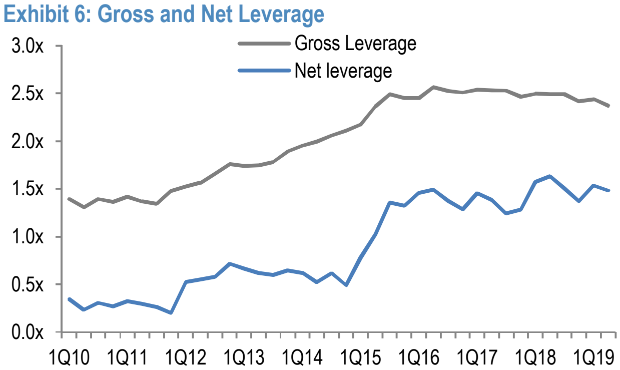


Exhibit 7: Interest Coverage Ratio

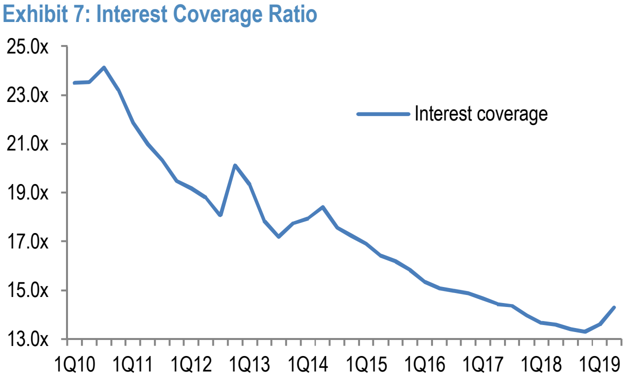
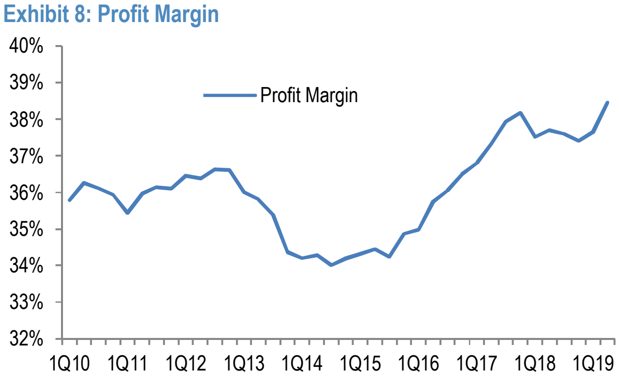


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Railroad/Shipping

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Transports performance YTD has been strong in absolute terms but has slightly underperformed the overall market (Transports 18bp tighter with a total return of 13.4% and an excess return of 3.2% vs. JULI 26bp tighter and returns of 12.8% and 3.5% respectively). YTD the railroads subsector has registered a total return of 15.5% and an excess return of 2.8%, freight has a total return of 11.0% and an excess return of 3.6%, and aviation has a total return of 8.9% and an excess return of 3.9%.

Our recommendation on the HG Railroad sector remains **Neutral**. Rails have benefitted significantly from lower corporate tax rates and from relatively strong US economic trends which are now slowing materially. The coal outlook specifically remains weak and intermodal volume trends have been impacted by tariffs/trade concerns and truck competition. Given the increase in retained cash flow post tax reform, the agencies afforded the rails more leverage flexibility. In 2018, CSX, UNP, and NSC increased capital return to shareholders through large debt funded buybacks which not only used up this additional debt capacity but in the case of UNP resulted in one notch downgrades and has taken CSX from strong to weak BBB+. The good news is that the leverage targets are now fairly well articulated. The net result of the step up in bond supply in 2018 was that rail credit sector performance didn't exhibit as much of the "defensiveness" which the market had come to expect during periods of widening spreads but we would expect the rail credit sector to outperform during the next recession. Precision Scheduled Railroading remains the driving strategic imperative for many rails. Recent headwinds of lower met coal prices and fading demurrage fees (basically penalties for not complying with more scheduled service) have been a concern for rails. The U.S rail networks have 23% of volume tied to imports/exports (which is second behind airfreight in the transport sector) so tariffs have a direct impact. Although trade concerns with Mexico are now on the back burner, note that KSU generates 30% of revenue from cross border traffic with Mexico (60% North to South) and UNP generates 10%. The Canadian rails could be one of the few beneficiaries if the CAD$ continues to weaken.

We reiterate our **Neutral** recommendation on the HG Freight sector. UPS (UW) and FDX (N) continue to benefit from growth in e-commerce, although the upfront capital investment has depressed short-term return measures (as well as Amazon's delivery network ambitions). The cyber security attack at FedEx's TNT operations over the summer of 2017 proved to be very disruptive and highlights a risk that we believe heretofore wasn't a focus by many. The low rate environment increases pension funding, negatively impacts pension adjusted ratios, and has already led to bond issuance (with more coming) to fund pension deficits. Fear of a freight recession weighs on stocks as well. Trade disruptions are a clear negative for the freight sector and the ramifications of tariffs are not yet fully determined, but will likely have a lasting effect on global supply chains and freight flows. Regulations remain a headwind for the trucking sector through 4Q19, which is when the hours of service regulations are likely to be finalized.

In Aviation, traffic growth has slowed materially from the 10yr post crisis ~6% run rate to recent levels at or below 5% (noise from the Hong Kong protests plus the MAX grounding are two contributing factors). Lower global demand (traffic) is however still in line with net supply given the MAX delays despite scrapping running below the long term trend, which has sustained record global load factors. We are worried that the capacity surge expected in 2020 as the MAX returns to service might not be offset by an increase in scrapping or economic activity, which perhaps means 2019 represents the peak of the aviation cycle. Airline credit quality continues to improve (as least at the US carriers) given strong cash flow, a result of cooperative fuel and still robust demand trends offset by higher yr/ye labor costs. Aircraft leasing credits continue to benefit from an improvement in credit quality almost across the board with rising ratings (Avolon, Aircastle, Dubai Aerospace) with upgrades expected at Air Lease (to high BBB) and AerCap (to mid BBB) before YE20. The lone exception to this is Aviation Capital Group where bond ratings will return to the stand-alone ratings (three notches lower at S&P, 1-2 notches lower at Fitch) post the sale of majority ownership from Pacific Life to Tokyo Century.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Union Pacific Corp	22,787	27%	23	11	27	2.5x	11.1x	48%	74%
2	CSX Corp	16,183	19%	12	6	16	2.6x	9.2x	52%	81%
3	FedEx Corp	13,649	16%	70	5	18	3.6x	8.4x	7%	42%
4	United Parcel Service Inc	13,274	15%	73	8	26	3.4x	12.1x	10%	51%
5	Norfolk Southern Corp	10,782	13%	12	5	12	2.3x	9.0x	46%	75%
	Sector Summary	**85,947**	**100%**	**203**	**40**	**139**	**2.8x**	**10.0x**	**37%**	**64%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Union Pacific Corp	3%	3%	20%	0.3x	-2.9x	0%	-32%
2	CSX Corp	7%	15%	18%	0.1x	-0.4x	4%	11%
3	FedEx Corp	6%	-41%	6%	1.6x	-6.6x	-6%	27%
4	United Parcel Service Inc	5%	-22%	14%	1.1x	-5.9x	-4%	9%
5	Norfolk Southern Corp	6%	9%	24%	0.3x	0.1x	1%	34%
	Sector Summary	**6%**	**-7%**	**7%**	**0.6x**	**-2.8x**	**0%**	**6%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector has increased 6% y/y which is 2% lower than the 8% y/y increase in 1Q. The magnitude of y/y revenue increase of largest issuers of the sector was similar with 7% y/y revenue increase of CSX Corp, 6% y/y revenue increase of Norfolk Southern Corp and 6% y/y revenue increase of FedEx Corp, which was accompanied by 3% and 5% increase in y/y revenue for Union Pacific Corp and United Parcel Services Inc respectively.
- EBIDTA decreased 7% y/y, mainly driven by 41% and 22% y/y decline in EBIDTA of FedEx Corp and United Parcel Services Inc respectively. This has been partially offset by 15% y/y increase in EBIDTA of CSX Corp and 9% y/y increase in EBIDTA of Norfolk Southern Corp.
- Debt increased by 7% y/y which is 4% lower than debt increase y/y for 1Q (i.e. 11%). The increase was mainly driven by Ryder Systems Inc (32% y/y), Norfolk Southern Corp (24% y/y), Union Pacific Corp (i.e. 20% y/y) and CSX Corp (i.e. 18% y/y). Meanwhile gross Leverage increased by 0.6x y/y to 2.8x.
- The earnings payout ratio has increased 6% y/y to 64%, with Norfolk Southern Corp reporting largest y/y increase in the earnings payout ratio (i.e. 34%) and Union Pacific Corp reporting the largest y/y decline in the earnings payout ratio (i.e. -32%).
- Interest coverage has declined 2.8x y/y for the sector, led by 6.6x and 5.9x decline in y/y interest coverage for FedEx Corp and United Parcel Service Inc respectively.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Union Pacific Corp	22,787	27%
2.	CSX Corp	16,183	19%
3.	FedEx Corp	13,649	16%
4.	United Parcel Service Inc	13,274	15%
5.	Norfolk Southern Corp	10,782	13%
6.	Canadian Pacific Railway Ltd	4,989	6%
7.	Ryder System Inc	4,284	5%
	Total	**85,947**	**100%**

Exhibit 2: Revenue

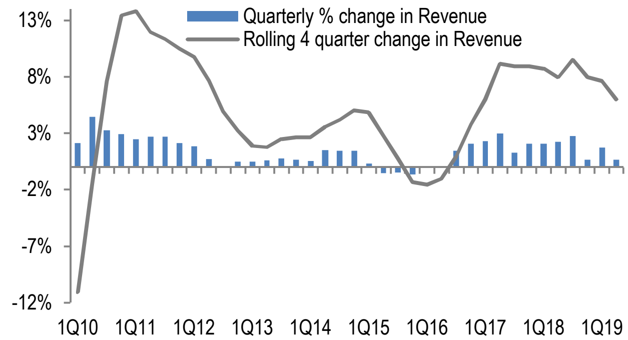


Exhibit 3: EBITDA

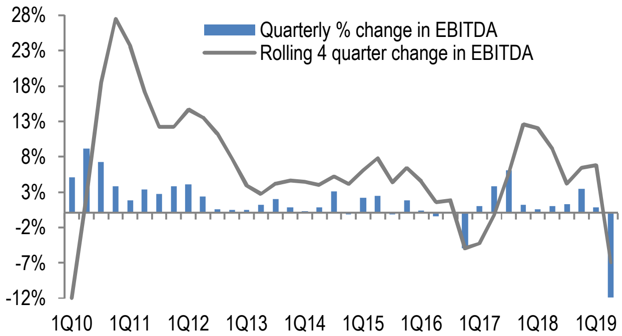
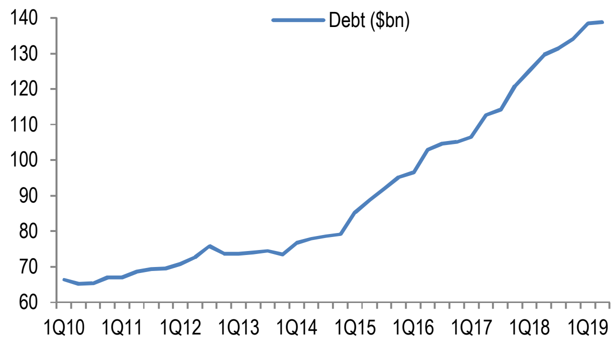


Exhibit 4: Debt



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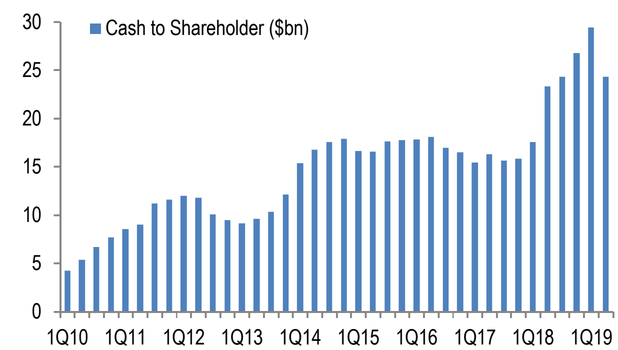


Exhibit 6: Gross and Net Leverage

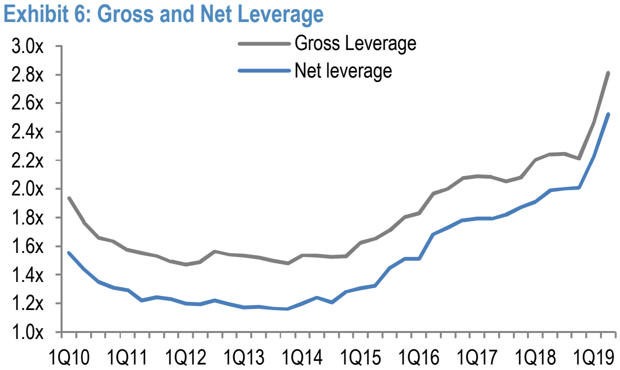


Exhibit 7: Interest Coverage Ratio

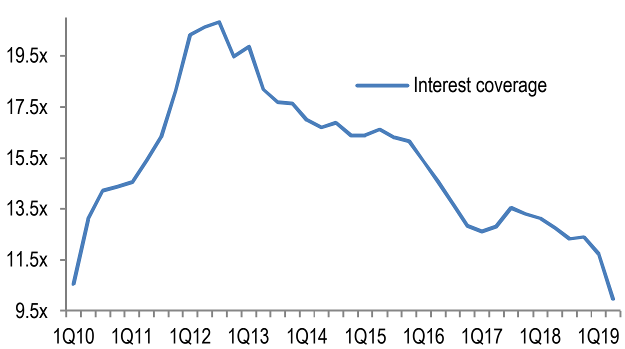
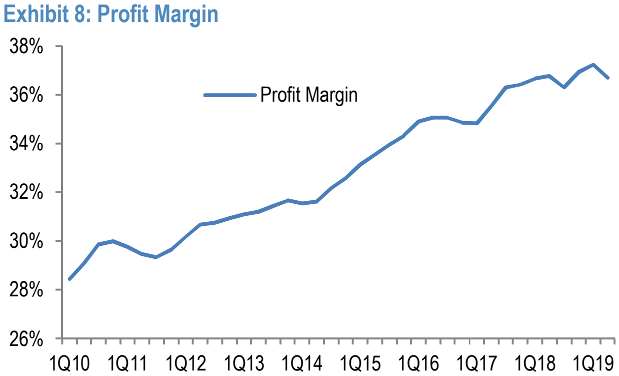


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Technology

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We remain **Underweight** technology based largely on valuation and macro fears surrounding the trade war in China and slowdown in Europe. The trade dispute between China and the U.S. has weighed on earnings and sentiment in the technology sector, impacting most of the issuers under our coverage either directly or indirectly. Within the sector, the semiconductor market has been in particular focus as our issuers were cut off from supplying Huawei and experiencing soft demand from Chinese customers. In 2Q19, several of our semiconductor issuers were able to obtain waivers to continue selling certain products into Huawei, which benefitted earnings in the quarter. M&A remains a key theme in the sector with Broadcom announcing their intentions to acquire Symantec's enterprise security business as software acquisitions remain in-vogue.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Apple Inc	74,218	25%	259	77	108	1.4x	21.1x	30%	107%
2	Microsoft Corp	68,776	23%	126	55	86	1.6x	20.3x	43%	59%
3	Oracle Corp	52,531	18%	40	20	56	2.8x	9.5x	50%	186%
4	International Business Machines Corp	38,522	13%	78	17	78	4.6x	18.2x	22%	57%
5	Dell Technologies Inc.	22,984	8%	91	8	55	6.7x	3.2x	9%	173%
	Sector Summary	**293,406**	**100%**	**716**	**227**	**438**	**2.2x**	**18.1x**	**36%**	**104%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Apple Inc	1%	-3%	-5%	0.0x	-4.8x	-1%	13%
2	Microsoft Corp	14%	21%	13%	-0.1x	3.9x	3%	9%
3	Oracle Corp	-1%	4%	-7%	-0.3x	0.1x	2%	120%
4	International Business Machines Corp	-4%	-11%	72%	2.2x	-10.7x	-2%	10%
5	Dell Technologies Inc.	11%	-14%	7%	1.3x	-0.8x	-3%	165%
	Sector Summary	**5%**	**4%**	**9%**	**0.2x**	**-1.6x**	**1%**	**40%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector has increased 5% y/y which is 2% lower than the 7% y/y increase in 1Q.EBIDTA increased with lower pace of 4% y/y. The y/y revenue growth was driven by the 11% y/y revenue increase of Dell Technologies Inc. and 14% y/y revenue increase of Microsoft Corp, which was accompanied by 1% and 4% decrease in y/y revenue for Oracle Corp and International Business Machines Corp respectively.
- Debt increased by 9% y/y which is 8% higher than debt increase y/y for 1Q (i.e. 1%). The increase was mainly driven by International Business Machines Corp (72% y/y, +$33bn), Microsoft Corp (i.e. 13% y/y, +$10bn) and Dell Technologies Inc. (i.e. 7% y/y, +$4bn) which partially offset by decline in debt in Apple Inc (i.e. -5% y/y, -$6bn) and Oracle Corp (i.e. -7% y/y, -$4bn). Gross Leverage increased by 0.2x y/y to 2.2x. Meanwhile, profit margin increased 1% y/y to 36% which is 2% lower than profit margin level in 1Q (i.e. 38%).
- The earnings payout ratio has increased 40% y/y to 104%, with Dell Technologies Inc. reporting largest y/y increase in the earnings payout ratio (i.e. 165%) to 173%.
- Interest coverage for the sector has decreased 1.6x y/y to 18.1x, while International Business Machines Corp and Apple Inc, had 10.7x and 4.8x decline in y/y Interest coverage ratio respectively.
- Cash to Shareholders increased by 41% y/y, which is 32% lower than Cash to Shareholders increased y/y in 1Q (i.e. 73%)

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Apple Inc	74,218	25%
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4.	International Business Machines Corp	38,522	13%
5.	Dell Technologies Inc.	22,984	8%
6.	Intel Corp	20,197	7%
7.	Cisco Systems Inc	16,177	6%
	Total	**293,406**	**100%**

Exhibit 2: Revenue

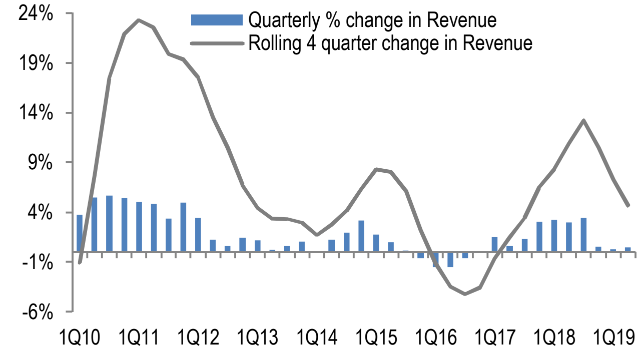


Exhibit 3: EBITDA

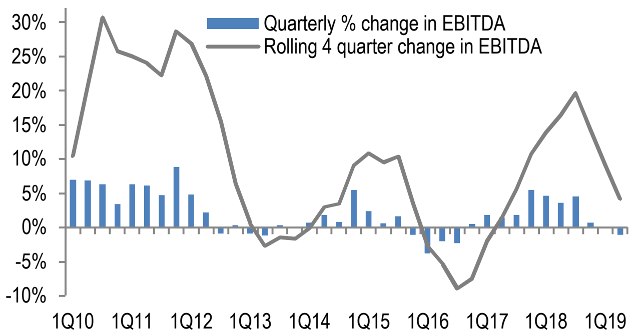


Exhibit 4: Debt

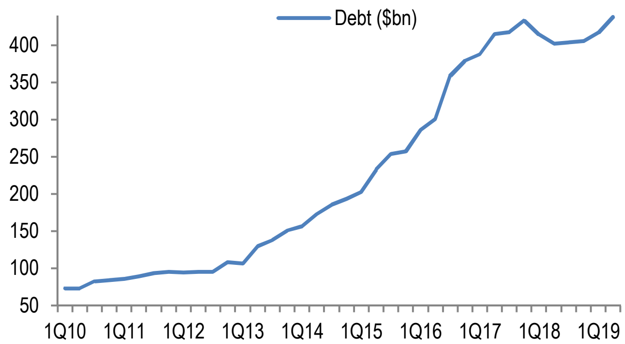


Exhibit 5: Cash to Shareholders

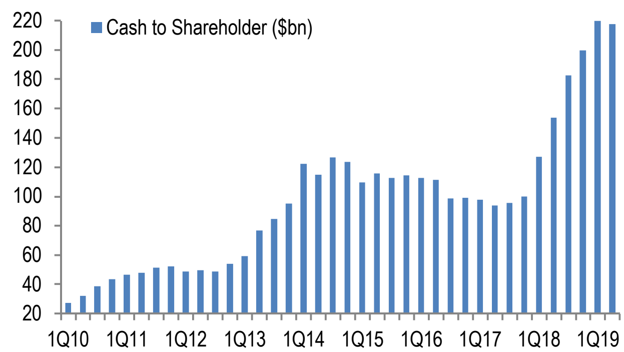


Exhibit 6: Gross and Net Leverage

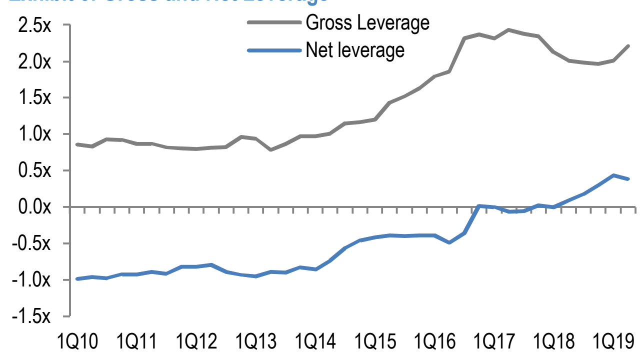


Exhibit 7: Interest Coverage Ratio

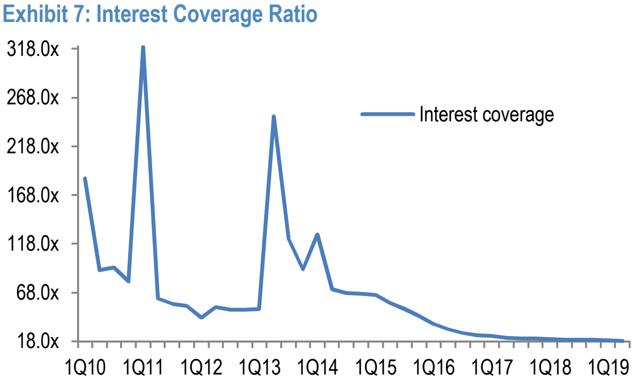
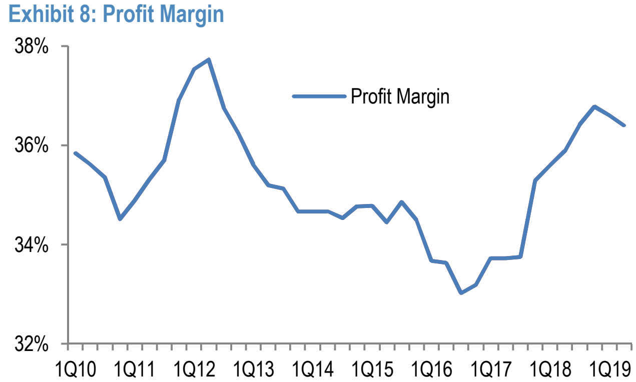


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Telecoms—Domestic

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We maintain our **Overweight** recommendation on Domestic Telecom as fundamentals continue to improve across the sector, while operational trends remain largely consistent with solid growth in wireless being offset by weakness in traditional video offerings. Results at AT&T in 2Q19 were better than expected with revenue ahead of expectations and EBITDA in-line. Operation trends remain mixed as the company outperformed on adding prepaid subscribers, but fell behind expectations on postpaid additions. Video customer losses remain massive, with nearly a million subscribers lost in the quarter (combined DTV and DTV Now). Positively for credit investors, balance sheet commentary remains sanguine and AT&T raised their FY FCF guidance to ~$28bn. Peer Verizon had a relatively uneventful quarter as wireless growth remains strong offset by weaker equipment revenue and wireline results. Balance sheet commentary was limited from Verizon, but the company remains focused on reducing leverage. On the cell tower side, the settlement between the Department of Justice and S/TMUS offered a more favorable result to tower operators with Dish emerging as a fourth player in the wireless industry, which should help offset the potential business lost from Sprint and T-Mobile combining.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	AT&T Inc	97,299	54%	184	61	169	2.8x	7.2x	33%	23%
2	Verizon Communications Inc	73,878	41%	131	48	112	2.4x	9.9x	36%	21%
3	Rogers Communications Inc.	7,927	4%	11	5	15	3.3x	8.4x	40%	20%
	Sector Summary	**179,104**	**100%**	**326**	**113**	**296**	**2.6x**	**8.3x**	**35%**	**22%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	AT&T Inc	-4%	4%	-11%	-0.5x	0.4x	2%	-1%
2	Verizon Communications Inc	1%	2%	-2%	-0.1x	0.2x	0%	0%
3	Rogers Communications Inc.	2%	6%	20%	0.4x	0.6x	1%	2%
	Sector Summary	**-2%**	**3%**	**-7%**	**-0.3x**	**0.3x**	**2%**	**0%**

Source: J.P. Morgan, Capital IQ

- Revenue for the sector decreased 2% y/y while it was up by 2% q/q. Revenues recovered this quarter after dropping for the past three quarters. EBITDA grew at 3% over the year while it was almost flat q/q. Revenue was down by 4% y/y for AT&T while it was modestly positive for Verizon and Roger Communications. Profit margin for the sector increased by 2% y/y to 35%.
- Gross leverage for the sector fell by 0.3x over the year to 2.6x as Debt was down significantly (-7% y/y) along with an increase in EBITDA (+3% y/y). Leverage for the sector has been stable in the past few year with a range of 2.3x to 2.9x. Thus, current leverage is in the middle of this range.
- Interest coverage increased over the year and is currently at 8.3x. Interest expense was about flat for the sector and was outpaced by the 3% y/y increase in EBITDA.
- The Earnings payout ratio was flat over the year at 22%. The Earnings payout ratio for the sector is around its post crisis low. Cash to Shareholders increased by $447mn (+2% y/y) mainly driven by the increase in dividend payouts by about $1.6bn over the year (+7% y/y).

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	AT&T Inc	97,299	54%
2.	Verizon Communications Inc	73,878	41%
3.	Rogers Communications Inc	7,927	4%
	Total	**179,104**	**100%**

Exhibit 2: Revenue

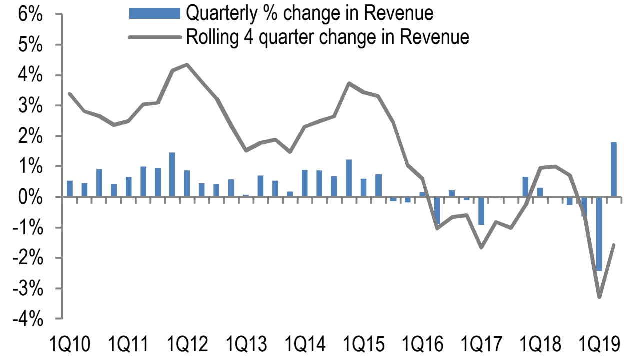


Exhibit 3: EBITDA

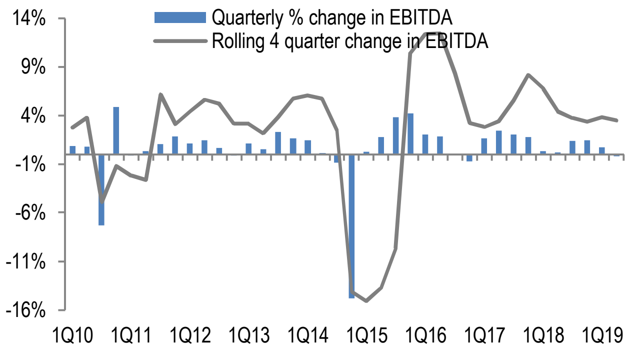


Exhibit 4: Debt

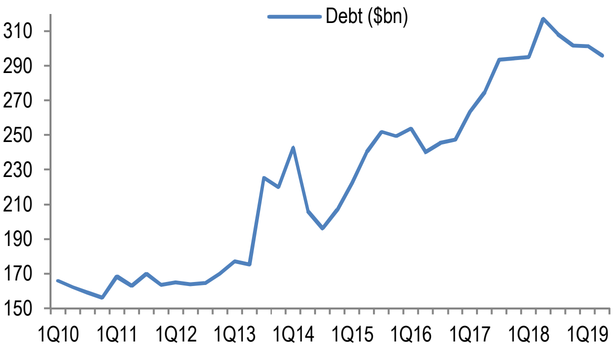


Exhibit 5: Cash to Shareholders

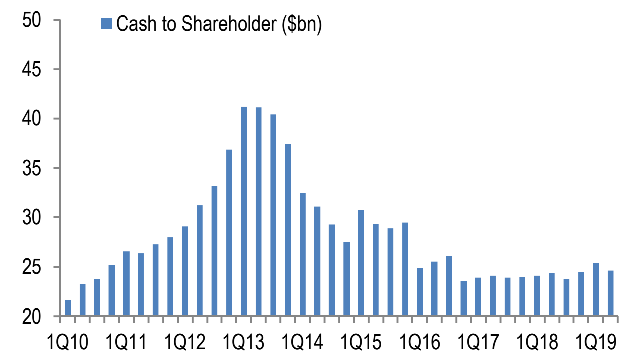


Exhibit 6: Gross and Net Leverage

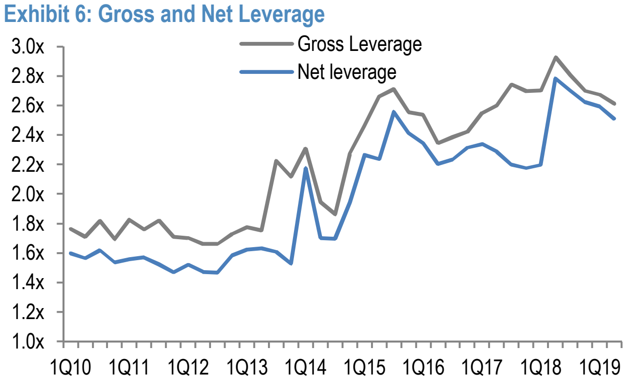


Exhibit 7: Interest Coverage Ratio

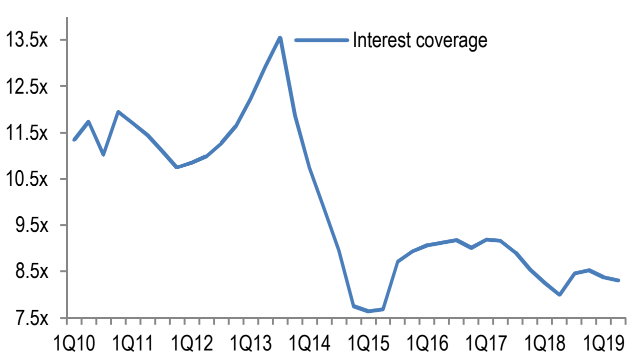
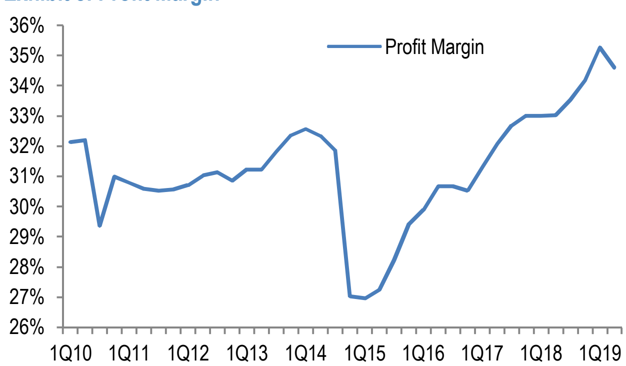


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Telecoms—Yankee

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We maintain our **Overweight** recommendation on the Yankee Telecom sector based on valuation with the sector trading at a discount (~24bps) to the aggregate JULI Index. We have seen a number of balance sheet enhancement initiatives across the sector, including dividends cuts (VOD, potentially BT) and significant asset sales (TELEFO, VOD) with proceeds used to pay down debt. We would expect these initiatives to continue as companies look for ways to fund spectrum and infrastructure investments, while maintaining a focus on credit ratings/balance sheet improvement. These credit positive initiatives have helped tighten the gap between the JULI and the sector as that relationship has compressed by ~16bps YTD. Additionally, the compression we have seen earlier this year has continued between Domestic and Yankee Telecom, with the two sectors now trading only ~9bps apart.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Vodafone Group PLC	22,145	35%	50	16	64	3.9x	9.7x	33%	25%
2	Telefonica SA	14,894	24%	56	19	71	3.7x	8.5x	35%	9%
3	Deutsche Telekom AG	12,955	21%	90	29	71	2.4x	10.8x	33%	13%
4	Orange SA	7,051	11%	48	14	48	3.4x	10.0x	30%	15%
5	BT Group PLC	5,556	9%	30	10	21	2.1x	13.3x	32%	0%
	Sector Summary	**62,600**	**100%**	**272**	**89**	**274**	**3.4x**	**9.8x**	**33%**	**16%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Vodafone Group PLC	-10%	-6%	29%	1.1x	-5.9x	1%	-13%
2	Telefonica SA	-5%	4%	14%	0.3x	-2.9x	3%	-5%
3	Deutsche Telekom AG	3%	26%	1%	-0.6x	2.0x	6%	-12%
4	Orange SA	-3%	-4%	25%	0.8x	1.1x	0%	-1%
5	BT Group PLC	-1%	-3%	3%	0.1x	-2.0x	-1%	-22%
	Sector Summary	**-3%**	**6%**	**14%**	**0.4x**	**-2.7x**	**2%**	**-9%**

Source: J.P. Morgan, Capital IQ

- Yankee telecoms saw a drop in Revenue (-3%) while EBITDA increased at modest 6% over the year. Revenue for the sector is at its lowest in the past 3 years.
- Debt increased significantly (14% y/y) resulting in an increase of 0.4x y/y in gross leverage ratio to 3.4x, its highest level since 4Q16. Debt levels increased for all the companies with Vodafone (+23% y/y, $14.3bn) being the major driver.
- Interest coverage for the sector decreased by a solid 2.7x y/y to 9.8x as there was an increase in interest expense of +14% y/y to $8.8bn.
- Earnings payout ratio decreased by 9% over the year to 16%. Dividends decreased for the first time in the past 3 years by 15% y/y but remained about unchanged over the quarter.

Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Vodafone Group PLC	22,145	35%
2.	Telefonica SA	14,894	24%
3.	Deutsche Telekom AG	12,955	21%
4.	Orange SA	7,051	11%
5.	BT Group PLC	5,556	9%
	Total	**62,600**	**100%**

Exhibit 2: Revenue

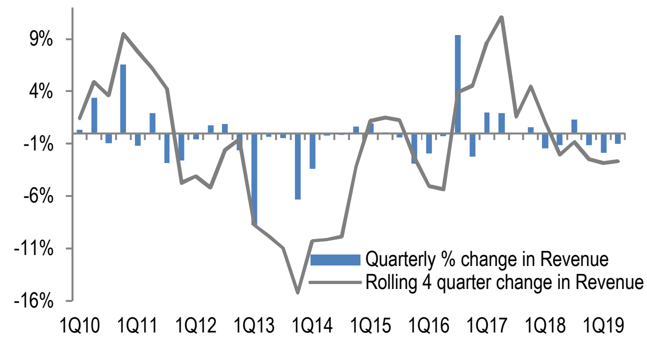


Exhibit 3: EBITDA

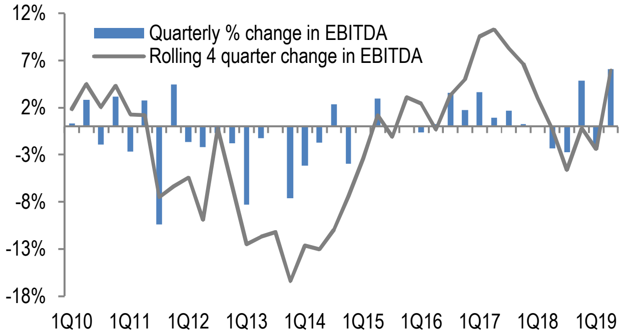


Exhibit 4: Debt

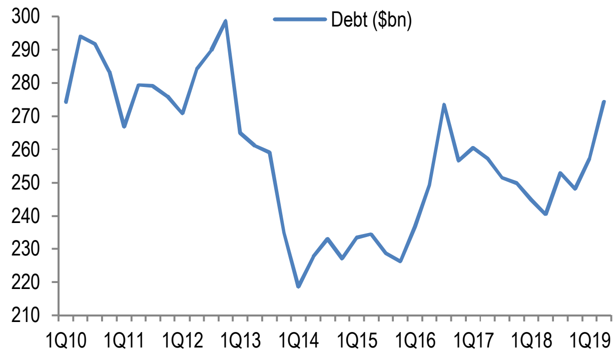


Exhibit 5: Cash to Shareholders

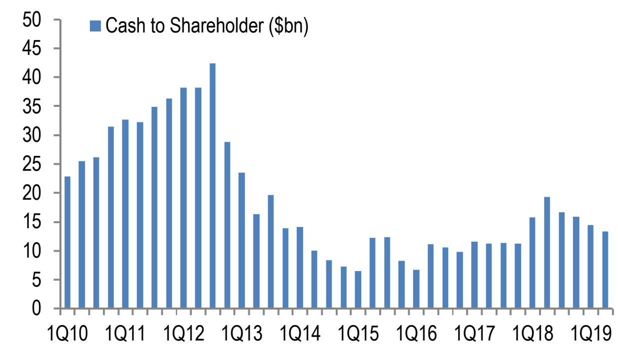


Exhibit 6: Gross and Net Leverage

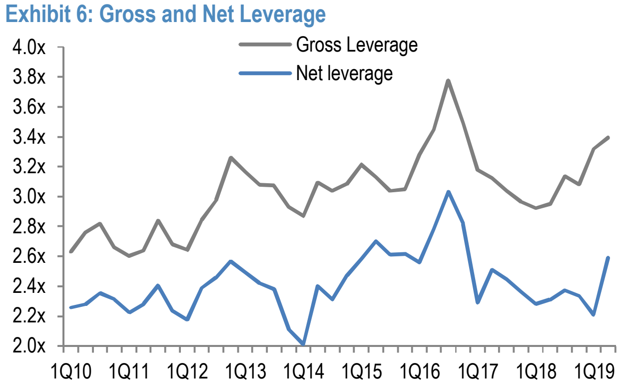


Exhibit 7: Interest Coverage Ratio

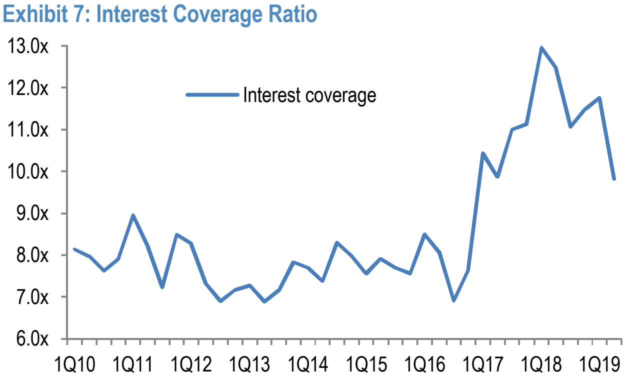
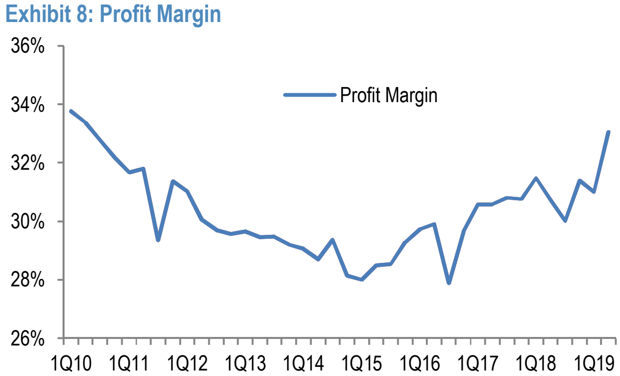


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

Utilities

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We maintain our **Overweight** on HoldCo's, **Neutral** on OpCo's and **Underweight** on GenCo's. During the second quarter, the Utilities sector tightened ~3bp, while the JULI and JULI Non-Financial index tightened ~6bp and ~5bp, respectively. In 2Q, utility HoldCo's tightened by ~8bp, while OpCo's and GenCo's both widened slightly by ~1bp. YTD, Utilities have performed essentially in-line with the broader JULI index, tightening 20bp versus 23bp, respectively for the broader index. The generic utility holdco/opco relationship has tightened to ~28bp, compared to the 3-year average range of +25-30bp, and we continue to think much of the negative impacts of tax reform are behind us.

For utilities, first quarter results are typically a large contributor to earnings, and results during the quarter were modestly positive, partially driven by constructive weather conditions and overall lower expenses. The broadly neutral impact of tax reform has mostly passed at this point, resulting in higher equity ratios and delayed treatment of deferred tax liabilities. Utility management teams are increasingly focused on rate case actions and implementation. In addition, we think the regulatory environment for utilities remains generally supportive as a focus on infrastructure improvements and grid hardening and resiliency are mutually beneficial for corporates and local governments.

Key themes in the sector remain unchanged as management teams continue to implement elevated multi-year capital spending plans to update existing grid infrastructures. Grid modernization has been a consistent theme for the sector over the last several quarters, particularly as utilities continue to grapple with seemingly more volatile weather events such as the recent wildfires in California. For merchant generators, power pricing remains a near-term weakness, but should be partially offset by cost reduction programs and a decline in growth investments. Power pricing in ERCOT is expected to strengthen this summer as reserve margins remain tight, but we expect overall power market fundamentals to be soft as forward curves have generally remained flat.

Largest issuers in the sector:

#	Issuer	Debt in JULI ($mn)	Share	Revenue ($bn)	EBITDA ($bn)	Debt ($bn)	Leverage	Int Cov	Profit Margin	Earnings Payout Ratio
1	Duke Energy Corp	43,297	12%	24	10	63	6.0x	4.9x	43%	15%
2	Berkshire Hathaway Energy Co	27,119	8%	20	7	42	5.9x	3.9x	36%	4%
3	Exelon Corp	26,776	8%	35	9	39	4.1x	5.8x	26%	13%
4	Southern Company	22,899	6%	22	8	46	5.4x	4.7x	38%	14%
5	Dominion Resources Inc/VA	21,899	6%	15	7	43	6.3x	3.9x	46%	-17%
	Sector Summary	**354,336**	**100%**	**321**	**112**	**608**	**5.5x**	**4.5x**	**37%**	**17%**

Change

#	Issuer	Revenue (y/y chg)	EBITDA (y/y chg)	Debt (y/y chg)	Leverage (y/y chg)	Int Cov (y/y chg)	Profit Margin (y/y chg)	Earnings Payout Ratio (y/y chg)
1	Duke Energy Corp	3%	2%	12%	0.5x	-0.2x	-1%	-1%
2	Berkshire Hathaway Energy Co	3%	-1%	4%	0.3x	0.0x	-1%	3%
3	Exelon Corp	1%	-8%	8%	0.6x	-1.1x	-3%	2%
4	Southern Company	-8%	6%	-7%	-0.8x	0.3x	5%	-8%
5	Dominion Resources Inc/VA	13%	5%	13%	0.4x	-1.1x	-3%	-21%
	Sector Summary	**2%**	**0%**	**10%**	**0.5x**	**-0.5x**	**0%**	**1%**

Source: J.P. Morgan, Capital IQ

- Revenue growth for the Utilities sector remains subdued and has slowed to 2% y/y in 2Q19. This is a multi-year low since 4Q16 (-4% y/y). EBITDA remained flat y/y and as a result, Profit margin also remained flat at 37%.
- The Utilities sector typically has a higher leverage relative to those in other sectors. The sector leverage rose by 0.5x y/y to a record high of 5.5x in 2Q19. This was the largest jump in leverage since 3Q02, and was primarily driven by a modest increase of 10% in Debt over the same period. Debt rose to record high of $603bn, and was led by NextEra Energy Inc which reported a 25% debt increase y/y primarily used for M&A financing.
- Interest Coverage fell six consecutive quarters and most recently by 0.5x y/y to 4.5x, the lowest level since 2Q06.
- The Earnings Payout ratio increased 1% y/y to 17% by the end of 2Q19, as both EBITDA and Cash to Shareholders remained flat y/y.

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Exhibit 1: Sector Constituents

	Sector	Debt outst ($mn)	Share
1.	Duke Energy Corp	43,297	12%
2.	Berkshire Hathaway Energy Co	27,119	8%
3.	Exelon Corp	26,776	8%
4.	Southern Company	22,899	6%
5.	Dominion Resources Inc/VA	21,899	6%
6.	NextEra Energy Inc	18,658	5%
7.	FirstEnergy Corp	16,174	5%
8.	Edison International	15,674	4%
9.	American Electric Power Co Inc	14,989	4%
10.	Sempra Energy	14,291	4%
11.	Others	132,560	37%
	Total	**354,336**	**100%**

Exhibit 2: Revenue

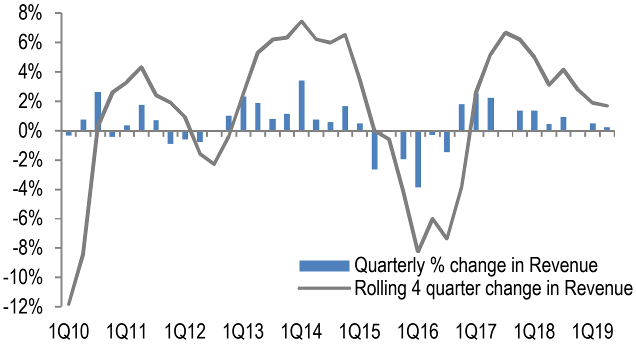


Exhibit 3: EBITDA

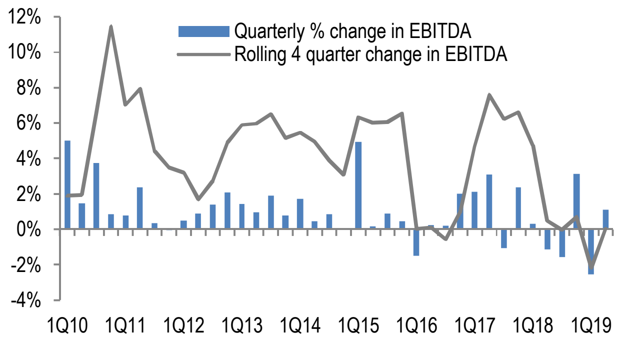


Exhibit 4: Debt

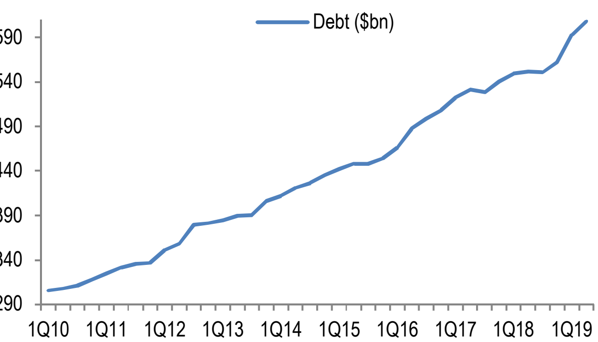


Exhibit 5: Cash to Shareholders

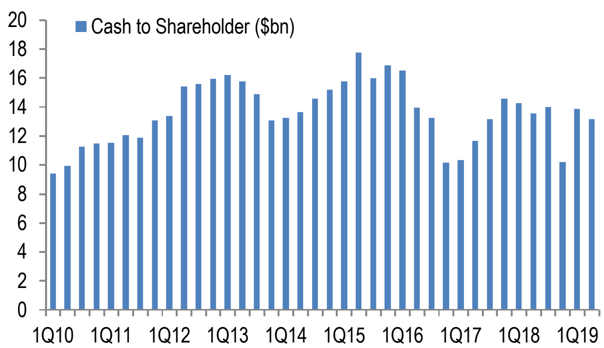


Exhibit 6: Gross and Net Leverage

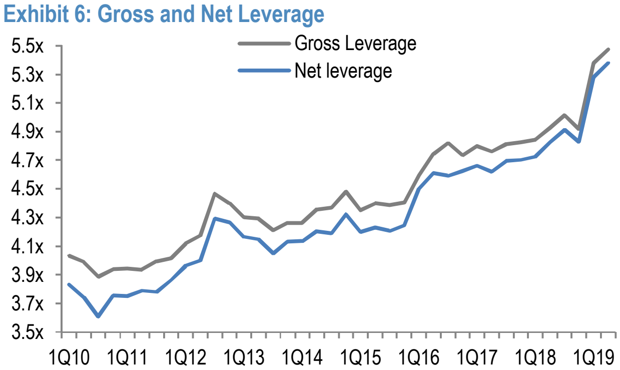


Exhibit 7: Interest Coverage Ratio

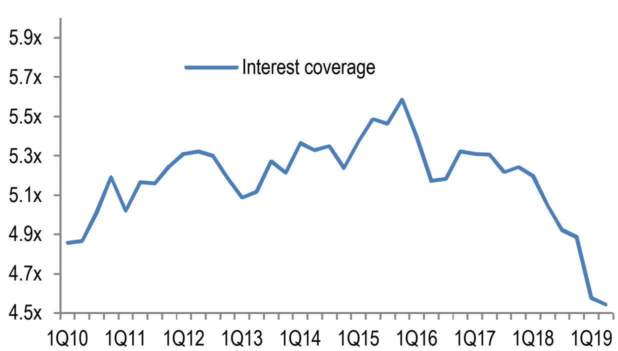
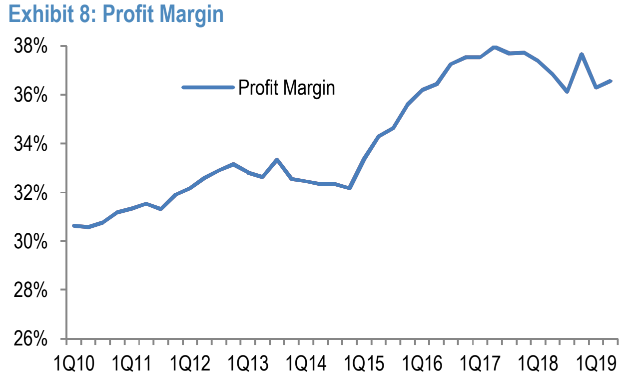


Exhibit 8: Profit Margin



Source for all exhibits on this page: J.P. Morgan, Capital IQ

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Methodology

The analyses in this report are based on about 200 non-Financial High Grade bond issues. For balance sheet and income statement data such as Revenue and Cash the figures shown are a simple sum of each company in the analysis. Financial ratios are calculated by taking each issuer's ratio and weighting it by its debt in relationship to the total debt of all issuers or of all issuers in the sector. In this process the top and bottom 10% of each ratio (weighted by debt) is eliminated from the calculations, to avoid distortion from outliers. Note that for all charts a constant composition methodology is used. This means when a company falls to high yield its current and all prior data from the company is eliminated from the analysis. We use the same list of companies with the same weights for all the history. The benefit of this approach is that it removed distortions from changes in composition. The downside is that the data over time are not comparable to bond indices, as indices rebalance regularly.

The data sources for the analysis include J.P. Morgan analysts, and Capital IQ. J.P. Morgan analysts have vetted the data and helped clean up or explain divergences for mergers or other events. These are highlighted in the commentary in each sector, which is included thanks to their participation.

Summary sections include analysis and exhibits for Non-Financial sectors. Six credit metrics are shown for each of the Industrial and Utility sectors discussed. Some of these metrics are not commonly a focus for each sector but are included so that the summary metrics can be analyzed. The sector-based analysis provides a brief summary of the complex trends occurring in each sector, and we refer clients to the extensive research from our industry sector credit analysts for more detail and insight. The appropriate analyst's name is included on the sector pages.

Exhibit 1: Industrial and Utility Credit Ratios Analyzed

Ratios
Gross Debt / EBITDA
Net Debt / EBITDA
EBITDA / Interest Expense
EBITDA / Revenue
Cash to Shareholders / EBITDA

Source: J.P. Morgan.

Analyst Certification: All authors named within this report are research analysts unless otherwise specified. The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the research analyst's personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. For all Korea-based research analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that their analysis was made in good faith and that the views reflect their own opinion, without undue influence or intervention.

Important Disclosures

- **Market Maker/ Liquidity Provider:** J.P. Morgan is a market maker and/or liquidity provider in the financial instruments of/related to Newmont Goldcorp Corp, Barrick Gold.
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Newmont Goldcorp Corp - J.P. Morgan Credit Opinion History

	Date	Action	Rating/Designation	Ticker/ISIN
Issuer	22 Feb 17	Downgrade	Neutral	NEM
4.875% '42 *	29 Aug 19	Initiate	Neutral	US651639AP18
3.500% '22	22 Feb 17	Downgrade	Neutral	US651639AN69
3.500% '22	29 Aug 19	Terminate	Not Covered	US651639AN69

Barrick Gold - J.P. Morgan Credit Opinion History

	Date	Action	Rating/Designation	Ticker/ISIN
Issuer	26 Apr 17	Downgrade	Neutral	ABXCN
Issuer	26 Feb 19	Upgrade	Overweight	ABXCN
Issuer	08 May 19	Downgrade	Neutral	ABXCN
Issuer	22 May 19	Withdrawn	Not Rated	ABXCN
5.750% '43 *	17 Nov 17	Initiate	Neutral	US06849RAK86
5.750% '43 *	26 Feb 19	Upgrade	Overweight	US06849RAK86
5.750% '43 *	08 May 19	Downgrade	Neutral	US06849RAK86
5.750% '43 *	22 May 19	Withdrawn	Not Rated	US06849RAK86
3.850% '22	15 Sep 16	Terminate	Not Covered	US067901AL20
4.100% '23	26 Apr 17	Downgrade	Neutral	US067901AQ17
4.100% '23	07 Dec 17	Terminate	Not Covered	US067901AQ17

***Indicates representative/primary bond/instrument.**

The table(s) above show the recommendation changes made by J.P. Morgan Credit Research Analysts in the subject company and/or instruments over the past three years (or, if no recommendation changes were made during that period, the most recent change). Notes: Effective April 11, 2016, J.P. Morgan changed its Credit Research Ratings System. Please see the Explanation of Credit Research Ratings below for the new definitions. The previous rating system no longer should be relied upon. For the history prior to April 11, 2016, please call 1-800-447-0406 or e-mail research.disclosure.inquiries@jpmorgan.com.

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We use the following ratings for bonds (issues) and issuers: Overweight (over the next three months, the recommended risk position is expected to outperform the relevant index, sector, or benchmark); Neutral (over the next three months, the recommended risk position is expected to perform in line with the relevant index, sector, or benchmark); and Underweight (over the next three months, the recommended risk position is expected to underperform the relevant index, sector, or benchmark). J.P. Morgan Emerging Markets Sovereign Research uses Marketweight, which is equivalent to Neutral. NR is Not Rated. In this case, J.P. Morgan has removed the rating for this particular security or issuer because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating no longer should be relied upon. An NR designation is not a recommendation or a rating. NC is Not Covered. An NC designation is not a rating or a recommendation.

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	Overweight	Neutral	Underweight
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*Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.
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