Industry Top Trends 2017

- 2 Aerospace and Defense
- 11 Autos
- 23 Building Materials
- 34 Capital Goods
- 43 Chemicals
- 51 Consumer Products
- 68 Healthcare
- 77 Hotels, Gaming and Leisure
- 89 Media
- 105 Metals and Mining
- 114 Oil and Gas
- 124 Real Estate
- 142 Retail and Restaurants
- 153 Technology
- 161 Telecommunications
- 172 Transportation
- 185 Utilities





Industry Top Trends 2017

Foreword

These are challenging times for the global corporate sector, with many of the orthodoxies that have governed economics, finance and politics over recent decades under challenge. While economic recovery, exceptionally low interest rates and abundant liquidity have created a broadly beneficial operating environment, risks remain present and evolving. The list of uncertainties is long; tax and trade policy, regulation, overcapacity, technological change and exceptionally low interest rates to name but a few. The political environment is febrile, reflecting questions around the direction of the new U.S. administration, the future of the E.U. and the U.K.'s impending departure from it and China's growing prominence.

To communicate our credit views on rated companies in this environment, we have recently published 17 S&P Global Ratings **Industry Top Trends** reports for corporate industries globally. This publication brings those reports together into a single volume and is the second annual collection in this format.

These reports outline S&P Global Ratings analysts' key industry assumptions for 2017, as well as key risks and opportunities that may affect sector trends. They draw on the assessments of over 4,500 corporate entities rated by S&P Global Ratings globally. By presenting our assumptions, risks and ratings trends in a consistent format we hope to aid understanding of our analytical assessment of industry trends.

We welcome your feedback.

Best wishes



Yann Le Pallec

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Industry Top Trends 2017

Aerospace and Defense



Overview

- Ratings Outlook: Rating trends across the aerospace and defense industry remain mostly stable, supported by increased defense spending in the U.S. and Europe (after years of stagnation) and somewhat weaker--but still solid--demand for most commercial aerospace suppliers. However, some suppliers' credit profiles have been deteriorating because of operational problems and required investments to support new or growing aircraft programs.
- Forecasts: We expect that the credit ratios of the companies in this industry will likely
 improve somewhat in 2017 due to modest revenue growth (less than 5%) and improved
 margins, though this improvement will be offset by the large U.S. defense contractors'
 shareholder friendly actions (using excess cash to reward their shareholders).
- Assumptions: Commercial aircraft order volumes will likely decline in 2017 and production increases at Boeing and Airbus will be modest. We expect that U.S. defense spending will grow modestly after remaining flat over the past few years, though defense spending may accelerate at a faster clip depending on the policies of the new Trump administration. The defense budgets of European countries remain far smaller than the U.S.', though spending levels will likely rise in some North Atlantic Treaty Organization (NATO) member countries.
- Risks: The largest risk facing the commercial aerospace industry is supply chain disruption, though the risk of uneven global economic growth, a strong U.S. dollar, and low oil prices could also negatively affect their business. For U.S. defense companies, the greatest risks stem from their financial policies and--perhaps--the increased scrutiny on program costs, which could impact their margins. The main risk facing European defense firms is that ongoing government deficits may limit some countries from increasing their defense spending.
- Industry Trends: The commercial aerospace market is softening somewhat but remains relatively strong. Additionally, defense spending is beginning to increase in both the U.S. and Europe.



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Ratings trends and outlook

Global Aerospace and Defense

Chart 1 - Ratings distribution

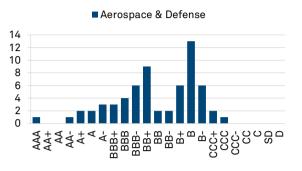


Chart 3 - Ratings outlooks

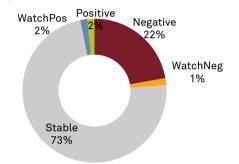


Chart 2 – Ratings distribution by region



Chart 4 - Ratings outlooks by region

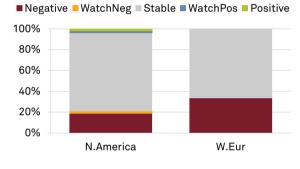
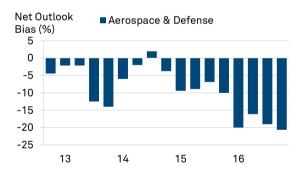
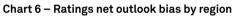


Chart 5 – Ratings outlook net bias







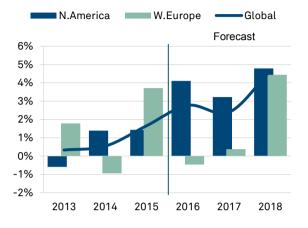
Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

As we currently have a stable outlook on 75% of the companies that we rate in this sector, we do not expect that there will be many rating changes in the next 12 months. However, there is a pronounced negative bias among those companies that do not have a stable outlook, thus any rating changes will likely be negative. Many of the companies that we currently have a negative outlook on are U.S. commercial aerospace suppliers that have had to invest to support new or expanding aircraft programs and have experienced either operational issues or program delays, which have weakened their credit measures. We could lower our ratings on these companies if they are unable to increase their earnings and cash flow as their revenue grows. In Europe, 90% of our outlooks are stable following several rating actions that we have taken since the beginning of the year (not reflected in Chart 5 above). We do not expect that financial policy decisions, including acquisitions, will have as large an impact on our ratings as they have in recent years when many large U.S. defense contractors significantly increased their shareholder returns or pursued large purchases. The notable exception to this trend is Rockwell Collins' pending acquisition of B/E Aerospace for \$8.3 billion, which will likely lead us to downgrade Rockwell by multiple notches after the acquisition is completed.

Industry forecasts

Global Aerospace and Defense

Chart 7 - Revenue growth (local currency)



Revenue growth will likely remain modest as the increase in production rates at Boeing and Airbus slow, though defense spending should begin to increase after years of stagnation.

Chart 8 – EBITDA margin (adjusted)

Chart 10 - FFO / debt (adjusted)

70%

60%

50%

40%

30%

20%

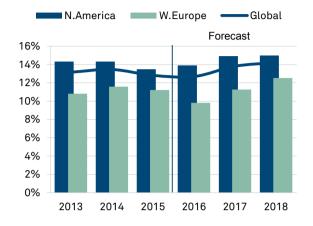
10%

0%

earnings increase.

2013

N.America



EBITDA margins should improve modestly as aerospace suppliers improve their operating efficiency and see their volumes increase. However, the margins of some defense companies could come under pressure despite the increased demand.

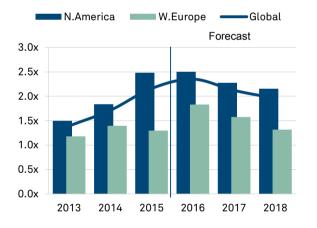
W.Europe ——Global

Forecast

2017

2018

Chart 9 - Debt / EBITDA (adjusted)



Leverage should begin to decline as earnings increase, although this decline may be offset if larger U.S. firms choose to allocate their excess cash for shareholder rewards. European firms tend to hold on to more cash than those in the U.S., which should allow them to maintain lower leverage levels.

Companies in this sector should also see their cash flow improve as their

2015

2016

2014

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Commercial Aerospace

commercia	ommercial Aerospace	
	Declining order volume	
1	In 2016, orders for large commercial aircraft declined to the lowest level since 2010 and we expect that they could decline further in 2017. The main factors behind this weakness are that most of the near-term demand has been met, there are large backlogs involving long waits for most popular aircraft models, and few new models are being introduced. In addition, relatively low oil prices have enabled some airlines to keep their older aircraft longer than previously expected. The demand for widebody aircraft has been particularly weak, and we expect that this weakness will likely continue in 2017.	
	Revenue will grow as production increases	
2	Both Airbus and Boeing are expecting to modestly increase their production rates in 2017. For Airbus, this will mainly be driven by increased production of its A350 and A320 models, which will be partially offset by reduced production of the A380. For Boeing, the increase will mostly be driven elevated production of the 737, which will be offset by declines in its 777 and 747 programs. Despite the declining order volume, both companies have huge backlogs (6-7 years of production for Boeing and 10 years for Airbus) so thatat worst overall production rates will level off over the next few years. Higher production rates should support increased revenue for most suppliers; however, the companies that are exposed to the declining widebody programs may not see as much improvement. The much smaller business jet and commercial helicopter markets remain weak, which could offset some of the increased revenue from the popular jetliner programs for certain suppliers.	
	Margins and cash flow should improve	
3	The large number of new program launches and the significant increases in production rates in recent years have increased the revenue of many firms in the sector, though these same factors have also weakened some companies' margins and cash flow. In addition, some suppliers have experienced	

The large number of new program launches and the significant increases in production rates in recent years have increased the revenue of many firms in the sector, though these same factors have also weakened some companies' margins and cash flow. In addition, some suppliers have experienced operational problems or program delays that have negatively affected their performance. However, now that the rate of production increases has slowed and there are fewer new programs being launched, most firms should see their margins and cash flow improve in 2017.

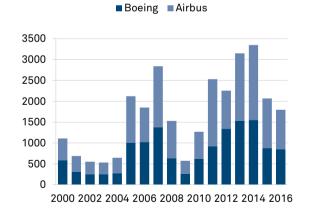
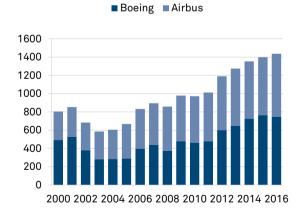


Chart 11 - Large commercial aircraft orders

Chart 12 – Large commercial aircraft deliveries



Source: Manufacturer's websites, S&P Global Ratings

U.S. Defense

	Revenues growing again
1	Most U.S. defense contractors should see their revenue increase in 2017 as U.S. military spending began to increase in fiscal-year 2016 after years of stagnation. However, some contractors may experience weaker growth or even modest declines in their revenue depending on the specific programs they work on. Nonetheless, their sales will likely continue to be bolstered by international demand. It is possible that the Trump administration will push for increases in U.S. defense spending that are above our current expectations, though this would not likely affect most firms' revenue until ar least 2018 due to the lag between when money is appropriated by Congress and when it is actually spent by the military.
	Moderating margins
2	The U.S. government continues to look for the best technology at the most affordable price even though overall defense spending levels have begun to increase. Therefore, we expect that the elevated pricing pressure in this industry will persist. Most companies have worked to rationalize their cost structures in order to bid more competitively on defense programs, though much of this savings is being passed on to their customers, which has limited any material margin improvement.
	Shareholder returns continue to be a significant use of cash for large firms
3	Most large U.S. defense contractors continue to generate solid cash flow and have sizable cash balances. This has led many of these contractors to increase their level of share repurchases and dividends. We do not believe that this trend will lead to a general decline in credit quality for these companies unless the level of shareholder rewards exceeds their cash flowwhich would materially reduce their cash balances or increase their debtor if they increase their acquisition activity without reducing their spending on share repurchases (like Lockheed Martin). The improving prospects for organic growth could reduce some of the pressure on these companies to maintain such a high level of shareholder returns, which should leave them with more cash to spend on internal investments.

European Defense

Uptick in European defense spending

We could start to see an uptick in European defense spending as regional and global threats continue to emerge and political pressure--including from the Trump administration--on European NATO members (who currently spend less than 2% of their GDP on defense) to increase their own spending and rely less on the U.S. grows. An increase in the number of terrorist attacks on European soil has also contributed to a greater willingness by the region's governments to strengthen their defense spending. France and Germany have both indicated that they plan to increase their equipment procurement budgets. However, as the U.K. already spends close to 2% of its GDP on defense, we expect that its defense spending will likely remain somewhat flat. Additionally, we anticipate that defense spending by the Italian government will remain weak.

Limited margin improvement

While the industry backdrop for defense spending is improving, we expect that the margins of most European defense companies will remain generally stable. This is because opportunities for margin expansion remain limited due to the lack of flexibility in government contracts given the competitive market environment. Cost reductions, efficiency gains, and the disposal of underperforming segments will be the main opportunities for companies in this industry to improve their margins.

Steady financial policy

We do not expect that there will be major changes in the financial policies of the main European defense players. We anticipate they will remain focused on securing new orders while executing efficiently on existing programs. Industry indicators suggest that conditions will be supportive of improved cash flow generation and we do not expect to see any major merger and acquisition (M&A) risk. Additionally, we anticipate that the level of shareholders returns will remain generally stable.

2

Key risks and opportunities

Commercial Aerospace

	Supply chain risks
1	Although the increases in production rates at Boeing and Airbus have slowed, their supply chains have barely been able to keep pace. Deliveries of new models like the A320 NEO and A350 have been delayed due to issues with engine and interior suppliers, respectively, and further disruptions are possible as the production rates for these aircraft increase. Both Boeing and Airbus are introducing new versions of their popular narrowbody aircraft, the 737 and A320, while also increasing their production rates. Any delays or disruptions at the original equipment manufacturers (OEMs) during these transitions could negatively affect the earnings or cash flow of their suppliers.
	Macro impacts
2	Low oil prices are having a mixed impact on the commercial aerospace industry. While low oil prices have increased the airlines' profitability, which makes it easier for them to pay for the aircraft they have on order, they have also allowed some airlines to hold on to their older, less fuel-efficient aircraft for longer (especially those that believe the low oil prices will persist). Global air traffic growth has remained strong despite the slowing economic growth in some parts of the world; however, some aircraft orders could be cancelled or delayed if economic growth weakens further. The strong U.S. dollar may also hamper some aircraft sales as all aircraft are priced in U.S. dollars, though this does not appear to be an issue so far.
	Delivering on a huge backlog
3	Both Boeing and Airbus have huge order backlogs, with the waiting lists for some models stretching out to seven to eight years. This represents a large amount of potential earnings and cash flow if the OEMs and their suppliers are able to increase their production efficiently. Furthermore, research and development (R&D) costs will likely decline because almost all of the new aircraft in development will enter production over the next few years.

U.S. Defense

2

Uncertainty	about the	Trump admin	istration's plans

President Trump has stated that he would like to increase the size of the U.S. military and eliminate sequestration, which would likely cause U.S. defense spending to increase at a faster pace than we currently expect. While it is not clear if Congress will go along with the administration's plans, somewhat faster budget growth is likely. Defense contractors may not benefit as much from the increased spending as they expect because some of the funds will be used to pay for additional troops and other related costs. So far, the clearest beneficiaries may be the shipbuilders as both the president and Congress have called for an increase in the size of the U.S.' naval fleet. Plans to intensity U.S. efforts to defeat ISIS could also lead to an increase in demand for defense contractors. On the negative side, the president has criticized the cost of the F-35 fighter and the proposed replacement for Air Force One, which may indicate that there will be increased scrutiny on large programs, which could reduce some contractors' margins.

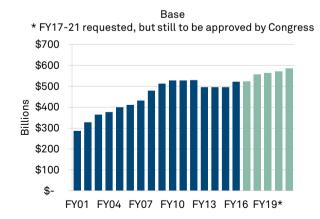
International sales

Many U.S. allies are increasing their defense spending, which has somewhat offset the lower level of U.S. spending in recent years. Low oil prices may also affect some sales to Middle Eastern governments if they persist for an extended period, though the perceived threat from Iran has prompted continued spending on missile defense systems. International sales typically carry higher margins than sales to the U.S. government, though they tend to be more difficult to predict and most countries have much smaller defense budgets than the U.S. Shifts in foreign policy under the Trump administration could turn out to be a mixed blessing for U.S. weapons exports. For example, the president has indicated that he would like our allies to spend more on their own defense, though they may not be inclined to buy weapons from U.S. companies.

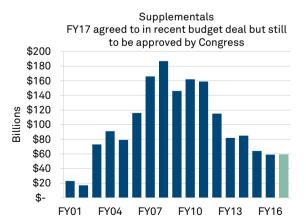
Mergers and acquisitions

The pace of M&A in the U.S. defense sector has been increasing over the past few years and could accelerate further in 2017 as visibility surrounding the government's future spending plans improves. There has been significant consolidation and intense price competition in the government services space due to the lack of available work, which has favored companies with greater scale, and we expect this to continue. Specifically, we anticipate that larger prime contractors will look to buy small-to midsize companies to acquire new technologies or gain access to certain markets. However, we do not expect that any of the large prime contractors will attempt to merge because the government has expressed concerns about the level of competition in the industrial base.

Chart 13 – United States defense spending







Source: U.S. Department of Defense, S&P Global Ratings

European Defense

	Defense spending remains tight
1	While we see prospects for elevated European defense spending, we think that any increases will be small in absolute terms because Europe accounts for a relatively small share of global defense spending and the continent's defense budgets will remain constrained by ongoing government budget deficits. Furthermore, the positive impact on new orders will likely be limited and take time to materialize given the delay between when government budgets become available and when new orders are placed, as well as the typically multi-year nature of these programs.
	Stronger U.S. dollar
2	A stronger U.S. dollar should help make Europe-based aerospace and defense (A&D) companies more competitive when bidding for contracts against their U.Sbased competitors because of the improved exchange rate when they convert their revenue back into their local currency.
	Weak oil prices and tensions in the Middle East
3	Weak oil prices will continue to constrain defense budgets in the Middle East. However, this is being offset by increased spending and an elevated level of new orders due to the regional tensions between major players, including Saudi Arabia and Iran, and the aspiration of certain Gulf states to strengthen their defenses.

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Related research

- Trump Victory Likely Positive For U.S. Defense Contractors' Credit Quality, Nov. 9, 2016

Cash, debt, and returns

Global Aerospace and Defense

Chart 15 - Cash and equivalents / Total assets

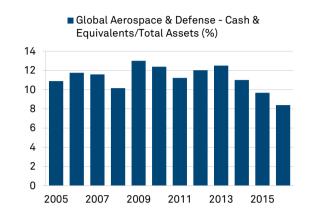


Chart 17 - Fixed versus variable rate exposure

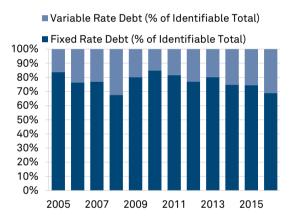
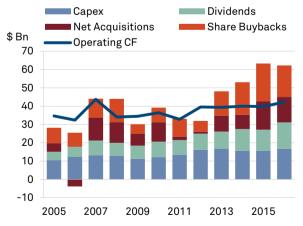


Chart 19 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 16 – Total debt / Total assets

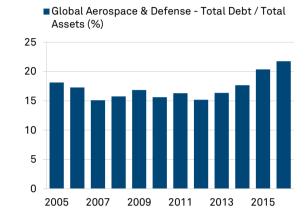


Chart 18 - Long term debt term structure

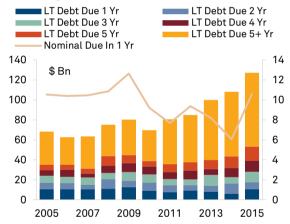
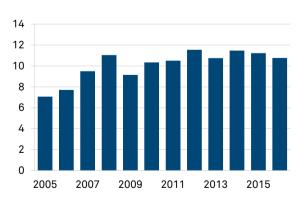


Chart 20 - Return on capital employed

Global Aerospace & Defense - Return On Capital (%)



Industry Top Trends 2017 Autos



Overview

- Ratings Outlook: Rating trends across the global automotive industry remain mostly stable, indicating that prospects for higher or lower ratings are fairly limited for the majority of issuers. This reflects globally steady sales and production volumes, as well as a degree of ratings headroom, supported by a better product mix, higher-technology content, company-specific progress from asset disposals, and cost reductions from continuous restructuring. Offsetting factors include significant competitive price pressure, higher regulatory costs, and the risk of disruptions to trade flows.
- Forecasts: Credit ratios are likely to deteriorate slightly in 2017 as companies face headwinds in sustaining or improving EBITDA margins. Some issuers will also face increasing pressure to use excess cash to reward shareholders. Given the current rating headroom auto manufacturers have, we don't expect that increased competitive pressures amid slow growth globally will have a major rating impact.
- Assumptions: Global auto sales increase by about 1%-2% in 2017 and 2%-3% in 2018, which is directionally consistent with our expectations for global GDP growth as global light-vehicle sales hover above 93 million units driven mostly by Asia-Pacific and Europe. In China, we expect slower auto sales growth because of reduced tax incentives.
- Risks: Key risk factors include volatility of earnings and free cash flow generation through the cycle, late compliance with emission standards and possible regulatory violations, inability to adapt to fast-moving technology trends in a timely fashion.
- Industry Trends: The impact of the U.K.'s negotiated exit from the EU (Brexit) and the trade and tax policies of incoming U.S. President Donald Trump add uncertainty to the industry's earnings capacity over the next two years. Automakers and suppliers will likely face higher commodity costs, foreign currency transaction impacts, tougher environmental regulations and requirements over the coming year, which could limit their financial flexibility because they will have to incur significant costs.

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Ratings trends and outlook

Global Autos

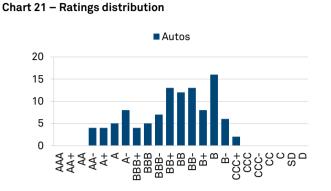
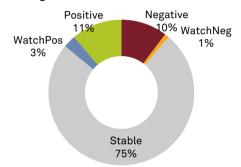
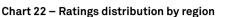


Chart 23 - Ratings outlooks





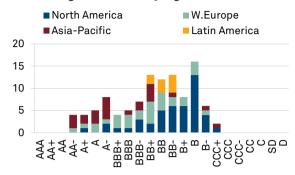


Chart 24 - Ratings outlooks by region

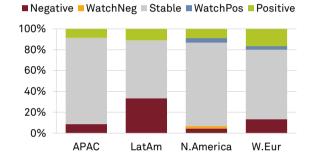
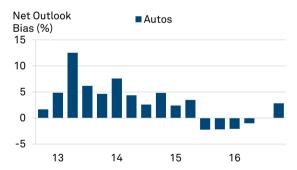
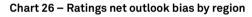
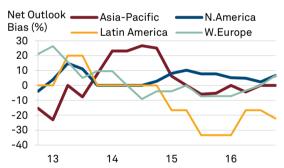


Chart 25 – Ratings outlook net bias







Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

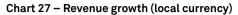
From a global ratings perspective, we see fairly limited prospects of further upgrades or downgrades in 2017. Most of the likely downside that we expect is for automotive issuers in Latin America and, to a much lesser extent, Western Europe.

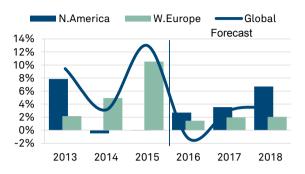
In the **U.S.**, the outlook for auto ratings is generally stable, with limited upside. We think ratings are approaching a ceiling for most companies, 80% of which have a stable outlook. Furthermore, nearly 70% of rated issuers are at or above pre-recession rating levels. Following their upgrade into investment-grade category in 2013-2014, carmakers GM and Ford have both seen further upgrades in the past nine months to 'BBB'. We see limited likelihood of the ratings rising again over the next 12-24 months given increasingly competitive conditions in most major end-markets.

For **U.S. suppliers**, rating actions were mixed, further suggesting a peak or perhaps even the start of a downturn in credit conditions. For both public and private auto suppliers, there were twice as many downgrades as upgrades in 2016. On the other hand, positive changes in outlooks (including CreditWatch listings) were twice the number of negative changes.

Industry forecasts

Auto OEMs





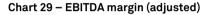




Chart 31 - Debt / EBITDA (adjusted)

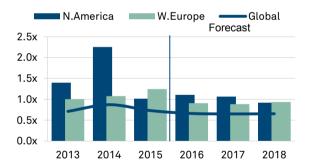
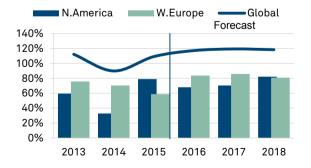
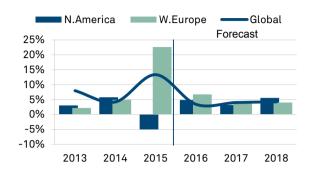


Chart 33 - FFO / Debt (adjusted)



Auto Suppliers

Chart 28 – Revenue growth (local currency)



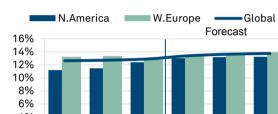


Chart 30 - EBITDA margin (adjusted)

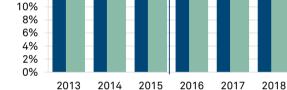


Chart 32 - Debt / EBITDA (adjusted)

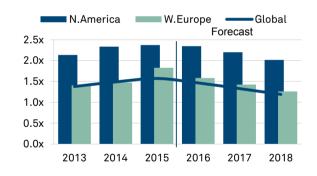
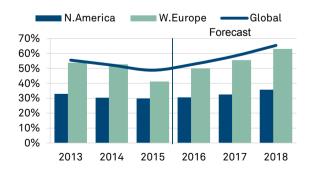


Chart 34 - FFO / Debt (adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. OEMs--Original equipment manufacturers. FFO--Funds from operations.

For **GM and Ford**, we expect revenue growth to be roughly flat, but both will likely maintain strong cash flow and steady profitability in 2017 and 2018, albeit amid slowing global automotive demand. We expect margin headwinds from pricing pressure in the U.S. and China, the weakness of the pound sterling, and the increase in inflation following the U.K.'s referendum vote to leave the EU. We also expect increased pressure on GM's and Ford's captive units from lower auction values, indicating increased supply, lower value, and increasing residual risks across vehicle segments. For Tesla Motors, we assume a faster pace of growth in orders in 2017 but a marginal decline in average prices due to foreign currency headwinds and a shift in product mix to less expensive Model S variants, which more than offset price increases, higher Model X prices, and higher option take rates.

For the **U.S.-based auto suppliers**, we expect steady low-single-digit revenue growth in 2017 as new business wins and increased content are offset by foreign currency headwinds and higher commodity prices. We expect EBITDA margins for most U.S. suppliers to flatten out as they look to focus on improving their manufacturing and engineering footprint and derive operational cost reductions. We expect credit metrics to stay steady for most suppliers. While some Tier 1 suppliers continue to absorb large acquisitions made in 2016, we do not think their appetite has been diminished for tuck-in purchases, especially of firms that help fill gaps in their technology portfolios. Moreover, for such suppliers that have recently made large acquisitions, we expect a commitment to debt reduction as well as ongoing streamlining of cost structure as they look to hold on to their investment-grade ratings.

For **EMEA-based original equipment manufacturers** (OEMs), we expect slow revenue growth for mass market segments in 2017, supported by higher volumes and offset by ongoing pricing pressures. For premium players, we expect volume and revenue growth to be stronger, assisted by the rollout of new and extended models, while high research and development (R&D) expenses and regulatory costs will weigh on margins. Other headwinds include the risks to demand and trade flows within the EU due to Brexit and within NAFTA due to policies from the new U.S. administration. We expect capital expenditure (capex) to remain high, due to investments in new models and new technology, constraining free cash flow generation. We also expect continued low net credit losses on financing receivables and for residual values on lease assets to remain broadly stable.

Europe-based auto suppliers are set to generate mid-single-digit revenue growth in 2017, in our view, mainly driven by a strong order book and increased content per car through new technology, constrained by foreign currency headwinds. We expect stable or even improving EBITDA margins for most European auto suppliers as they continue to focus on cost reductions and efficiency improvements. We expect credit metrics to stay steady for most suppliers and improve for some suppliers that spend most of their free operating cash flow to further reduce debt, as opposed to on acquisitions.

OEMs and suppliers based in the Asia-Pacific region are likely to maintain significant cash buffers given the strong financials of Japanese and Korean players. Some downside risk remains in the sector's operating cash flow given weaker global sales growth and increased profitability pressure due to higher competition. Also, capital investment and R&D expenses are likely to gradually increase to help companies fend off fierce competition and cope with tighter environmental regulation. Still, we expect operating cash flows to cover investments and the credit metrics are not likely to be undermined significantly given the strong financial buffer of the regional sector.

Our base case for **Japanese automakers** foresees a modest increase in earnings in 2017 at best after several years of improvement, given our anticipation of headwinds. Flat demand growth in the U.S. market, their largest profit contributor, and increasing competitive pressures both at home and the U.S., may easily outweigh ongoing efforts to reduce costs. Although the weaker yen in recent months has been favorable, a potential fall to extreme yen appreciation could harm profitability. In Korea, market positions and profitability for Hyundai and Kia are likely to level out after several years of deterioration, thanks to an improvement in product mix and the limited potential for a further significant slide in emerging markets in terms of currency or market demand, considering low bases. For both Japanese and Korean automakers, there are potential risks associated with the development of a new trade policy under the Trump administration.

We expect **Chinese auto OEMs** to continue facing pressure on profitability and cash flow. The Chinese auto industry remains characterized by tight competition, due to structural overcapacity, placing pressure on industrywide profitability. This is especially evident in the entry-level segment, where the expected launch of an abundance of new models forces OEMs to continue spending on product upgrades to maintain consumer interest.

In **Latin America**, the gradual recovery of Brazilian auto suppliers in 2017, which would maintain still weak domestic results in the next quarters, but resilient foreign operations results driven by healthy markets in the U.S. and Europe. Currently, Brazilian domestic operations represent less than 20% of Brazilian issuers' cash flow generation, so we do not expect relevant pressures on credit metrics assuming improved macroeconomic conditions. In the case of Mexican auto suppliers, we expect roughly double-digit revenue growth on average, underpinned by U.S. market demand (particularly for light vehicles) and new contracts, while we expect issuers will maintain credit metrics in 2017 that are in line with or better than in 2016.

Key assumptions

Auto OEMs

	Slowing global growth
1	In 2017, automotive profits may be constrained by modest revenue growth amid rising borrowing costs and wages, and a strong dollar. Other risks include slower-than-expected recovery in emerging markets, especially China and Brazil. In Europe, Brexit negotiations are also likely to lead to some uncertainty.
	Headwinds to EBITDA margins
2	We assume limited opportunities to improve profitability for most automakers because of increasing pressure from regulatory costs, foreign exchange, trade uncertainty under President Trump's administration, and commodity inflation.
	High capex and R&D will limit financial flexibility
3	The auto industry continues to facing increasing regulatory and public pressure to produce vehicles that emit less carbon dioxide (CO2)which is directly correlated with fuel consumptionand fewer air pollutants such as nitrogen oxide (NOx) and particulate matter (PM). This is likely to cost the industry dear over the coming decade, possibly in fines for exceeding regulated emission limits, but more importantly through R&D and capex to further develop renewable fuel alternatives to the combustion engine, such as electric cars.

Slowing global growth

Overall, we expect that the global auto industry will become even more fiercely competitive in 2017 and 2018 as volume growth slows. Global automakers face a tough path amid volatile financial markets, a slowdown in the important Chinese market, costly emissions regulations, and digital disruptions. We also expect that pricing competition will increase in emerging markets as the demand for vehicles fluctuates

We assume that global demand for new vehicles will increase from 1% to 2% in 2017. However, while U.S. auto sales were strong in 2016, we continue to expect that consumer demand for autos will flatten out in 2017 and 2018 after outpacing the growth rate of the overall economy since 2009. Although the continued economic recovery in the U.S. has been broadly supportive, we believe that declining retail demand, the increased use of incentives, and the potential that the lending environment will soon become less favorable will likely limit growth prospects for auto sales. Deregulation and fiscal stimulus seem more likely to boost economic growth, though trade barriers could increase vehicle costs and negatively impact volume.

We assume a mid-single-digit decline in used car prices, especially given an ongoing increase in the supply of off-lease cars and trucks into 2017 (amounting to about 9% according to J.D. Power estimates). This may further pressure new vehicle demand and transaction prices in the U.S., but also impact the profitability of the automakers' captive finance units as they revisit their residual loss assumptions.

In China, we expect that car sales volumes will be soft in 2017, despite the government's extension of a tax break (though at less favorable levels relative to 2016) for consumers that purchase small cars. In addition, we anticipate that pricing pressure will intensify significantly due to weak consumer demand and increased competition, which will be heightened by the diminishing benefit of a purchase tax exemption and the relatively high sales base in 2016. Production capacity in China has increased by 25% since 2013, and is still expanding by about two million vehicles per year--a big rise for a market totaling 26 million in 2016. What's more, domestic players have been regaining an increasing slice of market share from international players since 2014 and their product quality has also improved. They are particularly making inroads in the entry sport-utility vehicle (SUV) market segment, which is fast-growing. Local producers have launched a variety of new SUV and multi-purpose vehicle (MPV) models, which are competitively priced and of average quality. This has prompted global carmakers to slash prices and offer bigger incentives to maintain their market shares. Domestic players' current capacity utilization levels of around 70%, compared with 80%-85% for partly foreign-owned joint ventures (JVs), also leave them real headroom to grow further in coming years.

Headwinds to EBITDA margins

Our economists expect that inflation trends within the eurozone will diverge through 2017, with Germany ahead of other members. Despite pressures from Germany to raise interest rates, we anticipate the ECB will continue its asset purchases at only gradually declining rates into the first half of 2018. Automotive demand in Europe is likely to grow two percentage points to 3% from a combination of pent-up demand, favorable economic conditions, and a limited Brexit effect. While the current depreciation of the pound sterling could boost U.K. car exports, it could increase their production costs in Britain because around 60% of the parts for these cars are imported from the EU. The pound sterling's depreciation has effectively led to higher prices of imported vehicles with some manufacturers, such as Peugeot, which has already announcing that it would have to raise U.K. prices slightly to compensate for the revenue loss on the currency side.

Among emerging economies, we are predicting a return to positive sales growth next year for Brazil and Russia, after heavy sales slumps over the past three years. Auto sales in Brazil could grow in the low- to mid-single digits after several years of steep declines.

High capex and R&D will limit financial flexibility

The need to invest heavily in industry innovations is leading to high capex and R&D for established automakers. Most companies are guiding that they will maintain high capital expenditures over the coming years. We don't expect this will lead to mergers and acquisitions among automakers. A more common industry pattern is for companies to work together on technological projects such as automated driving, battery developments for electric vehicles, or a specific subset of engines.

Through medium-term partnerships, companies aim to share technology and protect themselves from being overcharged for the quality for the parts they're receiving. For instance, Renault and Nissan have a decade-long history of splitting capex and R&D, and Daimler is also cooperating with them on the small car segment. We see a possibility of more consolidation among the more fragmented and specialized auto suppliers, perhaps in areas of emissions sensors or batteries, and other emerging technologies.

Auto Suppliers

	Mixed revenue growth
1	Most companies have re-affirmed their 2017 guidance in recent investor conferences. Large diversified Tier 1 suppliers are likely to experience low- to mid-single-digit growth due to a shift in the global vehicle mix toward higher-content light trucks (particularly crossover utility vehicles [CUVs] and SUVs), emissions regulations and connectivity that drive higher-technology content. Pricing pressure, launch costs, and adverse mix shifts will lead to margin compression for several Tier 2 suppliers. Aftermarket-based suppliers will face increased competitive pressures from low-cost Asian imports and the bargaining power of big-box retailers. Overall, the strength of the U.S. dollar is likely to lead to currency headwinds in Europe and China.
•	Credit metrics peaking for most
2	We expect steady credit metrics for rated auto suppliers in general in 2017-2018, and believe that leverage and cash flow are more likely to underperform our forecasts than outperform them.
	Balanced shareholder returns and some M&A opportunities
3	We expect most large auto suppliers to prioritize investing in their core business, followed by accretive acquisitions mainly focused on new technology like connectivity and e-mobility. Still, as reasonably priced takeover candidates become scarcer, given the current stage of the auto cycle, we believe more cash will be returned to shareholders at the peak of the cycle in most end-markets.
	Auto suppliers must squeeze out operational efficiencies during the production life of a vehicle in order to survive in tougher environments. While raw material prices (which generally make up 40%-

order to survive in tougher environments. While raw material prices (which generally make up 40%-60% of auto suppliers' cost of goods sold) have been subdued, suppliers may soon face increasing pricing pressures as they seek to improve their market share.

We expect rising commodity costs to have an adverse impact on the profitability of tire makers over the next two years. Most global auto suppliers are also well positioned for a slower market, although the potential for leverage-increasing acquisitions could put some pressure on ratings on certain suppliers.

Key risks and opportunities

Auto OEMs

	Slow growth in China
1	China, the world's largest car market in which most global carmakers are heavily invested, is likely to slow considerably next year, threatening to dent joint-venture EBIT margins. Any possible trade war with the U.S could emerge as a meaningful risk since it could have an adverse impact on business and consumer confidence.
つ	Regulatory pressure
Z	The cost of meeting ever tougher emissions regulations will exert heavy pressure on capital spending.
	Investments in transforming technologies
3	Carmakers also face major disruptive risks from electric vehicles, digitalization, and automated driving, including competitive threats from big or nimble technology players.

Slow growth in China

A new normal in Chinese car sales growth of 1%-5% per year over the coming years, from close to double-digit growth in past few years, is just one aspect of a tougher ride for international manufacturers and suppliers that are heavily invested in China. Domestic players have been regaining market share from international players since 2014 and their product quality has also improved. They are particularly making inroads in the entry SUV segment, which is fast-growing. Local producers have launched a variety of new SUV and MPV models, which are competitively priced and of average quality. This has prompted global carmakers to slash prices and offer bigger incentives to maintain their market shares. Domestic players' current capacity utilization levels of around 70%, compared with 80%-85% for partly foreign-owned JVs, also leave them headroom to grow further in coming years.

Regulatory pressure

Secondly, the cost of meeting ever-tougher emissions regulations will exert heavy pressure on capital spending. The regulatory drive to cut emissions, which erupted a year ago amid revelations of manipulations at Volkswagen, is now affecting the whole industry, with calls for tighter testing and tougher regulations worldwide. This is also driving the rise of electric vehicles, pushing up automakers' R&D bills, and forcing them to rethink their product offering in terms of powertrain mix. The advance of new features on the road toward automated driving is also exposing them to threats from powerful high-tech competitors, such as Google and software start-ups. This digital disruption shows every sign of intensifying. Automated driving technologies, connectivity, and digitalization are already stone-cold reality for carmakers' finance departments, which have to finance takeovers, partnering agreements, or plain higher capital spending. The capex outlays to keep pace with rapid advances and see off the new high-tech challengers bear as many risks as opportunities. Some carmakers may benefit, but others will probably suffer. For the sector as a whole, we believe these challenges could constrain ratings over the coming years.

Investments in transforming technologies

Lastly, the industry also faces significant risks from longer-term trends that are transforming the car industry. Automated driving and alternative mobility, such as car-sharing schemes and robo-taxi services, are further technical challenges with the potential to shake up the auto industry landscape. Some of these technologies still have many potholes to negotiate, such as questions surrounding regulatory, safety, and insurance liability. We nevertheless see some of the investments being made by automakers in this area as high-risk given the possibilities of duplicating companies' capital and resources. We view these as mostly defensive efforts against risks that core auto sales will decline over the longer term. Ultimately, a narrow set of factors will determine what technologies make it to market, determined mainly by insurers, regulators, and consumers. This is unfamiliar territory for automakers and they are competing with large powerful tech companies or with agile and highly focused start-ups. We therefore consider that, overall, the risks outweigh the opportunities.

Auto Suppliers

2

Launch execution and operational efficiencies

As large OEMs prepare for significant global launches in 2017, launch execution and exposure to potential volatility is a bigger risk over the next 12 months for suppliers as we expect more volatility in production schedules, especially if demand weakens due to higher financing costs or a decline in consumer confidence.

Increasing pricing pressure from OEMs

Automakers face increased pricing pressures in key markets, which is likely to lead to more headwinds for auto suppliers--especially those that are more exposed to lower-value added products.

Technology-related investments

We believe the digital transformation of the auto industry could provide opportunities for auto suppliers if they can provide innovations that add value to the industry. A key test will be their ability to assist car manufacturers in new U.S. auto fuel consumption standards, as opportunities exist to increase efficiency in this area. In our view, the next few years will offer many chances for companies to provide products such as turbo chargers or direct injection that improve the efficiency of the combustion engine. Auto suppliers have entered into a transformational process and started to invest heavily into connectivity and e-mobility, offering new ways of appealing to the next generations of car buyers.

The auto industry is facing not just slow demand growth globally but also a rapidly shifting technological landscape. The advent of ride sharing and car sharing, the quickening pace of research into autonomous vehicles, and the migration toward electrified powertrains are all driving radical changes for global auto suppliers. Already superior connectivity and high-tech safety features influence car-buying decisions.

The changing landscape is unlikely to have a direct effect on issuer ratings in the near term but a rapid transformation of the competitive environment could drive future rating actions. Many suppliers continue to invest in new technology to squeeze more efficiency out of a very old one, the internal combustion engine. A key focus is assisting car manufacturers in meeting new U.S. auto fuel consumption standards of an average 55 miles to the gallon by 2025. Only about 15% of the energy from the fuel in the tank is used to actually propel the car, suggesting that opportunities exist to increase efficiency in this area. We see chances for many years to come for companies to provide products such as turbo chargers or direct injection to improve the combustion engine's efficiency.

Ultimately, a key rating driver for suppliers will be their ability to remain fluid and adapt to fastmoving technology trends.

Industry developments

The impact of the trump administration's trade policy

Ongoing debate and reform around trade agreements and tax policies add significant uncertainty to supply chain management for automakers with fortunes that are tied to the economic benefits of open trade with Mexico. But even if the new President's position on trade effectively turns out to be less punitive and more moderate, some downside credit risk could persist for U.S. automakers and suppliers if they are unable to offset potentially increased costs and pricing pressures with potentially lower cash taxes or other initiatives.

Our base case assumes a low likelihood that the U.S. would completely withdraw from NAFTA. Despite the potential for increased tariffs, U.S. automakers will have time to adjust their production and possibly pass through some of the increased costs to consumers to mitigate any earnings impact. Mexico constitutes a smaller portion of U.S. OEMs' North American footprint than it does for many foreign peers, and in our view this could mean some regional cost advantage if high tariffs were imposed. For instance, GM currently has 19% of its North America production capacity in Mexico and Ford 15%. Labor cost savings only account for about half of the cost savings for vehicles that are then sold in the U.S., and they're less than 15% of the total cost advantage for vehicles that are exported from Mexico to Europe for sale. Exports from Mexico for certain platforms could therefore be redirected to other regions to avoid any massive shutdowns in that region. Automotive exports can still be a positive for some U.S.-based auto suppliers because vehicles produced in Mexico may consist of up to 40% U.S. content.

The most likely scenario entails some manufacturing jobs moving back to the U.S., particularly those related to products that are dual-produced in the U.S. and Mexico. We also expect some adjustment in production capacity in segments such as small cars, where retail share weakness is likely to continue in 2017 and 2018.

Currently, the U.S. auto industry is operating at over 90% utilization and therefore it wouldn't appear to be pragmatic to move any meaningful capacity onshore in the next 12-18 months. In our view, this will not be economically viable for a majority of the manufacturing plants in the U.S., given the meaningful wage gap with Mexico and lack of production flexibility at these plants. Automotive industry compensation in Mexico is approximately 75%-80% lower than in the U.S., though this is somewhat offset by the higher worker attrition rates than in U.S. assembly plants.

A border tax would hit auto suppliers in varying degrees. For those suppliers with limited reliance on manufacturing in Mexico, we expect at most a modest impact on profitability over the near and intermediate term. For those firms with a heavy reliance on manufacturing in that country, there could be a significant impact on profitability within the next few years. While some of the increased expense from the border tax would undoubtedly be passed through to car buyers, we think suppliers would be required to share some of these costs with OEMs as well.

Rated Mexican auto suppliers could face some impact on profitability, but we expect them to remain resilient at least in the short term, mainly owing to the positive effects from Mexican peso depreciation, low labor costs, and lower tax rates in Mexico, as well as the companies' adequate liquidity position and solid credit metrics.

In general, suppliers may shift capacity wherever possible back to the U.S.--especially on non-laborintensive products--redirect some exports to outside the U.S, and adapt to a changing customer production footprint.

Financial policy

For most global automakers and suppliers, we expect financial policy to remain steady. We do not anticipate major M&A activity, although FCA has sought a merger partner in the past. Companies' key priorities will remain R&D and capex investments to maintain and strengthen competitive positions over the coming years of technological change, while at the same time seeking to preserve profitability and cash flow generation.

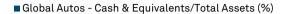
Related research

- Credit Implications For the U.S. Auto Industry Under The Trump Administration's Trade Policy, Jan. 25, 2017
- U.S. Auto Sales Will Likely Reach 17.5 Million Again In 2017 As Demand Begins To Level Off, Jan. 9, 2017
- Economic Research: 2017 U.S. Economic Forecast: Stir It Up... Will Trump Boost Growth? Dec. 1, 2016
- How A Trump Presidency May Hurt Asia-Pacific's Auto, Consumer Goods, Infrastructure, And Tech Sectors, Nov. 17, 2016
- Trump Election Victory Is An "Uncertainty Shock" For The Eurozone, Nov. 14, 2016
- Among U.S. Corporates, Auto Sector Is Most At Risk To Trump Trade Plans; Defense, Energy May Benefit, Nov. 11, 2016
- Can President Trump Reshape The U.S. Economy?, Nov. 10, 2016
- New Sources Of Disruption Ahead For The Global Auto Industry, Nov. 3, 2016
- Global Automakers Are Scrambling For Position As The Market Evolves, Conference Speakers Say, Nov. 2, 2016

Cash, debt and returns

Global Autos

Chart 35 - Cash and equivalents / Total assets



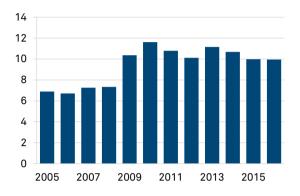


Chart 37 – Fixed versus variable rate exposure

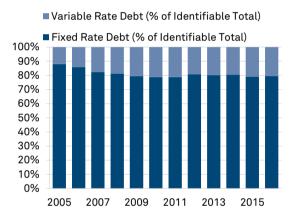
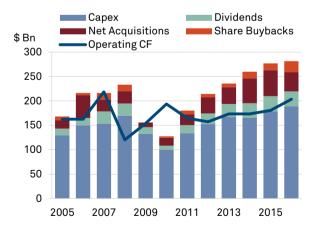


Chart 39 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 36 – Total debt / Total assets

Global Autos - Total Debt / Total Assets (%)

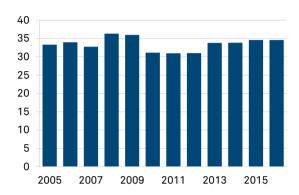


Chart 38 - Long term debt term structure

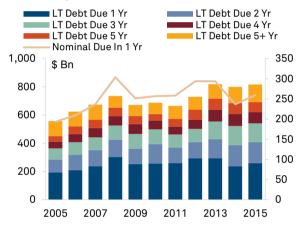
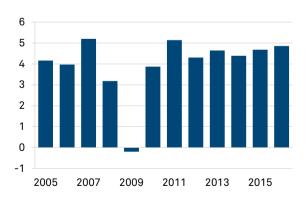


Chart 40 - Return on capital employed

Global Autos - Return On Capital (%)



Industry Top Trends 2017

Building Materials



Overview

- Ratings Outlook: Rating trends across the building materials industry remain mostly stable with an overall neutral bias, Asia-Pacific (APAC) excepted which displayed a negative trend over 2016. Still, positive momentum in the U.S. and the moderately recovering construction industry in Europe support mid-single-digit growth in those regions.
- Forecasts: Credit ratios are likely to improve modestly in 2017, reflecting improving operating leverage and moderately positive price movement. We believe that energy cost increases will limit further significant progress in margins.
- Assumptions: We still assume improvement in macroeconomic fundamentals in North America, with margin improvement across the board, notwithstanding increased energy prices and higher interest rates. In Europe, Middle East, and Asia (EMEA), we project a modest industry recovery, but any improvement in margins will likely be constrained due to still-tight price conditions and increased energy prices. In Latin America (Latam), we assume soft volume sales and still-leveraged capital structures. In APAC, we assume mild demand recovery and price stabilization; we also believe that debt reduction in the region will exceed cash flow improvement, as a result of trimmed investments.
- Risks: Overcapacity is still the major risk we see in the regions, with the exception of the U.S. In the U.S. and EMEA, we also see a risk of a relaxation of financial discipline, which could result in share repurchases or increased dividends. At the regional level, we also see risks related to an accelerated interest rate increase in the U.S., soft economic conditions in LATAM, and currency and raw material cost volatility in APAC. In the U.S., other risks include the uncertainty of future U.S. government policies regarding possible tax code changes, deductibility of interest expense for business, and the possibility of trade frictions that could make imports more expensive, dampening U.S. growth and slowing housing starts and construction activity as a result. Strict immigration controls could also exacerbate an already-tight labor market for construction.
- Industry Trends: We forecast further consolidation, particularly in the cement industry and, in the U.S., small regional manufacturers and distributors. Also, companies have trimmed investments in those regions with overcapacity, which may result in lower price pressure in the next couple of years. In most healthy regions, namely the U.S., we believe that companies will use cash flow to support growth or to return more funds to shareholders.

S&P Global Ratings

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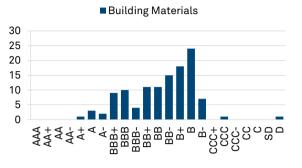
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Ratings trends and outlook

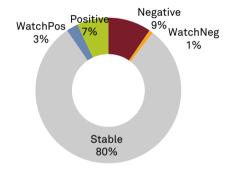
Global Building Materials

Chart 41 - Ratings distribution



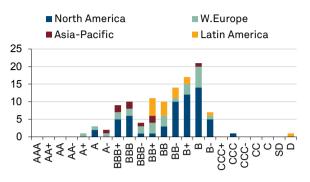
There are a high number of ratings in the 'B' category due to the large number of smaller highly leveraged issuers owned by financial sponsors.

Chart 43 - Ratings outlooks



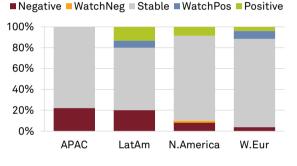
phase in both Europe and North America. Rating upside is limited,

Chart 42 - Ratings distribution by region



North America and, to some extent, western Europe, have the largest number of 'B' category ratings due to the prevalence of financial sponsor and private equity investment in the sector.

Chart 44 - Ratings outlooks by region



Overall, ratings are predominantly stable, because the sector is in the recovery We see a prevalence of negative outlooks in the LATAM and APAC regions, reflecting overall weaker macroeconomic conditions and significant notwithstanding positive sector fundamentals in the U.S. and Europe, because overcapacity compared with North America and Europe. of highly leveraged issuers owned by private equity.

Chart 45 - Ratings Outlook Net Bias

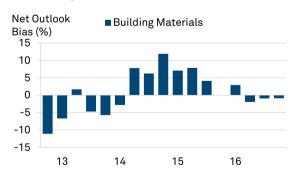
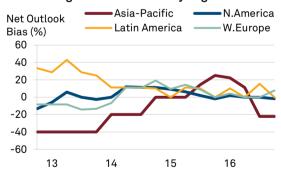


Chart 46 - Ratings Net Outlook Bias By Region

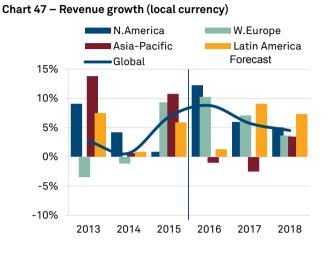


An overall stable and balanced outlook bias masks some divergence in the regions, with a worsening trend in the APAC and LATAM regions and a modestly improving trend in Europe.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

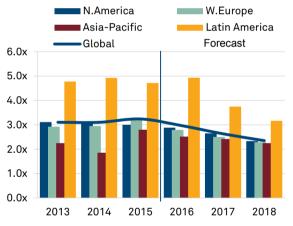
Industry forecasts

Global Building Materials



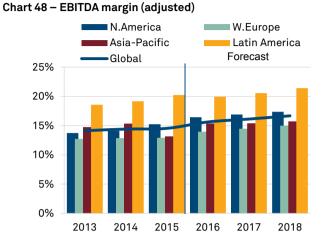
We expect mid-single-digit growth in most regions, with the exception of the APAC region.

Chart 49 - Debt / EBITDA (adjusted)



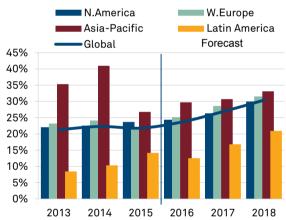
Increased EBITDA and capital expenditure optimization drive the improvement in leverage. For investment grade companies, we expect debt repayment to be less than 2016, and instead we believe companies may undertake acquisitions or increase shareholder remuneration. For financial sponsor-owned companies, we expect little change in leverage, because these companies should continue seeking out acquisitions or eventually pay dividends.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.



Overall modestly improving margins reflect increased operating leverage that offsets some recovery in energy prices.

Chart 50 - FFO / Debt (adjusted)



Key assumptions

North America

In the U.S., we expect 2.4% real GDP growth, 4.6% unemployment, and 1.3 million housing starts for 2017. We further expect mid-to high-single-digit growth in repair and remodel activity, continued choppy commercial construction activity, and steady to slightly elevated infrastructure spending due to stronger state budgets. Even in the event a large increase in infrastructure investment is put forth by the U.S. government, the benefit of such a program would not likely be felt until 2018 because it will take a year for projects to be identified and bid before monies are actually spent.

Flat-to-increased commodity costs, increased interest rates

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We expect commodity costs to rise modestly in the coming year(s), coming off of current low levels. While energy/oil-related costs have increased some as of late, they are still well below their 2014 and 2015 levels. We expect the impact to be slight overall, since many companies seem to have already implemented systems and cut costs in other areas and are now in a better position to accommodate commodity inflation. We also believe that interest rates will rise in 2017 and 2018, specifically that the Federal Reserve will raise interest rates three times in each year. Over the next 12 months we expect this to trigger refinancings, even for companies with maturities longer than three/four years

Improved margin across the board

As overall pricing environments continue to improve, we expect to see further margin expansion for many of our issuers, but not as robust as 2016. We do believe this trend will improve cash flow generation and provide companies the opportunity to improve balance sheets via debt repayments or capital improvements. Along those lines, we believe improving operating performance of companies will help keep--if not hasten--the pace of merger and acquisition activity in the building materials sector as acquirers seek opportunities to consolidate competition in certain fragmented segments (e.g., distribution, windows) or to improve geographic diversification or add to product lines. We expect such activity to be more pronounced among investment-grade issuers, but we do expect speculative-grade names (especially those owned by private equity) to consolidate in several subsectors such as windows and distributors. Possibly slowing this trend down is the prospect of an increased purchase multiple for targets in the sector.

EMEA

	2017 to be another steady year
1	Our forecasts suggest that in 2017 the eurozone construction sector will continue to follow a rather modest recovery path, but other markets that are important for some EMEA issuers, such as Turkey, South Africa, and Russia will remain sensitive to geopolitical risks. We expect eurozone construction output to increase by about 2% a year in 2016-2017, supported by real GDP growth of about 1.3%-1.4% and continued accommodative monetary policy by the European Central Bank (ECB). Low interest rates and cheaper mortgages improve home affordability and attract first-time buyers to the market. An inflow of refugees has also bolstered housing demand in some countries (e.g. Sweden).
	Pricing conditions remain tight
2	Although we expect to see construction activity increase, pricing conditions for heavy materials producers remain tough due to overcapacity, mainly in emerging markets. This overcapacity is especially relevant for cement, ready-mix, and aggregates producers, and often stems from excessive investment by companies over the past several years. We have also observed overcapacity in some developed markets, such as Italy, where construction activity and cement consumption has yet to pick up. That said, we expect continued consolidation in the industry and optimization efforts by larger firms to help reduce overcapacity over the next two years, which could lower price competition.
	Rising fuel and energy input prices could constrain margins
3	We believe that energy costs have bottomed out in 2016. Given the recent increases in oil and coal prices, we are already assuming an increase of energy costs in 2017, which could be 7%-9% in some regions. Given that the current market conditionsspecifically, very low consumer inflation in developed countries and significant production overcapacity in several developing marketslimit companies' ability to increase prices, this will likely affect companies' margins unless they implement actions to significantly increase energy efficiency.

Latin America

	Mild top-line growth
1	Revenue growth measured in U.S. dollars would continue to be affected by soft volume sales and the strong dollar. In terms of volume sales, we expect some recovery in 2017; however, low commodity prices will continue to create budgetary constraints for governments and limit their ability to allocate incremental public resources for infrastructure development. Also, high inflation, increasing unemployment rates, and lower credit availability would pressure household income, leading to a decline in demand for housing. However, we see the geographical diversification (outside Latin America) of some of the major companies benefitting top line growth. The leading market position of some companies could also help to bolster sales in 2017, since they enjoy a strong bargain power with price accretion.
	Profitability will hold
2	Latin American cement producers have been posting higher margins than those of global peers, mainly as a result of competitive cost structures and pricing power. We expect EBITDA margins to trend toward the 20% area in 2017, which would be supported by ongoing cost-control initiatives amid lower demand, such as shuttering of less efficient plants and logistics structure optimization, as well as the ability to overcome inflation costs by passing them through to end consumers.
	Leveraged capital structures despite debt repayments
3	We expect companies to continue reducing debt in 2017. Debt reduction will be supported by strategies to contain investments and raise cash through the sale of noncore assets to preserve liquidity. We expect the weighted average net debt to EBITDA to drop below 5x and weighted average funds from operations (FFO) to net debt to exceed 15% in 2017. We continue to see mismatches between dollar-denominated debt and local currency-denominated cash flow generation as a potential risk for smaller and weaker credit profile cement companies.

Asia-Pacific

	Stable year amid mild demand recovery
1	In line with our GDP growth forecast for Asia-Pacific countries, we believe moderate growth of infrastructure and property construction in the region will support modest demand recovery for building materials. We expect China's cement demand to stay in the low single digits, predominantly backed by infrastructure growth. In Korea, Japan, and Taiwan, we expect flat prices and stable profit margins as a result of the mixed effects of a property market slowdown, raw material cost volatility, and positive contribution from high-margin products. We forecast flat conditions for Australia's building materials industry as housing starts taper off following strong growth in past years and infrastructure spending dips, especially in the energy sector.
	Prices are stabilizing
2	In most of APAC, we see a stabilizing price trend due to a demand recovery. We expect overcapacity to constrain pricing improvement in some regions, like China. We didn't see a large capacity retirement in the past few years; however, self-disciplined production control between regional players helped to maintain prices.
	Deleveraging overweight cash flow improvement
3	Due to overcapacity, building material players in Asia-Pacific have trimmed investment and optimized cost structure. We expect leverage ratios, such as debt to EBITDA and FFO to debt, to moderately improve in 2017 (see charts 9 and 10). Our base-case assumes debt reduction will exceed cash flow improvement for building materials and forest products. In addition, we expect capital expenditure to decrease, lowering leverage.

Key risks and opportunities

North America Accelerated interest rate increases Should a hawkish Federal Reserve raise interest rates too far or too fast, companies could find themselves less able to facilitate investment opportunities as their cost of capital rises. This could also threaten to lower the pace of acquisitions in the space, notable among private equity-owned companies, where high levels of debt are often employed. Finally, a steep rise in rates could derail end market growth by pricing out potential homebuyers and reducing home improvement spending. Changes or uncertainty in the tax code, trade agreements The loss of the tax-deductibility of debt interest would almost certainly raise financing costs for companies across all industries, including building materials (but possibly more than offset by a general reduction in the corporate tax rate). Private-equity-owned companies could be acutely 7 affected, because the loss of interest deductibility could raise borrowing costs and required return on investment hurdles, particularly in a rising rate environment. For companies that import components or products, heightened trade tensions with countries such as Mexico and China could raise costs and reduce margins. Even if not a direct importer, the impact of higher costs on the consumer of imported products could reduce income available for home improvements and other discretionary spending. Too high acquisition multiples As the recovery cycle catches steam and sellers of companies demand higher multiples, acquirers will be forced to search for other avenues to invest their cash. For investment grade issuers, share repurchases, dividends, or debt repayment would be likely candidates, in addition to internal investments. However, the potential slowing of merger and acquisition activity overall could thwart further consolidation in the space and reduce future potential synergies and cost efficiencies.

EMEA

	Overcapacity and emerging market exposure
1	Several of the large Europe-based multinationals at the top end of the companies we rate, specifically large cement producers, have a significant presence in emerging markets where we have identified a production overcapacity and price pressure. Should an economic slowdown in these markets slow the pace of construction activity, prices would come under significant pressure. Further devaluation of emerging market currencies against the U.S. dollar or euro could also depress numbers, increasing local or regional geopolitical risk
	Political risks and Brexit
2	Europe is grappling with a patchy economic recovery and Brexit. The U.K.'s lengthy and complicated exit from the EU could erode consumer confidence in the U.K. and continental Europe, holding down the pace of construction. That said, the effect on the building materials sector would be delayed, especially for electrical equipment that is used later in the building process.
	Relaxed financial discipline
3	Relaxed financial discipline on the back of higher shareholder pressure for remuneration has become key risk for 2017. In our view, more generous shareholder distribution may slow down companies' deleveraging plans following an acquisition. For example, in November 2016, LafargeHolcim announced that it will pursue a more generous dividend distribution and a share buy-back program beginning in 2017; in our opinion, this may mean the company will reduce leverage more slowly if operating performance deteriorates suddenly in its key regions.

Latin America

	Overcapacity
1	Relatively low utilization rates among most Latin American cement makers could weigh on operating efficiency. We estimate that utilization rates in Brazil will remain at about 60% in 2017, well below the 75% before the country's economic downturn. Mexico is the second-largest market in the region, with about 40 million tons in cement sales and 61 million tons of installed capacity, while Peru's cement market has an installed capacity of 14 million tons and volume sales of about 10 million tons. Colombia is probably one of the countries with highest utilization rates, exceeding 75%.
	Delays in investments
2	High market volatility over the past 12 months has increased uncertainty on economic growth prospects for the region. Investment plans in some countries could be placed on hold and in some cases investors would move forward only after such market volatility dissipates. Low near-term investments would curtail the development of residential, industrial, and commercial projects, and undermine volume growth.
	Soft economic conditions
3	In 2017, we estimate annual GDP growth in the region of about 1.7%, and we consider that a 100 basis point (bps) decline in economic activity would result in at least a similar impact of 100 bps on volume growth expectations. In Brazil, for instance, we expect another difficult year in the cement industry, and we estimate negative volume growth in 2017. Also, despite the gradual decline in interest rates in that country, which remain at double digits, other factors such as inflation and unemployment continue to drag household leverage and disposable income, constraining demand prospects and limiting companies' ability to pass on inflation to clients. In Mexico, a cooling economy reflects heightened risks from changes in trade dynamics with the U.S., as well as still-low oil prices that reduce government nontax revenues and weak consumer confidence. All this translates into a GDP growth forecast of only 1.8% in this country.

Asia-Pacific

	Overcapacity
1	In our view, continued overcapacity remains a short-term risk for the building materials sector, particularly in China. We do not expect new capacity expansion for most companies, but industry consolidation could dampen profitability and amplify liquidity risks for small-to-midsize players.
•	Currency risk
2	Foreign currency risk is another risk in 2017. Appreciation of the U.S. dollar will burden borrowers with U.S. dollar-denominated debt and constrain raw material importers.
	Volatile raw material costs
3	Commodity price volatility could apply pressure to building material players' profitability. For instance, the coal price hike in the second half of 2016 largely eroded clinker and cement producers' profit margins. In our view, cement producers with an effective cost structure or those that can continue to reduce production costs may be able to offset or reduce the impact of raw material cost increases.

Industry developments

North America: further consolidation and more acquisitions funded by improved cash flow.

The North American building materials space still seems to have room for more consolidation, particularly in small regional manufacturers and distributors, aggregates (as has been the case for several years now), and windows.

On the investment-grade front, large companies will continue to search for acquisition targets to expand their product portfolios as well as their geographic diversity. With leverage already reduced to the lowest levels in years and cash balances building up, they are only left with a few options to invest cash (internal investment, acquisitions, or returning money to shareholders). As acquisition targets demand higher multiples, there is the potential for greater share repurchase and dividend activity if companies cannot find reasonably priced acquisition candidates. For the speculative grade issuers, most of which are owned by financial sponsors, we expect the already rapid rate of acquisitions and consolidation of smaller companies to continue. However, if interest rates rise more than expected, acquisition activity could be slowed due to higher debt costs.

EMEA: industry consolidation continues, particularly the cement sector

The European cement market has consolidated further since the heavyweight merger of Holcim and Lafarge in 2015. In October 2016, **HeidelbergCement** completed the acquisition of **Italcementi**, creating the second-largest global player. Both consolidated groups divested assets to comply with competition authority requests or to protect the combined group's credit metrics. These assets, in turn, have strengthened the market positions of the players that acquired them. For example, Ireland-based **CRH** acquired most of the assets that LafargeHolcim disposed of, and Italy-based **Cementir** has acquired Italcementi's assets in Belgium.

Some small cement producers are merging or absorbing assets from distressed companies, especially in more-fragmented markets such as Italy. Similar consolidation is taking place in other niche and specialty areas. Some of our rated issuers have previously demonstrated their appetite for midsize acquisitions of up to €100 million, if the right opportunities present themselves. Some issuers are following emerging markets such as Brazil, because opportunities may arise to acquire recently built, technologically advanced plants at much lower than usual multiples because weak local market conditions have distressed their owners.

In our view, consolidation could increase pricing discipline and trigger a modest reduction in the supply-and-demand imbalance in some cement markets. We anticipate that future acquisitions are likely to involve asset divestments or asset swaps aimed at achieving streamlined and optimized

country positions, satisfying competition authorities' requirements, supporting processes to reduce debt, or financing more-generous shareholder remuneration. For example, in July 2016, **LafargeHolcim** announced a further Swiss franc (CHF) 1.5 billion asset disposal plan to be completed in 2017, on top of the CHF3.5 billion in divestments it implemented in 2016, and large part of the proceeds will finance more-generous shareholder remuneration.

Latin America: uneven risks in the region during 2017

Size and scale are key for the cement producers and have spurred consolidation over time among Latin American players. A high operating efficiency by minimizing production and other operating costs and embedding flexibility in the cost base (i.e., a higher percentage of variable costs) may bolster profitability and cash flow over the business cycle. In each of these countries, the largest cement producers' dominant market position historically increased their efficiency, boosting cash flow generation. However, we expect low utilization rates among most Latin American cement makers as the likely soft demand weighs on their operating efficiency. Higher inflation and unemployment rates could hamper the companies' ability to pass on cost increases to customers. Nevertheless, in our view, Mexico's cement producers, compared with their regional peers, benefit from the more balanced supply-demand dynamics.

In general, we consider that a 100-basis-point (bps) decline in Latin America's GDP would result in at least a similar impact on cement volume growth because the industry is vulnerable to country risks. For example, low commodity prices have reduced governments' nontax revenues. As a result, lower government infrastructure spending could hurt the financial performance of domestic cement producers amid 2017 budget cuts for investments. Lower government revenues add to the risk of public budget execution over the next political cycles in countries like Brazil, Mexico, and Colombia.

Overall, we believe the main risks for the region are a further drop in economic growth prospects, potentially lower government spending, and high interest rates. The latter, along with increasing unemployment, hinder mortgage and refinance activity and take a toll on household leverage.

Asia Pacific: building materials sector to remain stable amid mild demand recovery

We see an improvement and stabilizing trend in 2017 despite the negative bias, which reflects the effects of some companies' weakened debt and interest serving capacity in 2015. In our view, downstream demand for building materials in Asia-Pacific will pick up over next 12 months, thanks to infrastructure projects and property market growth, particularly in China. We anticipate that key risks include foreign exchange losses, higher raw material costs, and some companies' aggressive investment appetite.

More specifically, for China's building materials sector, we expect production volume to remain subdued in 2017. Infrastructure recovery and property industry growth will fuel demand growth. We believe the increase in approvals on infrastructure projects led by the government and the government's **"One Belt, One Road" (OBOR)** initiative will underpin a pick-up in new starts in the coming quarters. Supply curtailment remains a long-term benefit for supply-demand equilibrium and price recovery. However, small players may stay under financial pressure and struggle in the industry consolidation. Large companies, on the other hand, are leveraging economic scale to cut costs and looking to form alliances on pricing to survive competition. We expect liquidity for most companies in Asia-Pacific to remain adequate. Companies with aggressive capital spending or heavy reliance on short-term financing may face near-term liquidity risk.

Financial policy

North America: As discussed, investment grade issuers have low leverage on a relative basis, so seeking outside investment opportunities would seem to be priority one, with share repurchases and dividends being secondary strategies. What may become key in the discussion are initiatives by the new Trump administration. The impact of tax on imports/tariffs and any retaliatory measures taken by trading partners is one area to focus on, because this could add significant costs. While a cut in corporate tax rates would add more to the bottom line, the possible loss of the interest deduction would have an opposite, but in our view, not totally offsetting effect. A tax holiday on the repatriation of foreign cash is another item on the table, because companies with cash overseas would likely bring it back to the U.S. for investment.

EMEA: We expect a general deleveraging trend across the building materials sector because of some market recovery in Europe, price stabilization in some emerging markets, and strict control on capital spending. We continue to monitor companies' financial discipline, on the back of higher shareholder pressure for remuneration, which may put pressure to ratings.

Latin America: Financial policy will continue to focus on deleveraging and protecting liquidity. We do not expect high M&A activity; the execution of major share repurchase programs; nor the expansion of capital investments, which would allow companies to use cash flow generation (both from operations and asset sales) for debt repayment. We would also expect companies to build on cash reserves to preserve liquidity, and, when market conditions permit, we anticipate liability management to mitigate potential refinancing risks.

APAC: We expect a general deleveraging trend across the building materials and forest products sectors because subdued market conditions across Asia will keep a lid on expansion plans for most companies. For some players in the sector with aggressive acquisition appetite, capital management remains under control but rating headroom has reduced. Disciplined financial policies and capital spending curtailment support our base case and stable outlook for the building materials sector.

Under Standard & Poor's policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Cash, debt and returns

Global Building Materials

Chart 51 - Cash and equivalents / Total assets



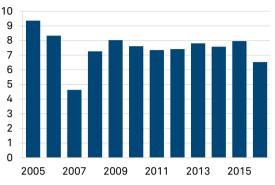


Chart 53 - Fixed versus variable rate exposure

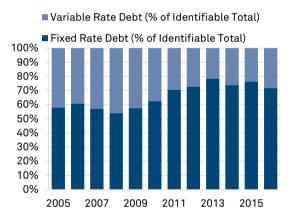
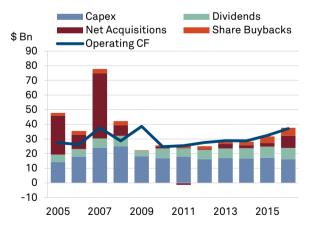


Chart 55 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 52 – Total debt / Total assets

Global Building Materials - Total Debt / Total Assets (%)

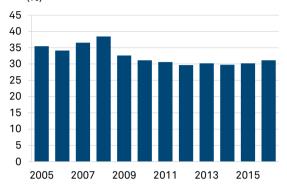


Chart 54 – Long term debt term structure

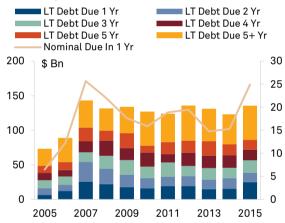
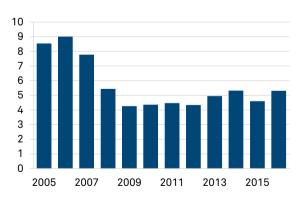


Chart 56 – Return on capital employed

Global Building Materials - Return On Capital (%)



Industry Top Trends 2017 Capital Goods



Overview

- Ratings Outlook: We maintain a negative bias in the global capital goods sector, where about 23% of ratings have a negative outlook. 2016 was marked by the most rating downgrades since the financial crisis, as the capital goods sector faced weak end markets related to commodities. Ratings will remain under pressure, particularly for companies with large exposure to commodities-related end markets. However, 70% of ratings on companies in the capital goods sector have stable outlooks and we expect the pace of downgrades could ease toward the end of 2017.
- Forecasts: A slight recovery in oil prices and most other commodities is alleviating
 pressure on companies' revenues. On aggregate, we expect the sector's earnings to
 somewhat improve and credit metrics to slightly strengthen. However, ratings continue
 to be pressured, with rating headroom reduced for many industry players.
- Assumptions: The capital goods sector in the U.S. will profit from solid macroeconomic growth and potential upside from an increase in infrastructure spending. We expect a slower recovery in Europe where many companies continue to focus on cutting costs, as modest economic growth and political uncertainty are dampening investments. In China, we expect the current lower economic growth rate to persist in medium term. The stabilization of commodity prices and the macroeconomic environment should present scope for some firms to increase their revenue base.
- Risks: Elections in key eurozone countries present event risk and could lead to systemic uncertainty and lower investment levels in Europe. In the U.S., greater-than-expected interest rate increases could potentially lead to rising borrowing costs and a strong dollar, constraining U.S. companies' profits. While economic growth in Asia-Pacific (APAC) is steadying, there remains risk of excessive credit growth in China and uncertainty around new U.S. economic policies affecting exports.
- Industry Trends: Industry dynamics are shaped by the low commodity price environment, which continues to affect companies with exposure to markets related to oil &gas and metals & mining. The industry focus remains on optimizing the cost base, with targeted M&A to strengthen core business areas. Especially in EMEA and APAC, we assume companies will preserve their credit metrics by curtailing capex and M&A expenditure. We expect financing conditions to remain supportive for well-performing key players.

S&P Global Ratings

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Ratings trends and outlook

Global Capital Goods

Chart 57 – Ratings distribution

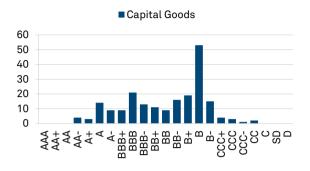


Chart 59 - Ratings outlooks

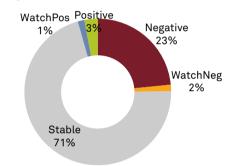


Chart 58 – Ratings distribution by region

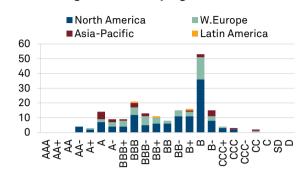


Chart 60 - Ratings outlooks by region

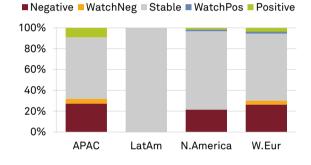
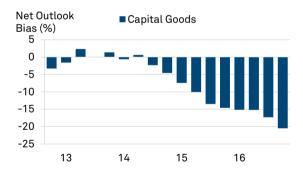
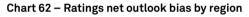
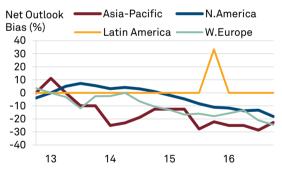


Chart 61 – Ratings outlook net bias







Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Since mid-2014 when oil prices started to plummet, we have downgraded many capital goods companies. This negative ratings momentum is likely to persist because of the low-growth, low commodity price environment. In 2016, there were more downgrades in the capital goods sector than in any given year since the Financial Crisis. However, **ratings in the capital sector should remain somewhat steady** in 2017, given that 71% of all rated companies have stable outlooks.

Nevertheless, a clear negative bias in outlooks persists. Notable rating actions during 2016 include the downgrades of General Electric (AA-/Stable/A-1+), Pentair (BBB-/Stable/A-3), Dover Corp. (A-/Negative/A-2), Joy Global (BB+/Watch Pos/--) and Toshiba (CCC+/Watch Neg/C). Furthermore, we revised our outlook on Caterpillar (A/Negative/A-1) to negative from stable. Other global industry players such as Honeywell (A/Stable/A-1), Hitachi (A-/Stable/A-2), Komatsu (A/Stable/--), Siemens (A+/Stable/A-1+), ABB (A/Stable/A-1), thyssenkrupp (BB/Stable/B), and Schneider Electric (A-/Stable/A-2) held their ratings as well as outlooks.

Industry forecasts

Global Capital Goods

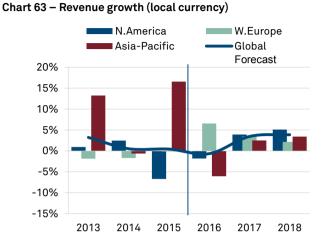
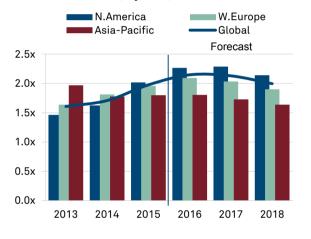
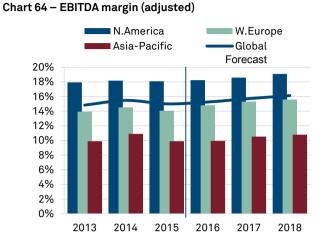
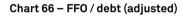
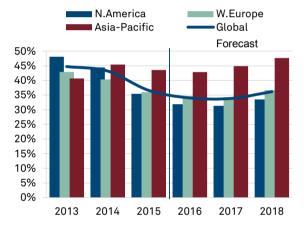


Chart 65 - Debt / EBITDA (adjusted)









Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

For the capital goods sector globally, we expect a modest recovery in revenues and operating profit in 2017, as well as a slight improvement of credit metrics from 2016 levels. We expect the partial recovery of commodity prices, as well as our base case of a moderately supportive macroeconomic environment, to favorably influence revenues. This positive effect is most pronounced in the U.S. compared with EMEA and APAC.

We expect EBITDA margins to continue to improve as a result of the expected topline growth and costcutting measures implemented by a large majority of the largest industry players. We forecast that our key credit metrics, adjusted FFO to debt and adjusted debt, will modestly strengthen as we expect companies to refrain from large scale debt- and cash-financed acquisitions, and we assume no further downside related to pension liabilities on the back of the current rising interest rates. Overall, we observe that ratio headroom has reduced for most of the industry players as a result of the adverse operating environment of recent years.

Key assumptions

Capital Goods

7

Improving (but uncertain) macroeconomic conditions

Global economic growth remained soft in 2016 but we expect it to pick up in 2017, driven by emerging markets and developing economies. Key expectations for 2017 include inflation returning to the eurozone, higher interest rates following the December FED rate hike, a stronger U.S. dollar and a persistent slowdown of growth in China. However, 2017 is surrounded by macroeconomic uncertainty and event risk around the new U.S. administration's economic and fiscal policies, elections in major eurozone countries, and the negotiated exit of the U.K. from the EU. These macroeconomic events could directly impact the capital goods sector, as earnings are derived from end customers' capital expenditure, which is in turn linked to the broader economic climate.

Commodity markets stabilize but remain weak

Although commodity prices have somewhat recovered over the course of 2016, we expect that they will remain weak in 2017. We believe that the price of oil (West Texas Intermediate) reached its bottom in late 2015 and we have increased our forecast to \$50 per barrel for 2017. Despite more balanced production **volumes** we expect upward price moves for oil to be limited, as there are persistently high levels of crude and oil product inventories. Conditions in the metals and mining sector have improved, but we expect pricing and production volumes to remain under pressure, which is not likely to support significant new equipment orders. Our projected level of commodity prices supports a gradual recovery of the capital goods sector, but remains challenging for companies in the industry, especially those exposed to the oil and gas industry.

A focus on restructuring and cost cutting

Weakness in several important end markets has made it difficult for many capital goods companies to organically grow their businesses. Over the past years, companies' strategic focus has shifted toward an environment of restructuring and cost-cutting to counteract pressure on margins resulting from lower volumes. This is likely to persist over the course of 2017. However, expected improvements in both macroeconomic conditions and commodity prices for 2017 could leave many companies some breathing space for increases in capex as well as top-line revenues.

Key risks and opportunities

Capital Goods

Although not our base case, in Europe there is a plethora of political risks that could upset the economy and the capital goods sector: Elections in major eurozone countries could present a real threat to the EU and there is uncertainty regarding what the implementation of the Brexit will look like. In the U.S., the newly elected president will likely bring some tailwind for capital goods companies in the form of a simplified tax code and an increase in government spending. However, there is significant uncertainty around the U.S. economic trade policy. Potential tariffs and other protectionist measures could prevent companies located in Europe and APAC from benefitting from these opportunities and soften global trade.

An increase in U.S. infrastructure spending is driving demand

The proposed \$1 trillion, 10-year spending plan on U.S. infrastructure by the new U.S. administration is a clear positive for issuers in the capital goods sector globally, should it be realized in the form currently envisaged. An investment of this magnitude in the country's water grids, security infrastructure, roads, and telecommunications is likely to create thousands of jobs in the public and private sector and could increase demand for products from many capital goods companies. Although envisaged to commence in 2017, we expect the increase in infrastructure spending to fully come into effect in late 2017 and throughout 2018.
 Digitalization of manufacturing is a crucial long-term opportunity

"Industry 4.0" or the digitalization of products and the manufacturing process presents one of the greatest structural opportunities and challenges for capital goods companies in 2017 and beyond. We see substantial scope for manufacturers to enhance productivity through digitalized processes, especially for early adopters. Over the next few years, we expect Industry 4.0-related spending on R&D and new assets to squeeze some budgets and we see scope for some consolidation and M&A as companies expand their digital capabilities beyond their core competencies.

Industry developments

1. Macroeconomic environment: a slight (but uncertain) turn for the better

Strengthening U.S. economic growth and the expected gradual recovery of some commodity-based end markets should provide a relatively stable operating platform for U.S.-based capital goods companies in 2017. We forecast U.S. GDP growth to reach 2.4% in 2017 following an estimate for 1.6% growth in 2016, reflecting solid consumer fundamentals, a robust improvement in the job market, as well as a rebound in energy sector investments. We expect economic activity in the manufacturing sector to expand, supported by a recent increase in industrial production to 0.8% and an increase in the PMI index to 54.7 in December 2016, compared with negative 0.7% and 53.2 in November 2016, respectively. While there is optimism that policies from the newly formed government could propel economic growth, there are still many unknowns related to these new policies to factor into our forecast. However, any policy-related increase in real GDP will be likely to show up in late 2017 and 2018.

From a macro perspective, European capital goods companies still face a more challenging lowgrowth environment: We forecast the economic recovery will continue gradually and GDP will grow at 1.5% in 2017 (1.8% in 2016). We expect 2017 to mark the return of inflation to Europe as higher oil prices and depreciation of euro and the pound are pushing up prices. However, the ECB's monetary policy is likely to remain accommodative throughout 2017. For the capital goods sector, the weakness of both the pound and euro allows for cheap exports but this is mitigated by the softness in global trade. It is our expectation that, despite slower economic growth in Europe, the current macroeconomic climate will support a recovery of the capital goods sector, accompanied by low default rates, as issuers benefit from low interest rates and abundant liquidity in the market.

Following the interest rate hike of 25 basis points (bps) in December 2016 by the Fed, and assuming the economic momentum is maintained, we think there will likely be two or three more rate increases of 25 bps each in 2017. We think most issuers can absorb a moderate pace of interest rate hikes, given limited refinancing needs through 2018, but a sharper rate of increases could pressure liquidity or covenant compliance for weaker issuers. Under the moderate interest rate hike scenario, we expect steady access to capital markets to support potential M&A activity in the sector, especially in the U.S.

China's economic slowdown has contributed to more difficult operating conditions for many companies, especially in the APAC capital goods sector. A key assumption for the APAC region is the moderate slowdown of China's growth, expected at 6.4% for 2017. However, we continue to expect Chinese infrastructure spending growth to slightly exceed that of Chinese GDP at around 6.5%, as the Chinese government relies heavily on investment to sustain growth and create new employment.

2. Political uncertainties bring risks for Europe, opportunities for the U.S.

A number of elections in core eurozone countries (Netherlands, France, and Germany) could lead to systemic uncertainty should Eurosceptic party's further gain momentum. It is likely that Europe's ability to integrate immigrants into the labor market will shape the outcome of these elections and influence the political landscape in 2017. At the same time, the terms and timing of Brexit are still largely unknown. Uncertainty around these events is shaping the macroeconomic climate and we expect many firms to be reluctant to invest additional capital under such conditions in the short run.

In the U.S., after the election of a new president serving alongside a republican Congress and Senate, the outlook of a simplified tax code lowering tax rates and lower tax on repatriation of cash are potential positives for capital goods issuers. Since the details are as yet unknown and tax reform is complex, this could take longer than most expect. Increased spending in infrastructure resulting from government spending would be positive for the capital goods sector, driving demand for construction-and electrification-related fields. We also view this as a medium- to long-term opportunity, most likely starting to materialize toward late 2017.

Complete details of the new U.S. administration's trade policies have not emerged, but a protectionist stance that raises barriers to international trade, unwinds cost efficiencies from global supply chains,

and possibly imposes U.S. trade tariffs could hurt exporters and pressure revenues, especially for capital goods companies located in APAC. Furthermore, trade and tariff negotiation issues may impede capital goods companies that seek to benefit from opportunities arising from the rise in infrastructure spending in the U.S.

3. A mixed picture from end markets: weak commodities stabilize, U.S. construction is healthy, and global car sales slow

We expect that commodity prices will remain somewhat weak in 2017 but start to stabilize. Our current oil price assumption for 2017 stands at \$50 per barrel for 2017 (revised in December 2016 from \$45 per barrel), reflecting the agreements of OPEC and non-OPEC countries to cut production by roughly 1.8 million barrels per day. However, further upward movements in price might be restricted by persistently high levels of crude and oil product inventories.

Conditions have improved in some metals and mining markets, with iron ore prices recovering following stimulus measures by Chinese policy makers driving higher demand, while steel prices are improving despite capacity utilization remaining low. Conditions remain difficult for the coal industry because of competition from fracking technology that results in lower prices for natural gas, and because of environmental concerns in particular in Europe, eroding coal's market share. Furthermore, we expect a stabilization or positive trends for some commodities such as aluminum or copper. These improvements will relieve some rating pressure from companies with metals and mining exposure.

In the global auto sector, companies' profits are growing healthily. However, we see medium-term risks mounting. China, the largest car market in the world, is set to slow considerably in 2017. In the past few years, we observed double-digit growth rates. We expect this to considerably slow in 2017 and stabilize at 2%-5% per year over the coming years. Supported by still low gas prices and the cheap availability of credit, we expect car sales in the U.S. to plateau in the coming years. On a global level, we currently project global car sales to slow to 2% in 2017 from 3% in 2016.

We expect U.S. nonresidential construction to recover in 2017 with 3.0% growth following a contraction of 3.5% **in 2016**, largely due to a recovery in construction from commodity-related industries.

4. The focus on cost-cutting and restructuring continues to be important, but is slowly fading

Cost reduction has been crucial for many capital goods companies to mitigate the impact of revenue decline amid the cyclical downturn. Although more optimistic about the future, many companies continue their focus on restructuring and cutting costs. In particular capital goods companies with exposure to the oil and gas sector have radically cut costs, as oil and gas companies have not only been cutting capital expenditure but also operating expenditure. We believe that this focus will have to continue in 2017 as the macroeconomic climate is set to improve only moderately and commodity prices are only now starting to stabilize.

Similar to other companies around the globe, many U.S. issuers have implemented significant multiyear cost reduction programs that have helped them stem the decline in profit margin. However, their programs are largely complete--unlike those of many European peers--and if the expected recovery in the second half of 2017 does not materialize, profitability could come under pressure.

On a global level, we see a long-term trend of "on-shoring"--companies locating their production closer to end markets, often in the U.S. and Europe. This is a reaction to soaring wages in low-cost countries. The movement toward a more efficient digitalized production process is furthermore accelerating this development.

5. M&A activity: slow pick-up of activity, acquisitions to enhance technological capabilities

We expect capital goods M&A activity for U.S. issuers to be flat or rise modestly in 2017, given our expectations for a continued recovery in the sector, as some of the key commodity-based end markets to begin to stabilize. We expect issuers to look for acquisitions to enhance their market position, including technologies that can add value to the product offerings. Still, we expect

acquisition multiples to remain relatively high, which could slow M&A activity this year. We believe there is still some appetite for divestitures or spinoffs of business segments (particularly weaker performing segments), as companies continue to focus on their core competencies and improving margins. Acquisition activity increased in the final quarter of 2016 with GE (AA-/Stable/A-1+) announcing a transaction to combine its oil and gas assets with Baker Hughes, Parker-Hannifin (A/Negative/A-1) acquiring CLARCOR, and Siemens (A+/Stable/A-1+) acquiring Mentor Graphics.

We expect active M&A in 2017 for some established capital goods companies in APAC, to pursue global growth. However, there is a gap between major and minor players in the region. Most weaker players continue to cut costs to maintain profitability, leading to ongoing efforts by companies to protect their creditworthiness, such as curtailing capex, M&A, and returns to shareholders. This has resulted in operating and credit metrics broadly consistent with our existing rating expectations.

Financial policy

The financial policies of capital good companies in EMEA and APAC have been shaped by the uncertain operating environment: Whereas we see the major players continuing to return cash to their shareholders, in aggregate the growth in dividends and share repurchases was modest, and companies have continued to carry high cash balances. This helped protect credit metrics, despite a weak market environment. We do not expect a notable change toward more aggressive financial policies by major players in the current still-volatile environment. Furthermore, we increasingly see companies refinancing their debt at more favorable conditions as low interest rates persist but are expected to rise in 2017, especially for debt denominated in U.S. dollars.

Financial policies in the U.S. were slightly more shareholder friendly: Despite the uncertain outlook for the capital goods sector, investors have pressured companies for shareholder returns. Overall, we expect companies to retain a high level of liquidity, but we believe that securing funding for growth projects will become more challenging and expensive for those players with weaker earnings and a lower credit market standing.

Under Standard & Poor's policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Related Research

- Global Corporate Rating Trends 2017: Slight (But Uncertain) Turn For The Better, Jan. 16, 2017
- U.S. Capital Goods Companies Most Reliant On Commodities Face The Highest Credit Risks, April 6, 2016
- Industry Credit Outlook: Asia-Pacific Capital Goods Companies Will Endure Downward Pressure But Limited Capex Could Lighten The Load, Nov. 24. 2016
- Heavy Lifting Ahead For Asia-Pacific's Capital Goods Sector As China And Commodities Weigh Greatly, July 27, 2016
- Industry 4.0: How Digitalization Is Transforming The Global Industrial Landscape, Nov. 24, 2016
- New Sources Of Disruption Ahead For The Global Auto Industry, Nov. 3, 2016

Cash, debt and returns

Global Capital Goods

Chart 67 - Cash and equivalents / total assets

Global Capital Goods - Cash & Equivalents/Total Assets (%)

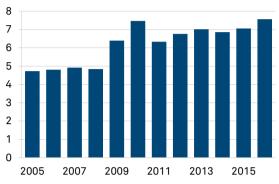


Chart 69 – Fixed versus variable rate exposure

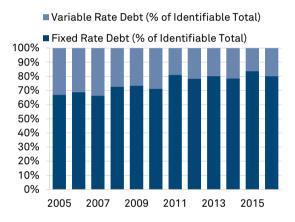
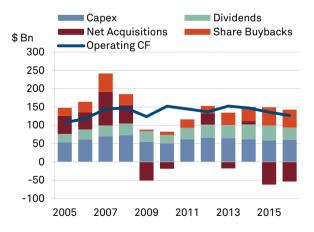


Chart 71 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 68 – Total debt / total assets

Global Capital Goods - Total Debt / Total Assets (%)

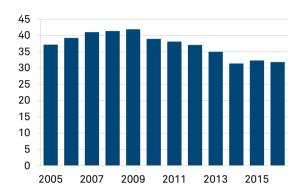


Chart 70 – Long-term debt term structure

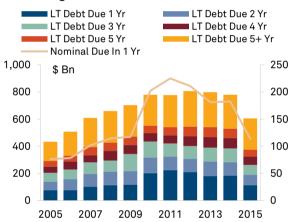
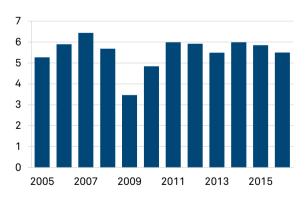


Chart 72 - Return on capital employed

Global Capital Goods - Return On Capital (%)



Industry Top Trends 2017 Chemicals



Overview

- Ratings Outlook: Rating trends across the global chemicals industry remain mostly stable, reflecting our base-case assumption for 2017 that risk from oversupply and volatile feedstock costs will remain balanced with steady global demand growth, moderating capital expenditures (capex), and gradual improvement in key credit metrics.
- Forecasts: We anticipate that sector revenue will grow in the low-single digits and profitability will remain broadly stable on average, supported by organic growth and companies reaping the benefits from cost-improvement programs implemented over the past few years.
- Assumptions: We assume a steady increase in oil prices in 2017 relative to 2016 with mixed results for global chemical producers. Price increases will likely benefit North American chemical producers using "shale gas" as an input, but it could be a disadvantage to chemical producers in other parts of the world that use oil-based inputs. We also anticipate steady demand growth supported by GDP growth in most markets around the world. We believe large increases in commodity chemical capacities in the U.S. will significantly pressure commodity prices and possibly margins, but only beyond 2017. Our base case for 2017 incorporates steady deleveraging at an aggregate level for the sector, but with notable exceptions at the individual company level.
- Risks: Oversupply through a wave of new capacity expected to hit the U.S. market later this year and weaker-than-anticipated growth in China could materially alter the supplydemand balance in the chemicals industry globally, while financial policies and continued high appetites for mergers and acquisitions (M&A) are key risks for the sector in 2017.
- Industry Trends: Recent oil price declines could temper some large investment plans in the U.S. petrochemical industry and in China's olefin-production projects, but we anticipate that capital spending will remain high by historical standards. We also think M&A activity will likely increase, including European firms that want to tap highergrowth markets, notably in the U.S.

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Ratings trends and outlook

Global Chemicals

Chart 73 – Ratings distribution

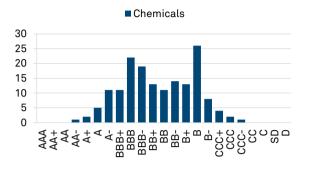
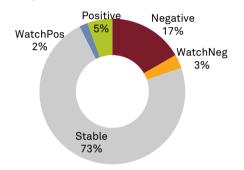
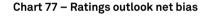


Chart 75 – Ratings outlooks





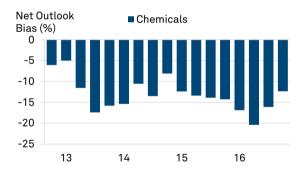


Chart 74 – Ratings distribution by region

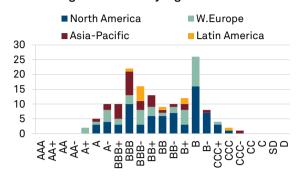


Chart 76 - Ratings outlooks by region

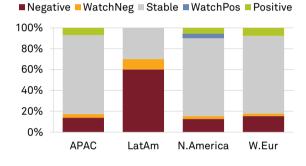
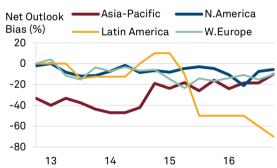


Chart 78 – Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

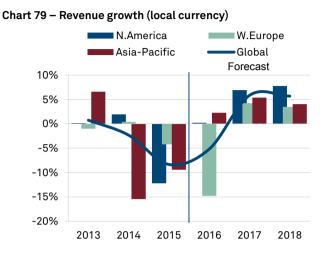
The ratings outlook globally is generally stable with nearly three-quarters of outlooks at stable. However, negative outlooks (about 20% of total outlooks) outweigh positive outlooks (7% including CreditWatch positive) in each of the major regions resulting in an overall negative net outlook bias.

A major contributor to the overall negative outlook pool is the Latin American region that has the largest negative net outlook bias due to negative outlooks on about 65% of our rated entities. The Latin America negative outlooks, in general, reflect risks related to weak currencies, and very low GDP growth in key countries, and their potential negative impact on earnings and cash flow.

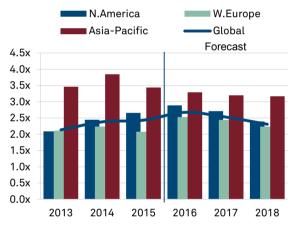
Negative outlooks in other parts of the world reflect company-specific risks arising from operating issues but also event risks such as M&A. Risks from M&A are especially pronounced in the North American and European regions. Still, with the exception of LATAM, the outlook is broadly stable with prospects of improved GDP growth that should support demand increases for most chemical companies. In addition, we anticipate that some subsectors--including titanium dioxide and agricultural chemicals--should exhibit less volatility than experienced in recent years.

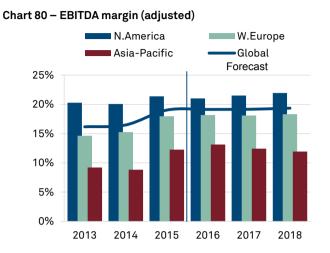
Industry forecasts

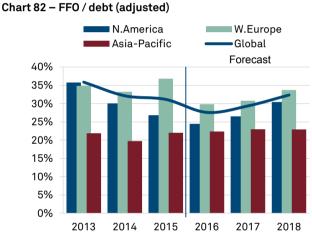
Global Chemicals











Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Western European chemical producers in particular suffered from declining revenues in 2016, largely driven by lower oil prices. Oil-based derivatives are key inputs for producers outside of North America in this sector and oil prices influence chemical pricing, particularly for many commodity chemicals. The impact on absolute profits varies across segments.

Overall absolute EBITDA for the industry increased moderately in 2016, and we expect EBITDA to be stable or grow in the low-single digits in 2017, supported by organic volume growth that remained healthy in 2016, and the beneficial impact of improved pricing in some regions. Margins are likely to remain broadly stable, supported by an unchanged supply-demand balance and companies reaping the benefits of cost-efficiency initiatives started over the past few years. In aggregate, we believe debt leverage might have peaked in 2016 and gradually decline in 2017, as internal cash flows and cash balances look sufficient to fund capex and dividends, while large M&A is the key event risk.

Our base case assumes positive global revenue growth in 2017 following several negative years. We expect the most marked revenue improvement from European companies driven by pricing increases in particular and some volume growth. Despite this, we don't expect margins to increase but believe global EBITDA margins will likely hold firm over the next couple of years. However, higher absolute EBITDA should contribute to strengthening debt leverage. We expect median debt/EBITDA and funds from operations (FFO)/debt ratios to strengthen in our base case across the globe. We don't anticipate across-the-board debt leverage improvement and our negative outlooks reflect risks including the potential for a weakening of debt leverage in some instances.

Key assumptions

Chemicals	
	Higher average oil prices
1	Oil is a key input for the global chemical industry and we expect rising prices to influence commodity chemical product prices, pushing them higher. Even in parts of the world such as North America where shale gas has more or less replaced oil-based inputs, chemical prices tend to be influenced by oil prices because in a commodity business, prices are set by the marginal producer, which usually rely on higher cost, oil-based feedstocks. Specialty chemicals generally are somewhat insulated from the effects of oil price increases, given that competition in specialty chemicals is based more on the product features than on price. We anticipate this will contribute to revenue growth in 2017.
	Large capacity increases in some commodity chemicals
2	We anticipate that beyond 2017, the impact of new capacity, especially in North America, will start to exert downward pressure on the prices of many commodity chemicals. We believe that capacity increases will exceed demand growth toward the end of this decade. We don't believe specialty chemicals will be hurt by this capacity. We also expect that the new capacity will displace at least some existing capacity.
	Steady demand growth
3	Global GDP growth should support demand growth for chemicals over the next several years, though capacity growth in some commodity chemicals could exceed demand growth. We expect GDP growth and related chemical demand to be unevenly spread across the world. China, which is the largest chemical market in the world, should see stable growth, though the prospect of bumpy GDP growth remains a risk. We also expect key end markets such as automobiles, general industrial, housing, and agriculture, some of which have exhibited volatility in demand in the recent past, to be more stable in 2017 relative to 2016. At the same time, we project growth in Europe to remain sluggish.
	Steady deleveraging
4	Overall, on an aggregate level, we anticipate a steady deleveraging and a gradual improvement in key credit metrics such as debt/EBITDA and FFO/debt. A key contributor to this deleveraging is an expected improvement in earnings and, in some cases, the phasing out of major capex programs, which should enhance free operating cash flow generation. However, we also believe there will be several exceptions to this broad general trend. In addition, M&A remains a key event risk given continued favorable financing conditions and limited potential for organic growth in some regions (e.g., Europe) or markets (e.g., agrochemicals and fertilizer).

Key risks and opportunities

Chemicals

Chemica	
	Oil price and oversupply
	In Asia, fast-rising oil prices, if they occur, are a major potential risk to sector profitability in 2017. Our price assumption for Brent is US\$50 per barrel for 2017about 10% higher than in 2016. A sharper-than-anticipated rise will increase naphtha prices, a major feedstock for chemical products in Asia and Europe, in particular, pressuring product spreads regionally.
1	North America is witnessing the prospects of a meaningful increase in petrochemical capacity, especially beyond 2017; the sector could benefit from the relatively recent emergence of shale gas as a globally competitive low-cost input. Many North American petrochemical producers have enjoyed a run of strong EBITDA over the past several years. We believe that the increased capacity over the next several years could offset the beneficial impact of potential tailwinds such as strong economic growth, and hurt EBITDA at some petrochemical companies. We believe that the supply-demand balance, which currently favors North American producers, will turn unfavorable over the next couple of years.
	For European petrochemical, we expect the first half of 2017 to be better than the second half, driven by gradually increasing oil prices in 2017 and a high heavy maintenance season, which could drive prices higher for many base chemicals in the first half of the year before a wave of new capacity is set to come on-stream in the U.S., which could lead to pressure on product margins that were healthy in 2015 and 2016.
	Demand and margin volatility
2	Volatility in margins is an inherent industry risk. Still, some key factors could contribute to greater- than-usual volatility. We highlight some of these factors here: Any slowdown in our China GDP growth assumption remains a major risk for the sector regionally, given that the country's pace of GDP growth has historically had a sizable influence on both the pricing of chemical products regionally and on market sentiment.
2	If the modest GDP growth we anticipate in Latin America weakens, it could hurt demand in 2017, which, when coupled with potential foreign exchange volatility is a key risk for this region.
	European diversified chemical players benefit from their exposure to higher-growth regions outside Europe, somewhat balancing the slow growth in the domestic market expected for 2017, exacerbated by the adverse headwinds from domestic political uncertainties and the fragility of the Eurozone's recovery.
	Mergers and acquisition-related debt, risk
3	Several North American and European chemical companies are participating in M&A. In Latin America, we also expect that some companies will pursue local and cross-regional acquisition opportunities. As a result, there's an increased likelihood of mounting debt leverage to finance these transactions or a general increase in integration and transaction risk. Some M&A deals could result in companies divesting existing assets or businesses for regulatory reasons, which also creates some uncertainty.

[

Industry developments

We expect operating conditions for the sector to be broadly stable overall for the next 12 months. The regional demand and supply balance continues to vary substantially across chemical products. But on the whole, we project regional demand to grow in the mid-single digits, in line with regional GDP growth.

We still expect product spreads to vary considerably across the different chains, with the polymer chain maintaining overall more positive outlooks and above mid-cycle spread levels through at least the first half of 2017. High legacy overcapacity in the polyester chain, most notably in China, will continue to constrain prices and spreads over the next 12 months.

Our assumption for Brent is US\$50 per barrel in 2017, about 10% higher than that in 2016. We think this price increase is unlikely to significantly hurt product spreads at producers using naphtha as a feedstock. Notably, overall product spreads in some parts of the world declined in the second half of 2016 following a rapid rise in Brent prices, though they remained above their long-term averages. Nevertheless, we believe any rapid increase in Brent prices resulting in meaningfully higher than our current base-case expectations, is likely to lead to rapid spread compression, especially for polymers. Oil price increases tend to favor North American and Middle Eastern producers that use gas-based feedstocks as an input and we expect these producers to benefit. However, eventually, the prospect of capacity increases in North America, mainly in 2018 and beyond, has the potential to more than offset these benefits.

Financial policy

M&A continues to raise questions about financial policies at some companies. The combination of relatively low interest rates, strong corporate balance sheets, and a subdued demand environment, have some companies looking to supplement stagnant organic growth with large M&A deals. The agricultural chemicals sector has been particularly ripe for consolidation, with many of the large players announcing transformational transactions. We believe the announced transactions could spur additional M&A because participants might need to divest certain businesses in order to clear regulatory hurdles.

The EBITDA multiples that have been paid for these acquisitions remain high by historical standards, with the purchase prices in the low- to mid-double-digit range (pre-synergies). The high multiples paid are typically funded with a significant debt component, which increases a company's vulnerability to earnings volatility and integration-related challenges, including the inability to fully achieve targeted cost synergies.

The tables below depict several of the large transactions announced in the chemicals sector, starting in November 2015.

Table 1 | Acquisition announcements

Acquirer	Target	Announcement date	Reported purchase price (USD billion)	Rating action taken on acquirer
L'Air Liquide S.A.	Airgas Inc.	17/11/2015	13.4	Ratings placed on CreditWatch with negative implications upon announcement, 2 notch downgrade from 'A+' to 'A-' following the closing
China National Chemical Corp. (Chem China)	Syngenta AG	03/02/2016	43.0	No rating action taken
Sherwin-Williams Co.	Valspar Corp.	20/03/2016	11.3	Ratings place on CreditWatch with negative implications
Bayer AG	Monsanto Co.	14/09/2016	66.0	Ratings placed on CreditWatch with negative implications.
Lanxess AG	Chemtura Corp.	25/09/2016	2.7	Outlook revised to negative.
The Mosaic Company	Vale Fertilizantes business from Vale S.A.	19/12/2016	2.5	One notch downgrade to 'BBB-'.

Source: S&P Global Ratings

Companies	Announcement date	Combined market value at time of announcement (USD billion)	Rating actions taken
			Ratings unaffected. Proposed transaction; no definitive
Praxair Inc./Linde AG	20/12/2016	67	agreement between parties yet.
The Dow Chemical Co./Dupont (E.I) De			Dow- placed on CreditWatch with developing implications
Nemours & Co.	11/12/2015	130	Dupont- placed on CreditWatch with negative implications
Agrium Inc,/Potash Corp. of Saskatchewan			Agrium-placed on CreditWatch with positive implications
Inc. 12/09/2016		27	Potash Corp Ratings affirmed

Table 2 | Merger announcements

Source: S&P Global Ratings

The rationale for large transactions has varied by company, with some of the key reasons cited below:

- To unlock significant cost synergies.
- The need for industry consolidation to potentially help firm up pricing (particularly in the global seed, agriculture, and fertilizer industries).
- To expand a company's geographic reach and provide a footprint in faster-growing regions.
- To diversify a company's product mix.
- To supplement subdued organic growth opportunities.

We expect 2017 capex to continue to moderate from record-high 2014 levels. Despite a recent pickup in oil prices, current prices remain well below 2014 levels, which erode the economics for building world-scale petrochemical plants. We expect that many of the projects currently under construction will be brought online eventually, but projects contemplated beyond those might not come to fruition. We also expect that shareholder rewards in 2017 will remain high, particularly in cases where companies are unable to identify attractive acquisition opportunities.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Related research

- S&P Global Ratings Raises Its Oil And Natural Gas Prices Assumptions For 2017, Dec. 14, 2016
- The Great Disruption: European Corporate Credit Outlook 2017, Dec. 13, 2016
- For U.S. Chemical Companies, Financial Sponsors And Strong Credit Usually Don't Mix, Nov. 30, 2016
- M&A Seeds Change In The Global Agricultural-Chemical Sector, Nov. 21, 2016

Cash, debt and returns

Chemicals

Chart 83 - Cash and equivalents / total assets

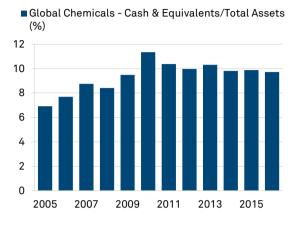


Chart 85 – Fixed versus variable rate exposure

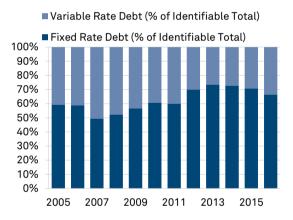
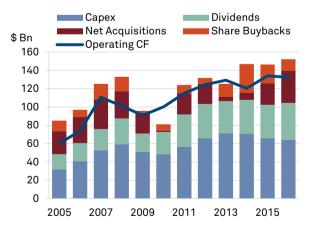
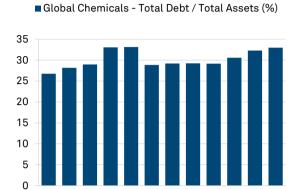


Chart 87 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 84 – Total debt / total assets



2009

2011

2013

2015

Chart 86 – Long term debt term structure

2007

2005

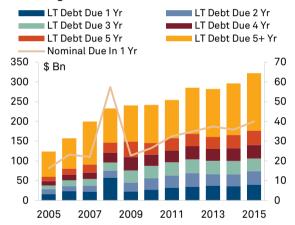
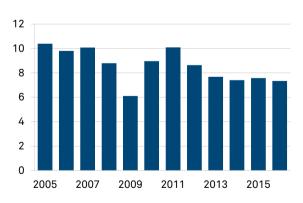


Chart 88 – Return on capital employed

Global Chemicals - Return On Capital (%)



Industry Top Trends 2017

Consumer Products



Overview

- Ratings outlook slightly negative: Rating trends will likely continue to be modestly
 negative in 2017. We expect rating actions to result from merger and acquisition (M&A)
 activity and managements' financial policy decisions as well as company-specific
 variations in operating performance, rather than widespread sector challenges. We have
 stable outlooks on the majority of the rated companies, reflecting the generally good
 cash flow generation capabilities of the companies within the sector.
- Revenue pressures continue: Organic sales growth should continue to be in the lowsingle digits, driven by price/mix. We attribute the softness in revenue growth to consumers' cautiousness, changing consumer preferences for certain products, and a shift in spending habits (i.e., increased spending on electronics and health care). We expect consolidation to continue in 2017 as companies look to augment top line growth and opportunities to drive out additional operating costs.
- Credit ratios and margins strengthen: Credit ratios are likely to strengthen slightly in 2017 as companies benefit from healthier cost structures and companies that made transformational acquisitions in 2015 and 2016 focus on deleveraging. Margins should improve because of companies' cost reduction initiatives and M&A synergies.
- Industry faces event risks: We expect M&A activity to continue in 2017, driven by companies' needs to generate top line growth (as organic growth is elusive), healthy balance sheets, and private equity sponsors attracted by the good cash flow generation capability of the sector. Geopolitical risks, changes in trade policies, and the appreciating dollar/depreciating sterling are also risks.
- Innovation, portfolio repositioning, and cost reduction are key: Companies will
 protect/grow market share by investing in their brands, product innovation, and
 repositioning their portfolios. Commodity tailwinds fade and companies will be laserfocused on lowering their cost structures.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.



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Global Consumer Products

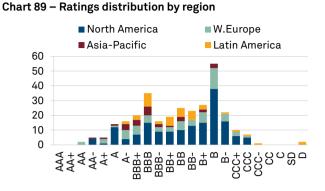


Chart 91 - Ratings outlooks by region

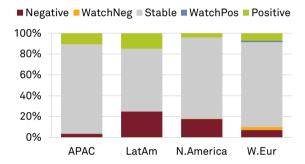


Chart 93 - Ratings net outlook bias by region

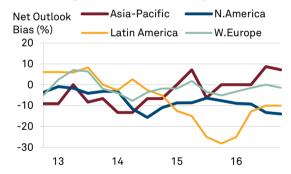


Chart 95 – Ratings outlook

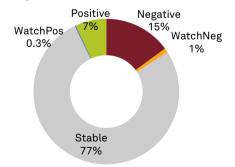


Chart 90 - Ratings distribution by sub sector

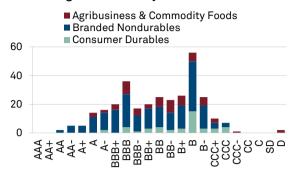
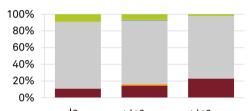


Chart 92 - Ratings outlooks by sub sector

■ Negative ■ WatchNeg ■ Stable ■ WatchPos ■ Positive



Agri & Commodity Foods Branded Nondurables Consumer Durables

Chart 94 - Ratings net outlook bias by sub sector

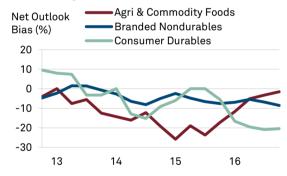
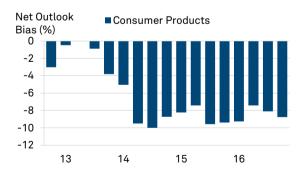


Chart 96 – Ratings net outlook bias



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

With more than 75% of outlooks stable, we do not expect many rating changes in the next 12 months. However, among the ratings with non-stable outlooks there is a pronounced negative bias, so any rating changes would likely be downgrades. Most of the negative outlooks reflect financial policy decisions and company-specific operating issues rather than industrywide conditions.

W.Europe

Forecast

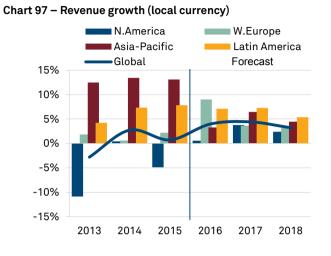
2017

2018

Latin America

Industry forecasts by region

Global Consumer Products



Global growth of low-single digits. Latin America is forecasted to have the fastest growth as it benefits from Brazil and Argentina coming out of recession achieving synergies from acquisitions. and companies passing on inflationary costs to consumers.

Chart 99 - Debt / EBITDA (adjusted)

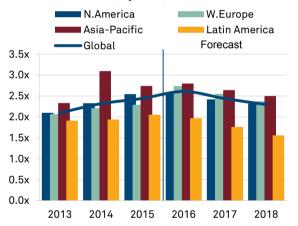


Chart 100 - FFO / debt (adjusted)

2013

Chart 98 - EBITDA margin (adjusted)

25%

20%

15%

10%

5%

0%

N.America

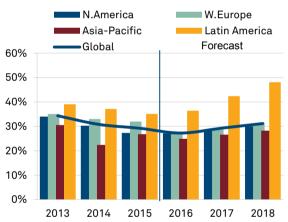
Global

2014

2015

2016

Asia-Pacific



Credit metrics are expected to strengthen through a combination of debt repayment and EBITDA growth. Historically, investment-grade companies have reduced share repurchases in an effort to restore credit metrics. Leverage in the sector rose in 2015 and 2016 because of large transformational M&A.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

	Consumer spending should hold steady
1	We expect U.S. economic growth to pick up moderately in 2017 from weak 2016 levels. There is a potential upside for growth as our baseline scenario does not incorporate President Trump's possible pro-growth policies. The outlook for consumer spending overall continues to be healthy as housing is still a source of strength and incomes are rising (but at a slower pace than last year). U.S. household net worth, which is at a record level, and the strong labor market, should also support consumer confidence and spending. We believe the consumer savings rate will decline modestly and offset the impact of rising oil prices. The confluence of the above should support sales growth in the sector, albeit at a lower-single-digit rate. The sector's growth rate will likely be below economic growth because of intense competition and continuing changes in consumer tastes and preferences.
	Margins are under pressure
2	Although our forecast calls for margins to slightly expand primarily because of the sector's focus on lowering its cost structure, there is risk to our forecast. The tailwind from lower input costs is fading, which has been a key factor for margin growth/stability for companies in the sector that have not benefited from M&A synergies. Moreover, there are no signs that sales growth in the sector will pick up any time soon given the intense competition in the sector and lack of opportunity to accelerate growth in emerging markets. In addition, U.Sbased multinationals will continue to face foreign exchange headwinds given the strength of the U.S. dollar and the potential for it to strengthen further when U.S. interest rates rise. Given the current environment, we believe companies will pursue acquisitions to generate scale efficiencies in an effort to strengthen margins. In addition, companies will pursue targets that geographically expand their footprint, add faster growing categories, and boost their digital capabilities to spur top line growth.
	Credit metrics should strengthen
3	We forecast credit metrics will strengthen over the next 12 months because of debt repayment. Leverage rose modestly in the sector in 2015 and 2016, primarily because of large M&A (e.g., the mergers of Kraft and Heinz, Reynolds and Lorillard, and Newell and Jarden, as well as Molson Coors' acquisition of MillerCoors). Following such debt-financed acquisitions, companies have reduced share repurchases in an effort to restore credit metrics. Furthermore, during periods of headwinds (i.e., foreign exchange), we have seen companies scale back share repurchases in order to preserve cash flow measures. Although we have not factored it into our forecast, we believe share repurchases as a percent of free operating cash flow, which has been below pre-recession levels, could rise if the U.S. government reduces taxes on the repatriation of the large amounts of overseas cash U.Sbased multinationals have on their balance sheets. This could cause leverage in the sector to remain at current levels.

Europe

Laropo	
	Slow growing economy
1	Despite geopolitical risks facing Europe in the form of Brexit and general elections expected in 2017 in France and Germany, corporate credit quality of European consumer goods companies is likely to remain resilient. After Brexit, our overall GDP forecast for the U.K. and for the eurozone has been lowered due to lower trade and business investments stemming from uncertainty expected in 2017. But we believe European consumer companies are resilient due to fundamentally good credit quality. We expect business lending rates to remain fundamentally low, capital expenditures by consumer goods companies to remain steady, and monetary and foreign exchange flexibility should help the U.K. to avoid recession.
	Return of inflationary environment without real wage growth
2	We believe that 2017 will see a return of inflation in the U.K. and the eurozone. Sterling depreciation versus the dollar and euro (with about one third of food being imported in the U.K.) is expected to raise import prices for European consumer durables and nondurables manufacturers. Headline inflation for the U.K. is expected to reach to about 3% for 2017the highest in the eurozonewhich would translate to higher input costs.
L	To avoid the havoc of 2008-2012 commodity price increases, nondurables and durables companies are likely to focus on tight cost management, zero-based budgeting, and supply chain efficiencies. Food price inflation will likely be passed on to the end consumers, albeit with a time lag and not in its entirety. Wages are unlikely to rise materially, which would lower consumer confidence, and growth would be driven by inflation, not volumes, in 2017 and beyond.
	Despite competitive landscape, margins remain resilient
2	Despite the tough competitive landscape, we expect EBITDA margins to remain resilient, and we forecast gradual improvement in leverage ratios across European consumer goods companies. Business had been focusing on M&A to maintain margins due to the tough competitive landscape. Financial policy decisions will likely dictate rating movements in most cases. M&A had been a key theme for 2016 for consumer goods companies in Europe, with total M&A for 2016 at more than \$150 billion versus \$28 billion in 2015. In the investment-grade space, companies have to decide on efficient use of cashwhether to reward the shareholders via dividends and/ or share buybacks, or to invest in future gains by accessing newer territories and new target markets.
3	Businesses in speculative grade have been front-loading and considering M&A activity more aggressively. We expect to see private equity-run companies changing hands to mitigate upcoming geopolitical risks.
	We expect the investment-grade companies to continue absorbing all of their free cash flow (FCF) into returns of cash to shareholders and bolt-on acquisitions. We cannot rule out large M&A due to the historically low global economic growth prospects, although valuations and return-on-capital rationale on those will be very controversial due to regulatory risks (such as antitrust clearance) and taxation. For these reasons, companies might consider external expansion in adjacent promising businesses.

Latin America

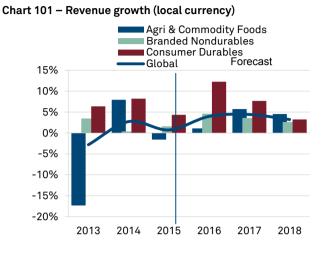
	Still sluggish growth
1	Slow economic growth should continue in Latin America, with an average GDP of 1.7% in the region in 2017. We foresee volatility and slower growth in Mexico following the U.S. election and potential impact in the trade between the countries. We forecast economic growth will turn positive in Brazil and Argentina this year, with Brazil's economy growing less than 1% and Argentina's 2.5%.
	Revenue growth among consumer producers in the region will follow their ability to pass on inflationary costs to consumers. Volumes should be flat to slightly positive as companies are still benefiting from commodities' exports and the region's sound participation in global trade of sugar and protein. In addition, Mexican companies' with overseas earnings will benefit from the depreciation of the peso.
	We forecast a gradual improvement in rating trends
2	We expect a gradual improvement in ratings trends amidst a more stable environment of credit and capital markets combined with a gradual improvement in macroeconomic fundamentals, mainly coming from Brazil. Furthermore, companies should be able to maintain relatively stable operating margins despite pressures from foreign exchange given that in recent years companies have controlled their leverage through concentrated cost and capital expenditure-cutting initiatives. Key challenges will remain high competition from multinational and regional players that continue to pursue growth, but in a much slower growth environment, which can compromise margins.
	Margins and cash flow improvements
3	We expect a gradual improvement in leverage ratios. We believe commodity processors will benefit from higher prices and food producers will enjoy more stable grain and input prices in their domestic currencies. Key challenges for the companies will continue to be foreign exchange volatility and the impact of it on debt and cash flows, as well as the ability to grow amid still low consumer confidence. Beverage and food companies will be challenged to pass on sugar and packaging price increases to consumers given the weak consumption environment; however, healthier cost structures and gradual reduction in interest burdens should drive a slight improvement in margins and cash flows.

Asia-Pacific

	Organic growth remains healthy, but varies across regions and sectors
1	Asia-Pacific's positive GDP growth will continue to moderately lift domestic consumption, and medium-term fundamentals remain solid. We expect sector revenue growth to vary from low (Japan) to mid-single digits (most countries in ASEAN and China) for the next 12 months. We also expect to see varying growth prospects for individual consumer product segments, especially in China. Growth in the food staple sectors might stay in line with our mid-single-digits forecast. However, we expect growth it the sportswear, health care, and medical related sectors to continue to beat GDP growth, given a lower penetration rate and consumers' increasing health awareness. While consumer sentiment in Asia-Pacific will stay weak amid a slowing economy, revenue growth could come from product upgrades, which increase average selling price (ASP), and higher product penetration.
	Intense competition continues to constrain margins
2	We expect overall profitability in the region to stay subdued for the next 12 months, mainly due to intense competition and weak-to-declining consumer demand as economic growth decelerates. Although product upgrades could help to push up ASP and support profitability, we expect spending or marketing and promotions to remain heavy, which will keep margins tight. We see limited room for further efficiency improvements but individual companies could still outperform the industry with successful product and marketing strategies.
	Debt-funded M&A drives growth and market consolidation
3	We expect market consolidation to continue, with overseas M&A rising, especially for Chinese corporate entities, driven by high market fragmentation or attempts to gain control over high-quality product sources or better brands. This trend, however, could stress companies' liquidity and financial leverage in the short term. It could also challenge companies' financial discipline, especially when the number of good acquisition targets increases. In the longer term though, consolidation could help to improve companies' brand image, market position, and profitability.

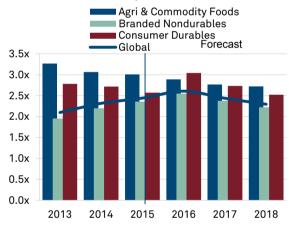
Industry forecasts by subsector

Global Consumer Products



Consumer durables should generate the strongest revenue growth. Companies will focus on product innovation to boost growth.

Chart 103 - Debt / EBITDA (adjusted)

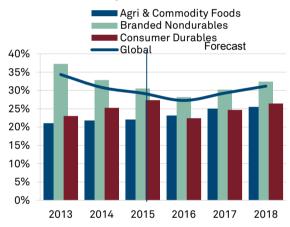


Branded nondurables should delever the most. We attribute this to companies returning to historical debt levels after transformational acquisitions.

Agri & Commodity Foods Branded Nondurables Consumer Durables Global Forecast Global 25% 20% 15% 10% 5% 0% 2014 2015 2016 2017 2013 2018

Margins in each sector are expected to expand slightly. Branded nondurables have the most lucrative margins in the industry.

Chart 104 - FFO / debt (adjusted)



Branded nondurables continue to generate high levels of cash flow.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Chart 102 – EBITDA margin (adjusted)

Key risks and opportunities

Packaged Goods

Active M&A to leverage cost structures

Weak organic sales growth continues, with large packaged food companies losing market share in certain categories to new brands that are more on trend with consumers. As a result, the manufacturers seek to revive growth by buying these new brands while continuing to expand capacities in emerging markets to tap volume growth. Larger M&A deals are possible with Kraft Heinz setting the precedent. With excess capacity in the industry in mature markets, there are opportunities to drive out additional operating costs. Despite an increase in debt tolerance, the strong cash flow profile of the large players remains generally supportive for deleveraging.

Margin enhancement and cost cutting a key ingredient

Industry players have stepped up their margin enhancement initiatives given the low growth environment, excess capacity in the industry, and pressure from activist investors. We believe that these cost savings will help protect operating margins as some raw materials costs (sugar, packaging) are rising again amid foreign currency volatility for global players, especially when sluggish volume growth makes price increases more challenging. With the revenue pressures and changes in distribution channels such as the increase in online sales, companies are also evaluating their trade and promotional strategies. All of these initiatives have resulted companies reviewing their entire supply chain and should drive greater industry efficiencies, leaving additional cash for reinvestments in the business, or for shareholder returns.

Managing brand and product portfolio to spur growth

We expect a portion of cost savings to be reinvested back into the products as companies innovate and renovate to meet consumer demands for more natural, healthy, and less-processed products. We see companies continuing to actively manage their portfolios on revenue growth and cash flow generation by brands/categories and allocate investment dollars accordingly. As a result, we expect divestitures and acquisitions to continue. In terms of product mix and price positioning, we observe that manufacturers pursue a premiumization of their product offering, notably to reduce pressure from private label and to improve price and mix.

Beverages

Taxation and government policies a modest margin threat so far

The U.S. has been the latest country to levy taxes on sugary drinks, albeit only locally so far in cities like Philadelphia and San Francisco. The last country to levy a national tax on sugary and high calorie products was Mexico. Although demand did bounce back with margins largely restored in Mexico after a temporary fall, an increase in legislators' willingness to levy taxes is an unwelcome development for the beverage industry (including possibly high-calorie beer and spirits producers too) that could pressure margins if companies can't fully offset the tax with pricing. Moreover, this risk is not contained in the U.S. or Mexico. For example, the U.K. government has also published draft legislation for a tax on sugar-sweetened drinks, which is set to begin from April 2018, while other countries, such as France, have levied taxes in the past and may do so again.

Volume pressure in core categories is a leak that requires constant plugging

Core carbonated soft drink volumes continue to decline in mature markets for the nonalcoholic beverage industry, while emerging market demand has slowed and is still recovering from recessionary conditions in key markets such as Brazil. Large-scale brewers in markets like the U.S. also continue to face volume declines in core national brands, particular in light beer, as the craft category continues to take share. The soft drink companies have been able to offset core volume declines by expanding into noncarbonated offerings and by repackaging into smaller portions with higher pricing and margins. This is a trend we believe can continue with some success for a few more years as much of their portfolios have not been repackaged. While repackaging is not a viable alternative for brewers, they continue to look to expand into faster growing markets and faster growing categories like craft to offset core product declines.

M&A is a key risk that limits balance sheet flexibility

With market valuations still high, we believe any large-sized M&A transactions would pressure leverage and rating flexibility. While balance sheets for most rated beverage companies (particularly spirits companies) are in fairly good shape, those that have completed recent M&A (such as Molson Coors and Anheuser Busch InBev in beer, or Dr Pepper Snapple and Coca-Cola European Partners in nonalcoholic), have taken leverage up to their downgrade triggers or at least pressured their discretionary cash flow. Heineken, for example, is contemplating the acquisition of Brazilian operations of Japan's Kirin Holdings Co. While we believe it has some leverage headroom, we anticipate that its external growth strategy will absorb all of its discretionary cash flows over the next two years. In short, companies that purse M&A will have very little room for additional debt-funded strategies without the risk of a downgrade.

Agribusiness And Commodities Foods

Margins set to rebound with tame commodity inflation, but regulatory ch	anges
and any new trade barriers could disrupt trade flows	

While the multiyear glut around the world in agricultural commodities like corn, wheat, and soybeans continues following another large U.S. harvest and a better upcoming harvest projected out of Brazil, the weaker margins processors and merchandisers faced during this deflationary cycle appear poised for a rebound as excess capacity should decline. In biofuels and oilseed processing, the expected margin improvement is mainly because of steady global demand growth that is catching up with production capacity (coupled with certain strategic plant closures). In addition, other commodity producers like sugar refiners are benefiting from some welcome reflation. Still, there are emerging risks to this outlook stemming from regulatory changes, such as the removal of sugar production quotas in the EU, which could lead to depressed local prices, and potential trade flow disruptions in case of new import barriers in the U.S. levied by the Trump administration.

How long can balance sheets stay healthy as large M&A is shunned?

Companies continue to signal that future M&A is likely to mirror the recent trend of small to midsize acquisitions in faster-growing ingredients and other value-added food segments; and/or even strategic divestitures. Companies are prioritizing product diversification and better operating discipline, and are rebalancing their businesses mix to meet these objectives rather than pursuing transformational M&A. This suggests balance sheets will not be pressured by higher debt levels. Still, with leverage generally low across the sector, and cash and liquidity not under any particular pressure to fund an inflationary working capital cycle, shareholder pressure for higher returns and leverage may become more pronounced as lower leverage levels are sustained. Moreover, certain sectors may begin consolidating. This includes the more highly leveraged South American sugarcane producers who, up until recently, had suffered from a very weak industry cycle characterized by low sugar prices. With pricing and profits on the mend, M&A may follow.

Favorable protein margins a silver lining that keeps shining

Margins remain healthy industrywide as continued increases in U.S. beef and pork production in 2017 should keep meat prices in check and prevent the more volatile poultry sector from overproducing. Moreover, strong domestic and export demand should prevent inventory levels from creeping up and allow for another year of strong margins for producers in the U.S. While unforeseen trade restrictions could spoil the party for U.S. producers, we do not believe this is likely as key export markets do not have many cost-effective alternatives to meet growing demand. In South America, another key protein producing region, beef margins should remain healthy as cattle supplies are plentiful, while still recovering economic growth is keeping cattle costs low. We expect South America pork and poultry margins to quickly recover with a better harvest leading to lower local grain prices following last year's higher feed grain costs from relatively small regional harvests and a stronger U.S. dollar that increased grain exports.

7

Household Products

	More effective trade promotional spending
1	Many consumer product companies spend huge sums on promotions. In our opinion, lackluster center- of-store growth will incentivize companies to explore all areas of the income statement, including promotional items, a sizable portion of which are buried between gross and net sales. New tools and data analytics could enable companies to utilize promotions more effectively, including, for example, finding optimal pricing and deciding when to make adjustments. More effective promotional activity will spur both net sales and operating profits. We assume in 2017 that companies will make promotional adjustments at a measured pace.
	Cosmetics maintain good growth prospects
2	Consumers' incessant quest for agelessness, the rising middle class in emerging markets, and the aging population in mature markets are promising ingredients for cosmetic producers in 2017. Companies are looking at new segments like "man beauty" and are dealing with several opportunities coming from new trends set by millennials and increasing digitalization. New innovative companies are capturing large interest by the public and are increasingly becoming interesting targets for the incumbents that want to stay up to speed. In developed markets, innovation is the biggest driver of growth; in emerging markets, new customers are the key.
	Rising input costs
3	Over the last few years, household and personal care companies have benefitted from historically low and declining oil-based inputs costs, which are key components particularly in packaging. Similarly, energy costswhich are important in running manufacturing facilities and distribution centers declined. These cost reductions contributed to issuers sustaining historically high profit margins, but they also posed a limit to possible price increases on branded consumer products. We expect the low raw-material-cost tailwind to turn into a headwind during 2017, potentially pressuring profit margins, especially in light of renewed foreign exchange volatility. However, we believe the new environment will have a more severe impact on unbranded and private-label producers than on the branded producers that, in some cases, will take advantage of the new environment.

Consumer Durables

	Growth continues to be tied to macroeconomics
1	Market growth in home appliances should continue to be driven by solid consumer consumption in Asia and the U.S. but remain flat in Europe, thus following global socioeconomic trends. Growth in diversified durables, a very fragmented industry, will depend very much also on the specific segment and country. The main sector threat, in our view, is the risk of rising tariff barriers for exporters in major markets like the U.S.
	Industry consolidation should continue
2	In home appliances, we see further industry consolidation globally after a number of deals in 2016. U.S. and European players are seeking to complement their product portfolios with some high margin, relatively niche businesses, mostly in mature markets (like the SEB SA-WMF AG deal). Emerging market players meanwhile are looking to acquire international brands and increase market share in both mature markets and fast-rising Asian markets (e.g., Haier-GE Appliances, Midea-Toshiba, Arcelik-Dawlance).
	Margin enhancement focus as commodity tailwind fades
3	We expect some increase in input costs in 2017 driven by higher oil and metal prices, which should affect gross margins. Faced with intense competition, higher operating costs and changing consumer preferences, home appliances manufacturers are focusing on cutting operating costs in mature markets and investing more in product differentiation to protect their margins. Hence the growing importance of connected appliances, which are higher priced and more susceptible to appeal to techsavvy consumers, like millennials.

	Protectionist policies might hurt the sector
1	The uncertainties related to the new U.S. commercial policies, and to the global economic environment in general, pose potential threats for luxury good producers. These companies rely on a global customer base and the potential increase in barriers is a negative factor. However, we believe the same factors could impact companies in different ways depending on where their production base is located. We notice that in the latter part of 2016 there were signs of increasing domestic consumption in China. If this trend continues, it could be an important opportunity for many players in the sector.
	Touristic flows could be a positive if companies target the right destinations
2	The ability to intercept main touristic flows is large part of the success of luxury companies. In 2016, the usual routes were hit by disruptions linked to specific factors like the terrorist attacks in France and Belgium, and the adverse foreign exchange that has reduced the attractiveness of some countries like the U.S. At the same time, destinations like U.K. have been in the spotlight after the depreciation of the sterling. In 2017, touristic flow will be crucial again and the ability to read the early signs of the next movements will be a clear advantage.
	Retail network optimization is a central part of luxury manufacturers' strategy
3	The end of the double-digit growth period started in 2013 has forced luxury companies to revise the network expansion policy. In many cases, the rate of new store openings has significantly decreased and relocations and refurbishing have been the preferred solutions. The increase of sales per square meter is the common target for the sector. Given the need to maintain strong control of distribution and brand image, network optimization continues to be a central part of luxury companies' strategy. This is reinforced by the difficult situation in the wholesale channel due to the crisis that some large department stores are facing.

Apparel Manufacturers

	Cash flow levels should increase as supply chains become more efficient
1	Not everyone can emulate fast-fashion, but all manufacturers need to continuously improve the efficiency of their global supply chains to reduce the time it takes from the product design stage to availability at retail, the benefits being to minimize working investment while creating a product assortment that is timely, resonates, and sells through to consumers with minimal fashion risk. Increasing speed to market enhances cash flow for reinvestment and reinforces brand strength while supporting shareholder returns near recent levels.
	Operating performance could become more volatile
2	The U.S. retail landscape is changing swiftly with department stores losing share to online retailers. Ir response, retailers are reducing their collective brick-and-mortar footprint. To fill that void, apparel manufacturers are opening their own stores to complement their online offerings. Apparel retailing is highly competitive and apparel manufactures' operating performance may become more volatile as they increase their brick-and-mortar presence.
	Changes in trade policy could be disruptive
3	Evolving U.S. tax, repatriation, and trade policies could impact apparel companies' global supply and distribution platforms. With the policy environment uncertain and consumer buying preferences continuously changing, companies will need to quickly respond and continually adapt to evolving market conditions. Changes in trade policies could increase companies' sourcing costs as most apparel manufactures source products outside the U.S. Moreover, companies may not be able to pass these cost increase along to the consumer given the poor fundamentals in the retail sectors. Companies could combat this by diverting cash from share repurchase activity to reinvest in their businesses.

Financial policy

Shareholder distributions in the consumer products sector have historically been greater than free operating cash flow measures, but we believe M&A activity is much more of a credit risk for investment-grade companies, as they continue to prioritize the acceleration of top-line growth. Given that the prospects for organic sales growth are in the low-single digits, we have seen companies become more willing to sacrifice a notch in their rating to acquire midsize to large businesses that complement their existing portfolio and operate in faster growing sectors (such as snacks, health, and wellness). Following such debt-financed acquisitions, investment-grade companies have tended to reduce share repurchases in an effort to restore credit metrics. Furthermore, in difficult economic environments or during periods of headwinds (e.g., foreign exchange), they have also scaled back share repurchases in order to preserve cash flow.

We expect most acquisitions in the sector to be small to medium in size and to complement existing businesses. However, we believe there could be large transformational acquisitions as subsectors encounter disruptions; for example, if activist investors such as 3G put pressure on the packaged goods sector to cut costs in order to increase margins. How companies fund the acquisitions and how quickly they can reduce leverage will largely determine the direction of rating actions. Moreover, we believe U.S. multinationals will return more capital to their shareholders if the Trump administration reduces taxes on cash repatriation of foreign earnings, given that U.S.-based multinational consumer products companies have large amounts of foreign cash on their balance sheets. We do not expect dividends to impact leverage. Dividend payments as a percentage of free operating cash flow have increased over the past few years; however, we expect them to grow at a slower pace given companies are preserving cash for M&A activity.

Related research

- A Shifting Foundation: Smaller Players Are Making Established Cosmetics Brands Blush, Jan. 11, 2017
- Credit FAQ: What's Driving M&A Among EMEA Consumer Goods Companies, Nov. 28, 2016
- Industry Credit Outlook: Asia-Pacific's Consumer Products Sector Will Lure M&A, But At A Cautious Pace, Nov.22, 2016
- The U.S. Tobacco Industry Is Still Standing Tall Despite Increased Regulatory Risks, Aug. 11, 2016
- U.S. Tobacco Companies Face Persistent But Diminishing Litigation Risks, Aug. 11, 2016
- Peer Comparison: ADM, Bunge, And Cargill Look To Reshuffle Their Portfolios As Global Grain Stocks Remain Plentiful, Aug. 3, 2016
- Credit FAQ: How We Net ADM's, Bunge's, And Cargill's Adjusted Readily Marketable Inventories Against Debt, Aug. 3, 2016
- U.S. Packaged Foods Companies Will Likely Continue To Consolidate And Reduce Costs, Jul. 13, 2016
- The Millennial Surge Is Changing How U.S. Consumer Products Companies Do Business, Apr.5, 2016
- Are The Brazilian Sugarcane Industry's Bitter Conditions About To End?, Mar. 1, 2016

Cash, debt, and returns

Global Consumer Products

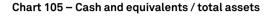




Chart 107 – Fixed versus variable rate exposure

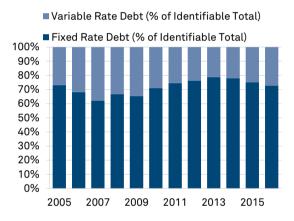
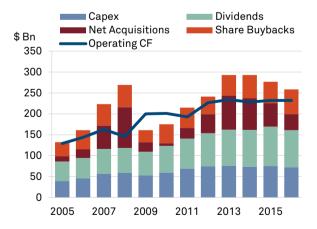


Chart 109 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 106 – Total debt / total assets

Global Consumer Products - Total Debt / Total Assets (%)

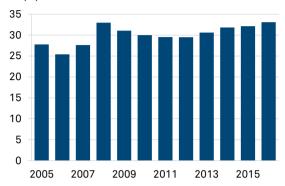


Chart 108 - Long term debt term structure

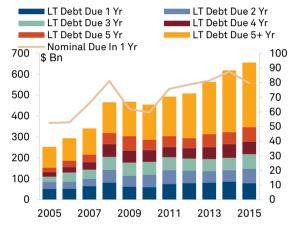
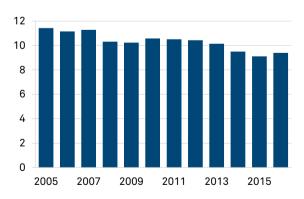


Chart 110 – Return on capital employed

Global Consumer Products - Return On Capital (%)



Industry Top Trends 2017 Health Care



Overview

- Ratings Outlook: S&P Global Ratings' ratings outlook for health equipment companies remains stable, reflecting the relatively still solid underlying operating fundamentals, and companies' ability to manage growing challenges, mainly from health care reform. We maintain a negative bias in health care services because we expect some deterioration in debt protection metrics due to pressure on margins and cash flow from rising costs and constraints on reimbursement. We recently revised our ratings outlook on pharmaceutical companies to stable from negative but remain watchful.
- Forecasts: For health care service companies we expect low-single-digit top-line growth stemming from small price and volume increases. In Europe, due to ongoing consolidation, margins and credits metrics will benefit from synergies from acquisitions. For equipment companies we see low-to-mid-single-digit top line growth, with margins facing pressure from foreign-exchange (F/X) headwinds and increasing pricing pressure. We expect worldwide pharmaceutical sales to grow by the low-to-mid-single-digit range and that companies will leverage strong balance sheets for continued significant M&A.
- Assumptions: We expect that governments in developed countries will continue to cut health care spending and obtain the best value for their money. Developing countries will still offer growth opportunities, reflecting the increasing ability of governments and individuals to pay for treatment. Following the U.S. election, we expect a repeal of the Affordable Care Act (ACA), but not likely until 2018 at the earliest when we realistically think a simultaneous repeal/replace can occur.
- Risks: Key risks for health care service companies include the likely repeal of the ACA in the U.S., the growing influence of rising costs and health reform including the rise of alternative payment methodologies, and consumerism. Equipment companies face the risk of escalating pricing pressure from the shift to value-based reimbursement, and a wave of product liability litigation. Pharma companies are subject to risks associated with patent expirations, executing on their pipelines, and maintaining pricing power.
- Industry Trends: Health care reform--involving the way care is provided, where it's provided, the value received, and how it's paid for and funded--is a major issue, and all elements are under redesign in some way. Pharma industry fundamentals remain solid.

S&P Global Ratings

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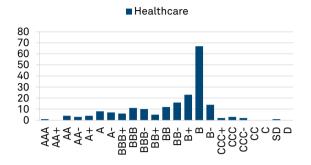
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Ratings trends and outlook

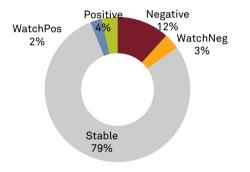
Global Health Care

Chart 111 - Ratings distribution



The corporate health care sector ratings distribution remains skewed toward the 'B' category, reflecting the risks associated with this highly regulated industry that is under ever-growing pressure to control health care costs.

Chart 113 – Ratings outlooks



Though ratings are predominantly stable, the larger number of negative outlooks as opposed to positive outlooks reflects the changing landscape as health reform constrains reimbursement and alters the incentives to incorporate value and greater cost consciousness.

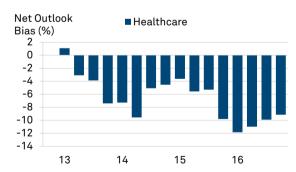
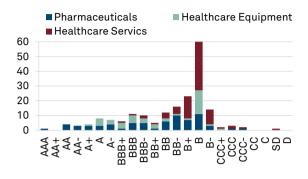


Chart 115 – Ratings outlook net bias

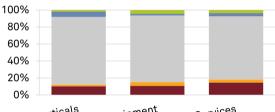
Chart 112 – Ratings distribution by sub sector



The pharmaceutical sector is the highest rated health care subsector. The much lower-rated health care services is the largest area of health care spending and most heavily influenced by its exposure to direct reimbursement risk, and efforts to reduce patient utilization.

Chart 114 - Ratings outlooks by sub sector

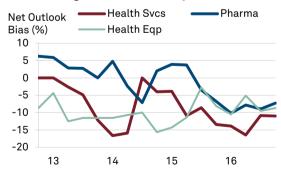
Negative WatchNeg Stable WatchPos Positive



Pharmaceuticals Healthcare Equipment Healthcare Services

The weakest ratio of negative to positive outlooks in the health services sector reflects its greater susceptibility to industry developments relative to equipment and pharmaceutical companies.

Chart 116 - Ratings net outlook bias by sub sector



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

We recently revised our ratings outlook on pharmaceutical companies to stable from negative but remain watchful as climbing valuations, sizable merger and acquisition (M&A) deals, and slower returns could quickly deplete headroom that some companies maintain within their ratings. The revision reflects the recent decline in M&A activity for Big Pharma and biotech and also the ability of these companies to absorb M&A without rating revisions.

Industry forecasts

Health Care

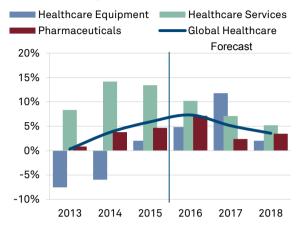
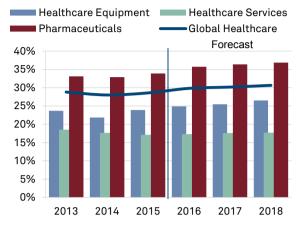


Chart 117 – Revenue growth (local currency)

Chart 118 – EBITDA margin (adjusted)



This revenue trend line is not representative of our underlying growth estimates Relative stability of margins reflects companies' aggressive efforts to control as it includes numerous factors skewing the results including M&A activity, divestitures, and currency fluctuations.

Chart 119 - Debt / EBITDA (adjusted)

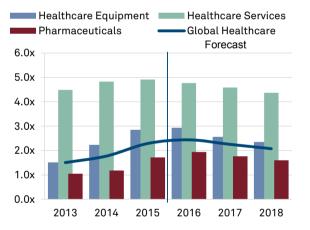
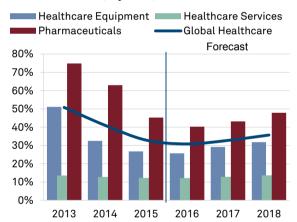


Chart 120 - FFO / debt (adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

For health care service companies we expect low-single-digit top-line growth stemming from small price and volume increases. Credit ratios for health care services are likely to deteriorate modestly in 2017 as reimbursement pressure limits the ability of these companies to offset rising labor and pharmaceutical costs. In Europe, due to ongoing consolidation, margins and credits metrics will benefit from synergies from acquisitions closed in 2015 and 2016.

For equipment companies we see low-to-mid-single-digit top line growth, with margins facing pressure from recent foreign-exchange (F/X) headwinds and increasing pricing pressure but offset by a likely repeal of the medical device tax.

We expect worldwide **pharmaceutical** sales to grow by the low-to-mid-single-digit range, 4%-5%, with variance by region, with improving margins, as companies continue to focus on cost savings and new-product launches to drive future growth. We also expect that companies will continue to leverage their still-strong balance sheets for continued significant M&A in the sector, seeking to fill out their product pipelines.

Key assumptions

Healthcare Services

	The Affordable Care Act will be repealed or substantially revised
1	President Trump's first executive action set the stage for the ultimate repeal of the Affordable Care Act. While we believe a repeal or substantive revision of the ACA will take place, we do not expect it to happen until 2018. With about 20 million people now insured as a result of the ACA's health care exchanges and Medicaid expansion, we believe a full repeal must be accompanied by a replacement plan. Given its complexity as well as the goal of avoiding the loss of health coverage by those who gained coverage under the ACA, we believe that won't happen until next year or possibly even later.
	Margins will remain pressured
2	We expect the health care service companies as a group to experience margin pressure in 2017, reflecting costs (especially for labor and pharmaceuticals) that will likely grow faster than reimbursement rates. We also expect the increased focus on treating patients in lower-cost settings to constrain margins for certain health service companies, such as hospitals. For this reason, we expect EBITDA margins for most service providers to be flat to slightly down in 2017 versus 2016.
	Utilization will remain tepid at best
3	While health care service providers experienced a small uptick in demand following the implementation of the ACA in 2014 and early 2015 primarily due to the expansion of Medicaid, utilization trends slowed in 2016 and we expect them to remain tepid in 2017. This reflects our expectation for stable insurance coverage levels, rising consumerism due to increasing patient cost sharing, and some growth in new payment methodologies (such as bundled payment initiatives) that reward both quality and efficient use of care to continue to pressure utilization statistics, especially fo acute-care hospitals.

Healthcare Equipment

	We expect low-to-mid-single-digit top-line growth, on a constant currency basis
1	Moderate top-line industry growth is supported by favorable demographic trends, increasing penetration in emerging market, and a steady pace of technological innovation. We see this as offset by some pricing constraints stemming from margin pressure at hospital customers, a continued shift from volume to value, and initiatives to accelerate the pace of regulatory approvals, which incrementally increases competition.
	Moderate M&A pace
2	Following several years of consolidation, we expect M&A to ease but remain moderate. As a result we expect leverage metrics to improve or remain near current levels. This assumption is supported by leverage levels that are still elevated, increased uncertainty about U.S. health care policy, and a moderate increase in interest rates in the U.S. This view does not incorporate the potential impact of tax reform which may make foreign cash reserves more easily accessible for repatriation.
	Stable business fundamentals
3	We view the sector as relatively stable, given low correlation to swings in the economic cycle and high barriers to entry stemming from regulatory requirements and extensive intellectual property. Moreover, the industry is also protected because it has only indirect exposure to reimbursement risk from government and commercial payers, as most products are sold to health care provider intermediaries such as hospitals.

Pharmaceuticals

Pricing pressure will continue
In the U.S., the pricing discussion will continue to be a key industry focus. President Trump's proposals regarding price negotiations with the federal government changes the conversation a bit, but does not alter the public's view that pharma prices are high and that a solution needs to be found.
For branded drugs, the impact of pricing trends varies depending on the drug and therapeutic class, and geography. Pharmacy benefit managers have played a role by imposing severe discounts in certain areas such as respiratory. We expect the diabetes market to get hit with discounts in 2017 with Eli Lilly & Co. already taking lead with a 40% discount on Humalog, Humulin, and Basaglar. We expect rising cost sensitivity for drugs for rare diseases even for small patient populations.
In Europe, the tough pricing environment will continue, especially for me-too type of drugs, putting even more emphasis on innovation and demonstration of significant benefit to the patient and payor when compared to existing products and standards of treatment.
Generic drug companies, given the commodity like nature of their portfolios, and given the increasing negotiating power of wholesalers, pharmacy chains, and payors, will likely see continued heavy pressure in 2017.
Innovation still delivering
Innovation and continuous launch of new products remains a key success factor. Blockbusters are still losing patent exclusivity and sales to generics. For example, we expect the loss of exclusivity of drugs such as AstraZeneca PLC's cholesterol treatment Crestor, and Novartis's cancer drug Gleevac will cause revenues for these products to decline substantially.
In 2017 about \$34 billion worth of worldwide sales are predicted to be at risk with \$19 billion to be lost to generic competition, compared with \$50 billion and \$24 billion, respectively, in 2016.
Although 2016 saw the lowest approval of new molecular entities (NMEs) at 25, well below 2015 with 32 NMEs and 24 biologics, we believe that 2017 has a potential for several blockbusters approved and launched. Most of these are for autoimmune diseases. Oncology will continue to be a featured area for innovation. Interestingly, European companies are leading the league table in the terms of pipeline value with Roche, Novartis, and AstraZeneca taking the top three spots, followed by Eli Lilly, AbbVie in the top five.
M&A to pick up in 2017
We expect a buildup in cash balances due in part from the disposals of non-core assets could spark an increase M&A in 2017 after a decline in 2016. The number of deals and deal value declined 35% and 48%, respectively, in 2016 compared with 2015. In fact, we are off to a quick start in 2017 with the announcement of Johnson & Johnson acquiring Actelion for \$30 billion, and the \$5.2 billion takeover of Ariad by Takeda.
We expect companies will continue to seek opportunities to restock pipelines and portfolios following patent expirations, counter competitive pricing, and pursue tax inversion opportunities. Fewer high-quality, less-risky assets will likely keep multiples high. And deals are increasingly containing clauses of delayed payments contingent upon performance of acquired assets, reflecting in our review less predictable pricing and approval environment.

Key risks and opportunities

Healthcare Services

	Uncertain future of the ACA and Medicare and Medicaid funding
1	While the ACA addresses only a relatively small segment of the total insured market, its fate could have significant implications for the sector as a whole, particularly for providers such as hospitals. Absent a viable concurrent replacement, providers would contend with a return to the higher levels of uninsured patients they treated pre-ACA. In addition, the way both Medicare and Medicaid are funded as open-ended entitlement programs could be at risk as the Republican-led health care platform considers more close-ended mechanisms such as block grant and vouchers to reduce funding.
	Health care reform will continue to reshape the industry
2	While the ACA's future is murky, health care reform is not. We expect the industry, including the private insurance market, will continue to move aggressively toward population management which incorporates a shift in incentives that reward cost reduction, quality, and value. As such, we expect several developing industry characteristics such as value-based payment methodologies, rising consumerism as a result of increasing consumer out-of-pocket costs, and narrow networks will require companies to be proactive and adopt the necessary strategies to remain relevant in their markets.
	M&A will take on new forms
3	In 2016, M&A activity was very different than in the active period from 2013-2015, when several large- scale hospital acquisitions occurred. Instead we saw a reversal with a few tuck-in transactions geared toward solidifying local market presences. More notably, several operators announced plans to divest hospitals or markets where they perceived themselves to be uncompetitive, including Community Health Systems Inc., Tenet Healthcare Corp., and Quorum Health Corp. We are also witnessing an emerging trend toward active M&A activity among players in different health care services niches as capital is being deployed to address the changing strategic challenges these companies face due to health reform, including gaining competitive advantage, driving volume growth, or better provide integrated care.

Healthcare Equipment

	Potential for still significant M&A
1	Notwithstanding our expectations for only moderate levels of M&A and gradual deleveraging in 2017, we view the potential for more significant debt-financed M&A as a still elevated risk to ratings in this sector, as the dust is still settling on the recently consolidated landscape.
	Pricing pressure
2	A material intensification of pricing pressure, stemming from health care reform initiatives in the U.S., including the shift to value-based reimbursement, initiatives to increase pricing transparency or more comparative research between competing products, could weaken the industry. This is particularly true in the U.S. where device prices are often substantially higher than in countries where government payors negotiate price more aggressively.
	Product liability
3	The industry is exposed to product liability issues, including a wave of large lawsuits relating to pelvic mesh and hip implant products that continue working their way through the courts. The industry is also exposed to foreign exchange risk, and has suffered in 2015 and in late 2016, as a rising U.S. dollar reduces the value of international revenues. There are also potential changes to tax rules, regulatory changes, and international trade tariffs that could constrain the industry.

Pharmaceuticals

	Tax reform
1	While the timing and details of proposed tax reform in the U.S. are still unknown, the proposed reduction of the U.S. corporate tax rate, to as low as 20% from the current 35% rate, is a clear positive for U.Sbased pharmaceutical companies. Additionally, under the proposed reform pharmaceutical companies with significant amounts of "trapped" cash and investments held offshore for tax purposes will have full access to the cash at the lower rate, adding liquidity and reducing balance sheet complexity for the industry.
	U.S. federal drug pricing legislation remains a wildcard
2	The Republican victory in the U.S. presidential election was viewed as a slight positive for the pharmaceutical industry in that it reduced the chances of major structural change to drug pricing in the U.S. However, concerns about rising drug prices and continued populist pressure may lead to government action. President Trump has also expressed favorable views on universal health care and the government negotiating for drug prices. While we do not project that major federal drug pricing legislation will occur in the near term, we think the issue bears watching.
	Financial policies following U.S. tax reform
3	While we view tax reform as a positive for the industry (see above section in Opportunities), we believe there is a risk that financial policies may become more aggressive in the near term as companies decide how to deploy their overseas cash once it is brought back to the U.S. and made fully accessible under tax reform. Since we net cash and investment balances against debt for our credit metrics, the use of that cash is key, whether it is used to repay debt, invest further in R&D and capex, fund acquisitions, or for shareholder-friendly actions, such as share repurchases and/or large one-time dividends. Longer-term financial policies may change as well since there will no longer be cash trapped offshore.

Industry developments

Health care reform -- involving the way care is provided, where it is provided, the value being received, and how it's paid for and funded--is a major issue, and all these elements are under redesign in some way. Private insurance companies are aggressively managing the ongoing rise in health care costs. The U.S. government is grappling with the burden of the uninsured and unaffordability while managing bloated health care costs that now make up about 18% of GDP. This reimbursement risk is one key reason why health care providers' margins are at risk and why the government is considering changing how it pays, possibly capping Medicare and Medicaid expenses as opposed to the current open-ended system. In addition, the industry, including the private insurance market, is demanding to know the "value" of the services and products that consumers receive, hence the growth of programs that foster changes in payment methodologies that reverse incentives. Unless health care providers adapt, their future will be at risk. These forces influence why M&As are so different today as new cross-functional business models are formed that break down the barriers between various subsectors such as an insurer (United Health Group) buying a provider (Surgical Care Affiliates), or a distributor (McKesson), purchasing a radiation therapy provider (Vantage Oncology).

Pharma industry fundamentals remain solid and will continue to benefit from favorable demographics, still relatively good pricing power, and generally strong cash flow. With the backdrop of mixed macroeconomic growth trends globally, we believe revenue drivers will be independent of global GDP, and be more reflective of disease patterns, population, and life style-related trends. However, companies are facing increasing scrutiny over pricing at the same time that they need to invest to rebuild and broaden their portfolios to stay competitive. But they have also been aggressively cutting costs and outsourcing over the past five years to preserve margins. Given the increasingly competitive environment and the trend for payors around the world to set drug prices based on perceived value, we think credit quality of those companies that are overly reliant on a small number of products and prospects could be constrained. Broadening the pipelines increases the chances of finding that "best in class" product.

Financial policy

Despite the growing pressure that health care companies are experiencing, shareholder return remains an important financial strategy, most notably for the pharma sector. This is our highest rated sector which has the greatest capacity for shareholder returns. Supporting our view that shareholder returns are important to these companies is that the percentage of free cash flow that is being applied to dividends and share buybacks has been increasing, and we expect this to continue in 2017. However, we expect these companies to manage the potential increase in leverage as a result of acquisitions by temporarily reducing share buyback activity so they can finance highly valued acquisition activity.

Not surprisingly, shareholder buybacks are not as significant for lower-rated companies, which are the more common rating categories for the health care services sector. One exception for a very prominent non-investment grade company is HCA Inc. That company generates significant free cash flow, but returns the cash to its shareholders, which is one reason why the rating remains noninvestment grade. We expect the changing health care landscape and the strain on margins and cash flow will influence financial policy as these companies must decide where best to apply capital particularly as they have less capacity to be shareholder-friendly than their investment-grade peers. As companies need to nvest appropriately to address health reform, we expect strategic decisions will place high priority on investing in targeted M&A and internal infrastructure investments. We think this will keep shareholder buybacks relatively muted.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Related research

- The U.S. Corporate Health Care Sector Is Generally Stable, Except For Health Care Services, Dec. 15, 2016
- The Prognosis For For-Profit U.S. Health Care Services Is For Extended Weakness, Dec. 15, 2016
- The Implications Of The U.S. Presidential Election Results Are Mixed For Pharmaceutical and Medical Device Companies, Nov. 14, 2016
- U.S. For-Profit Health Care Service Company Ratings Not Immediately Affected By Election Results, Nov. 10, 2016

Podcasts

- The S&P Pharma Dose Episode 12: Pharma Chat It's All in the Transparency, Feb. 2, 2017
- The S&P Pharma Dose Episode 11: Four Takeaways Eli Lilly, Jan. 13, 2017
- The S&P Pharma Dose Episode 10: U.S. Tax Reform Positive But Some Near Term Concerns For Pharma Ratings, Dec. 15, 2016
- The S&P Pharma Dose Episode 9: Pharma and Trump, Nov. 28, 2016
- The S&P Pharma Dose Episode 8: Generic Drug Pricing, Nov. 28, 2016
- The S&P Pharma Dose Episode 7: Pharma Chat Recent Topics, Jul. 22, 2016
- The S&P Pharma Dose Episode 6: S&P's Positive Ratings Outlook for CROs What is driving it? Jul. 12, 2016
- The S&P Pharma Dose Episode 5: Brexit & Pharma No Rating Changes, But Negative Implications, Jul. 12, 2016
- The S&P Pharma Dose Episode 4: What's Behind The Ratings On Amgen, May 5, 2016
- The S&P Pharma Dose Episode 3: How Company Healthcare Exchanges Could Affect The Industry, Feb. 25, 2016
- The S&P Pharma Dose Episode 2: What Lies Ahead For Teva, Feb. 25, 2016
- The S&P Pharma Dose Episode 1: Our Rating Action On Gilead, Feb. 25, 2016

Cash, debt and returns

Global Health Care

Chart 121 - Cash and equivalents / total assets

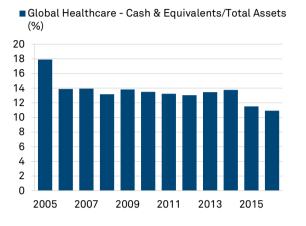


Chart 123 - Fixed versus variable rate exposure

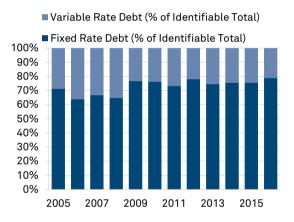
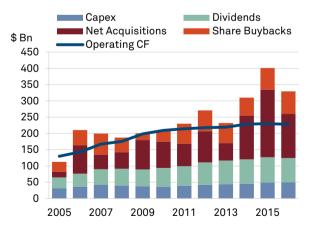


Chart 125 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 122 – Total debt / total assets

Global Healthcare - Total Debt / Total Assets (%)

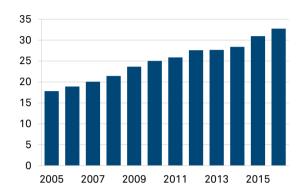


Chart 124 - Long term debt term structure

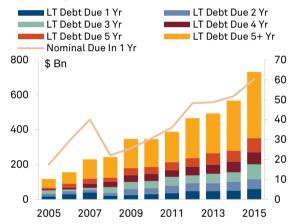
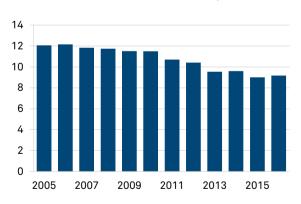


Chart 126 - Return on capital employed

Global Healthcare - Return On Capital (%)



Industry Top Trends 2017

Hotels, Gaming and Leisure



Overview

- Ratings Outlook: Discretionary spending in the global leisure industry will likely improve modestly in 2017—the base-case ratings outlook for the sector remains stable, with more than 80% of ratings outlooks on issuers currently stable.
- Forecasts: Credit ratios are likely to improve very modestly in 2017, as modest revenue growth will likely contribute to a slight improvement in margin across the sector. Offsetting leverage improvement will likely involve large, higher-rated, leisure companies using excess cash to reward shareholders, and some issuers will probably opportunistically acquire assets.
- Assumptions: We expect operating strength in theme parks, continued growth in the cruise segment, slowing revenue gains in lodging, growth in the Vegas and most U.S.based gaming markets, and a recovery in Macau gross gaming revenue.
- Risks: The key risk facing gaming operators across Asia-Pacific remains the impact of
 ongoing anti-corruption efforts in China. Geopolitical and terrorist events continue to be
 a risk factor for cruise operators in the luxury, expedition, river segments, and in the
 European hotel market. We are also watching the potential negative impact from a
 strong U.S. dollar and the recent U.S. travel ban on inbound international travel.
- Industry Trends: We expect modest merger and acquisition (M&A) activity, through acquisitions of single assets or small portfolios, to remain a key component of many gaming and lodging companies' strategies, in particular given limited opportunities to grow in gaming and a slowing RevPAR environment in U.S. lodging. Ratings impact will depend on how companies' capitalize the transactions and how the acquired assets improve business positions. Additionally, real estate separations are likely in 2017, with the expected emergence of Caesars Entertainment Operating Co. Inc. from bankruptcy later this year and its anticipated spin of its real estate. Lodging company La Quinta has also expressed a desire to spin its real estate, which follows Hilton's successful real estate spin in the first week of 2017.

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S&P Global Ratings

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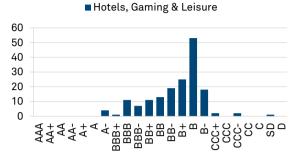
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Ratings trends and outlook

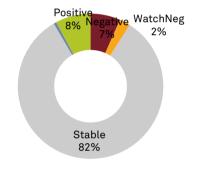
Global Hotels, Gaming and Leisure

Chart 127 – Ratings distribution



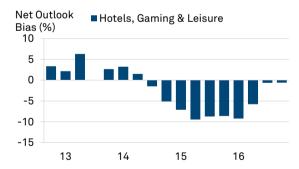
The vast majority of ratings are non-investment grade, reflecting high levels of competition and fragmentation in this discretionary and cyclical sector, combined with high leverage in many cases.

Chart 129 – Ratings outlooks



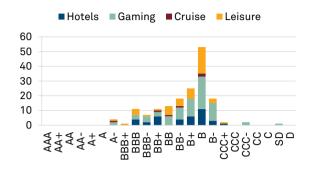
Discretionary spending in the global leisure industry will likely improve modestly in 2017—the base-case ratings outlook for the sector remains stable, with more than 80% of ratings outlooks on issuers currently stable.

Chart 131 – Ratings outlook net bias



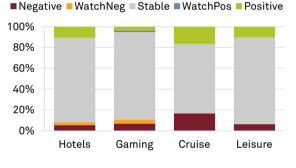
After swinging modestly negative in 2015, ratings outlook bias stabilized in 2016.

Chart 128 - Ratings distribution by sub sector



The majority of ratings are non-investment grade in all sub sectors. There are multiple investment grade ratings in hotels, gaming and leisure sub sectors, with only one investment grade rated cruise company.

Chart 130 - Ratings outlooks by sub sector



Rating stability is present across all sub sectors.

Chart 132 - Ratings net outlook bias by sub sector



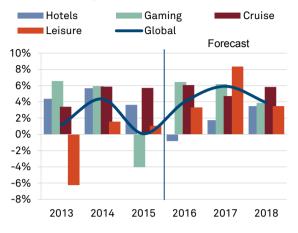
Ratings outlooks improved in 2016 in cruise, gaming and leisure sub sectors. Outlooks in the hotels sub sector have remained stable for several years.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Industry forecasts

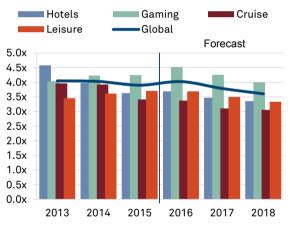
Global Hotels, Gaming and Leisure

Chart 133 - Revenue growth (local currency)



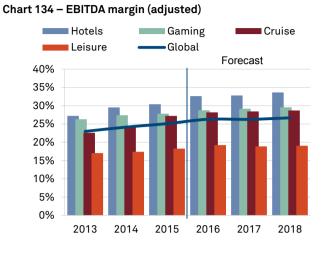
In 2016, Macau's recovery helped gaming and dollar strength hurt hotels revenue amid a slowing RevPAR environment. Moderate revenue growth is forecasted across all sub sectors in 2017.

Chart 135 – Debt / EBITDA (adjusted)



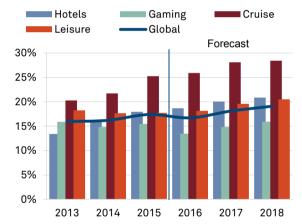
The base case forecast for modestly improving leverage in 2017 reflects modest revenue growth, but for many issuers, the forecast does not include opportunistic acquisitions and other unexpected leveraging events, which will almost certainly flatten this downward curve in future periods. The disparity in forecasted leverage in the gaming sub sector compared to the others reflects the tendency of many gaming companies to take on high leverage.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.



We forecast that margin improvement in 2017 is going to be tough given moderately higher inflation expectations in developed economies.

Chart 136 - FFO / Debt (adjusted)



As with the debt to EBITDA chart, opportunistic leveraging events will almost certainly cause this upward curve to flatten in future periods.

Key assumptions

Gaming

7

The good times keep on rolling...in Vegas

We expect non-gaming revenue, in particular lodging revenue, to be the catalyst for growth in Las Vegas. We anticipate 2017 will be another year of RevPAR growth, in the low-to-mid single digits, despite a slowing lodging cycle across the U.S. We believe the dynamics are still favorable on the Las Vegas Strip for continued average daily rate growth and high occupancy. The Las Vegas Strip will experience almost no new supply growth over the next two years, which compares favorably to other U.S. lodging markets, unless new gaming projects like Genting's Resorts World Las Vegas or Alon are completed. The timeline and financing for these projects remain uncertain, and we believe it's unlikely they could open before 2019. Coupled with strong visitation to the market and continued growth in convention visitation, operators should be able to increase rates. On the gaming revenue side, we are forecasting low-single digit growth. However, we expect baccarat revenue, which represents about 20% of total gaming revenue, will remain particularly volatile and could continue declining compared to prior years.

Macau finally recovers

We expect the opening and ramp up of mass-market-focused new casinos, addition of non-gaming entertainment attractions and hotel rooms, and better transportation connecting Macau with mainland China will drive the rebound in gaming revenue in Macau. We forecast gross gaming revenue in Macau to resume positive growth of 0%-10% in 2017, after a decline by about 3% in 2016. We believe the rebound will also drive a continuous structural shift from the "VIP" (or credit-fueled high rollers) to the mass market gaming segment. We forecast the mass-market segment to grow 5%-10% in 2017, while VIP gaming revenue could swing from a decline of up to 5% to positive growth of 5% during the period given it is more sensitive to changes of the Chinese government's regulations on the gaming industry. EBITDA margin is also likely to improve because of the continuous revenue shift toward the more profitable mass market segment from VIP, as well as better operating leverage following the recovery in revenues.

Slowing U.S. regional gaming revenue could pressure margins

We expect gaming revenue growth in U.S. regional markets to be largely correlated to consumer spending growth given maturity of most markets, except where the introduction of new competition hurts an adjacent market. We expect that anemic top line growth will cause casino operators to exercise cost discipline in order to sustain EBITDA, as inflation pressures wages and health benefits. The two largest expenses that gaming companies can typically exert some control over are marketing costs and labor costs. We expect gaming companies to keep refining their use of data and analytics to assess the impact of promotions and incentives on different consumers, as well as revenue and profitability, and adjust spending throughout the year as needed. We believe operators will sacrifice top line revenue if that revenue is not profitable enough. Companies can sustain marketing discipline as long as the economic environment is supportive of discretionary spending and competitors also remain disciplined. Additionally, as inflation drives wages and health care costs higher, we expect casinos to continue to utilize part-time schedules and to focus on efficiencies in scheduling employee hours, including using software tools that can analyze customer traffic patterns and ensure staffing levels are appropriate for the expected number and demographics of customers.

Hotels

	U.S. revenue per available room (RevPAR) grows 1% to 3%
1	U.S. RevPAR slowed significantly in 2016, to around 3%. Occupancy growth showed signs of life in the month of November 2016 reflecting pent-up demand for travel following the election, but reverted back to zero growth in December 2016. Our bet is that occupancy trends are flat in 2017 as demand grows around 2%, in line with our economists' current expectation for GDP growth, offset by accelerating supply growth around 2% across the industry. Average daily rate should grow between 1% and 3%, as still-record high occupancy rates enable lodging operators to sustain pricing power. Policy uncertainty, the travel ban fallout, and a continued strong U.S. dollar are key risk factors to this base case forecast (see Key Risks and Opportunities for the Lodging sector).
	Wage and cost inflation pressures hotel margin given slowing RevPAR growth
2	In the last U.S. jobs report of the year, average hourly earnings rose at the highest pace since the recovery began in mid-2009. Wages are likely to rise further in 2017 as the supply of labor becomes scarcer, and the lodging sector will not be immune to the resulting increase in costs. In addition, the general level of inflation will likely cause food and beverage costs to rise. As a result of this and slow anticipated 2017 RevPAR growth, hotel margins could deteriorate absent offsetting efficiency moves on the part of operators. If hotel profitability suffers, growth in incentive fees would flatten or possibly decline for some hotel managers.
	European RevPAR grows in the low-single digits
3	European RevPAR also slowed significantly to less than 2% in 2016 (in euros), especially in western Europe due to terrorism's lingering negative impact on visitation to key travel markets, particularly Paris and Brussels. Given the current trend and our economists' forecast for a slowdown in 2017 GDP growth to 1% in the U.K. and to 1.4% in the eurozone, partly offset by low new supply, and incorporating the potential for continued political volatility in Italy and Turkey, European RevPAR as a whole could grow only modestly in 2017, in the low-single digits. This could be so even if key western Europe markets recover and no additional tragic terrorism events occur in 2017.

Cruise

1	Vet	rev	enue	yie	lds	grow
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Constant currency net yields should improve in the low-single digit percent area through 2017 reflecting continued good anticipated consumer demand for cruises and well received new ship builds that command pricing premiums. Net yield growth will also be supported by moderate industry capacity growth of around 6% (according to data provided by Cruise Line International Association, [CLIA] and company information), and a favorable economic environment that should drive pricing discipline across large cruise operators. For the U.S.-based cruise operators, the strong dollar may result in continued pressure on current dollar yields, but lower expenditures in dollar terms for operating costs and ship deliveries provides some offset.

Capacity expands

We estimate 2017 capacity to grow around 6% based on data provided by CLIA and company filings. We believe this level of capacity growth does not represent over-supply, since we believe a favorable economic environment and growing markets such as China, where operators are redeploying existing ships and introducing new builds, will support demand. We expect operators to continue to invest in the Chinese market. In 2017, Norwegian Cruise Lines (NCL) will introduce the Norwegian Joy, and Carnival Corp. will introduce the Majestic Princess, both specifically built and designed for Chinese customers. We expect other operators will either increase capacity in China or continue marketing itineraries specifically for Chinese outbound tourists. Capacity in the Mediterranean should decrease somewhat in 2017, as operators continue to modify itineraries following geopolitical and terrorist events last year that impacted demand in the region.

Rising fuel costs could slow margin improvement

We believe cruise operators' EBITDA margins may be pressured in 2017 given our forecast for fuel prices to increase, and the impact of the continued strengthening of the U.S. dollar. Nevertheless, we expect growth in net yields and operators' fuel hedging strategies to dampen these negative impacts. Although we are forecasting oil prices will increase about 7% in 2017, we believe operators' hedging strategies will mitigate some of this negative impact to EBITDA margin. NCL has hedged on average 79% of its total projected metric tons of fuel consumption for 2017, which we expect will mitigate some of the negative impact of rising fuel costs. We expect Royal Caribbean Cruises Ltd's fuel costs will remain relatively flat in 2017 since we expect any increases in fuel costs for the portion of its fuel consumption that is not hedged (40%) will be offset year over year declines in fuel costs because it does not hedge fuel costs, but rather relies on hedging instruments such as zero cost collars.

Key risks and opportunities

	Regulatory risks may weigh on gaming markets across Asia-Pacific
1	The key risk facing gaming operators across Asia-Pacific remains the impact of ongoing anti- corruption efforts in China. The Chinese government has also strengthened its policies and control to curb capital outflows from China since December 2016. Although we have not seen a material impact from the recent regulation tightening on the gross gaming revenue in the region, it could weaken the growth prospect of both VIP gaming segment and the fast-growing premium mass segment. Any further unfavorable regulatory change by the Chinese government could swing the growth of the VIP segment across the region given the majority of the VIP customers are from China, while mass market should be relatively stable, in our view.
	Could gaming in Japan be the next big thing? Risks will precede the rewards
2	Japan recently passed a law that could open the door for integrated casino resorts in future periods, paving the way to becoming one of the largest gaming markets in the world. We expect the path to opening integrated casino resorts, however, is likely to be a long one, and we don't believe a resort will open before 2022, at the earliest. This is because additional legislation will be required in future periods to determine the framework for casino resorts, including tax rates, the number of licenses, location of licenses, size of required investment, and any entrance restrictions. Once the legislation is passed, we expect there will likely be a competitive process for securing a license to develop a casino, and construction of these types of resorts typically takes several years. We expect many rated gaming operators, including Las Vegas Sands Corp., Genting, MGM Resorts International, Wynn Resorts Ltd., Melco Crown, and Caesars Entertainment Corp. will pursue opportunities to build integrated casino resorts in Japan. We expect operators will consider the size of any potential investments in the contex of the ultimate legislation and a likely competitive request for proposals, we believe that any meaningful investment by any of these operators is likely several years away. That said, given the size of possible investments that some operators have outlined in the past, we expect in future periods, the winners of these licenses would incur higher debt and weaker credit measures than we are currently forecasting.
	Will consolidation continue?
3	We expect M&A activity, through gaming operators' acquisitions of single assets or small portfolios, to remain a key component of many companies' strategies, because there are more limited opportunities to grow organically. This is because gaming in the U.S. is highly competitive and largely mature, which makes it difficult to achieve revenue growth in excess of consumer spending growth. Also, we expect few, if any, new gaming market opportunities over the near term in the U.S. As a result, operators are looking to M&A transactions as a way to drive faster growth and improve economies of scale. We also expect gaming real estate investment trusts, like Gaming & Leisure Properties and MGM Growth Properties, are actively looking to acquire as a way to grow. While there is still relatively good availability of capital, the rising cost of financing could slow the pace of large leveraging acquisitions. The extent to which these transactions impact ratings will depend on how companies' capitalize acquisitions and how the acquired assets improve business positions. Additionally, real estate separations remain present in 2017, with the expected emergence of Caesars Entertainment Operating Co. Inc. (CEOC) from bankruptcy later this year. We expect CEOC to spin its regional gaming and Caesars Palace Las Vegas real estate into a real estate investment trust that will be controlled by lenders. Over time, we believe it's possible that lenders may look to divest this real estate if it's not a core component of their longer term strategy.

Hotels

7

Assumed policy changes are fluid and meet congressional reality

We will probably see fluid policy positions from the new administration in 2017. In addition, whatever policy changes are pursued will need to be crafted into bills and voted on in Congress. Rarely does the initial policy idea equal the final legislation. Still, lodging is highly sensitive to economic growth and the health of consumer spending, and any meaningful changes in trade or fiscal stimulus policies such as taxation and infrastructure spending, that either increase or decrease forecasted economic growth, would impact lodging revenue trends in the same direction.

Strong dollar, travel ban = negative impact on inbound U.S. travel

Continued strength in the U.S. dollar compared to the euro and the pound could cause inbound European travelers to determine that travel to the U.S. is too expensive. Also, if the Trump Administration's review of visa rules and the pursuit of a travel ban are prolonged, or such measures result in a sustained negative global reaction, the American brand as an attractive travel destination could be harmed. Although annual inbound international travel to major U.S. gateway cities is somewhere around the single digits on average as a percentage of total bookings, depending upon the hotel group, we believe international travel to the U.S. can spike to a higher level during peak summer months. These risk factors could depress RevPAR growth in the U.S. through lower occupancy at gateway city hotels, or by potentially causing hotel operators to reduce rates (or increase them at a slower rate).

European travel

We expect security risks to continue to meaningfully affect the European travel sector in 2017, following a turbulent 2016 blighted by a series of terrorist attacks. We think the impact on issuers will vary depending on their geographic diversification, and where they lie in the travel value chain. Hoteliers present in France, Belgium, Turkey, or North Africa are likely to continue recording negative RevPAR and subdued earnings, but those focused in Spain, Italy, and Greece are likely to benefit as European travel is redirected to these regions. Europe's tour operators actually showed resilience in 2016, demonstrating their ability to redirect capacity to higher-demand markets in Europe or long-haul destinations at short notice, and absorbing the cost while maintaining earnings at least at the levels of the previous year. As long as certain key European holiday destinations remain open, we see no reason why 2017 could not at least match 2016's relatively subdued performance developments--although we will monitor event risks closely. As for online travel agencies, we have yet to observe a notable impact from security risks, since these issuers generate revenues from travel in any direction.

Cruise

	Event risk
1	Geopolitical and terrorist events continue to be a risk factor for industry demand in 2017, particularly for cruise operators in the luxury, expedition, and river segments. These operators generally cater to retirees, who tend to have more flexibility with respect to vacation schedules and therefore can more easily postpone or cancel vacations if they have safety concerns. This drives exposure to both lower occupancy and net revenue yield pressure following events. In 2016, the impact of geopolitical and terrorist events was more pronounced for Mediterranean itineraries. Operators have taken steps to modify itineraries or move capacity to other regions. We believe this lower supply in the Mediterranean in 2017 will support improved occupancy and pricing for those itineraries by the end of 2017.
	Capital expenditures
2	High levels of capital expenditures continue to be a risk factor for cruise operators since ship building commitments must be secured as many as five years in advance. These advanced commitments expose operators to meaningful swings in credit measures because if ship deliveries occur during periods of weak operating performance, operating cash flow may be insufficient to fund ship costs and operators will typically increase their borrowing to fund any remaining costs. We believe, however, that operators will take a measured approach with respect to new builds over the next few years since shipyard capacity is limitedthere are only about four major shipyards globally. Given operators' new build programs, and data from CLIA, which estimates there are 97 ships on order (including both ocean and river ships) between 2017 and 2026, we expect the major shipyards will be at full operating capacity for the next few years. We believe this, along with the long lead times to build ships, will preclude operators from unexpectedly, or meaningfully increasing their new build related capital expenditure levels over the near term.
	Cruise market in China continues developing
3	China remains a key growth opportunity for cruise operators, and many are repositioning existing ships into this market and introducing new ships designed specifically to take advantage of its growth potential. While we expect industry capacity in China to grow 20% in 2017, cruise capacity in China still represents a relatively small, albeit increasing, percentage of cruise operators' total capacity. As cruise capacity in China continues increasing across operators, we expect yields in China to decline, although we still expect them to be good relative to fleet averages. We expect the cruise market in China should benefit from a growing middle class with rising income, as well as improving infrastructure and transportation that improve connectivity within the country and make it easier for passengers further inland to travel to port cities in order to cruise. Estimates from CLSA suggest China outbound tourism and Chinese tourism expenditures will grow at a compound annual growth rate of 10% through 2020. Given this growth trajectory, we believe the industry will absorb the new capacity set to launch in Asian cruise markets.

Industry developments

U.K. gaming may see combinations in 2017

A number of completed and proposed M&A transactions in 2016 highlighted the U.K.'s betting and gaming industry's desire for consolidation within the domestic market, and expansion into overseas markets, driven in part by the ever-rising burden of regulatory costs. Remote gaming has become a key growth driver for the industry, and we expect operators with strong brand and product propositions to continue achieving double digit revenue increases in the digital segment in 2017.

We expect heightened levels of M&A activity to continue, given the persistence of driving forces which have emerged in the recent past, including:

- Volatility of profitability and margin pressure arising from regulation, which may be mitigated to an extent by a more balanced mix of revenues, both between betting and gaming, and between land-based and remote channels.
- Cross-border transactions as a means of acquiring share in lower-penetration markets with
 potential for rapid growth as the domestic online market moves towards maturity, and the landbased market exhibits gradual decline.
- Acquisition of technological capabilities and established brands in order to differentiate the customer proposition and strengthen competitive positions, which we view as critical success factors for digital operators.

As a result, we see the potential for further debt issuance from both seasoned and first-time issuers to finance M&A activity leading to increased industry leverage. We do not anticipate further material consolidation in the U.K. land-based segment due to restrictions imposed by competition authorities.

We anticipate increasing levels of industry capex, which may constrain free operating cash flow, both as a result of post-transaction integration and the needs of non-acquisitive peers to invest in their technological capabilities. In addition, we see the potential for increased shareholder returns as a risk to discretionary cash flows.

M&A could weigh on credit quality of terrestrial gaming companies in Canada

In 2017, we expect Canadian casino operators to remain opportunistic in pursuing terrestrial gaming bundles in the attractive Ontario market. We believe bidding for these strategically important assets will prove to be competitive, and that the acquisitions will likely increase debt leverage. While asset quality and diversity of revenue could improve somewhat, and most assets should provide for favorable economics, it might not be sufficient to support credit quality of some operators. Furthermore, through 2017, West Coast Casino operators will continue to be challenged by new conditions placed by the B.C. regulator on VIP players in late-2015 (specifically, the requirement to demonstrate source of funds) against the backdrop of still-tough and increasingly uncertain economic environment for players from China--who represent an important source of cash flow.

Cannibalization risk remains in Macau's gaming industry

Cannibalization could occur between new and existing casinos in Macau, especially during the period when several new casinos open together and demand is weaker than casino operators' expectation. We believe it will take the market more time to absorb the recently added new capacity, and that existing properties could face revenue cannibalization in 2017. Additionally, new casinos may not receive large gaming table allocations, which could lengthen their payback periods. Nevertheless, we believe the worst is behind the industry. Four of six Macau gaming concessionaires have already commenced operations for their new casinos in Macau's Cotai district over the past 12-24 months, with only one new casino set to open in 2017 and another one in 2018.

U.S. timeshare goes its own way, and sheds some capital intensity

We believe transaction activity will be slower in 2017 now that all major hotel companies have spun or sold their timeshare operations. In 2016, Diamond bought Intrawest's timeshare unit, Interval bought Vistana from Starwood, Apollo bought Diamond, and Hilton Worldwide spun off HGV. We also believe continued good sales execution should enable many rated operators in the industry to maintain

revenue growth slightly higher than overall consumer spending. We have seen large operators like Wyndham and Marriott Vacations shift focus to acquiring new customers rather than selling to existing owners, and we expect that trend to continue. The challenge will be whether they can manage marketing and other costs and preserve margins while adding new owners to their systems. Overall, we expect timeshare ratings to be stable in 2017. Even though we believe modest business improvement is possible for some as the industry continues to experiment with capital-light inventory sourcing models, it probably will not be enough to offset the key risk factor of high volatility experienced by this high priced, discretionary, leisure product.

Related research

- Macau Gaming: The Cards Look Right For A Recovery, Nov. 16, 2016
- Risks Rise In Aging U.S. Lodging Cycle, Sep. 9, 2016

Cash, debt and returns

Global Hotels, Gaming and Leisure

Chart 137 - Cash and equivalents / Total assets



Chart 139 - Fixed versus variable rate exposure

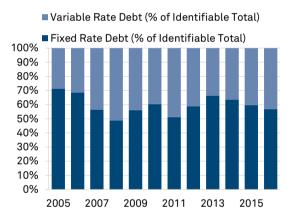
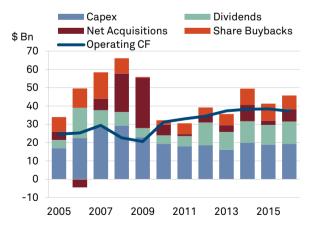


Chart 141 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 138 – Total debt / Total assets

Global Hotels, Gaming & Leisure - Total Debt / Total Assets (%)

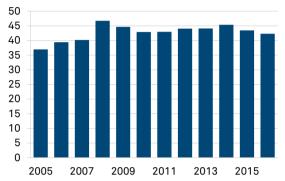


Chart 140 - Long term debt term structure

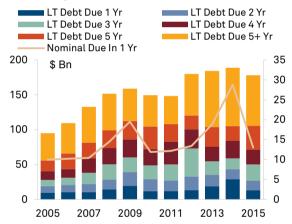
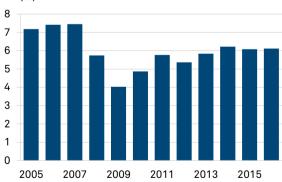


Chart 142 - Return on capital employed

Global Hotels, Gaming & Leisure - Return On Capital (%)



Industry Top Trends 2017

Media and Entertainment



Overview

- Ratings Outlook: Rating trends across the global media and entertainment industry remain broadly stable but negatively biased due to continued secular shifts in media consumption and advertising spending. Media companies in the print and publishing, radio, and, increasingly, television sectors face the greatest credit ratings pressures. Overall, we believe that diversified media companies with global footprints will be more favorably positioned than niche players with concentrated operations in few regions.
- Forecasts: Advertising spending is highly correlated to overall economic growth and consumer spending. We expect mid-single-digit percentage growth in global ad spending in 2017, fueled by strong growth in mobile ad spending. Traditional media ad spending will either slow down or decline, while growth in TV ad spending will vary by market, driven by cyclical events such as sports and elections. We expect lower TV ad spending growth in 2017 in the U.S. and key European markets (e.g. U.K., Germany, Franc), as a result of benefits from cyclical events (sports and political) and strong TV pricing in 2016.
- Assumptions: We forecast U.S. GDP growth of 2.4% and consumer spending growth of 2.5% in 2017, driven by job and wage gains and a stronger housing market, and eurozone GDP growth of 1.6% in 2017, with significant regional disparities. For the U.K., we expect the robust economic growth in 2016 to carry over into early 2017 before gradually slowing under the impact of Brexit, resulting in overall GDP growth of 1.4% in 2017.
- Risks: The key risks to our industry ratings outlook include global economic uncertainty or shocks damaging consumer confidence and ad spending, increased audience fragmentation, and continued shift in ad spending to digital from traditional media.
- Industry Trends: The media and entertainment industry continues to face growing secular shifts in viewing consumption and ad spending to digital media at the expense of traditional print-based media. Internet ad spending is booming, driven by mobility. Meanwhile, traditional sectors, such as print, radio, and increasingly TV, are seeing continued audience and ad revenue declines. We expect industry consolidation to increase in 2017, especially in the U.S., as media, telecom, and technology companies reposition themselves to address these secular trends.

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Ratings trends and outlook

Global Media and Entertainment



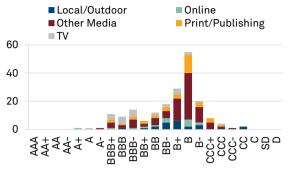


Chart 145 – Ratings outlooks by sub sector

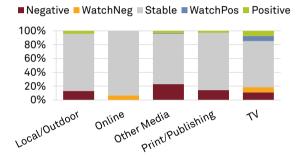


Chart 147 - Ratings net outlook bias by sub sector

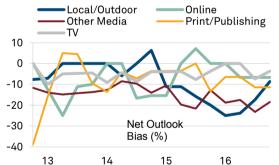


Chart 149 – Ratings outlooks

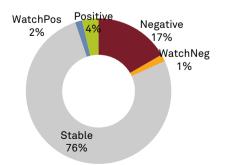


Chart 144 – Ratings distribution by region

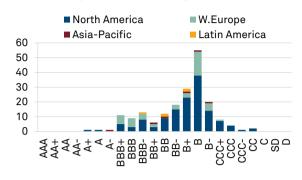


Chart 146 - Ratings outlooks by region

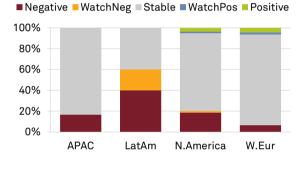
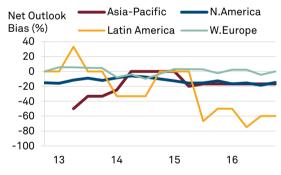
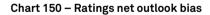
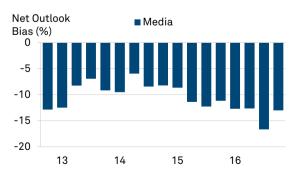


Chart 148 – Ratings net outlook bias by region



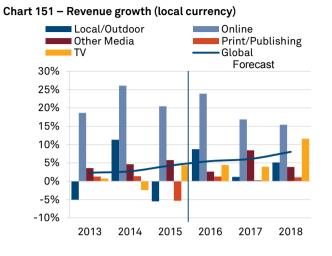




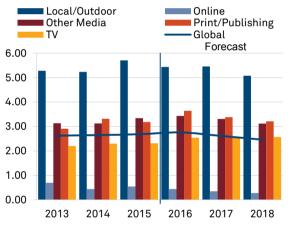
Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

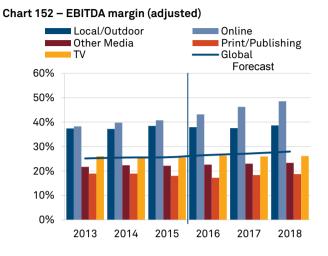
Industry forecasts

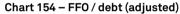
Global Media and Entertainment

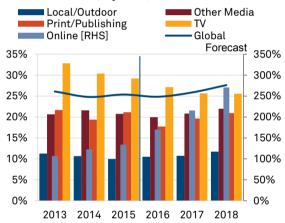












Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Television

Over-the-top (OTT) video services will continue to encourage further audience fragmentation

With accelerated growth in consumers viewing streaming OTT services such as Netflix, Amazon Prime, YouTube, Hulu, and others, traditional television consumption in the U.S. continues to decline. Although U.S. pay-TV subscriber rates declined roughly 1% in 2016, we expect this rate to increase modestly to above 1% in 2017 as consumers are presented with a growing slate of alternate viewing experiences. To counter this, media and entertainment and video distribution companies (cable, satellite, and telecom) have ramped up their product offerings. For example, AT&T Inc. launched DIRECTV NOW late last year, and we expect Hulu (which is owned by four major U.S. media companies) to launch its online bundled video service in the first half of 2017. Both promise consumers a slimmed down video bundle (so called "skinny bundle")--but still within the traditional TV ecosystem--that may help recapture customers who have dropped their pay-TV subscriptions.

In contrast to the U.S., we believe the risk of consumers moving away from traditional TV viewing to OTT platforms, and thus hurting broadcasters and pay-TV operators' revenues, is less pronounced in Europe and Latin America. Due to diversity of languages, cultural, and viewing habits in those regions, many viewers prefer local content, of which OTT providers have limited offering. Overall, we believe European and Latin American pay-TV providers have better U.S. content offering than OTT providers because the U.S. content libraries available on OTT platforms are both smaller and limited compared to those offered in the U.S. Additionally, in Latin America, the still relatively low penetration of broadband Internet service and pay-TV limit, to some extent, the threat OTT video services pose to traditional television, which remains advertisers' preferred vehicle for ad spending, though at declining rates.

TV ad spending will decline in most regions, including the U.S.

We expect global TV ad spending to decline in 2017, after growing at a mid-single-digit percentage rate in 2016. After six quarters of solid growth, U.S. TV advertising in 2017 will likely decline due to the absence of political and Olympic advertising this year, continued audience ratings declines, and advertisers allocating more dollars to digital video platforms. Similarly in Europe, TV ad growth will likely trail the 2016 levels, especially in the U.K. due to the uncertainties following the Brexit vote. Germany will likely see 2%-3% growth, though below 2016 levels, due to its still solid economic fundamentals; and France's growth rate will likely remain flat or increase slightly in 2017, compared to 2016, due to weak GDP growth and political uncertainties. Although secular pressures on audience ratings persist due to the continued fragmentation of video offerings, we expect ad pricing to remain resilient in the U.S. due to the strong upfront and limited ad inventory as declining audience ratings continue to limit overall inventory levels.

Competition for quality content will remain fierce

Media companies' ability to innovate, produce, and offer quality content is a key strategy to retaining audiences and remaining competitive against the OTT platforms. As a result, we expect these companies to continue spending aggressively on original content. Additionally, we expect spending on sports rights to remain robust as sports remains a must-have content offering for retaining live audiences. In 2016, according to FX Networks Research, there were 455 scripted original TV series in production in the U.S., and we expect this elevated level to continue due to the increased spend by non-traditional players such as Netflix, Amazon, Hulu, and other digital companies. While these newer entrants are comfortable sacrificing short-term profitability to acquire compelling content which they believe will help drive subscriber growth, this strategy will likely pressure operating margins for established media companies and require them to show considerable discipline in their programming budgets to keep operating margins stable. We also believe that while most media companies will continue to invest in their own content production, those with weaker balance sheets may search for access to content through partnerships.

7

U.S. local TV could see a resurgence of mergers and acquisitions (M&A)

Coming off of a U.S. presidential election year, we expect that U.S. local TV broadcasters' advertising revenues will decline in 2017 but remain ahead of 2015 levels due to robust growth in retransmission revenues and modest growth in core advertising. Operating margins will likely decline to below 2016 levels due to the absence of high-margin political ad spending but remain in line with or ahead of 2015 levels. The completion of the Federal Communications Commission's (FCC's) broadcast incentive spectrum auction on February 10, 2017 and the possibility of the FCC relaxing or eliminating broadcast ownership caps could increase M&A activity and result in increased leverage in the industry.

Local Media (Radio And Outdoor)

4

	Core radio advertising will continue to decline
1	Radio broadcasters' share of audience attention and advertising dollars will likely continue to decline modestly due to audience fragmentation and radio companies losing market share to digital media. Additionally, ad rate declines will make it challenging for radio broadcasters to maintain stable top-line growth via digital media or other revenue streams. We expect that the industry's share of audience attention will decline only slightly in 2017 as a result of digital radio and other media alternatives. We expect that operating margins will decline modestly due to stable to slightly lower top-line growth, offset by inflationary cost increases.
	U.S. outdoor advertising revenue growth will likely exceed GDP growth
2	With minimal disruption from digital advertising, we expect that U.S. outdoor advertising will continue to hold its share of advertising in 2017, with some top-line growth from higher ad rates and occupancy levels as a result of digital advertising board expansions. We expect outdoor revenue to grow modestly faster than our U.S. GDP growth forecast. Operating margins will likely remain robust and relatively stable.

Print And Publishing

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	Print ad revenue will likely decline by 10% in 2017
1	Newspaper and magazine companies in the U.S. and western Europe will likely lose about 10% of their print ad revenues in 2017 as consumers and advertisers continue to adopt new digital media technologies and media outlets. We believe this decline is unlikely to reverse during the next five years due to ongoing reduction in print readership, changing consumer demands, and advertisers' desire for improved ad measurement and investment returns.
	Publishers will extend their brands, content, and audiences into new revenue streams
2	We expect total revenues for newspaper and magazine companies, especially in the U.S., to decline at a low- to mid-single-digit percentage rate in 2017 as publishers extend their product mix and optimize their pricing models. Over the next year, we expect that publishers will make steady progress expanding into areas such as premium and custom content, live events, and marketing services such as customer analytics, creative development, and lead generation. Although many publishers generate only about 20%-30% of revenues from new digital initiatives and new ventures, we expect that percentage to steadily increase.
	Industry consolidation will continue as legacy printing and publishing companies struggle with declining profitability or business transformation challenges
3	Over the next five years, as print volumes decline and pricing pressure persist, we expect continued consolidation in the global printing and publishing industry. Print will remain a valuable component of the marketing mix, and we expect that low valuation multiples, along with good print attribution metrics (an advertising channel that is useful for brand awareness or contributing to a sale), will motivate strategic acquisitions. The primary factors driving strategic acquisitions include companies' desire to quickly obtain technology knowhow or capabilities, or to gain scale in profitable niches; and their need to maintain operating leverage to protect their margins or market positions.

	Online advertising will continue to grow strongly in 2017
1	Global online ad revenues will likely exceed \$190 billion by the end of 2017 due to strong growth in mobile advertising and surpass television to become the largest advertising category globally. Furthermore, Magna Global predicts that strong demand for video, social, and Internet search subcategories will result in compounded annual ad revenue growth in the mid-teens percentage area and lead to online advertising accounting for about half of global ad sales by 2020.
	Mobile advertising will boost online display ad growth as focus shifts to user engagement
2	Advertising on mobile platforms grew about 50% in 2016, representing over 45% of digital ad spending. We expect mobile advertising to increase to 50% of total digital ad spending in 2017 due to increased smartphone penetration and affordability, and improved availability of mobile telephony. Smartphone appsthe preferred method to access messaging and social media contentare redefining how media companies pursue mobile advertising. Apps, which provide a robust set of geolocation and first-party data, are helping to drive monetizing.
	Programmatic advertising will increase despite challenges
3	Programmatic advertising will remain the primary method for buying and selling online display advertising in 2017, despite fraud, viewability, ad-blocking, and complexity concerns. In 2016, programmatic advertising accounted for slightly more than half of digital ad spending in the U.S., and we expect this share to increase to about 60% in 2017. Globally, the trend toward programmatic advertising is becoming the norm. Advancements in ad technology and standards, increased personalization and targeting sophistication, and ad sales and purchase efficiency improvements should support growth.

Internet/Online

Other Media Subsectors

7

Ad agencies will remain healthy despite foreign exchange headwinds and concerns over transparency

We expect organic revenue growth of 2%-5% for global ad agencies in 2017, supported by accelerating growth in digital media, above-average growth in emerging markets, and improved economic growth in the U.S., tempered by a challenged ad spending environment in Europe. We expect that ad agencies' operating margins will continue to expand, albeit at a more modest rate than in past years, despite pressure on fees due to growth in higher-margin analytical services and continued focus on tight cost controls.

Film studios face growing risks from increased dependence on tent-pole films

Despite a record box office year in 2016 due to increased ticket prices (premiums for IMAX, 3D, etc.), the U.S. domestic box office is in a long-term secular decline because consumers have access to an expanding slate of entertainment choices. This has led to low-single-digit percentage audience declines, which will pressure domestic exhibitors' earnings. However, for film studios, healthy growth in international box offices, primarily in developing markets, should more than offset these domestic declines. Overall, we expect that U.S. domestic box revenues could grow at a low-single-digit percentage rate in 2017, compared with 2016, partly due to a new Disney Star Wars film. However, with any film slate, significant risks exist. Specifically, the major film studios have steadily increased their reliance on big-budget tent-pole films, and we believe this strategy will likely raise earnings volatility and significantly increase business risks.

Music is turning the corner on growth

The recorded music industry continues to face secular shifts as music consumption moves to higher-margin digital sales from lower-margin physical sales, and, within digital music, the shift to a streaming model from a download model. In 2015, global music revenue grew for the first time since the early 2000s. We believe the industry has finally reached an inflection point after over a decade of digital disruption, and digital revenue growth is now outpacing the decline in physical music sales.

In the digital music segment, strong growth in streaming revenues, which is far outpacing the decline in download revenues, is fueling the improved growth in revenues. Streaming music now accounts for almost 43% of total digital sales industrywide. We expect the healthy growth prospects for streaming music to continue, given the still relatively underpenetrated streaming markets in Europe and, to a lesser extent, the U.S.

We believe the shift toward digital streaming is inevitable, but continued experimentation in the various subscription-based models could slow its growth prospects. Service providers such as Apple, Pandora, Spotify, and Tidal continue to experiment with models such as album or artist exclusivity on their streaming services, and this may lead to a rationalization for smaller, less financially sound subscription-based services. Furthermore, changing revenue-sharing agreements between labels and artists or songwriters may result in higher fees or royalties distributions, which could adversely affect digital operating margins.

Key risks and opportunities

Television More M&A likely to come in 2017 After a lull in large-scale M&A activity over the past few years, we saw two significant deals announced at the tail end of 2016. AT&T's proposed acquisition of Time Warner Inc. and Twenty-First Century Fox Inc.'s proposed acquisition of Sky PLC. While both deals bring together content and distribution, it isn't clear what benefits vertical integration brings beyond diversification. Still, we believe these two deals will likely accelerate the merging of content and distribution. For U.S. local TV stations, in addition to the prospect of loosening media ownership caps and clarity following the completion of the FCC's broadcast TV incentive spectrum auction on February 10, 2017, we expect TV stations M&A to accelerate in 2017. Although there likely will be some rationalization in acquisition multiples following disappointing election revenue generation in 2016 and much lowerthan-expected spectrum auction values. M&A will likely lead to an increase in debt leverage for acquirers. Global economic pressures could hurt TV advertising We expect that weaker economic recovery in the U.K. triggered by uncertainty regarding Brexit, potentially weakening economic prospects for the U.S. and EU, and declining consumer confidence could pressure advertising budgets and negatively affect broadcasters' TV advertising revenues and depress their profitability margins. Conversely, we expect that, as a whole, Latin America's GDP growth will recover in 2017, reaching 1.7% on average, after a likely contraction of about 0.5% in 2016. 7 Specifically, in Brazil, after two years of recession, we believe that GDP growth and improving economic conditions might support a gradual recovery of ad spending in 2017 after a disappointing 2016 (despite the Summer Olympics in Brazil). Continued economic pressure will likely increase foreign exchange volatility. For companies that have significant currencies mismatches related to their revenues (because their debt are denominated in currencies that differ from their generated revenues), foreign exchange volatility can hurt their credit metrics if they haven't hedged exposure through forward contracts. More favourable regulatory and government policies in the U.S. With the start of the Trump administration, we expect significant changes in the U.S. regulatory environment which could favourably impact the media and entertainment industry. During the election, Trump gave mixed signals on various issues affecting media, such as consolidation, net neutrality, and privacy. However, we expect that regulatory conditions will be less intrusive under President Trump than during the Obama administration. We believe this bodes well for consolidation in the industry--among media companies and between content and distribution companies. Additionally, reduced oversight regarding privacy rules could help media companies, specifically television, use data to increase targeted advertising to consumers. Companies will continue to make sizeable investments in programming 4

Television companies' continuous effort to offer high-quality content-- either by acquiring third-party content or producing their own so as to attract and retain audience--exposes them to increasing programming investments and higher working capital needs. These factors can negatively weigh on the companies' credit metrics and ultimately harm their credit quality because they reduce the companies' free operating cash flow and constrain their liquidity.

Opportunities abound in digital advertising

As video content distribution expands beyond traditional platforms to include digital and mobile, broadcasters and pay-TV providers stand to benefit from significant growth in digital advertising, especially in the mobile space. The trend of rapidly growing video and TV content consumption over alternative media such as mobile devices is driving digital and mobile advertising growth. The relative ineffectiveness of ad blocking technology in the mobile environment is also driving this growth.

5

Local Media (Radio And Outdoor)

	Balance sheet capacity will limit radio M&A prospects
1	We don't see much prospect for additional radio M&A in 2017, beyond the proposed merger of CBS Radio Inc. and Entercom Communications Corp. Few companies have the balance sheet capacity to undertake a sizeable acquisition, and there is a significant discrepancy between buyers' and sellers' expectations. We also believe that any outdoor media transaction will depend on Clear Channel Outdoor Holdings Inc.'s need or willingness to sell additional markets.
	The economic impact
2	Local media revenue is highly correlated to GDP and the health of local markets. A U.S. recession, though not contemplated for 2017, would cause corresponding revenue declines for local media companies as well as magnified declines in EBITDA and operating margins. For instance, radio revenue declined 25% during the 2008-2009 recession. And although television broadcasters and outdoor media advertisers have recovered that lost revenue, the radio industry hasn't recovered most of its lost revenue.
	U.S. radio broadcasters' financial problems pose significant credit risks
3	With iHeart Media Inc. and Cumulus Media Inc., two of the largest U.S. radio broadcasters, facing financial duress and are seeking to restructure their debt obligations, we see the possibility of irrational pricing behavior that could cause larger-than-expected decline in radio advertising rates and revenues across the industry. Industrywide mid-single-digit percentage revenue declines or worse would likely result in several downgrades and us reexamining whether U.S. radio broadcasters' leverage levels are sustainable.

Print And Publishing

2

Ongoing cost reduction will be required to support a sustainable publishing business model

Over the next few years, traditional publishers will need to carefully balance their investments in growth initiatives with cuts in their legacy print and distribution platforms. Failure to carefully manage the transition, which requires implementing cash flow harvesting strategies to maximize the print readership base's residual value, could result in sharp declines in profitability as volumes decline. However, we expect that some companies will fail to make the transition, given the transformation's complexity and the need for continuous investments in the business.

Improved customer engagement should boost ad rates

We expect publishers to use the strength of their content and brands to establish deeper engagement and customer relationships around targeted interest areas. Increased personalization should help to improve audience conversations and brand differentiation. Additionally, increased engagement should improve ad relevance, response rates, and lead to higher ad rates. Technology investment such as improved data analytics and content management capabilities will be required. Equally important will be a fundamental redesign of business alignment, how content is created, and how businesses connect with audiences.

To succeed, publishers will need to publish and monetize their content on multiple third-party platforms

The rapid increase in content consumption on third-party platforms and the continued dominance of companies such as Facebook Inc. and Google Inc. in news and content aggregation are forcing publishers to rethink how their content is distributed, consumed, and monetized. As content marketing strategies mature over the next five years, we believe publishers will become more agnostic about which platform they monetize their content as longs as their brands and content remain relevant. We also expect that publishers will increasingly rely on social media and other new media platforms to promote their content, and that they will use a combination of online and offline multimedia channels to engage their audience in broader conversations.

Internet/Online

7

A few powerful technology platforms will dominate digital ad spending; scale and ability to collect robust first-party data sets matter

Despite the rapid growth of the global digital ad market, only a handful of information technology and social media companies (Google, Facebook, Baidu Inc., Yahoo Inc., Microsoft Corp., etc.) control most of the digital ad spending flow. We expect this trend to continue despite rapid changes in ad technology and new entrants, given these companies' dominant market positions, powerful technology platforms, vast technology development resources and expertise, broad user base and networks, and significant financial resources. Furthermore, these companies' ability to collect and accurately structure first-party data to build effective user profiles and predict user behavior provide them with a meaningful competitive advantage.

Data privacy regulations could impact content personalization

Companies' ability to provide personalized online user experiences at scale and to personalize ad communication has the potential to revolutionize online marketing. However, concerns about compromises or inappropriate use of personal data are causing regulatory authorities around the world to consider a number of restrictive legislative and regulatory proposals. We expect that a patchwork of new data protection frameworks and regulatory regimes will increase compliance costs, information security needs, and operational complexity. Furthermore, stricter rules or increased marketing complexity could impair personalized users experiences and new product developments.

Messaging and ChatBots offer growth potential

We expect that messaging app development will provide a new platform to support advertising and ecommerce growth in 2017 and beyond. Messaging apps, which historically offer users the ability to chat and exchange pictures and videos, is evolving to provide a one-to-one computer-simulated interaction over the Internet. Use cases include retail and voice search, and ecommerce transaction support. Over the next few years, we expect a sharp increase in investments in development tools to boost platform utilization and app growth. In Asia, for example, the companies that provide the WeChat (Tencent Inc.) and KakaoTalk (KAKAO Inc.) messaging apps have broad user bases, robust ad platforms, and are leading innovation.

Other Media Subsectors

Ad agencies face advertiser backlash in the short term but will benefit from advertising's increasing complexity long term

Over the past few years, advertisers have increased the number and frequency of agency reviews as they seek to consolidate advertising contacts, especially the purchasing of media inventory ("media buying"), to reduce fees paid to ad agencies. Thus far, the financial impact has been minimal due to ad agencies' holding-company structures, which create both geographic and client diversity.

Longer term, ad agencies face more competition for advertisers' dollars from digital giants such as Alphabet Inc. and Facebook, media companies with developing in-house capabilities, and technology companies ranging from Oracle Corp. to IBM. Still, we believe long-term disintermediation risk is likely contained due to the advertising landscape's increasing complexity and ad agencies' independence and broad capabilities, which other companies, such as digital ad agencies and technology companies don't have.

The music industry is reaching an inflection point as digital growth outpaces physical declines

We expect that growth in paid subscription music streaming services will outpace secular declines in physical music sources, such as CDs. The number of paying streaming subscribers worldwide has reached an inflection point, such that many streaming services have reached scale and now achieve economies of scale. We believe the services streaming companies provide (such as the ability to create a playlist and easy access to the latest hits or music news) and the relatively low price for monthly streaming subscriptions (typically at or below €10/\$10) have enabled the music industry to reduce its exposure to piracy versus download sales.

Demand for quality TV content continues to fuel film studios' growth; but will the TV content bubble burst as audiences shrink?

As growth in the U.S. box office continues to soften, healthy growth in the international box office is changing the definition of "success" for film studios. These changes include the film studios' growing reliance on a smaller number of very big-budget films which, with greater and less diversified financial risk, increase earnings volatility. Film studios have sought to reduce this volatility by entering into co-production deals that diversify risk among partners, especially for second-tier studios.

Although film production grows increasingly risky, studios are benefitting from the increased demand for quality original TV programming from pay-TV networks seeking to differentiate from their peers and online distributors that are building their brands. Still, longer-term monetization of this content is uncertain due to shrinking TV audiences and the decline in the U.S. syndication market. Last year, FX Networks Research estimated that there were 455 scripted original TV series in production in the U.S. We believe this content bubble will eventually burst because as audience fragmentation increases, film studios face the risk that viewers may not watch these increasingly expensive TV shows.

Industry developments

Audience fragmentation

In the U.S., fragmentation of television viewing is gaining speed as audiences continue to migrate away from traditional television to alternate sources of entertainment and as traditional video service providers face increased pressure to offer skinny video bundles with fewer cable networks (and, in the longer term, OTT content options). As the skinny bundle gains market share, we believe cable network operators' traditional bundling practice will become unsustainable. Cable networks operators have historically used the video bundle to both push and protect weaker cable networks by tying carriage of their flagship networks with their lower-rated networks. We believe that video service providers will either reposition those lower-rated networks to second-tier specialty bundles or transform them to online digital networks (like Comcast Corp. recently did with its Esquire network). We expect that television and, to a greater extent, cable network audience ratings will remain under pressure as a result of ongoing video fragmentation, with some protection for those providing must-watch content and live sports programming.

These trends are less clear-cut in **continental Europe**, however, where television is primarily free and funded by TV advertising. In France, for example, the number of freeview channels has increased to 26 in 2016 from six in 2005. And although the resulting market fragmentation has shrunk the incumbent channels' audiences, it has also led to average TV consumption (including catch-up TV viewing) remaining fairly stable at about 3 hours and 45 minutes daily for the key advertising target of women under age 50 who are responsible for purchasing decisions. This fragmentation has resulted in the smaller channels (some of which the incumbent players own) becoming more focused on one particular audience, while the incumbent channels remain generalist and a way to reach the masses.

In Europe, pressure from OTT remains moderate for now because OTT providers are constrained by the same local regulation as broadcasters (such as the minimum time lapse to release a movie from its release at the box office), while local content, including local language and references, remains key. In the U.K., where pay-TV has the highest penetration rate in Europe, skinny bundle offers and OTT pressure are less pronounced than in the U.S. due to the importance of local content.

Meanwhile, in most **Latin American** countries, the penetration of pay-TV and broadband is still low, accounting for less than 40% of households in Brazil, for example. In Asia Pacific, secular trends vary significantly across the region, though pay-TV and free-to-air television operators in some developed markets, such as Japan, South Korea, Singapore, and Australia, are under increasing pressure from OTT content providers.

Global media companies expand OTT platform experiments

As pressure on the traditional video bundle increases, media companies in Europe and, more reluctantly, in the U.S. have begun participating in virtual bundles. For example, although U.S. media companies are concerned that launching OTT options will undermine the existing domestic TV ecosystem, they have launched a number of virtual multichannel video programming distributor (MVPD) options (including Sling TV, DirecTV Now, and the soon to be launched Hulu vMVPD service) or offered their own subscription video on demand (SVOD) OTT services (such as CBS All Access, HBO Now, and the soon to be released ESPN SVOD service).

Still, it's too early to tell whether these services will stem the audience losses traditional cable and broadcast networks are experiencing or further encourage consumers to move outside the traditional television ecosystem. We view the current selection of OTT virtual bundles as incomplete and unlikely to fully satisfy consumers. Virtual bundles such as Sony's PlayStation Vue, Dish's Sling TV, and AT&T's DirecTV Now all lack a full slate of broadcast stations and exclude certain cable networks. Even Hulu's proposed virtual bundle, which we had high hopes for due to its ownership by Comcast's NBCUniversal Media LLC, Time Warner, Twenty First Century Fox Inc., and The Walt Disney Co., appears to be fully loaded with the partners' owned networks but lack most non-owned networks such as those offered by Discovery Communications Inc., Scripps Networks Interactive Inc., Viacom Inc., and AMC Networks Inc.

Advertising trends

We expect that overall ad spending in the U.S. will grow at about 2% in 2017, which is slower than in 2016, due to the absence of the Olympic Games and the presidential election. Excluding those two events, core ad spending (local and national) will likely increase by 3.2% in 2017-- ahead of our U.S. GDP forecast of 2.4%. We believe digital advertising will grow at a mid-teens percentage rate as it continues to take share from traditional media. We expect that only the digital, outdoor media, and TV sectors will show solid growth in 2017, while other media sectors (newspapers, magazines, and radio) will experience continued advertising declines. Although TV ad spending has shown surprising strength since the second half of 2015, we believe this recovery is cyclical and will begin to reverse in 2017.

We expect low- to mid-single-digit percentage growth in ad spending in Europe, the Middle East, and Africa (EMEA) in 2017, despite a slowdown in economic recovery and the uncertain prospects surrounding the U.K. given its impending departure from the EU. We anticipate that the main factors for this growth will be digital ad spending, particular in the mobile area, and that TV ad spending will decline from 2016 levels. In the U.K., ad spending will likely grow at a mid- to high-single-digit percentage rate, thanks to the digital expansion; while ad spending growth prospects will likely remain subdued in France, with flattish growth. In Germany, TV ad spending will likely grow at a 2%-3% rate due to the market's still solid economic fundamentals, and digital ad spending will likely grow at significantly higher rates than TV ad spending due to expansion of nonlinear offers (video, search, social media, etc.).

Financial policy

Vertical integration and subsector consolidation will likely increase transformational M&A

We believe M&A activity in the media and entertainment industry could step up during the next few years. For the past several years, we have discounted the possibility of a large-scale industry consolidation, despite growing pressures on the U.S. television business due to audience fragmentation and the shift in advertising away from traditional media to digital platforms. Most media companies have been developing strategies to address these trends, and few, in our view, saw themselves as vulnerable to the changing U.S. media landscape. However, we believe industry changes regarding video distribution and the proposed AT&T and Time Warner merger might make vertical integration of content creation and video distribution more attractive, leading other media executives to seek partnerships or sell their companies. This could result in meaningful consolidation of the industry because many media, telecom, and technology companies may feel strategic pressure to emulate the integrated platforms of AT&T and Time Warner, Fox and Sky, and Comcast and NBC Universal.

In Europe, however, we don't expect any transformational M&A. Rather, we expect that European media companies will focus on smaller bolt-on acquisitions to bolster their existing operations and improve their geographic footprint, and fund these acquisitions with generated cash flows. We also expect that TV broadcasters and pay-TV operators will focus on deals that extend their digital offering and content production. The absence of large M&A will, in our view, have a neutral to positive impact on leverage for European media companies in 2017.

M&A opportunities could temper shareholder-friendly actions in the U.S.

We believe the seven investment-grade U.S. diversified media companies we rate will return less cash to their shareholders in 2017 than in any year since 2010. The increasing possibility of sizable M&A opportunities has, or could, lead many of these companies--CBS, Discovery, Scripps, Time Warner, Fox, Viacom, and Disney--to scale back or temporarily suspend their share repurchase programs in 2017 or 2018. As a result, we expect many of these companies to start building acquisition capacity and reduce shareholder payouts. We estimate that the companies will return \$16 billion to shareholders (\$11 billion in stock repurchases and \$5 billion in cash dividends) in 2017, which is less than the \$21.6 billion annual average (\$17.6 billion in stock repurchases and \$4 billion in cash dividends) distributed during the 2010-2015 peak years. Our forecast doesn't include additional M&A beyond those already announced. Nonetheless, we believe additional M&A would likely result in the participants suspending their share repurchases, leading to further reduction in our shareholder payout forecasts for 2017 and 2018.

We don't expect media companies' reduced shareholder returns to have any impact on our credit ratings, unless that change is associated with M&A. Additionally, we don't expect any of the companies' adjusted leverage to exceed the thresholds we have set for the assigned credit ratings. More than likely, any upgrades or downgrades would occur as result of M&A.

Instead of making shareholder-friendly actions, we expect European media companies-contrary to their more aggressive U.S. media peers--to exhibit a relatively disciplined approach to shareholder returns in 2017, invest in the development of future revenue streams, and replace their structurally declining businesses with faster growing operations.

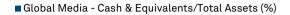
Related research

- Investment-Grade U.S. Media Companies' M&A Plans Will Reduce Shareholder Cash Payouts In 2017, Jan. 13, 2017
- Research Update: Time Inc. Rating Lowered to 'B+' From 'BB-' On Higher-Than-expected Leverage; Outlook Negative; Issue Ratings Off UCO, Dec. 21, 2016
- Research update: Twenty-First Century Fox Inc. Ratings Placed On CreditWatch Negative On Non-Binding Offer For Sky PLC, Dec. 9, 2016
- Research Update: Time Warner Inc. Ratings Placed on CreditWatch Positive On Pending Acquisition By AT&T Inc., Oct. 24, 2016
- The U.S. Media Industry's Toughest Casting Call: The Next Generation Of CEOs, Oct. 13, 2016
- Research Update: CBS Radio Inc. Assigned 'B+' Rating; Outlook Stable; New Debt Rated, Sept. 28, 2016
- Research Update: Viacom Outlook Revised To Negative From Stable On Weaker Operating Performance; 'BBB-' Rating Affirmed, Jun. 21, 2016
- U.S. Ad Spending Will Get An Olympic and Political Boost in 2016, Jun. 29, 2016
- Ratings Implications For Participants In the Broadcast Incentive Auction, Apr. 5, 2016
- S&P Credit FAQ: How Standard & Poor's Calculates Leverage For U.S. Diversified Media Companies, Apr. 4, 2016
- Conversations On The Road: U.S. Media Companies And Distributors Work To Create A Win-Win Path To The "Skinny Bundle," Mar. 18, 2016
- Research Update: Nexstar Broadcasting Group Upgraded to 'BB-' From 'B+' On Pending Acquisition of Media General; Outlook Stable, Feb. 25, 2016

Cash, debt and credit measures

Global Media and Entertainment

Chart 155 - Cash and equivalents / Total assets



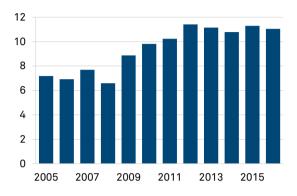


Chart 157 - Fixed versus variable rate exposure

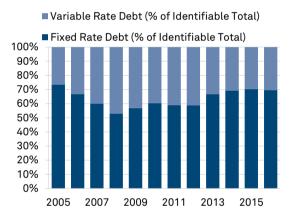
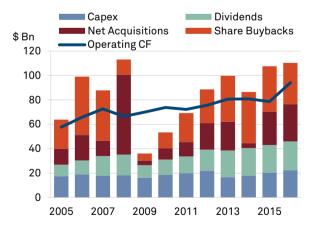


Chart 159 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 156 – Total debt / Total assets

Global Media - Total Debt / Total Assets (%)

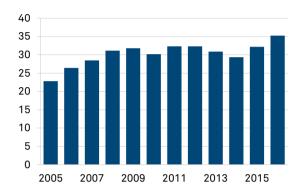


Chart 158 – New debt issuance or maturity schedule

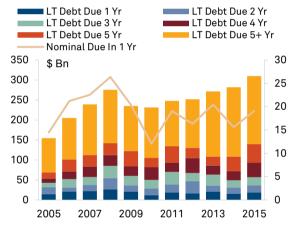
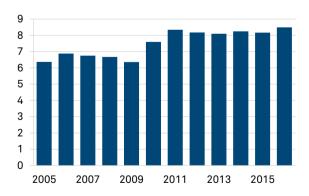


Chart 160 - Return on capital employed

Global Media - Return On Capital (%)



Industry Top Trends 2017 Metals and Mining



Overview

- Ratings Outlook: The worst is behind us and a significant improvement is expected in 2017 compared to last year. Depreciating commodity-linked currencies, cost reduction, sharply reduced capex, falling shareholder returns, deleveraging through equity issuances, sale of non-core assets, along with a recovery in base metals prices, have contributed to much improved cash generation for many rated upstream issuers. The outlook for U.S. and European downstream producers has also improved amid the industry consolidation, productivity gains, introduction of import tariffs, and higher prices. Asian and Latin American downstream sectors have, however, been held back by slower demand growth, leading to weaker-than-expected recovery in credit metrics, and M&A in China, which account for the bulk of negative outlooks.
- Forecasts: We expect a strengthening in credit metrics for the upstream sector in 2017, particularly if currently strong spot prices prevail. Supportive market conditions for downstream are expected to continue at least in the first half of 2017.
- Assumptions: Steady global demand and increasing discipline on the supply side have improved our view of the market balance for most commodities. We expect broadly steady prices for the majority of metals we track in the next three years. We also expect unit costs to remain stable. Issuers are expected to remain focused on rebuilding balance sheets to manage the impact of future commodity price volatility. We don't expect a strong pick up in M&A activity, but rising capex and shareholder distributions are expected following two years of severe cutbacks.
- Risks And Opportunities: Chinese demand continues to be our number one risk factor, given that it accounts for over half of global demand for most metals, followed by risks stemming from government policies and geopolitics. Conversely, stronger-thanexpected demand from China, combined with limited greenfield supply additions, could sustain significant price rallies, notably for copper and zinc.
- Industry Trends: A disciplined approach to new mining projects currently prevails, with the large industry players banking more on price increases than volume growth, to drive earnings and cash flow growth. Dividend policies have been re-written to align payouts to earnings and cash flow generation, and companies have revisited financial policies. With rising cash generation expected, the focus will be on how the cash is allocated between debt repayment, capex, M&A, and shareholders.

S&P Global Ratings

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Ratings trends and outlook

Global Metals and Mining

Chart 161 – Ratings distribution

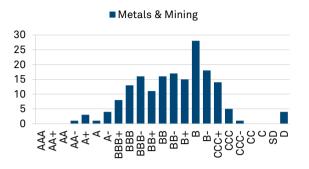


Chart 163 – Ratings outlooks

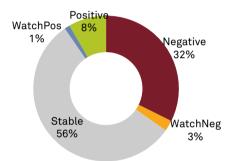


Chart 162 – Ratings distribution by region

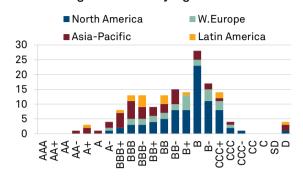


Chart 164 – Ratings outlooks by region

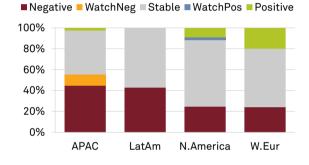
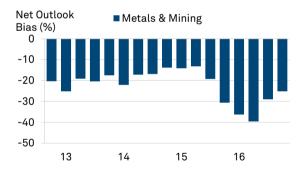
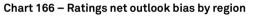
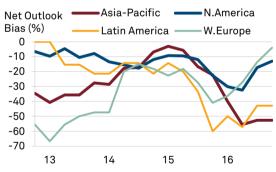


Chart 165 – Ratings outlook net bias





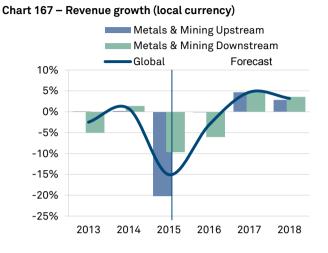


Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

The most notable trend among the rated metals and mining issuers worldwide can be seen in our net outlook bias (chart 5), which points towards a significant improvement heading into 2017, as opposed to a measurable downtrend for the same period last year. At the same time, the number of issuers with a positive outlook (chart 3) is considerably larger, at 8% versus last year's 2%. The positive rating trend is most noticeable for the North American and EMEA-based issuers, while their Asian and Latin American peers have been held back by slower demand growth in China and Brazil, which has led to weaker-than-expected recovery in credit metrics, particularly in the steel industry, and significant M&A in Asia, as seen among Yancoal International Resources Development Co. Ltd., Baosteel Resources International Co. Ltd., and Nippon Steel & Sumitomo Metal Corp.

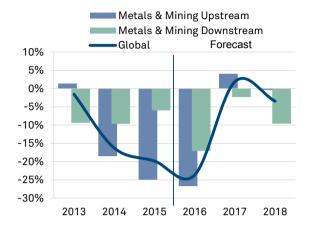
Industry forecasts

Global Metals and Mining



We expect a return to moderate revenue growth over the next two years, following relative improvement – notably for upstream producers – in 2016. Key drivers include our expectation for relatively favorable metals prices amid generally stable industry output. However, a gradual expansion of metals industry capacity and output is likely to mitigate material sustained price appreciation and revenue growth beyond next year.

Chart 168 – Capex growth (adjusted)



The capex cycle is expected to rebound in 2017 from weak 2016 level but to remain relatively stable thereafter. However, in the event prices remain near currently strong spot market levels for a sustained period, we believe this could result in increasing capital allocation towards growth projects in 2017 and 2018.

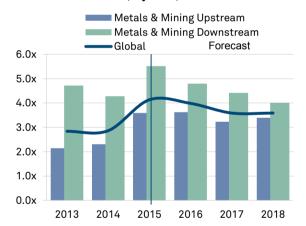


Chart 169 – Debt / EBITDA (adjusted)

Reducing leverage in 2016 – led by modestly higher average metals prices – should continue in 2017 and 2018. We believe most issuers will remain focused on strengthening balance sheets, given the relatively recent collapse in most metals prices and corresponding stress on financial profiles (notably in 2015). Higher earnings and stable to lower debt should drive the improvement – particularly for upstream producers.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Chart 170 – FFO / debt (adjusted)



Upstream

Depreciating commodity-linked currencies, cost reduction, sharply reduced capex, falling shareholder returns, deleveraging through equity issuances, sale of non-core assets for the past two years, along with a recovery in base metals and coal prices, have contributed to much improved cash generation for many of the rated upstream issuers in 2016, and we expect this trend to continue in 2017.

Very low capex spending in the past two years and the absence of major new greenfield projects could a spell a good year for the industry, during which issuers reap the benefits of supply discipline and more favorable industry fundamentals. The combination of reduced leverage, costs and capex--and in many cases dividends--in tandem with generally more supportive price realizations has turned some of the largest companies into cash engines. This is a significant turnaround, even if we note that many companies continued to be cash flow positive after capex, but before dividends, through the industry downturn.

Steady global demand--despite modestly slowing growth in China--and fairly stable supply have improved our view of the market balance for most commodities. This prompted us to revise upward our price expectations for most base metals in 2016 and early 2017. Although we expect capex to increase eventually and to moderate the rated issuers' cash generation, particularly if current commodity spot prices hold steady, it will likely take a couple of years before we will see significant capacity additions that could disrupt the market balance.

For precious metals producers, we expect continuing volatility in prices to translate into a relatively modest increase in capital spending and further debt reduction is expected. The rated gold producers' cash flow, for example, remains highly sensitive to gold price volatility with S&P's average price assumption of \$1,200 per ounce for 2017-2019 only \$100-\$200 above the breakeven cash flow levels for a large share of the industry. A key question is whether producers will remain financially disciplined if prices remain in line or increase above our current assumptions.. However, an increase in growth spending will eventually be required to mitigate the depletion of reserves and long-term sustainability of operations. Operating in high risk jurisdictions will be a factor over the next year as producers are already dealing with challenges ranging from export restrictions to labor disputes.

Coal producers are boosting production of metallurgical coal to take advantage of high spot prices, while stopping short of committing longer term investments required for capacity step ups. S&P expects prices to fall to more sustainable levels by the end of this year, as the imbalance in China dissipates. The three largest American coal producers, representing just below 40% of peak domestic production, filed for bankruptcy over the past 18 months. After paring assets down to the most profitable operations and reducing leverage, we expect these companies to be smaller, but in better balance with a new demand reality we estimate will be 15% off peak levels and with improved profitability as a result.

Downstream

The outlook for **U.S. and European** downstream producers has also improved on the back of industry consolidation, productivity gains, introduction of tariffs on imports notably from China and Russia, and higher prices. Some of the improvement is cyclical in nature, in our view, and some is sustainable (industry consolidation and capacity rationalization). We expect the higher prices and margins to remain at least for the next two quarters. **Asian and Latin American** downstream sectors are, however, held back by slower demand growth resulting in weaker-than-expected recovery in credit metrics, particularly in the steel industry, and overcapacity in the steel and coal industries, and M&A in China, which account for the bulk of negative outlooks for the industry.

We expect **China** to remain the most important factor in global steel and aluminum markets, both from a supply and demand perspective. Crude steel production continues to rise in Asia (specifically China), while production in the U.S. and Europe continues to decline (albeit slightly). Steel-related trade case filings in both the U.S. and Europe have stopped the dramatic rise in import levels--though levels remain elevated relative to historical trends--given excess supply and decreased demand in China.

Worldwide **steel** capacity utilization remains very low--at approximately 68% as of the end of 2016-and has declined in the majority of years since 2005. This is likely to keep margins depressed by historical standards, despite the recent improvement, as the majority of costs that go into producing steel--especially in blast furnaces, which make up about two-thirds of global steel production--are fixed, thereby increasing the marginal cost of steel and lowering profit margins. We believe more effort is required by the Chinese authorities to cut not just production capacity, but also production, for the market to find a balance that can support higher margins for the industry going forward.

A side effect of rising raw material prices (iron ore and coking coal) is higher steel production costs, which could pressure margins for some steelmakers in 2017. While the effect will likely be greater for integrated steel producers, the increase in scrap prices during the fall may pressure some electric arc furnace (EAF) producers as well--though to a lesser extent--given their highly variable cost structure and ability to tailor supply with demand better than a blast furnace.

Our **aluminum** price assumptions of \$1,650 per metric ton throughout 2019 reflects additional capacity that we expect to come on-line (especially in China) over the next 12-24 months, which should keep prices fairly in check. However, recent actions that the U.S. Trade Representative took against illegal aluminum subsidies could boost prices in the short term, but we don't expect a resolution to these talks to materialize in 2017. Longer-term, this--combined with potential trade actions outside of the U.S. against China--could boost aluminum prices.

Key assumptions

Metals and Mining

-	Modestly improving price outlook
	Steady global demanddespite modestly slowing growth in Chinaand relatively stable supply has improved our view of the market balance from most commodities.
	Balance sheet improvement should continue
2	Most issuers remain cautious on discretionary spending and potential acquisitions, given the distress for much of the industry during the most recent commodity price collapse that was in part related to excessive leverage.
	Relatively stable unit costs
3	Relatively stable output from most issuers is expected to limit substantial improvement in unit costs, leading to a continued focus on efficiency initiativesparticularly because the benefits of low oil prices and weak local currencies may not persist.

Modestly improving price outlook

We expect steady to modest improvement in average prices for the majority of metals we track over the next few years. Current prices in many cases are well above trough levels in early 2016, led by generally stable supply amid steady global demand growth that has contributed to our comparatively more favorable outlook. We also don't foresee a wave of capacity expansion, with most larger-scale projects likely to take several years to enter production. However, we expect steady supply growth-partly related to the recent price rally--to temper sustained price appreciation through 2019. Slowerthan-expected growth from China also remains a risk. Over the short term, we continue to expect volatility, with average prices in 2017--notably for iron ore and copper--expected to be below strong contemporary spot prices.

Balance sheet improvement should continue

Issuers are expected to remain focused on balance sheet strength to help mitigate the impact of future commodity price volatility on financial profiles. Much of the industry was forced to drastically reduce discretionary expenses during the most recent collapse in metals prices that reached its nadir about 12 months ago. Cash flows have since rebounded amid higher average prices for most metals and mining commodities in 2016 and into this year. However, we expect the majority of issuers to remain disciplined with planned capital allocations--typically the largest use of cash flow annually--which should benefit liquidity and net debt positions.

We don't expect a wave of new capital-intensive projects or large-scale acquisitions in the near term; many companies are now focused on asset sales and the development of existing resources that are unlikely significantly impact production before 2018. Recently, certain issuers have also espoused the potential benefits of partnerships for future larger-scale development projects as a means of mitigating financial and operating risk. However, we acknowledge the potential for capital budgets and shareholder-friendly initiatives to significantly increase in the event of a protracted period of commodity pricing strength (see Financial Policy section), and expect some level of catch-up in maintenance capex during 2017.

Relatively stable unit costs

Efficiency initiatives have been a core focus for a few years now, but are likely to continue in light of industry volatility and gradual input cost inflation (notably labor, the largest share of operating costs). Miners have benefited from low oil and freight costs and, in many cases, local currency depreciation over the past two years. However, there's no certainty that this will persist. In general, we believe the industry cost profile should remain relatively unchanged over the near term, given fairly stable estimated output, expected execution on new/ongoing productivity initiatives, and focus on reducing all-in breakeven cash flow levels. We typically reference issuers as having the most sensitivity to metals price fluctuations, and this is expected to remain the case. However, particularly for smaller-scale producers, modest changes in estimated unit costs can have a significant impact on credit ratios and ratings.

Key risks and opportunities

Metals and Mining

	China
1	Commodity prices could come under pressure due to lower demand from China's rebalancing and slowing economy as the impact of the country's stimulus recedes in 2017. The Chinese government's execution of reforms to reduce excess capacity in coal, steel, and aluminum will also likely have an impact on coal, iron ore, and aluminum prices. Last year China reduced steel and coal mining capacity by 65 million and 290 million tons respectively, and their latest announcements put the target for further reductions in inefficient capacity over the next three to five years at 140 million tons of steel and 800 million tons of coal. In addition, the Chinese government is consulting with the aluminum industry on a 30% shutdown of 11 million tons of smelting capacity during the winter period in an effort to reduce coal-fired power consumption and combat pollution.
	Government policy and geopolitical risks
2	Government policy and geopolitical risks could affect commodity markets. India's demonetization and fears of restrictions on gold imports, and Indonesia's ban and subsequent easing of unprocessed minerals, are policies that have recently affected commodity prices. Furthermore, the potential for protectionist measures and any retaliatory actions threaten to increase the risk of disruption to competitive market dynamics. These measures include the Trump administration's push for a punitive import tariff policy and the proposal by the state of Western Australia's opposition party, the National Party, to impose a mining tax on certain producers.
	Stronger price rally
3	Although it's not our base case, some industrial metals may encounter glory days ahead if Chinese demand growth doesn't soften as expected. Under that scenario, we believe metals such as copper and zinc may face serious upside potential as the industry has encountered many challenges to expand supply in the past five years, such as geological (ore grades of new discoveries are meaningfully lower than they were 15 or 20 years ago), political, and environmental. In the case of copper, if Chinese demand keeps growing above 3.5% per year, the industry would need meaningful

Financial policy

price increase to generate new supply.

After two years of scaling back dividends, abandoning progressive dividend policies, and instead linking payouts to earnings, and capex cuts, to protect cash and reduce leverage, the vast majority of the big miners have managed to withstand the turbulence and is reducing nominal debt levels. Also, many of them have sold non-core assets to free up capital to invest in core projects or just to strengthen the balance sheet--examples of these are Vale's sale of its fertilizer business to Mosaic Co., Glencore's sale of GRail to Genesee & Wyoming Inc., and Anglo American's sale of its phosphate and niobium assets to China Molybdenum Co.

We believe 2017 could be a year when big miners focus again on shareholders remuneration and select M&A activity. For example, Rio Tinto just announced a final dividend for 2016 of \$2.6 billion, well above the minimum dividend payout based on its newly adopted dividend policy. As return on capital diminishes (see chart 16; Return On Capital Employed), companies feel the need to improve shareholder returns by adopting attractive dividend policies and/or buying back shares periodically. Chart 15 shows that nominal dividend payments have remained stable for the past decade, while share buybacks are more popular in times of excess cash flows.

We don't expect the big miners to pursue major acquisitions over the short-term, as most assets available for sale are positioned in the third or fourth quartiles of the global cash cost, whilst competitive assets remain scarce and carry expensive price tags. In the current situation, miners are likely to find brownfield expansion more attractive. This is demonstrated by the u-turn that Anglo American Plc has taken with its previously planned divestment of its Australian hard coking coal mines following the recent rally in prices. Nevertheless, because smaller players will find it harder to compete in an environment where borrowing costs may be rising and metal prices remaining volatile, we believe chances for market concentration increase, favoring the largest and strongest issuers that own the best assets and enjoy better capital access.

From a rating perspective, we balance our base-case projected credit metrics for a company with its stated financial policy leverage thresholds. Under our base-case assumptions, we assume that miners will rebuild headroom for the existing ratings in 2017 and 2018. While we don't rule out further rating upgrades, those will need to take into account the volatility of prices, quality of asset portfolios and the willingness of companies' to maintain conservative balance sheets.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Related research

- S&P Global Ratings Revises Its Price Assumptions For Metals For 2017-2018 And Adds Assumptions For 2019, Jan.17, 2017.
- U.S. Steel Prices Fade With The Changing Leaves, But Not Before Credit Quality Improves, Dec.7, 2016
- European Steel: Sparks In The Second Quarter Offer A Glimmer Of Hope For A Sustainable Recovery, Sep. 20 2016

Cash, debt and returns

Global Metals and Mining

Chart 171 - Cash and equivalents/Total assets

Global Metals & Mining - Cash & Equivalents/Total Assets (%)

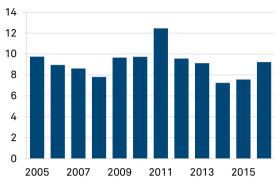


Chart 173 - Fixed versus variable rate exposure

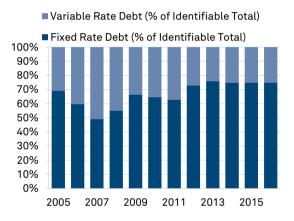
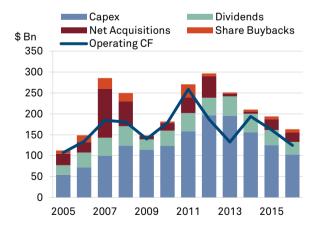


Chart 175 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 172 – Total debt/Total assets

Global Metals & Mining - Total Debt / Total Assets (%)

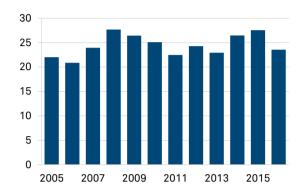


Chart 174 – Long-term debt term structure

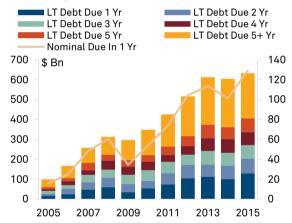
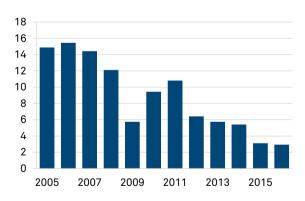


Chart 176 - Return on capital employed

Global Metals & Mining - Return On Capital (%)



Industry Top Trends 2017 Oil and Gas



Overview

- Ratings Outlook: Rating trends across the energy sector continue to stabilize. The subsectors with the highest percentage of negative outlooks primarily are oilfield services and offshore contract drilling. The tremendous number of downgrades and bankruptcies we saw over the past two years will not likely be repeated.
- Forecasts: Credit ratios for many upstream companies are improving materially owing to the rebound in hydrocarbon prices. Going forward, we expect credit ratios to improve nominally as volumes and oilfield-service (OFS) prices increase and more cost efficiencies are achieved upstream.
- Assumptions: Our hydrocarbon price decks for oil and natural gas are flat owing largely to relatively flat futures curves and reduced production costs. We expect capital expenditures (capex) to begin increasing along with an increase in OFS costs of about 10% in 2017, led by North America. We expect offshore drilling to remain weak and still vulnerable to additional new supply entering the market. We also think gasoline demand will likely increase modestly with a more robust response in distillate. There could also be some modest improvement in overall industry crack spreads.
- Risks: Hydrocarbon price risk is of great concern mainly because we don't know whether OPEC will continue with its six-month production-cut agreement at the end of June. Also, there is a high degree of uncertainty regarding sweeping GOP tax reforms and what the implications could be for the energy sector.
- Industry Trends: The industry should remain relatively stable for at least the next six months while the oil and gas markets catch their breaths following the prolonged downturn and 2016 upturn. The near-term oil price driver is the market perception of the effectiveness and longevity of the OPEC cuts and the production response from U.S. shale. In 2017, the extent to which the global oil market shifts away from oversupply will be key for the sector's incipient recovery to become a rebound.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.



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Ratings trends and outlook

Global Oil and Gas

Chart 177 – Ratings distribution

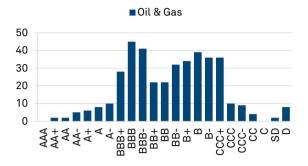


Chart 179 - Ratings outlooks

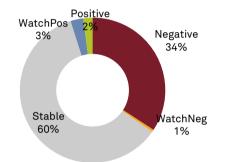


Chart 178 – Ratings distribution by sub sector

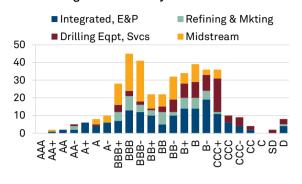


Chart 180 - Ratings outlooks by sub sector

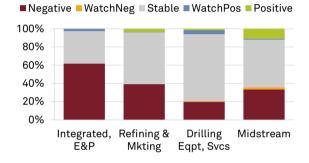


Chart 181 – Ratings outlook net bias

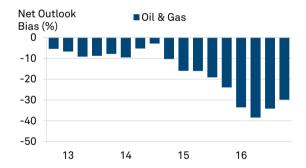
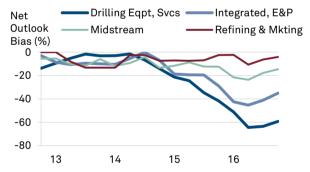


Chart 182 – Ratings net outlook bias by sub sector



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

The overall distribution of outlooks in the oil and gas sector has improved over the past six months along with the recovery and stabilization of oil and gas prices. Many negative outlooks translated into defaults in early 2016 but there have been fewer downgrades in late 2016. Although balance sheets remained stretched, many companies have adapted to the expectation of lower oil prices for longer by meaningfully lowering their cost structures, cutting capex, and becoming more efficient. Liquidity risks have largely abated and capital market access appears to have returned to the deep speculative-grade issuers with yields and spreads tightening significantly. The majority of our investment-grade ratings are on U.S. companies, largely due to a significant number of new issuers from 2011 to the end of 2014, stemming from the shale explosion, high oil prices, and low interest rates. Bifurcating this further, approximately two-thirds of the speculative-grade ratings on U.S. companies category. Despite oil prices stabilizing, our rating outlook on OFS companies are largely negative due to the inability to pass through price increases sufficient enough to garner improved credit metrics and Internal rates of return that cover their capital costs.

Industry forecasts

Global Oil and Gas

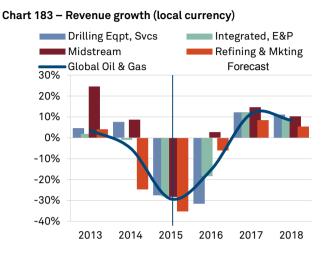
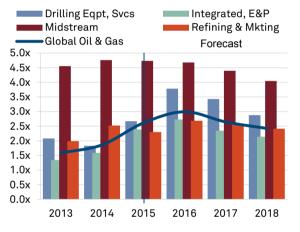


Chart 185 - Debt / EBITDA (adjusted)



Drilling Eqpt, Svcs Integrated, E&P Midstream **Refining & Mkting** Global Oil & Gas Forecast 30% 25% 20% 15% 10% 5% ٥%

Chart 184 - EBITDA margin (adjusted)

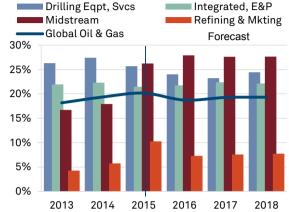
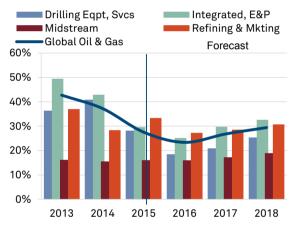


Chart 186 - FFO / Debt (adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

> As expected with any rebound in commodity prices, industry credit metrics and profitability measures were largely improved in 2016. With our price deck slightly increasing in the latter years, we think the sector will remain mostly relatively stable. Over the longer term, we expect margins in the exploration and production (E&P) segment to remain relatively flat given our generally flat price deck, companies' limited ability to squeeze further efficiencies, and prospects for modest increases in OFS costs. However, we project that near-term cash flow measures will improve based on the rebound in hydrocarbon prices with longer-term metrics sustained or improving due to higher production as companies ramp up capex.

Key assumptions

Exploration and Production

Exploration	
	Oil prices
1	Our base case price deck for West Texas Intermediate (WTI) and Brent is relatively flat at \$50 per barrel (bbl) for 2017 and 2018, and \$55/bbl for 2019 and beyond. We believe the recent OPEC production cuts provided a floor to oil prices at least temporarily. An oil price above \$55/bbl is bound to lead to a meaningful production response in U.S. shale because breakeven prices were significantly lowered as producers became much more efficient. We believe shale is the new swing producer, one based on economics and not politics and, over the medium term, will provide a cap on oil prices over the next couple of years. We expect demand to remain relatively stable with the supply-side of the equation, ultimately determining the direction of oil prices.
	Natural gas prices
2	Our price for natural gas is stable at \$3.00 per Btu over the next three years. Natural gas prices have had a nice rebound owing to declines in the gas-directed rig count and associated natural gas production from liquids drilling reductions, as well as an unseasonably warm summer. This has led to inventory levels finally declining below the five-year average. Going forward, we expect production growth to come from the prolific and low-cost Marcellus and Utica shale plays. Significant take-out capacity will alleviate any bottlenecks and further tighten the regional gas differentials. Demand will get a boost from utilities switching to natural gas from coal, growing demand for liquid natural gas (LNG), and exports to Mexico. Still, we believe that long-term natural gas prices are unlikely to remain at well-above \$3, due to low-cost Marcellus and Utica output effectively capping prices.
	Capital expenditure
3	While we haven't gathered our preliminary capex budget data yet, it's clear that spending will be higher this year than last, especially in the U.S. as producers in these higher-cost basins look to take advantage of the rebound in energy prices and replenish reserves and augment production. Some industry research firms are projecting capex will increase globally by an average of 6%-10% with U.S. capex increasing over 20%.
Oilfield Ser	vices
	Spending
1	The growth engine for oilfield services is undoubtedly E&P spending. After years of significant declines in production, which decreased at a compound annual growth rate (CAGR) of 37% in 2015 and 2016, we expect capex to increase along with the rebound in hydrocarbon prices. Any increase in spending is sure to give service companies a lifeline. We generally anticipate a slower recovery outside the U.S.
	Margins
2	The sector's revenue and margins have been severely hurt by the significantly lower volumes stemming from the declining rig count and price concessions companies have had to give up to the E&P companies. We believe that in 2017, OFS companies, on average, and depending on their geographic position, could achieve price increases anywhere between 8% and 12%, with certain subsectors like pressure pumping achieving higher returns in the neighborhood of 15%-20%. Nevertheless, despite

Rig count/recovery

The rig count decline had been unprecedented, with rig counts in the U.S. declining more severely and rapidly than at any other point in history. Oil rig count declined 80% from a peak of 1,609 in October 2014 to a low of 316 at end of May 2016. However, with the increase in oil prices, rig count activity has rebounded nicely especially in the Permian basin. Total rig counts currently stand at 712, an increase of 125% from the low. Oil-directed rigs account for most of the rigs with 583. We expect nominal increases in rig counts from current levels both globally and domestically because we expect oil and natural gas prices to remain flat.

such initial price recovery, additional price and volume increases will be necessary for these

companies to achieve internal rates of return (IRR) that will sustain value.

Refining

	Gasoline demand
1	Global gasoline demand and demand growth, as for other oil products, are likely to remain driven by emerging economies as demand from the Organization for Economic Cooperation and Development members moderates further. China consumes about one-third of the gasoline volumes consumed by the U.S, but the International Energy Agency (IEA) estimates China's gasoline demand is likely to continue growing at 7.2% in 2017. According to the EIA, U.S. gasoline demand is expected to moderate from 2016's 1.1% growth, mainly due to slower growth in highway travel. Lower growth in highway travel reflects forecasts for slower employment growth and rising gasoline prices. Our demand forecasts are generally in line with the EIA, with gasoline demand growing about 0.5% in 2017 and by 1% in 2018.
	Distillate demand
2	Industrial activity is likely to support demand for diesel, even if growth rates across major markets globally are estimated to be in the low-single-digit range. In the U.S. we expect diesel and other distillate demand to strengthen in 2017, driven by stronger expected economic growth, increasing oil and natural gas drilling activity, and an assumption of normal temperatures. Our forecast for distillate demand growth is about 3% in 2017 and 2% in 2018.
	Crack spreads and utilization
3	We are forecasting 2017 crack margins to be only modestly better than 2016, but to exhibit a fair amount of volatility if Congress approves the Trump Administration's plan to tax exports. Higher U.S. gasoline production and inventory levels in 2016 contributed to refinery margin compression. Despite an increase in gasoline production and high inventory levels, rising exports provided some support for gasoline margins, which we expect to continue into 2017. Diesel margins should be somewhat better, driven by higher crude oil prices and stronger demand. We expect average utilization for U.S. refining capacity to be in the low- to mid-90% area. On the contrary, refining margins in Europe and Asia have broadly declined as oil prices rose in late 2016. We currently anticipate broadly flat margins outside the U.S. in 2017.

Contract Drilling

	Supply/demand
1	We believe that the deep water offshore market will continue to remain oversupplied through 2017 as more rigs need to be retired or cold stacked in order to balance supply and demand. Fundamentals are incredibly weak due to all the newbuilds that flooded the market over the past couple of years and the lack of demand given low oil prices. We recently revised our estimate of the start of a recovery in the sector from late 2018 to late 2019 resulting in numerous recent downgrades. We are broadly assuming there will be no new contracts until late 2019. Still, any recovery will be tepid and we remain uncertain whether oil prices will be sufficient to garner a sustained level of capex for greenfield deep water projects. We believe the jackup market has bottomed and with the sector needing lower oil prices to recover, we expect modest improvement with demand slated for newer, higher-specification rigs.
	Utilization and day rates
2	Utilization rates will remain low and pricing power will not return to rig operators until industry utilization rates climb to at least 85% in the deep water segment. We've assumed that contract drillers will not be replacing contracts that expire through 2019. Pressure remains on day-rates because the

market remains oversupplied and non-contracted newbuilds continue to apply pressure on rates.

Midstream

	Commodity prices
1	We believe commodity prices will provide a floor for most midstream companies' credit measures in 2017, but will not be a meaningful driver of improved credit profiles. Our price assumptions for WTI crude oil is \$50/(bbl in 2017 and 2018, and \$55/bbl in 2019 and beyond. Our price assumption for Brent price crude oil is the same, with currently no differential from WTI. Our natural gas price assumption is \$3 per million Btu, held flat from 2017-2019. Natural gas liquids prices are 60 cents per barrel in 2017. We believe these assumptions will result in relatively stable to growing throughput depending on the basin, but should encourage at least a modest pickup in drilling activity.
	Throughput will vary
2	We expect throughput for gathering and processing companies will vary somewhat, depending on where midstream companies are located. We believe companies that have strong acreage dedications in the Marcellus, South Central Oklahoma Oil Province (SCOOP) and Sooner Trend Anadarko Basin Canadian and Kingfisher Counties (STACK), and Permian basins will have the best economic results and see growing throughput to support organic expansion plans. Midstream companies that are less diversified and have significant systems in dry-gas plays like the Haynesville or parts of the Uinta or Powder River basins will see less favorable throughputs but some base level if natural gas prices in those areas can stay above \$3/million (mm) Btu. The Northeast region could get a boost from stranded natural gas due to a lack of takeaway capacity, as several pipeline projects, like the Atlantic Sunrise, received approvals to move ahead. But in-service dates for some projects are more than a year away.
	Financing
3	Capital markets should be much more cooperative for midstream players compared with the first half of 2016. We believe there's a lot of pent-up demand for new debt offerings for investment-grade issuers. The equity markets are also open for mist companies, particularly those that have reset distributions to a more sustainable level because equity investors realize that the rest was necessary for long-term growth to continue. A shift by many companies to retain more excess cash flow for reinvestment in the business will also help alleviate public equity requirements, but many diversified investment-grade companies still have significant needs and will have to be somewhat aggressive in the use of at-the-market programs to meet their targets.

Key risks and opportunities

Exploration and Production

	Oil/natural gas prices
1	The recent agreement by OPEC members to cut production has, at a minimum, set a floor on prices. However, depending on how closely demand matches supply, should OPEC not continue production cuts after the agreement is up in six months, we could see oil prices begin to retreat. Furthermore, there is uncertainty regarding proposed GOP tax bills and the implications they could have on oil prices. The implementation of a plan that taxes imports but not exports would lead to an immediate increase in WTI, rising to a tax-adjusted level. The higher price garnered by U.S. producers would result in them quickly increasing production, which could lead to lower oil prices globally. Moreover, the tax plan could lead to a rising U.S. dollar, thus lowering demand for oil.
	Mergers and acquisitions
2	We're expecting the pace of M&A to increase somewhat due to the return of the capital markets and issuer accessibility to the energy sector. Interest rates still remain low and oil prices appear to have stabilized at least temporarily. Moreover, with so many issuers having emerged from bankruptcy and eliminated much of their debt, one of the hurdles to acquisitions over the past couple of years, the need for a purchaser to redeem debt at full value (due to make-whole clauses in bond indentures), were eliminated.] Valuations, while improved, still remain relatively low in comparison to when oil was trading above \$100. Nevertheless, we have recently seen transactions in mature provinces such as the North Sea.
	Proposed U.S. corporate tax changes
3	In an industry that relies heavily on capital-market access, especially debt markets, to fund capex, a proposed tax plan that would eliminate the interest-expense deductible, could clearly be detrimental. The loss of deductible interest for tax purposes would affect companies' cost of capital and could stem project development, especially during periods of rising interest rates. However, for 2017, given our expectation of a relatively low interest rate environment, we would expect the impact on project development to be marginal.

Oilfield Services

	Hydrocarbon prices
1	We think the primary risk to the OFS segment is if OPEC doesn't extend its production-cut agreement. Without an extension and a rebound in shale production due to the higher oil price, the industry could see a return to the trough we just experienced. Clearly, this would lead to significant declines in OFS services and goods and possibly more downgrades and bankruptcies. A declining rig count would be the initial impact.
	Limited price improvements
2	Overall, we believe prices will increase on average approximately 10% in 2017. However, this level is still insufficient to garner sufficient IRRs to cover many of the small companies' cost of capital. The industry will need further price improvements to achieve some stability. Most of the issuers in this segment have negative outlooks largely due to the sustainability of price increases.
	Aggressive competition
3	As companies fight to win the limited tenders and work available, in part to keep employees and equipment in operation, we continue to see some at- or below-cost pricing. In addition, companies could target new or different markets, such as the Middle East, where investments have been cut back much less. This can impact the price points and margins for incumbent OFS companies that might have to renegotiate terms to retain business.

Refining

	Regulation/tax changes
--	------------------------

U.S. merchant refiners continue to face headwinds in 2017, and could experience even stronger gales if certain federal tax policies are implemented. Recent discussions in Washington, D.C. on an import tax, which we assume would include oil imported into the U.S., could lead to more volatility, margin pressure, and weaker credit profiles. Refiners would have incentive to buy domestically produced crude that they would still be able to deduct for tax purposes, thus driving up the price of WTI. U.S. producers would require a tax-adjusted price from domestic buyers (largely refiners) to compensate them for not shipping oil overseas tax free. WTI would rise to a tax-adjusted price relative to Brent and ultimately trade at a level that would make refiners indifferent as to whether they imported or bought oil domestically.

Margin pressure

U.S. refining margins and profitability will continue to be under some pressure because of narrow crude differentials and global capacity additions that could somewhat limit export opportunities. A narrow spread between Brent- and WTI-based crudes would most likely lead to increased international competition for U.S. refineries and pressure profitability. Refineries will try to pass any increase in oil prices from tax reforms to the U.S. consumer (as prices could increase anywhere from 30-36 cents/gallon) However, the companies might not be able to pass it all on and volatility and margin pressure would be a likely result. Depending on the refineries' crude slate, the overall impact could be neutral unless they import a significant portion of feedstock, like the refiners located on the East and Gulf coasts. Many of these refiners have little flexibility to switch to light sweet WTI because the assets are configured to run heavy sour, mostly imported crude. Refineries that predominately run crude oil sourced from Canada, could also see a margin impact. The reduced tax rate, however, could spur higher utilization and lead to potential oversupply of product without a strong demand response, which would pressure margins.

Rising leverage

Weaker profitability in 2016 has mostly led to higher leverage and less liquidity, which has eroded the large cushion in credit ratios refineries built up from 2011-2015. Larger diversified refineries with a full backlog of midstream or retail assets will fare much better than their smaller less-diversified peers. Refiners that have growing midstream master-limited partnerships, have some options and flexibility to monetize assets, which could help reduce consolidated debt and weather a difficult operating environment.

Contract Drilling

2

	Hydrocarbon prices and effect on demand
1	The demand side of the equation here is ultimately driven by the industry view of the level and sustainability of oil prices. We think that for greenfield deepwater demand to return, oil prices, at a minimum, would need to be sustained at \$60/bbl. And for a more sustained recovery, prices would have to stay near \$75/bbl-\$85/bbl. Without a higher oil price, the recovery necessary to restore day and utilization rates to a more normalized cycle, could be pushed out beyond our 2019 recovery assumption. If we were to assume that recovery is further delayed, it could result in more negative rating actions. Most of the offshore drillers currently have negative outlooks.
	New builds
2	Both the deepwater and jackup markets continue to remain oversupplied and subject to more new construction in 2017. Jackup utilization rates are still very low but with the recovery in oil prices, we expect day and utilization rates to improve marginally as lead times for this segment are much shorter than the deep and ultra-deepwater markets. Higher-specification jackup rigs could see higher utilizations compared with older jackups, which overall, have a limited market, primarily in Asia. If newbuilds find their way to market and the oil prices revert, both segments are ripe for much deeper declines in day and utilization rates.

Midstream

	Cost of capital
1	This year presents a host of challenges for midstream companies: stretched balance sheets, weak coverage ratios, high-cost equity capital, and significant financing requirements for a healthy backlog of projects. While this somewhat tempers our cautiously optimistic view of the sector, some midstream companies have adjusted their financial strategies and corporate structures to better position themselves for sustainable long-term growth. Most midstream companies' equity yields skyrocketed after crude prices plummeted in the first quarter of 2016, which made it much harder to finance organic growth. With many equity investors already pricing in a distribution cut, midstream companies took the opportunity to reset distributions and growth targets, eliminate the incentive distribution rights (IDR) structure, fix their cost of equity capital, improve liquidity, and reduce leverage. For these reasons, the consequences of a cut weren't viewed to be as punitive to a company's equity price as were the distribution cuts in 2008-2009.
	High leverage
2	We the midstream industry to focus on repairing balance sheets that have been stretched from large capital projects and reduced EBITDA from lower commodity prices and volume throughput in 2017. We expect investment-grade midstream companies to have improved leverage ratios (debt/EBITDA) of about 4.5x, down from about 5x in 2016. Leverage is declining for several reasons, but the biggest driver is that midstream companies are retaining more cash flow rather than distributing it and using the excess cash to pay down debt. The retained cash flow helps reduce equity needs and financing risk to some extent, but many large midstream players still need to raise a significant amount of equity in 2017 to bring leverage down, which we believe presents some execution risk.
	Lower capital expenditure
3	Lower commodity prices encouraged management teams to instill a level of spending discipline as they've tried to reduce costs and improve efficiency across their asset bases. While the level of volatility in commodity prices has subsided, management teams remain cautious on spending for 2017. We expect the amount of capital spending to be 25% to 30% less than during the 2013-2015 period but remain significant, particularly for most diversified investment-grade companies. For the investment-grade peer group (Buckye Partners L.P., Boardwalk Pipeline Partners L.P., Energy Transfer Partners L.P., Kinder Morgan Inc., Magellan Midstream Partners L.P., Oneok Partners L.P., Plains All American Pipeline L.P., Spectra Energy Partners L.P., and Williams Partners L.P.), spending peaked at \$23.2 billion in 2015 and came down to \$17.3 billion in 2016. We expect spending in 2017 to be about 30% lower than the peak at roughly \$16 billion.

Related research

- Despite Obstacles, North American Midstream Energy Companies' Outlook Is Stable For 2017, Jan. 31, 2017
- After The OPEC Decision, What's Next? Dec. 21, 2016
- S&P Global Ratings Raises Its Oil And Natural Gas Prices Assumptions For 2017, Dec. 14, 2016
- U.S. Shale-Oil Producers Continue To Suffer From OPEC Pressures, Nov. 22, 2016
- What's The Current Cash Breakeven Cost For The U.S. Oil And Gas Industry? Sep. 29, 2016
- U.S. Oil And Gas E&P Buyers Aim To Increase Acreage While Sellers Seek To Shore Up Balance Sheets In Third Quarter 2016, Sep. 27, 2016
- To Drill Or Not To Drill: Can Spec-Grade E&P Companies Keep Up Production? Sep. 27, 2016
- International Oil Majors Test The Limits Of Integration In 2016, Sept. 15, 2016
- The Market For Liquefied Natural Gas: Staying Afloat In A Sea Of Supply, Apr. 12, 2016
- S&P Analysts Drill Down Into How Our Lower Oil And Gas Price Assumptions Affect Energy Company Ratings, Feb. 17, 2016
- Why Reserve-Based Loan Lenders Have Experienced Strong Recoveries, Jan. 13, 2016

Cash, debt and returns

Global Oil and Gas

Chart 187 - Cash and equivalents / Total assets

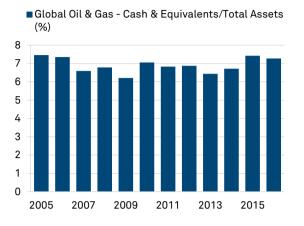


Chart 189 – Fixed versus variable rate exposure

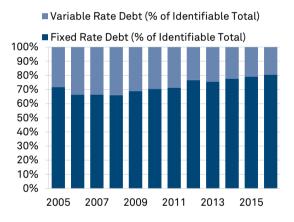
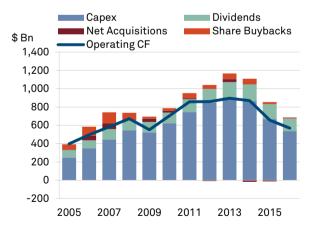


Chart 191 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 188 – Total debt / Total assets



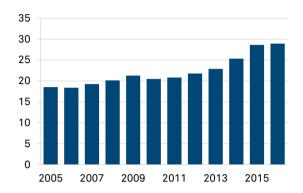


Chart 190 - Long term debt term structure

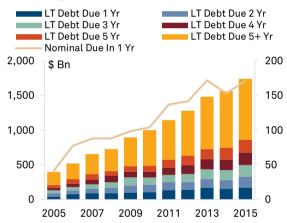
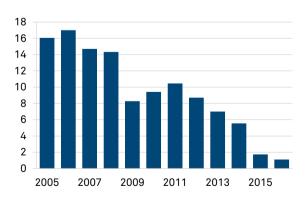


Chart 192 – Return on capital employed

Global Oil & Gas - Return On Capital (%)



Industry Top Trends 2017 Real Estate



Overview

- Ratings Outlook: The outlook for the real estate issuers is generally stable (for both homebuilders and REITs), but there is notable variability around the globe, with weakness more prevalent in the Asia-Pacific (APAC) and Latin American regions. The outlook for U.S. homebuilding is stable, leaning toward positive, given a continued housing recovery and positive new home demand growth. By contrast, the outlook for homebuilders in APAC is slightly negative, because of high financial leverage among Chinese developers and our expectations of lower industry sales this year. Among REITs, our ratings outlook remains mostly stable after a significant number of upgrades in the sector, particularly in Europe and the U.S., in the past two years. However, somewhat negative trends are emerging in APAC and LatAm.
- Forecasts: S&P Global Ratings' economists forecast U.S. housing starts to grow about 8%, to 1.3 million, this year, underpinning our forecast for increasing new home sales. In Europe, growing revenues supported by regulatory measures in several jurisdictions, and healthy level of planned deliveries, should sustain developers' credit ratios. In APAC, property developers' credit metrics are diverging. We expect Chinese developers' financial leverage to improve slightly but to remain high. In LatAm, we expect somewhat improving credit metrics from the combination of lower interest rates and some demand recovery in Brazil. For REITs, we expect positive, though decelerating, rent growth.
- Assumptions: Our assumptions for homebuilders/developers diverge globally based on supply and demand conditions. We expect new home sales for U.S. homebuilders we rate to slow but maintain positive growth of about 6%. On the contrary, APAC homebuilders face lower sales. We forecast that property sales in China will decline 5%-10% this year, driven by a drop in volume. For U.S. REITs, we expect overall net operating income (NOI) growth in 2017 to slow to 3.5%. We expect rental revenues in EMEA to benefit from slightly higher inflation given usage of indexation clauses in leasing contracts.
- Risks: The pace of increase rate rises and uncertainty around policy are the main concerns for U.S. building and property markets. China faces renewed policy risk amidst signs of overheating price in some cities. HK also faces pressure from higher rates. Europe faces prolonged uncertainty regarding Brexit and its impact on commercial and residential property prices and indirect effects on other European cities. In Latin America, uncertainty around Brazil's economic recovery is a key risk.

S&P Global Ratings

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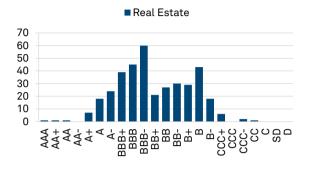
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Ratings trends and outlook

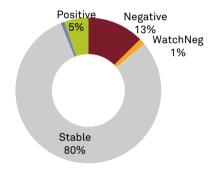
Global Real Estate

Chart 193 - Ratings distribution



Rating distribution reflects a concentration of investment-grade issuers in the REIT sector and concentration of speculative-grade in the homebuilers/developers sector.

Chart 195 - Ratings outlooks



Overall, our rating outlook is stable for the real estate sector with a slight negative bias because of the majority of negative outlooks in LatAm.

Chart 197 - Ratings outlook net bias

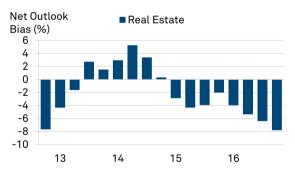
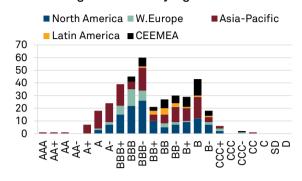
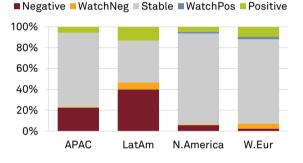


Chart 194 - Ratings distribution by region



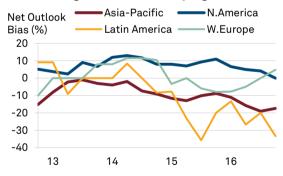
North America, APAC, and Europe have the largest amount of investment-grade REITs while ratings in LatAm are speculative-grade due to sovereign rating limitations

Chart 196 - Ratings outlooks by region



Europe leads the regions with positive outlooks, while APAC and LatAm are weighted more heavily toward negative.

Chart 198 - Ratings net outlook bias by region



We maintain our negative bias for 2016, as the number of negative outlooks in Negative outlooks remain prevalent in LatAm while the remainder of the regions exhibit relatively stable trends.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Overview

While S&P Global Ratings' 2017 outlook for the real estate issuers is generally stable (for both homebuilders and REITs), there is notable variability around the globe, with weakness more prevalent in the Asia-Pacific (APAC) and Latin American regions. For example, our outlook for the U.S. homebuilding sector is stable, leaning toward positive, given our expectation for the U.S. housing recovery and positive demand for new homes to continue. By contrast, our outlook for homebuilders

APAC and LatAm.

in APAC is slightly negative, because of high financial leverage among Chinese developers and our expectations of lower industry sales this year. Similarly in LatAm, the higher number of negative outlooks reflects the challenges Brazilian homebuilders continue to face after two years of weak demand and high sales cancelations. Among REITs, our ratings outlook remains mostly stable after a significant number of upgrades in the sector, particularly in Europe and the U.S., in the past two years. However, somewhat negative trends are emerging in APAC and LatAm.

U.S.

REITs: We have a stable rating outlook for U.S. REIT space in 2017. We expect the pace of upgrades to meaningfully decelerate in 2017 because of moderating NOI growth for the sector and our expectation for limited key credit ratio improvement; we do not foresee much downside developing. This follows two years of credit quality improvement with 16 upgrades to 1 downgrade in 2016. The positive trend in the U.S. reflects steady economic growth, limited supply growth, and improving employment and consumer spending that will drive rent growth and occupancy.

Homebuilders/Developers: We currently have a stable outlook on the U.S. homebuilder/developer sector, but believe continued recovery in the housing sector and healthy demand for new homes could support some positive ratings momentum in 2017. The case for an upside surprise relative to our forecast could be due to a number of possible factors: easing of labor market tightness, higher-than-expected entry-level buyer activity, better sale price appreciation, or a pickup in finished lot supply. Any of these factors could contribute to credit metrics improving faster than we expect. We see limited downside for homebuilder credit ratings through 2017 (except for those companies that currently have a negative outlook), because our projections broadly call for EBITDA improvement and higher cash flow generation. In our opinion, it would require a reversal of this trend--a hard stall to the housing recovery--to spur more than a few downgrades.

EMEA

REITS : Our sector outlook for European REITs is now broadly stable following several upgrades during 2015 and2016. Among European REITs, three companies -- France-based Gecina, Germany-based residential holding company Adler Real Estate AG, and New Europe Property Investments PLC (NEPI), which mainly focuses on retail assets in central and eastern Europe -- currently have a positive outlook reflecting the scale of their growing portfolios and leaner balance sheets. The steady recovery in most economies, notably Spain, and highly favorable funding conditions overall should further strengthen credit metrics for REITs in 2017. Rental revenues, especially in 2018, should benefit from slightly higher inflation thanks to wide-spread usage of indexation clauses in leasing contracts, in particular in the office real estate sector. We also see growth potential in M&A transactions on the back of attractive risk weighted returns. The busy European election schedule for 2017 and uncertainties related to the Brexit process represent new sources of risk for the region.

Homebuilders/Developers: Improving economic conditions across Europe, including falling unemployment – admittedly from a high base -- and improving consumer confidence in the face of moderate inflation should continue to support robust revenue growth for developers in 2017. In the U.K., we rate the second-largest homebuilder, Taylor Wimpey PLC. Throughout Brexit, we expect the shortage of housing and government's measures to support average selling prices nationally, with any decline likely to be concentrated on the London Prime residential segment, for properties exceeding £1 million.

APAC

REITs: Our net outlook for the sector is somewhat negative. Rental growth in the major commercial real estate markets of Australia, Hong Kong, and Singapore is subdued because of new supply, anemic wage growth, soft household earnings, and cautious tenants due to sluggish economic conditions. In Japan, however, we expect continued moderate recovery in the leasing market supported by solid tenant demand and a manageable level of supply for the coming year despite increasing uncertainty in the overall economy. However, credit metrics would improve because we expect newly completed developments will contribute to REITs' NOI. In addition, REITs continue to

have stable occupancy levels and contracted increases in lease rental income. While base interest rates are at historical lows, the banking sector is looking to pass on its increased cost of funding. We are therefore factoring in modest increases in interest rates in our forecasts. Debt capital remains available and is competitively priced for core real estate. While our forecasts include a modest increase in interest costs, the low cost of debt is a tailwind for REITs and we believe debt providers will support REITs in rolling over maturing debt. In particular, Japanese REITs are benefiting from lower interest expenses as a result of the Bank of Japan's negative interest rate policy.

Homebuilders: Our net outlook for the sector is slightly negative. We expect the Chinese property sales to slow down over the next 12 months as a result of government tightening policies. Rapid price increases have fueled fears about the financial stability and local governments of larger cities have tightened home purchase requirements as well as land auctions over the past few months. Developers now face curbs for new financing, including tight restrictions on domestic bond issuance for developers. Many rated Chinese developers have stepped up land acquisitions and expansion plans, spiking land prices to record highs. We believe the land acquisition frenzy will hurt the profitability and cash flows of more aggressive developers in the longer run.

Hong Kong developers' contracted sales have largely met or exceeded expectations. The robust recurring incomes of their rental properties are strongly supporting the ratings despite a weaker retail environment. Property prices in Hong Kong rebounded due to abundant liquidity and strong demand. However, we expect rising interest rates and higher supplies could lead to moderately lower prices in 2017.

Indonesian developers' sales were muted in 2016 as the government's tax amnesty created some uncertainty. Selling prices have remained flat, with most developers not launching during the year . We expect more new product launches in 2017, which should translate to higher sales year-on-year. However, this will be much lower than the peak sales achieved in 2013 and 2014.

Latin America

REITs : Our outlook for real estate operators is mostly negative as a result of the negative outlook on the sovereign rating of Brazil that limit the ratings on some companies at a specific number of notches above the sovereign rating or higher leverage and interest coverage pressures amid relatively high vacancy rates in the office segment due to poor macroeconomic conditions over the past two years.

Homebuilders/Developers : We have negative outlooks on Brazilian homebuilders mainly due to high unemployment and weak consumer confidence over the past two years that have been pressuring demand and issuers' cash flow generation. We might see downgrades during 2017 if companies are not able to improve cash flows amid expectations of some economic recovery. Mexican homebuilders are poised to be challenged by tougher macroeconomic conditions and higher funding costs through 2017 but ratings are likely to remain steady thanks to financial flexibility, including low leverage and healthy liquidity.

Industry forecasts

Real Estate Investment Trusts (REITs)

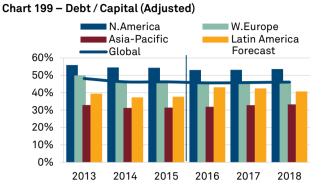


Chart 201 - EBITDA interest coverage (adjusted)



hart 203 – Debt / EBITDA (adjusted)

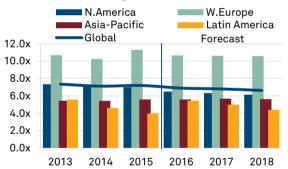
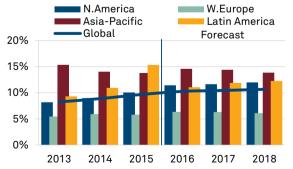


Chart 205 – FFO / debt (adjusted)



Homebuilders and Developers

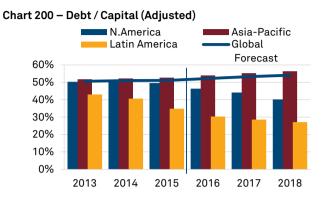


Chart 202 - EBITDA interest coverage (adjusted)

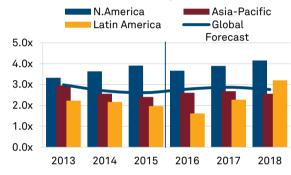


Chart 204 – Debt / EBITDA (adjusted)

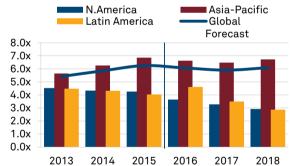
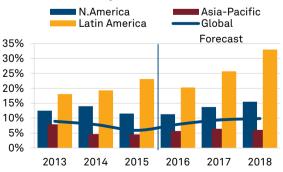


Chart 206 - FFO / debt (adjusted)



Source: S&P Global Ratings. All figures are converted into USD using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

For **homebuilders/developers**, S&P Global Ratings' economists forecast **U.S. housing** starts to grow about 8%, to 1.3 million, this year. This underpins our forecast for increasing new home sales,

especially considering our view that single-family homes will continue to compose a larger proportion of total housing starts than multifamily. In **Europe**, growing revenues supported by regulatory measures in several jurisdictions, and healthy level of planned deliveries, should sustain developers' credit ratios. In **APAC**, however, property developers' credit metrics are diverging. We expect Chinese developers' financial leverage to improve slightly but to remain high. Earnings will likely pick up following strong sales last year, but the scale of improvement will be capped by aggressive debtfunded expansion. In **LatAm**, we expect somewhat improving credit metrics from the combination of lower interest rates and some demand recovery in Brazil and Mexican homebuilders to maintain a prudent approach to leverage while facing weakening macroeconomic conditions.

For **REITS**, we expect positive, though decelerating, rent growth. In the **U.S.**, steady economic growth in the world's biggest economy, rising rental revenues, constrained supply levels, and still favorable funding conditions should support credit metrics, while occupancy remains robust. Similar conditions prevail in **Europe**. In **APAC**, we expect improving credit metrics due to conservative financial profiles across the sector. However, new supply, anemic wage growth, soft household earnings, and cautious tenants due to sluggish economic conditions are keeping the lid on rental growth in the region's major commercial real estate markets. In **LatAm**, we forecast stronger cash flow generation from rent growth after several discounts in 2016 and declining basic interest rates in Brazil.

Key assumptions

Overview

Our assumptions for **homebuilders/developers** diverge globally based on supply and demand conditions. Our outlook for the **U.S.** calls for continued stable demand and a tight supply of new homes, which is supported by S&P Global Ratings' economic forecast and our view that many demand drivers for new homes to remain positive. We expect new home sales for U.S. homebuilders we rate to slow but maintain positive growth of about 6%. With backlogs remaining strong through year-end 2016, we expect home deliveries to be up about 10% to 12%.

On the contrary, **APAC** homebuilders face lower sales. We forecast that property sales in China will decline 5%-10% this year, driven by a drop in volume. This is largely because we think the Chinese government may continue to implement tightening measures to cool runaway prices. In Hong Kong, rising interest rates and growing supply may put a damper on prices even as demand remains robust. We expect prices to decline 5% to 10% in Hong Kong, offset by higher volume as developers pursue a flexible pricing strategy to maintain high sales through.

For **U.S. REITs**, we expect overall net operating income (NOI) growth in 2017 to slow to 3.5% from an expected low-4.0% range in 2016 due to moderating rent growth and pockets of increasing supply in some sectors such as multifamily, storage and industrials.

We expect rental revenues in **EMEA** to benefit from slightly higher inflation from the wide-spread usage of indexation clauses in leasing contracts. We also see growth potential in M&A transactions on the back of attractive risk weighted returns.

In **APAC**, we expect the median funds from operations (FFO)-to-debt ratio to gradually improve as debt usage remains stable and the asset-enhancement and asset-replacement initiatives undertaken by issuers begin to generate incremental cash flow. In addition we expect a continued commitment to moderately conservative financial risk profiles will allow them to take advantage of debt-funded opportunities or deal with unexpected economic or financial shocks.

U.S. REITs	
	Stable, yet decelerating growth
1	Our expectation for REITS is for decelerating, yet positive low-single digit NOI growth in 2017. We believe we are near or at the peak of the real estate cycle and anticipate rent growth in mature markets will remain mostly steady over the next 12 months despite some longer term trends of disruption occurring throughout certain pockets of subsectors. Generally, we do not expect occupancy levels to deviate significantly from prior year levels.
	Improved credit protection measures
2	Our base-case forecast for REITs includes our expectation that credit protection measures will remain at the strongest levels observed over the last 10 years with issuer's debt-to-EBITDA and interest coverage either slightly improving or remaining roughly equivalent to their 2016 levels.
	Increased funding costs
3	We expect interest to rise at a measured pace, with two 25-basis-point (bp) increases in 2017. While we believe rated REITs can absorb modest increases in interest rates given our expectations for positive NOI growth and limited refinancing needs. Access to capital markets remains favorable for rated REITs and we saw robust debt issuance in 2016, slightly surpassing 2015 levels. Non-traditional REITs (gaming and telecom) have been among the largest debt issuers in 2016.

European REITS

	Revenues up, thanks to indexation, and growing portfolios
1	Widespread indexation of rents on various measures of inflation and improving macroeconomic trends suggests that like-for-like revenue growth for Europe-based REITS, especially those operating in the office segment, will increase to low-single-digits in 2017 to 2018, after two years of sluggish increases We see rising revenues from portfolios' additions, partly as a result of M&A but also through direct investments and high ongoing development activities (renovations, extensions, and greenfield or pre- let projects). In Germany, demand for commercial properties remains strong with positive effects on occupancy rates, and we expect low- to mid-single-digit like-for-like rental growth for office and other commercial real estate players in 2017. In the U.K., commercial valuations may come under greater pressure because of Brexit.
	Improved earnings
	We see two main trends that should support operating performance this year:
2	 The market for continental office lessors will benefit from moderate GDP growth with rent level improving and occupancy staying robust. Commercial real estate markets in Spain and Italy notably are in recovery mode; and German residential property players will continue to flourish amid strong demand and favorable funding conditions.
	Robust coverage ratios, potential M&A activity
3	Following very active refinancing activity until the very beginning of this year, our base-case scenario for REITS in Europe foresees stable or moderately improving interest coverage ratios in 2017. Leverage metrics are more dependent on execution of pipeline but most REITs harbor a disciplined investment policy and may benefit from portfolio revaluation gains. High liquidity provisions and increased headroom under most REITs' leverage covenants should favor high acquisitions volumes this year. Occurrence of M&A transactions will depend on availability of targets per asset class and evolutions o share prices (versus NAV) throughout the year.

Asia-Pacific REITs

Asset enhancement and replacement initiatives begin to generate incremental cash flow

We expect the sector's median FFO-to-debt ratio to gradually improve as debt usage remains stable and the asset-enhancement and asset-replacement initiatives undertaken by issuers begin to generate incremental cash flow. The real estate investment markets where the REITs are located (Australia, China, Hong Kong, Japan, Singapore, and Taiwan) have varying supply conditions that will modify the prospect of demand and rents in each market.

Increasing interest rates

While our base-case forecast factors in a modest increase in the lending margin on floating interest rates, the median interest coverage for the rated sector is likely to improve over the medium term due to the low, average, base interest rates. Likewise, the forecast debt usage is likely to remain relatively static, given that the sector remains hesitant to make debt-funded acquisitions when competing with capital-rich funds.

Continued commitment to moderately conservative financial risk profiles

Many of the rated entities retain sufficient buffer within their financial policies to take advantage of debt-funded opportunities or deal with unexpected economic or financial shocks. This is in the context of REIT policies that are referenced to a debt-to-asset measure; and where asset prices are buoyant due to low base interest rates and the investor hunt for yield. The asset-price inflation is at odds with the payback and coverage credit metrics, and distorting REITs' balance-sheet gearing ratios. Also, the gearing ratio is distorted by the inclusion of Japanese REITs that report their accounts on a historical cost basis. For companies that report based on International Financial Reporting Standards, tighter capitalization rates are inflating asset values and keeping the gearing ratio in check. However, this can also disguise an increase in the actual debt.

Latin American REITs

Improving credit metrics on stronger cash flow generation

We expect companies to present increasing cash flow generation in 2017 as a result of some area growth and lower discounts on the rent contracts negotiation as Brazilian economy shows some recovery with GDP growth and increasing consumer confidence. Most of the companies we rate focus on more resilient segments, such as malls for high-income clients and high-quality offices at premium locations, which has supported relatively high occupancy rates amid the economic crisis in Brazil and should even improve somewhat this year on better prospects.

	Declining interest rates
2	The expectation of significant decline in base interest rates in Brazil during 2017, even if still high, coupled with companies strategies to reduce leverage should result in improved interest coverage for most of the players we rate.

U.S.Homebuilders/Developers

	New homes sales and home deliveries expected to continue growing
1	We expect new home sales for our rated homebuilders to slow but maintain positive growth of about 6% due to strong underlying demand. A slower spring selling season translated to slower closing growth to close 2016 and into 2017. Backlog volume remains substantially higher but labor issues persist. As a result, we still expect home deliveries to grow about 10% to 12% in 2017.
	Stable profitability but improving EBITDA
2	Profitability among rated builders had been stagnant entering 2017, reflecting a contrast between weaker gross margins and better sales, general, and administrative expense (SG&A) as a percentage of sales. We expect adjusted gross homebuilding margins (which exclude capitalized interest from cost of sales) to contract for most builders for the year. The primary factor for tighter margins, we believe, continues to be higher land prices while labor and costs associated with land development delays also affect the bottom line for many. While we expect gross margins to contract, we also expect the majority of builders to improve their SG&A as closing volumes increase. With the roughly break-even impact of gross margins and SG&A as a percentage of sales, higher closing volumes and average selling prices should help overall EBTIDA grow for most builders.

European Homebuilders/Developers

German housing market still far from overheating, while U.K. real estate is more uncertain

Despite significant increases of house prices in German metropolitan areas in 2016 (+9.6% according to Hypoport statistics), we see limited risk of a housing bubble developing in Germany over the next few years. Rising demand is supported by high migration, a shortage of housing supply, and fundamentally a strong economy: Germany is at full employment and wages are gradually rising. Although property construction output surged last year, it will unlikely fulfil the gap that has accumulated in recent years. Also, home price levels in Germany remain fully comparable with those of other European countries and affordable when put against real income level or rent yields. For developers, we forecast robust housing markets in Germany.

This should be slightly less the case for the U.K. although the structural undersupply of housing and government schemes such as help-to-buy continue to support demand for new homes, in particular in the mid-range and affordable housing segments. U.K. homebuilders could be affected by the Brexit fallout if demand for new homes starts falling as purchase decisions are delayed and house prices decline on the back of market uncertainties.

Recovery underway in France and Southern Europe

Market conditions in the rest of continental Europe, especially in Spain and France, are clearly recovering. We expect the trend to continue as long as the positive macro-economic trends are coupled with a good penetration of mortgage loans.

French developers should see growing demand as fiscal uncertainty evaporates and the underlying economy improves. Growth in projects starts and building permits turned clearly positive in 2016 and we expect those trends to support French homebuilders and developers' revenues at least throughout calendar 2017.

Slow recovery in the Russian housing market

Recovery of the Russian housing market is slow, constrained by weak personal income growth. Russian households have borne the brunt of the adjustment from the lower oil price environment. At the same time, affordability measures have increased due to nominal price declines of housing properties. On the back of marked slowdown in inflation, key policy rate set by the Central Bank of Russia has been declining, A similar trend occurred for market mortgage interest rates which have declined to pre-crisis level. As a result, the Russian government has decided not to extend its mortgage subsidy program for 2017. Structural demand for housing in Russia remains high and this should support the market.

Asia-Pacific Homebuilders/Developers

	Tightening liquidity for Chinese developers
1	We expect Chinese property developers to face tighter liquidity conditions in 2017 due to slower cash collection from sales and tightening conditions for onshore bond issuances. The government may roll out further policies to curb asset bubble risks in China. The abundant liquidity and lower funding costs enjoyed by Chinese developers in 2016 is likely to reverse in 2017. However, refinancing risks should be manageable on the whole as many developers have early redeemed offshore bonds and cash balances have grown due to strong sales achieved in 2016.
	Slight recovery in profitability but long term pressure remains
2	The profit margin of rated Chinese developers is likely to diverge with a slightly positive tilt in 2017. Many developers benefited from large increase in prices in 2016, particularly in high tier cites in China. The recognized earnings in 2017 should therefore reflect the price growth off a lower land cost. However, as land prices surged in 2016, developers will face renewed margin pressures over the next two to three years. The challenge is especially daunting for developers that were most aggressive and acquired high cost land in the second half of 2016.
	Hong Kong developers continue to show prudent financial management
3	Resilient property prices in Hong Kong have improved the credit metrics of Hong Kong developers. Rated developers continue to have ample financial buffer as they remain largely conservative and prudent in new investments and land acquisitions. The high proportion of rental income also improves to stability and resilience of Hong Kong developers.

Latin American Homebuilders/Developers

	Slow recovery in Brazilian industry trends after two difficult years
1	Under our assumptions of GDP growth and lower interest and inflation rates in Brazil, we believe demand would start to show some improvements and sales cancelations would be lower than the high levels registered in the past year. As a result, companies would post increasing cash flow generation. Profitability might remain pressured as companies continue to provide discounts to promote sales and reduce inventories.
	Mexican homebuilders to face challenging macroeconomic conditions
2	We expect Mexican homebuilders' revenues growth to slow down towards the mid-single-digit area based on our expectation of tougher macroeconomic environment through 2017, which could rein in housing demand as lower disposable income due to higher inflation and higher interest rates on mortgages could postpone customers' decision to buy a house. Operating margins could also face some declines as the stronger dollar increases raw material construction prices. Additionally, interest payments are likely to increase given companies' high exposure to variable interest rate loans, although leverage remains relatively low.

Key risks and opportunities

Overview

The primary risks to our baseline forecast for **homebuilders** are similar to those from last year. Delays in land development could lead to increased cycle times and hurt builders' profitability. Combined with an already tight labor market and rising material costs, this could cause builders to miss our forecasts and trigger negative ratings actions. Despite these risks, our outlook generally calls for stable demand for new home construction, which should limit the downside for most **U.S.** homebuilders.

Meanwhile, **China**'s property market faces renewed policy risk, as the government has sent strong signals to damp overheating prices in key cities. In Hong Kong, faster-than-expected interest rate increases could lead to weaker than expected credit metrics.

The pace of interest rate increase remains a key risk for the global **REIT sector**, putting moderate pressure on valuations, which have become frothy in some markets from aggressive bidding from investors; still we expect solid operating fundamentals to support asset value based on expectations of steady cash flow.

In the **U.S.**, the political climate will likely remain a challenge for U.S. REITs, and we will look for further clarity on key policies such as tax reform, health care, immigration, and trade. The process of the **U.K**. leaving the European Union (Brexit) that will unfold in the next two years could weigh on valuations of commercial properties in London, but may prove beneficial for some continental cities such as **Frankfurt**. We expect the impact to be less for the U.K. housing market overall, concentrated on prime residential properties in **Central London**. Rising interest rates could pose a threat to weaker-than-expected credit metrics. Further, should household incomes suffer a sharp dip and property prices decline, the banking sector may seek to cut their exposure to the sector.

U.S.REITs

	Rising interest rates
1	Interest rate increases appear imminent in 2017 as it may begin to test the appetite and frequency REITs will access the capital market. Despite the risk of an increasing cost of capital, we believe REITs will be able to absorb modest rate increases given their limited refinancing needs and our expectation for positive NOI growth. However, a steeper-than-expected jump in interest rates or amplified market volatility could weaken growth prospects.
	Political risks
2	The political climate will most likely remain a challenge for REITs in 2017, potential changes in tax policies, the hotly debated repeal of the ACA and uncertainty surrounding global trade including Brexit, a rebalancing Chinese economy, and potential U.S. trade policy creates ongoing pressure for issuers.
	Supply conditions
3	Real estate supply has increased in certain markets for the multifamily, industrials, and health care sectors, but overall demand for real estate remains healthy and we still see relatively good absorption of new supply. For the multifamily sector, we expect pockets of oversupply (particularly in New York and San Francisco) to continue to hamper NOI growth. Still, occupancy levels remain high and we expect lease rates to improve albeit at a moderated pace.

European REITs

U.K. commercial real estate companies may be affected by stagnating valuations in certain areas like London as the implications of the Brexit process, especially for the financial industry, become clearer. We believe Brexit will give financial services firms that are already under pressure to contain costs more reason to consider reducing their office space in London. We expect the pressure to be most acute for landlords with a large number of offices or high-end residential properties in the City of London, a market that was already cooling off in 2016. Even if a cheaper sterling partly compensates and helps to attract new investors to the U.K., the decision to leave the European Union is likely to put the brakes on the long-run trend of commercial real estate asset appreciation in London.

Conversely, some continental locations like Frankfurt or to a lesser degree Paris may benefit from the separation process. We view Brexit as a medium-term risk though, with full effects to unfold over a period of several years, rather than being fully visible within 2017.

Higher interest rate

Across Europe, recent increases in property valuations have been partly driven by low interest rates. A change in monetary policy and more expensive funding conditions would likely depress valuations unless rents adjust upward with only a limited time lag. Current valuations incorporate substantial risk premium though, reflecting assets characteristics and credit standing of issuers. This should act as a buffer against sudden adverse movements in portfolio values in 2017.

We believe the generally low interest environment will prevail in the Eurozone in the near term so that companies can continue to refinance under favorable conditions this year.

Change in retail

We believe retail property owners in 2017 will continue to face three main challenges:

- The steady development of online retail, which is positive for demand of industrial assets, but not so for retail space;
- Fears for individual security, such as those related to terrorism threats, now visible in France but also in Germany. This can impact physical footfall and retailers sales, at least temporarily and for specific locations; and
- Tougher competition between existing shopping centers, while prime international retailers are becoming more selective in choosing their physical stores. We see a clear trend among retailers to cut on the number of shops and to concentrate on the best quality assets.

Unless landlords take measures to attract customers, these are likely to affect physical footfall and retailers' sales in shopping centers. We expect the flight-to-quality to continue among large European shopping centers owners. The gradual shift from hypermarkets to convenience stores has been supporting the operational performance of those retail REITS focused on city-center locations, a trend that we expect to continue in 2017.

	Higher interest rates
1	The spread over the base interest rate is increasing incrementally, lifting total interest costs. Rising interest rates could pose a threat given that the REITs maintain a portion of their debt holdings at a floating rate and that interest is one of their largest expenses. Offsetting this risk is the manageable refinancing task because of the sector's sound liquidity and longer tenor of debt, when compared with the sector's debt tenors at the onset of the global financial crisis.
	Pull back in bank lending
2	Banks might seek to cut their exposure to the sector should property prices decline as household income dips. A number of REIT managers continue to maintain healthy liquidity positions that will serve as a buffer should this risk eventuate.
	Overbuilding creating excess supply
3	Given the long lead times and low barriers to entry, overbuilding could occur in the gateway Asia- Pacific cities in which the REITs are invested, amid substantial developments taking place. Securing committed bank construction finance and tenant pre-commitments are the key risk-mitigating factors. In addition, varying supply conditions across these cities will modify the prospect of demand and rents in each market.

Latin American REITs

	Prudent growth strategies
1	We believe the companies we rate might perform acquisitions, as observed at the end of 2016, but we expect those to be accompanied by a prudent approach to leverage, by raising equity if there were to be large acquisitions. The companies are also cautious on capex for new greenfield projects, either postponing some investments or focusing on outlets for instance, that require lower capex than new malls. As a result, we believe companies would post increasing revenues base with no relevant leverage increase.
	Brazil's economy not recovering as expected
2	If the Brazilian economy does not recover as expected in 2017, we could see higher vacancy rates and delinquencies, what would probably force companies to provide discounts to existing tenants and negotiate new rent contracts at lower prices. This would impair issuers' profitability and cash flow generation.

U.S.Homebuilders/Developers

Tight construction labor market and land development delays

While we expect demand for new homes to remain strong through 2017, we believe a tight construction labor market and increased land development durations will be the most significant impediments to meeting that demand, restricting supply and resulting in higher average sale prices and a continuation of the "slow and steady" pace the market has been exhibiting. Land development delays could lead to increased cycle times and negatively affect builders' profitability. This dynamic, when combined with an already tight labor market and rising material costs, could cause builders to miss our forecasts and trigger negative rating actions. In regard to labor, an August 2016 survey conducted by the Associated General Contractors of America showed nearly 70% of respondents indicated having difficulty filling craft positions while almost half reported having to increase base pay rates. Some builders we speak with opine that tight labor is nothing new to the industry; however, it's difficult to deny its impact on the current recovery because many of the trade laborers who lost jobs during the most recent downturn have not returned, and there are concerns regarding the aging out of skilled labor, which has been well-documented. Despite these risks, our outlook generally calls for stable demand for new home construction which should limit the downside for most U.S. homebuilders in 2017.

	More aggressive government tightening policies
1	China's property market faces renewed policy risk given that the government has sent strong signals to dampen overheating prices in key cities. Developers that have stepped up land purchases and new investments could be vulnerable because their profitability or even cash flows may worsen if the sales environment becomes more adverse than expected.
	Higher-than-expected interest rate increase
2	Hong Kong faces a medium-sector risk due to rising supply, prices exceeding average household affordability, and weaker economic conditions in Hong Kong and China. Although demand for new development seems resilient, rapid succession of multiple interest rate increases could lead to declin in market confidence and significantly undermine house prices.
	Indonesian rebound likely
3	The outlook for Indonesia is low risk over the next 12 to 24 months. The resolution and roll-out of the tax amnesty have improved investor sentiment. Sales look set to improve in 2017 with more new launches. Coupled with better sentiment and lower borrowing costs, a strong rebound in Indonesia's sales volumes should occur for 2017.

Latin American Homebuilders/Developers

Macroeconomic conditions impairing housing demand

1	If the Brazilian economy does not recover as expected in 2017, we could see continued weak demand, limiting companies' ability to improve cash flow generation. In a similar way, as we expect slower GDP growth, higher inflation rates and potential interest rates hikes in Mexico, lower consumer confidence will probably start to pressure housing demand. In addition, the reduction in government subsidy programs (down32% from 2016 level) will impact some of the homebuilders' top lines given their partial reliance on such programs.
	Mexican peso depreciation against U.S. dollars
2	The raw material costs of Mexican homebuilders are highly correlated to the U.S. dollar. As a result, a stronger-than-expected dollar against the local currency could pressure margins and cash flow generation of Mexican issuers, despite their capacity to partially pass these costs to homebuyers.

Other industry developments

Gulf Cooperation Council (GCC)

We expect 2017 to remain as challenging as 2016 for the real estate sector as currency pressures persist and residential prices and rents will continue to fall. Markets and sentiment are weaker as GDP growth rates are slowing down for the oil dependent countries. While the economies are adjusting to life with oil prices around \$55, we expect governments to cut or postpone expenditure to manage tight fiscal budgets. The GCC countries have unanimously agreed to rollout a 5% valueadded tax across the six countries in 2018. While rolling out these taxes countries may experience some operational hurdles but we believe these will help the economies be competitive and provide an additional source of revenue. In the medium-turn, tourism should remain an important source of market growth spurred by Dubai's Expo 2020 and Qatar's Soccer World Cup 2022. While population growth is fundamentally supportive for residential real estate, the segment in Dubai has come under pressure. We expect rents and house prices in the city to fall further in 2017 with many developers delivering large projects over 2017 and 2018 therefore increasing housing supply. We expect polarization of the market to remain pronounced in the office segment where we observe some oversupply, while rents should be stable for prime office locations. A weaker Pound, Euro, and Yuan have affected tourist spending which a key driver is for the UAE and more importantly for Dubai (Emirate of) whereas tourist arrivals have grown by 4% year-to-date to November 2016. We therefore expect hotel revenues and retail sales to fall in 2017. While GCC online sales only accounts for 1% of total sales, e-commerce penetration has increased in 2016 and poses a potential threat to brick and mortar retail.

Israel REITs

Our outlook for the income producing real estate sector in Israel remains stable and we estimate that companies will maintain adequate interest coverage and leverage ratios in the upcoming year.

In 2016, most companies continued to present a 2.5% to 3.5% growth rate in same properties' NOI year-on-year. Occupancy rates in high-quality assets remained high, around 97% to 100%, and we continue to see large investments being made by most companies. We can also see that new spaces are rented out quickly even in the saturated Tel Aviv Metropolitan area. Nevertheless, we expect that in the medium term, excess office and commercial space and an increase in online sales may pressure NOI or at least limit rent hikes.

We believe **the Bank of Israel will raise the interest rate moderately** in line with the interest hikes in the U.S. However, we do not expect it will significantly affect assets' capitalization rates. We therefore believe that a moderate interest rate increase and pressure on rents are unlikely to materially affect coverage ratios in the short to mid-term.

Israel Developers

We expect to see further increases in home prices in 2017 supported by the still-low borrowing costs which are likely to continue to provide some support to demand for housing. Government housing policy "**Mechir Lamishtaken**" supports demand of first-time buyers as well. As the building starts rate for 2016 is about 48,000 per annum, similar to household growth, we do not expect any supply-side downward pressure on prices. If the building starts rate continues to slow down we may even see upward pressure on prices, due, among other things, to inflexible demand for housing. On the other hand, government reforms to improve affordability for young couples, very high housing prices, the increase of investor's purchase taxes, and increasing interest mortgage rates are expected to slow down house price growth pace in 2017.

Financial policy

U.S. REITs

Credit protection measures, particularly debt-to-EBITDA and fixed-charge coverage, have improved to levels previously unobserved and it is our expectation for 2017 to follow that trend of enhancement for the majority of U.S. REITs. We believe favorable demand fundamentals should continue to support asset prices longer term, but note that we are probably late in the recovery cycle since many REITs are already posting peak level operating metrics for occupancy and annualized base rents (ABRs). As a result, we think further upside is relatively limited.

Access to capital markets also remains advantageous for rated REITs and we saw higher debt issuance in 2016 slightly surpassing 2015 debt issuance. Non-traditional REITs (gaming and telecom) were among the largest debt issuers in 2016. Credit spreads for investment-grade issuers have generally narrowed despite some volatility. While the 10-year Treasury note yield increased sharply over the past few months, interest rates remain relatively low historically and many REITs still find it attractive to refinance at these rates.

We expect **financial policies** of U.S. REITs to remain stable. Given our expectations for fairly balanced acquisition to disposition, we expect credit metrics to remain healthy. Many rated REITs have largely completed their repositioning strategies and asset valuations are stabilizing. We believe both the debt and equity markets will remain relatively favorable, providing an effective funding source of capital to fund future acquisitions or development activities. Merger and acquisition (M&A) activity in 2016 remains below 2015 levels, and we do not expect a significant increase in M&A activity in the sector given still-elevated, although stabilizing, property values.

U.S. Homebuilders

M&A activity remains a hot topic after Lennar Corp. completed the purchase of WCI Communities Inc. on February 10, and there is mounting speculation of further consolidation in the industry. While we do not take a uniform view on M&A and assess each situation individually, the impact on a company's financial risk profile depends on how the transaction is financed and our forecast of its pro forma credit metrics. We would likely view a heavily debt-financed acquisition less favorably. On the other hand, a transaction that enhances a builder's geographic diversity and strengthens its share in local markets could bode well for a company's business risk profile. We also take transaction size and integration risk into account when considering the ratings impact, which again is situational.

Many companies within the homebuilding sector took advantage of **low interest rates** over the past few years by **proactively refinancing debt** and pushing maturity dates. At this time, there is approximately \$2.3 billion in rated homebuilder debt coming due in 2017 and \$2.6 billion in 2018. Given the high level of cash generation at this point in the cycle and some companies' stated intentions to make debt reduction a priority, we anticipate that a portion of the debt maturing in 2017 may be retired rather than refinanced, reducing the companies' overall debt. The majority of debt maturing in 2017 and 2018 sits with companies that we view as having relatively stronger balance sheets, which, in conjunction with our expectation for some debt pay down in 2017, supports our view that refinancing needs will be relatively low.

European REITs & Homebuilders

The current supportive market conditions and rise in valuation has resulted in constant improvement in LTV ratios. We believe this provides some **headroom to credit metrics** should the market conditions deteriorate and property valuation drops. We also note that most REITs have kept a high level of interest hedging and extended their debt maturity profile in recent years.

The currently favorable environment on the equity market also means that more REITs, especially the most under leveraged ones, may be **considering M&A, IPOs or a possible listing in 2017**. In the case of developers, debt reductions have been limited because of lower free cash flows but growing revenues from projects deliveries should sustain credit ratios in 2017.

APAC REITs & Homebuilders

Many of the **rated entities retain sufficient buffer within their financial policies** to take advantage of debt-funded opportunities or deal with unexpected economic or financial shocks. This is in the context of REIT policies that are usually referenced to a debt-to-asset measure. After calibrating these gearing targets, to payback and coverage credit measures, we view rising interest rates as a potential threat. In light of the potential for interest costs to increase, a number of our rated issuers have sought to lengthen their debt-maturity profiles and tap currently favorable onshore and offshore debt markets.

We believe the **higher volume of land acquisition in China** and **better sales prospect this year in Indonesia** could slightly increase construction capital expenditure for most property developers we rate. In China, the tightening of funding channels could create refinancing difficulty for weaker players but stronger players with strong bank relationships are unlikely to be affected. Most developers have lowered their proportion of foreign debt, decreasing the potential impact of further depreciation of the renminbi.

Most players in the region, particularly those in Hong Kong, have **sufficient buffer or financing flexibility** to absorb the potential impact of the expected gradual hike in U.S. interest rates. In Indonesia, most rated developers have refinanced their notes due in 2019 and 2020, further extending their debt maturities.

LatAm REITs & Homebuilders

Most of the **Brazilian issuers** are focused on reducing leverage after two years of weaker cash flow generation that in general pressured companies' main credit metrics. We also expect companies to continue refinancing debt, taking advantage of lower interest rates and extending debt maturity profiles. In general, we expect **Mexican homebuilders** to maintain prudent financial policies with low leverage and healthy liquidity. Nonetheless, as a result of higher cash position due to IPOs through the last 12 to 18 months, few players might pursue strategic land acquisitions in order to accelerate growth strategy, and/or could be more aggressive on dividend distributions.

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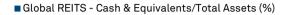
Related research

- Tight Inventory And Continuing Housing Recovery Will Support U.S. Homebuilder Sales Growth In 2017, Dec. 14 2016
- Solid Leasing Market Buttresses Japan's Real Estate Companies; Potential Price Peak And Rate Rise Pose Risks, Dec 12, 2016
- Lay Of The Land: U.S. REITs' Performance Was Strong In The Third Quarter; We Expect Growth To Decelerate In 2017, Dec. 9, 2016
- Asia-Pacific REITs Newly Completed Developments Would Boost Credit Metrics, Nov 23, 2016
- Asia-Pacific Retailers Risk Getting Trampled In The Stampede To Online Shopping, Nov 17, 2016
- Large Spanish Real Estate Companies Are In Revival Mode With Leaner Balance Sheets, Better Demand, And Now M&A, Sept 29, 2016
- Lay Of The Land: Positive Momentum Continues For North American REITs With Steady Economic Growth And Demand, Sept. 9, 2016
- Market Tremors Add To U.K. Real Estate Uncertainty, Aug. 04, 2016
- Brexit Weakens The Prospects For U.K. Real Estate Companies, But Downgrades Are Unlikely In The Short Term, Jun. 27, 2016
- Asia-Pacific REITs Large Buffer Will Bear A Downturn', Jun 13, 2016
- Rating Activity For North American REITs Continues To Be Positive, But Negative Trends Are Emerging, Jun. 8, 2016
- ICSC 2016 Real Estate Conference: Mall And Strip Center REITs Have Entered A Retail Landscape Gauntlet, Jun. 7, 2016

Cash, debt and returns

Global Real Estate (REITs only)

Chart 207 – Cash and equivalents / total assets



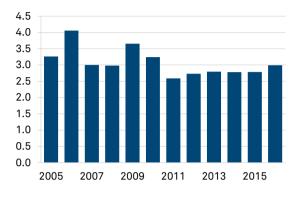


Chart 209 - Fixed versus variable rate exposure

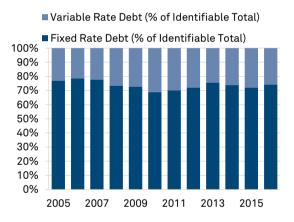
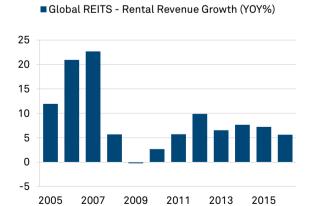


Chart 211 – Rental revenue growth



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 208 – Total debt / total assets

Global REITS - Total Debt / Total Assets (%)

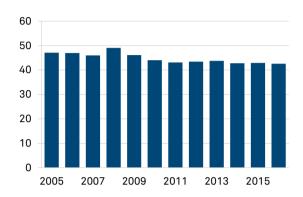


Chart 210 - Long term debt term structure

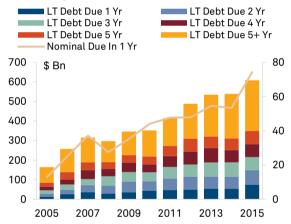
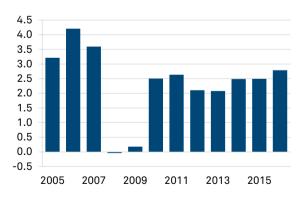


Chart 212 - Return on capital employed

Global REITS - Return On Capital (%)



Industry Top Trends 2017

Retail and Restaurants



Overview

- Ratings Outlook: Rating trends across retail and restaurants are negative, even though the majority of outlooks remain stable. Shifting consumer preferences and patches of global economic and policy uncertainty are contributing factors to the increasingly negative outlook bias.
- **Forecasts:** Overall, we expect mixed revenue growth—some companies or subsectors will experience revenue declines (negative same-store sales or store closings) while others will have revenue growth (favorable sector dynamics). Slow economic growth in the West will also constrain revenue growth for some.
- Assumptions: We assume slow, but continued global GDP growth, some wage growth in developed markets (good for consumer spending, also possible pressure on margins) and continued significant investment in e-commerce by most retailers.
- Risks: Consumers become even more cautious and hardwired to seek discounts. Companies strive hard to adapt to shifting consumer preferences with limited success while wage growth compresses margins. Trade, tariff or tax regimes develop in several nations that disrupt existing retail supply chain economics or raise costs and pressure margins. Higher-rated issuers shift capital allocation more aggressively towards shareholders.
- Industry Trends: Dynamics that are triggering strategic shifts include large investments in online commerce and delivery logistics, successful retailers (not rated) with worldclass supply chains, demographic trends rooted in the millennial generation, and subpar economic growth in many markets.

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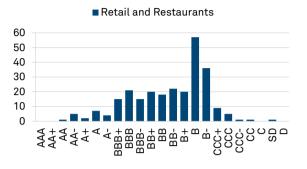
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S&P Global Ratings

Ratings trends and outlook

Global Retail and Restaurants

Chart 213 - Ratings distribution



The majority of our ratings are speculative-grade and we do not expect much upward rating migration in categories with stronger investment-grade ratings given continued investment, M&A, slow growth, and financial policy shifts in light of real and potential activists.

Chart 215 – Ratings outlooks

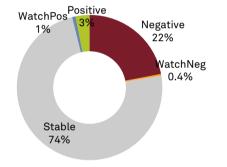
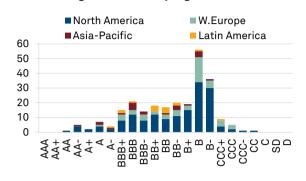


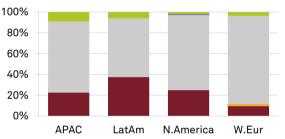
Chart 214 – Ratings distribution by region



The dominance of speculative-grade ratings is consistent across regions. The 'B' category dominates the rating scale.

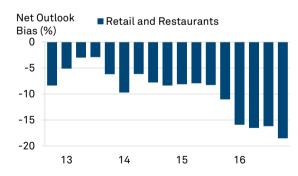
Chart 216 - Ratings outlooks by region

Negative WatchNeg Stable WatchPos Positive



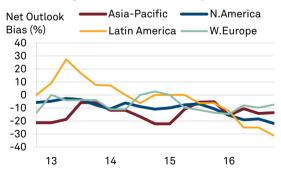
Most rating outlooks are stable, but the majority of the non-stable outlooks are In all regions, negative outlooks outweigh positives. This is a shift from last year negative and we expect this to continue. The shift toward negative outlooks continued over the past year. and reflects local economic challenges and company specific execution, given the local nature of retail.

Chart 217 – Ratings outlook net bias



The sector has had a negative bias over the past few years, but the trend has accelerated in the past several quarters, reflecting strategic and financial policy choices and underperformance in a challenging environment.

Chart 218 - Ratings net outlook bias by region



The negative outlook bias has been consistent in North America and Latin America, but has moderated some in APAC and Western Europe.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

S&P Global Ratings

U.S. and Canada: We expect somewhat better economic growth in the U.S. in 2017, but without much positive impact on the credit quality of the retail companies we rate. In 2016 (as in 2015), there were many more downgrades than upgrades. By the end of the year 27% of non-stable outlooks were negative versus just 3% positive. The performance of issuers in the department store and specialty apparel are the most challenged, along with some restaurant concepts. Discounters continue to do well. Following what was a weak holiday season for many rated retailers, we assume 2017 will continue to challenge companies' ability to meet shifting consumer preferences for value and growing preference for shopping online.

One of the key risks for Canadian retailers is a severe housing correction in Ontario and British Columbia that would likely erode consumer confidence and curtail discretionary spending in these key markets. We believe such a scenario would weigh on same-store sales (sales at stores open a year or more) and profitability.

EMEA: Despite lackluster macroeconomic conditions, European (and particularly U.K.) retailers benefited from resilient operating performance in 2016, ending with robust holiday trading with a notable exception of some apparel segments. The very few upgrades in the retail sector mainly came from restaurants, which reflected consumers' preference for spending more on leisure and eating out than shopping. Downgrades were essentially triggered by poor trading conditions in some geography where companies struggled to catch up with changing consumer behaviors.

Grocers in the U.K. and across the continent continued to face tough competitive landscape with demanding consumers and ongoing pressure from discounters with their beneficial cost structures. Among the rated retailers in Europe, the apparel sub-segment was in a notably tougher spot as weather became increasingly unpredictable, diminishing their ability to sell seasonal goods at full prices.

While there are more stable outlooks in our rated portfolio, our outlook for the sector overall for 2017 remains stable to negative as we expect 2017 to present a challenging economic environment that we think will lead to pressure on top line growth for retailers as consumers will likely face inflation across the product categories without real wage growth. We expect retailers' EBITDA margins will be squeezed and headroom within the ratings will subsequently be pressured. Increasing pension deficits would also be a governing theme especially for U.K.-based retailers with material defined benefit plans.

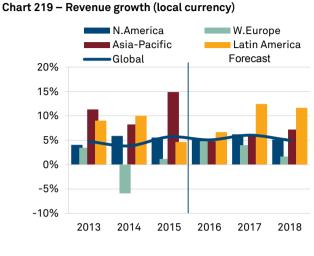
Latin America: Our outlook for Latin America is stable to negative. In Brazil, after two years of poor macroeconomic conditions that pressured retailers' top line and margins, we expect some improvement, with lower inflation and interest rate declines probably leading to increasing consumption, although still confronted with high unemployment rates. Negative outlooks on Brazilian retailers mainly reflect potential downgrades if companies are not able to recover profitability and cash flow generation.

Mexico, on the other hand, faces a changing environment that will bring the industry's high-singledigit growth in 2015 and 2016 down to the low-single-digit area. Key factors that will curtail consumption patterns relate to the increase in interest rates and inflationary pressures, coupled with sluggish economic growth. On top of this, the risk of a reduction in remittances from the U.S. would undermine household income, leading to more conservative consumer spending habits. We consider that these conditions pose heightened downside risks on the financial risk profile of most Mexican retailers

APAC: Overall, we expect a negative bias to continue. In particular, we've observed the creditworthiness of Chinese department stores under intense strain. This is because of not just China's economic slowdown but also to the aggressive stance of department store operators regarding capital investment and acquisitions. We also expect negative rating trends to continue in Australia and Japan, but mainly because of company-specific issues like merchandizing, store operations, and aggressive appetites for expansion amid heightened competition. For auto retailers, too, rating trends vary among countries. While slowing somewhat, good growth prospects for auto sales in every developing country in Asia-Pacific support underlying rating outlooks, but aggressive attitudes to expansion offset the trend for some issuers.

Industry forecasts

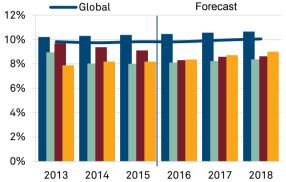
Global Retail and Restaurants



We expect slow revenue growth for the sector overall. In North America, we anticipate slower revenue growth but at rates a bit above GDP. In Western Europe, revenue growth will be moderately positive In APAC, we expect more stable revenue growth. In Latin America, growth partly reflects recovering economies.

N.America W.Europe Asia-Pacific Latin America Global Forecast

Chart 220 - EBITDA margin (adjusted)



We anticipate margins will remain fairly flat for the industry overall and that is also the case by region. While not large movements, we think Western Europe margins may improve somewhat as well as in LatAm.

Chart 221 – Debt / EBITDA (adjusted)

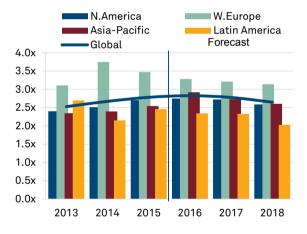
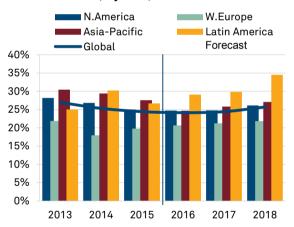


Chart 222 – FFO / debt (adjusted)



We think the sector will deleverage slightly over the next two years, with continuing lower leverage trends in all regions. It is unlikely that aggregate deleveraging will be sufficient to trigger wide-spread upgrades. We think some growth in EBITDA, rather than significant reduction in debt will account for most of the deleveraging. Any lower leverage in the speculative-grade segment would signal potential dividend recapitalizations or sale on sponsor-owned retailers.

We assume aggregate cash flow to debt as measured by FFO/debt will have bottomed out in 2016 but we do not expect any large improvements; the exception being LatAm, mainly due to expected deleveraging. Lower interest rates in Brazil will also driving higher FFO.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

U.S. and Canada industry forecast

In the U.S., we expect many companies to report flat or declining same-store sales and a significant amount of store closure announcements. This will lead to flat or decreased revenue for sectors such as department stores and specialty apparel. Other segments will show revenue growth and net store openings. We think wage growth is finally accelerating, and not just because of rising state or local minimum wage requirements. This could pressure margins in some segments, such as restaurants. So far, low unemployment has not been not big catalyst for small-ticket retail spending.

In Canada, we think consumers' focus on price coupled with lower input costs should result in more competitive pricing as consumers continue to gravitate toward discount banners in the food segment. This makes store format mix and execution on merchandising and cost management more important. Of the three largest food retailers in Canada, we believe Loblaw Cos. Ltd. is in the best position to benefit from consumers' preference for discount prices given our view that more than 50% of its grocery stores feature discount formats versus about 35% for Metro Inc. and 10% for Sobeys Inc.

European industry forecast

In 2017, we expect U.K. retailers will begin to feel the impact of the Brexit decision with pressure on both top line and EBITDA margins expected. This is particularly the case as inflation begins to creep upward as a result of sterling depreciation and higher commodity prices. Although some pickup in inflation is positive for retailers, they will face a tough choice of how much of the price increases they should pass on to customers. We anticipate intense market competition, return of inflationary environment resulting in pricing pressure across the retail sectors with price wars expected amongst the U.K. grocers.

Now that price wars have subsided in French grocery markets, the focus is more on price promotions as discounters present tough competition. Further, geopolitical risks will be a theme in continental Europe with upcoming French and German elections. We expect retailers playing catch up with their online penetration strategies.

Across Europe, we expect sales at grocers will to continue to grow between 2% and 3% while sales for apparel will be muted and fall between -3% and +3%, led by new store openings and e-commerce expansion. We expect margins to remain in the 17% to 25% range for apparel in 2017 and grocers to remain between 5% and 10% depending on the geography.

Latin America industry forecast

We forecast mixed trends in Latin America: On one hand, we expect low-single-digit same-store sales growth for Mexican retailers, during 2017. Such expectation captures our views that consumer spending in Mexico will suffer over the next few months amid higher inflation and interest rate. In fact, we believe that the steep decline in consumer confidence during January 2017 to record lows may already signal short-term consumer concerns.

On the other hand, in Brazil and Chile we expect a recovery in same-store sales (after weak levels in 2016), which combined with an increase in opening of new stores by the large players we rate, should drive revenues growth of around 7.5% on average, compared to about 5% in 2016. The Brazilian retail industry showed significant price competition and several promotional activities last year as companies tried to control inventories and/or gain market share; we expect this to moderate during 2017 although still present.

APAC industry forecast

Although we expect somewhat weaker same-store sales growth in APAC in 2017, this varies across APAC countries. Still, ongoing urbanization and higher wages in areas including China and Indonesia will support growth in total retail sales of about the mid- to high-single digits. In China, despite slowing economic growth, we expect total retail sales to increase slightly more than 10% in 2017, supported by government efforts to shift the country to a consumption-led economy from an investment-led one.

While online retail has made deep inroads in some product categories such as retail consumer electronics, we believe most consumers in China still enjoy shopping at physical stores. In developed, matured countries such as Japan and Australia, we estimate total retail sales growth will be in the lower single digits and retailers will need to cope with intense competition, an oversupply of stores, and industrywide consolidation. In the matured Japanese market, we believe the cost reduction is the key for maintaining profitability. We expect somewhat slower, but still high, capital expenditures and strong appetites for acquisitions in many countries to counter heightened competition and enhance their market positions against rivals.

Key assumptions

Retail and Restaurants

	Slow global GDP growth
1	Slow GDP growth will be the norm in most Western countries. For others (China for example) growth will moderate but remain above other regions.
•	Interest rates will rise in certain markets
2	Increased rates in the U.S. in 2017 will likely be the most notable "scheduled" increase. Rising rates in other regions remain subject to more sustained economic recovery.
	A more inflationary environment
3	We now see an increased likelihood of rising wages and energy prices as headwinds for retail, even if higher wages could help consumer spending. We see a possibility for food deflation to reverse course later in 2017.

Slow global GDP growth will be the norm for now

We think **U.S.** GDP will grow less than 2.5% in 2017, with consumer spending growing at about the same rate. Our economists did not consider campaign promises in our baseline forecast. They plan to consider policy changes into the baseline forecast once the administration's proposals become clearer, and have a better understanding of congressional approval. We expect the unemployment rate to dip to around 4.6% and wage gains to reach 3.6% year over year by year-end 2017.

After the Brexit vote, it is likely that the **U.K.** government will trigger Article 50 in March 2017; and as a consequence of the uncertainty S&P Global Ratings' base-case growth forecast for the U.K. and **Eurozone** has been lowered by 0.7% in 2017 to 1.4% and 0.9% to 1.3% in 2018. The Eurozone forecast has been lowered as Europe braces for the forthcoming French and German elections. Despite slowing European economy, we don't expect the U.K. or Europe to dip into a recession as fundamental credit conditions remain robust. The credit quality of European corporate retail and restaurant entities had been facilitated in the past due to low interest rate environments, resilient consumer confidence despite the Brexit vote and accordingly, we have seen these companies maintain their capital expenditures to date. However, we expect slow GDP growth for 2017 as retailers gradually adjust to new evolving era of uncertain 2017.

We expect GDP growth will recover in 2017 for **Latin America** as a whole, reaching 1.7% on average, after a likely contraction of around 0.5% in 2016. In Brazil, after two years of recession, we believe GDP growth and better macroeconomic environment might support gradual improvements in consumer confidence and drive stronger same-store sales and top line growth for retailers. In Mexico, we expect GDP growth at 1.8% for 2017, which will very likely slow same-store sales growth to the low-single digit area in 2017. We expect a higher impact on department and specialty stores than in supermarkets or pharmacies that sell less discretionary goods.

In **APAC**, our baseline scenario GDP forecast in 2017 is around mid-5% level for 2017. We saw a reasonably firm pick up in APAC's macroeconomic momentum indicators. Retail sales offer the clearest sign of pick up and are currently trending upward in most of the region's economies. Nonetheless, in the some retail formats, such as department stores in China and Japan, intense competition among them and with online retailers constrains the growth.

Gradually rising interest rates presents a risk for consumer spending

In the **U.S.**, we think the forecast economic growth of 2.4% in 2017 and 2.3% in 2018 (assuming current fiscal policies), near full employment, and the strength of the medium-term economic path likely justify two to three more rate increases (of 25 bps each) in 2017. While rising rates have the potential to slow spending, rising wages and solid consumer confidence (some of the highest levels since 2001) could support consumer spending. We think consumers' focus on other ways to spend (autos, technology health care) is as much a driver of retail spending as the impact of rising rates.

A potential rise in interest rates in the **U.K.** could restrain consumer spending given still-high levels of household debt. However, we don't expect an interest rate hike in the near term as we believe Europe

has other pressures in the face of commodity inflation, FX risks due to sterling depreciation, and overall subdued consumer confidence.

Although still very high, an expected decrease of interest rates in **Brazil** during 2017 should also promote a gradual increase in consumer spending. Additionally, lower interest rates will reduce interest burden and improve interest coverage metrics as issuers carry mostly floating-rate debt. This might reduce downward pressure on ratings for some issuers if accompanied by stronger cash flow generation. In contrast, the Mexican central bank increased its policy rate by 250 bps in 2016, with more hikes expected in 2017. We believe higher interest rates could affect retailers, taking an important share of revenues generated through their credit divisions. Moreover, those retailers with exposure to variable rate debt may see an increase in financing costs and weaker coverage metrics.

For **APAC**, we see elevated risk for higher interest costs, volatile foreign exchange rates, and refinancing challenges. We do not expect the higher interest rate to constrain consumer confidence significantly in emerging markets in APAC, thanks to the strong appetite for consumption. Nonetheless, the higher interest rate would hit retailers in developed countries with weaker credit metrics. EBITDA interest coverage ratio of retailers in these countries is already quite low, and there is less room to absorb the impact of rising interest rates. In addition, Chinese retailers may face challenges with refinancing, but we believe the risk is largely mitigated by satisfactory access and liquidity in the domestic capital markets, as we saw in 2016.

Inflationary environment

In the **U.S.**, our economists expect stronger demand and reduced excess supply to boost wages and consumer prices next year, which is good for retail, with core Personal Consumption Expenditure (PCE) likely to reach the Fed's target of 2.0% at some point in 2017. We see headline PCE peaking at 2.5% in the third quarter, before low oil prices drop out of the calculation and the dollar's strength diminishes—though inflationary pressures above 2% will probably prove temporary, in our view. Food deflation has been a headwind for grocers, but we anticipate that will subside later this year. If new trade policies create upward price pressure in the supply chain, this could hurt margins if companies cannot pass them to through to consumers.

Canadian consumers have become more price-sensitive given the combination of higher inflation (for food, in particular) over the past couple of years (due in part to the strong U.S. dollar), along with near-record-high levels of household debt to income and lackluster employment data. We believe this may pressure Canadian retailers, particularly as food price inflation recedes. Although retailers more dependent on discretionary spending--such as apparel, home improvement, and general merchandise--will feel the greatest pain, even the cyclically resilient supermarkets could see slower and somewhat uneven earnings growth. Retailers operating in Western and Atlantic Canada are already feeling the heat, but demand is holding up relatively well in other markets such as Ontario and British Columbia.

U.K.-based retailers and restaurants also have to contend with increases in labor costs, in line with new regulation on national living wages. Although we expect many companies to readdress and redesign their benefits packages to offset somewhat the full impact of the wage bill increase from the new regulations, this will still have a negative impact overall on EBITDA margins.

Even though commodity prices are currently quite low with price deflation in the U.K., we expect return of inflation. S&P Global Ratings forecasts that inflation in the U.K. will reach to about 3% in 2017. Sterling depreciation against the euro and USD without real wage growth could become even more disconcerting for end consumers that would be concerned about prices when commodity and oil prices increase. In such an environment, U.K. retailers could find it hard to pass increasing costs to consumers due to commodity inflation, weaker sterling, and higher labor costs.

We expect increasing inflationary pressures in **Mexico** during 2017 because of the continuous depreciation of the Mexican peso over the past two years. We believe most retailers will pass-through cost increases to end consumers, especially on imported products, which would help protect margins. However, passing on the costs would also have a negative impact on sales volume and potentially top line growth. High consumer price inflation has been pressuring **Brazilian** retailers' labor costs over the past two years, which made several issuers review and adjust its SG&A structure.

For 2017, expected lower inflation will alleviate wage pressures and allow companies to improve profitability compared to recent levels.

Key risks and opportunities

Retail and Restaurants

	Adapting to shifts in consumer preferences is critical
1	Consumers in most regions continue to look for value (despite almost a decade having passed since the financial crisis). Meanwhile, millennials' buying habits (including brand choices) are affecting retail in new and complex ways that retailers are trying to address. Technology has driven a high degree of price transparency to which many traditional retailers are struggling to adapt.
	E-commerce expansion will continue to affect most retail segments
2	E-commerce is disrupting almost all segments of retail to greater or lesser degrees with no end in sight. However, it's not all downside for those retailers that can manage their physical footprint while building successful online capabilities. We think signs of winners and losers are emerging now, although the upheaval of the retail landscape will continue.
	Geopolitical shifts
3	Global growth prospects will compete with evolving geopolitical trade impacts on companies, consumers, supply chain, trade relationships, and economic policies following recent election outcomes.

Shifting consumer preferences and competition for share of wallet will confound the best efforts of many retailers.

We believe there have been steady and persistent shifts in consumer spending patterns. Consumers have become increasingly sensitive to prices and tend to seek out the best bargains. We believe this trend took root during the financial crisis and the ensuing economic slowdown, but has since become entrenched in consumers' habits. At the same time, in the U.S. the millennial generation is now the most populous generation and their retail behavior is the largest population cohort. Rampant growth in online sales has created more price transparency and has made comparisons easy for a range of products. We don't yet think improved consumer confidence and spending and some growth in disposable income will offset these challenges in 2017 for rated companies.

Increasing price sensitivity has also spurred the growing acceptance of discount stores which continue to open large numbers of new stores, in sharp contrast to most traditional retailers. We believe these trends will intensify and as a result, retailers will seek to differentiate themselves further by creating focused brands that communicate price, value, and quality more clearly.

In Europe, millennials are now dictating the ways in which businesses engage with the end consumer, which we think will continue going forward. With shorter attention spans, shifting focus, changing technologies and upcoming apps, retailers that are adapting to consumer behaviors are clearly commanding better market shares and emerging as stronger players. To be a winner, retailers have to replenish the shelves and aisles with greater agility and care to defend their market shares. This could mean increasing the number of items that are "free from" certain ingredients, expanding their "world foods" aisles, or focusing on organic products to cater to changing preferences.

The Latin American retail market remains more fragmented compared to the more mature markets in the U.S. and Europe. In Chile, Peru, Mexico, and Brazil more than 60% of the market corresponds to mom & pops and/or the informal market.

In Japan, middle-class consumers will remain very selective about prices and quality of daily necessities. In addition, consumers are already satisfied with goods, and have been shifting their preference to enjoy services and leisure even in the physical stores. To cope with this, retailers have scraped and rebuilt old retail formats into to shopping centers with entertainment offerings. Thus we believe retailers' business performance in 2017 is unlikely to worsen substantially from 2016.

E-commerce will continue to expand for most retail sectors; winners and losers will begin to emerge

E-commerce evolution means that previously successful retailers may not remain so. At a minimum, their growth rates will slow down if they do not execute e-commerce strategies well. We are seeing the pace of store closures increase in the over-saturated **U.S.** retail sector, but that alone will not be a sufficient condition for future success. Internet sales currently account for less than 10% of total U.S. retail sales yet they continue to have a disproportionately large impact on the traditional retail sector. Most traditional retailers are spending significant sums to increase their technological capabilities and shift their go-to-market strategies, such as reevaluating physical footprints. It's not easy to reformat parts of the business model including supply chain and distribution networks, while enhancing customers' store experiences. At the same time, pure online operators are building a physical presence—if not rapidly, then with significant fanfare. These companies' objectives include faster delivery (an evolving strategy for all retailers) and giving customers the traditional touch and feel of the product.

In the U.K. and across Europe, adapting to changing consumer behavior comes with increasing focus on digital spend. We see increasing focus of large retailers to have a clear distinct strategy on digital marketing. The U.K. together with Germany and France generated about 40% of Europe's online retail sales in 2016. The U.K. has the highest penetration of online sales at about 17% of the total sales. We believe multi-channel retail can lend support to topline sales of a company as integrated e-commerce can support physical stores and top line growth.

Retailers in continental Europe and in the U.K. are increasingly focusing on the hybrid format 'click and collect'. Hybrid format drives the customers into stores which may result in increasing basket size. Gaining volumes to defend market shares is the theme for 2017 in Europe. Historically, e-commerce, with its easy price comparisons, was credited with putting pressure on prices in the European retail sector. However, as traditional retailers adapt, there is evidence that e-commerce can even support retailers' operating performance if well executed.

In Latin America, e-commerce is still very small compared to overall retail revenues, in part due to the still-low penetration of the Internet in households. Online sales represent less than 5% of total sales for most of the retailers that we rate, and we expect that in the near future retailers would not see significant profits generated through this channel. Nevertheless, we expect large retailers to continue investing important amounts in technology and integration to have relevant growth from online sales, as we've been seeing over the past few years.

We think that strategies to capture soaring demand for online retailing are an urgent priority for physical retailers in **APAC**. In our base-case, we expect online retail sales will continue to grow about 20% a year in the next one to two years, significantly outstripping total retail sales growth. In particular, our base-case forecast of mid-30% year-on-year growth in online retail in China is much higher than the global average. However, we think many offline businesses will be unable to capitalize on the shift in consumer preference to online shopping and will miss opportunities that allow pure online retailers to further penetrate the market. Accordingly, we don't expect online retail's strides to drive strong growth for many retailers in the region in the coming years. Furthermore, growth and further acceptance of online retail will relentlessly undermine the profitability of offline stores, because the top reason consumers shop online is to find the best prices, and this is causing price erosion of products and services.

Geopolitical shifts

Recent unexpected election outcomes have raised the scenario count on trade flows, tariffs, and taxes that could impact the global retail sector such as margins and supply chain. We are watching any direct and indirect impact of protectionist initiatives to retail sales, perhaps through deterioration of consumer confidence in the export-driven markets, like China, Japan, and probably Mexico.

We think many rated retailers need to up their supply chain game but it could prove difficult to make long term plans in 2017. Supply chain effectiveness has always been a key to success in retail, but the stakes are even higher now with the consumer so focused on value and e-commerce. The

discounters have benefitted from consumers' greater sensitivity to price and/or private labels and the sector has expanded rapidly, hurting traditional apparel retailers.

With the possibility of Britain invoking article 50 as early as March 2017, we expect new trading relationships to emerge—especially for the U.K. which imports about one third of its food from Europe. Similarly, elections in Germany and France could mean new rules on trading not just for the U.K. but also for the U.S. and rest of the world. In 2017, we expect retailers to work more aggressively toward cost optimization and supply chain effectiveness to maintain market shares and resist price increases that could hurt top line. We believe discounters have more headroom because of lean structures and their focus on efficiencies, and therefore we expect to see blurring lines between discounters and super markets going forward. Grocers are increasingly pushing their private-label brands to compete with discounters on every front where possible.

Cash, debt, and returns

Global Retail and Restaurants



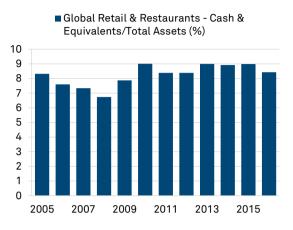


Chart 225 – Fixed versus variable rate exposure

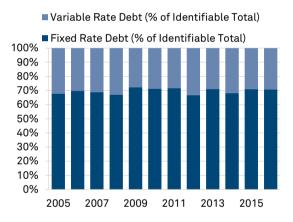
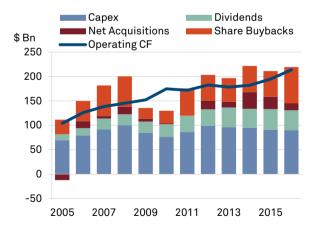


Chart 227 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 224 – Total debt / total assets



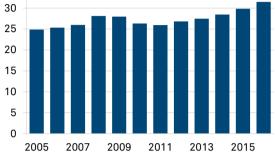


Chart 226 – Long term debt term structure

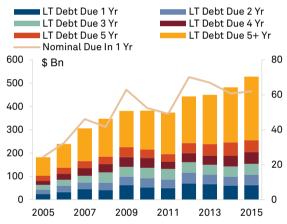
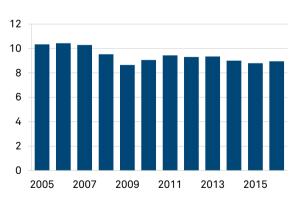


Chart 228 – Return on capital employed

Global Retail & Restaurants - Return On Capital (%)



Industry Top Trends 2017 Technology



Overview

- Ratings Outlook: Rating trends remain mostly stable for the global technology sector, with a slight negative bias primarily due to operating weakness at certain legacy technology companies and, to a lesser degree, due to higher financial leverage incurred by some companies to fund acquisitions and shareholder returns.
- Forecasts:

Cloud winners and losers -we view companies positioned to achieve operating growth in cloud solutions favorably compared with those who remain weighted in legacy, on premise offerings. We expect revenue growth for those companies serving cloud service providers directly or indirectly, including Google, Intel, Microsoft, and SAP.

Hardware revenue declines: We expect traditional technology hardware providers overall will continue to experience low-single-digit percentage revenue declines in 2017, even as spending grows in the low-single digits for the overall technology sector, driven by mid-single-digit PC unit declines, flat performance in enterprise markets, and only flat to low-single-digit smartphone unit growth. We see flash storage hardware and semiconductor equipment manufacturers able to capitalize on 3-D NAND (a type of semiconductor memory architecture) flash storage and cyclical growth from IBM mainframe hardware and software revenues as areas of growth within the broader hardware decline.

- Assumptions: M&A for scale and diversification continues we expect firms will continue to prioritize acquisition spending over combined shareholder returns in 2017 as they reshuffle product portfolios to capture growth opportunities. We also expect semiconductor industry consolidation will continue, albeit at an abated pace compared to 2016, supported by a quest by certain companies to achieve scale efficiencies and to reduce exposure to the set of smartphone original equipment manufacturers.
- Industry Trends: Tax policy uncertainty the 2016 presidential election has raised expectations of tax relief for firms with significant overseas cash holdings, including Apple, Microsoft, Cisco, Google, and Oracle, amongst others. We generally do not expect major rating actions under scenarios of repatriation tax reform, as we expect that firms with large overseas cash balances will likely continue to manage to conservative financial policy although surplus cash cushions may potentially decline over time.

S&P Global Ratings

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Ratings trends and outlook

Global Technology

Chart 229 – Ratings distribution

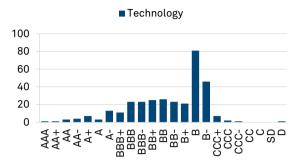


Chart 231 – Ratings outlooks

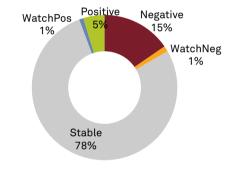


Chart 230 – Ratings distribution by region

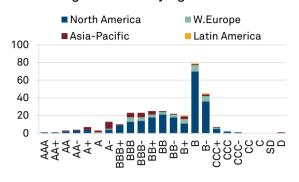


Chart 232 – Ratings outlooks by region

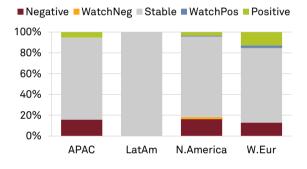


Chart 233 – Ratings outlook net bias

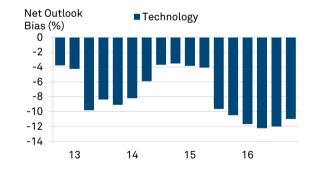
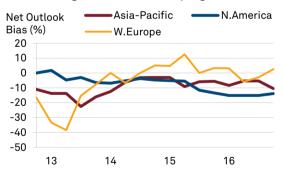


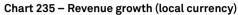
Chart 234 – Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Industry forecasts

Global Technology



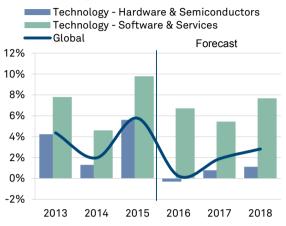


Chart 237 - Debt / EBITDA (adjusted)

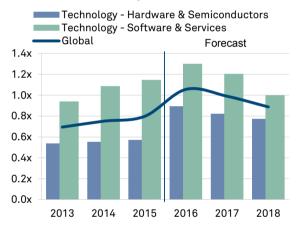
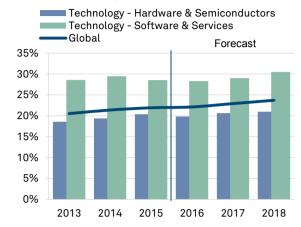
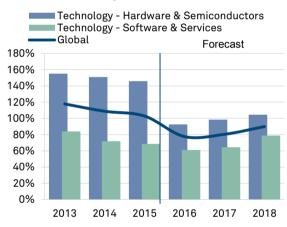


Chart 236 – EBITDA margin (adjusted)







Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Technology

3

Cloud transition involves winners and losers

A rapidly increasing share of corporate IT workloads moving to public and private cloud architecture will continue to support growth for technology providers well-positioned to participate in this transition at the expense of firms that remain tied to legacy architectures and delivery channels. We expect software-defined architectures will continue to pressure hardware sales and software delivered as a service (SaaS) models will prevail over legacy consumer and enterprise software licenses. Mobility and big data consumption should continue to support cloud service provider sales, storage capacity, and wireless industry sales growth. This technology evolution will continue to pressure legacy businesses weighted in on-premise hardware, traditional printing, perpetual licensing, and mailing equipment markets.

Hardware remains weak

We expect traditional technology hardware providers overall will continue to experience low-singledigit percentage revenue declines in 2017, even as spending grows in the low-single digits for the overall technology sector, driven by mid-single-digit percentage PC unit secular declines, flat performance in enterprise markets due to cloud workload migration, and smartphone market maturity leading to only flat to low-single-digit smartphone unit growth. However, we see flash storage hardware, semiconductor equipment manufactures able to capitalize on increasingly difficult process node migration, and cyclical growth from IBM mainframe hardware and software revenues as areas of growth within the broader hardware decline.

Semiconductor sales will grow, primarily from memory

We expect temporarily constrained memory semiconductor capacity, growing NAND content in computing hardware, and more rational capacity management will result in memory and overall low-single-digit semiconductor sector revenue growth in 2017.

Cloud transition involves winners and losers

Our outlook for 2017 incorporates the accelerating migration of corporate IT spending to cloud environments amid an overall muted level of enterprise hardware demand. While we forecast the global tech sector to grow in the low-single digits in 2017, we expect firms with convincing cloud infrastructure offerings such as Microsoft and Google to outperform tech sector peers whose product and service businesses weighted in traditional on premise IT architecture. Although the shift to a ratable revenue model may temporarily depress revenues at some software firms, we believe that over the longer term, an increasingly subscription-based software industry will support sector operating growth and creditworthiness. We expect the migration from hardware to software architectures will result in mid-single-digit revenue growth for the software sector overall in 2017.

Hardware remains weak

We expect server and legacy storage hardware will continue to decline in 2017 as enterprise customers pull back on premise investment. Networking equipment revenues will likely be flat to slightly down again in 2017, including our expectation for low-single-digit revenues declines at Ericsson and Nokia, as telecom carriers continue to temporarily slow capital expenditures following 4G network spending and as Asian competition remains heady, particularly in European and emerging markets. We see some near-term growth in optical networking and TVs on the adoption of OLED panels. Given industry maturity, we expect low-single-digit revenue growth for the smartphone hardware sector and mid-single-digit revenue decline in the PC sector will continue in 2017.

We expect smartphone unit sales to be up in the low-single digits in 2017. We believe that this market is reaching saturation, however, and that mobile will not return as a major growth area for global hardware players, although smaller firms may be able to grow through regional expansion. We do see a bright spot in optical networking as the Chinese government expands spending on urban connectivity and hyperscale players increasingly deploy fiber in the datacenter. We expect the substitution of hard-disk-drive (HDD) storage with solid-state drive flash memory and secular PC market declines will continue to pressure HDD sales and result in further moderation of share buybacks at Seagate during 2017. The ongoing decline in printer use will likely continue to keep the pressure on industry participants, including Xerox, to increase investments within subsectors that exhibit growth potential, including the A4-sized format, and will limit share repurchase spending. Legacy mailing equipment and solutions providers, including Pitney Bowes, should continue to experience mid-single-digit percentage revenue declines in 2017. The key factors for 'BBB'-rated legacy hardware companies, including Pitney Bowes, Seagate, and Xerox, potentially crossing to high yield during 2017 include whether they can restore organic growth while maintaining a conservative financial policy.

Despite PC and enterprise computing market weakness, we expect Dell Technologies' revenues will grow in the low-single-digit percentage area over the next 12 months, supported by cloud provider customer demand. We also expect Dell will reduce its debt-to-EBITDA ratio to the low- to mid-3x area by fiscal year ending Jan. 31, 2018, from leverage in the mid- to high-3x area in 2017. To consider Dell for an upgrade, we would look for its organic operational growth and repayment of debt to continue, such that leverage declines and remains below the 3x level, and commitment to a financial policy minimizing the potential for leverage to sustain above 3x.

Weak on-premise enterprise hardware spending also continues to pressure distribution sector operating growth. Distributor Tech Data Corp. announced plans to acquire Avnet Inc.'s enterprise computing distribution business for \$2.6 billion in September 2016. We expect this deal to improve Tech Data's client, product, and geographic revenue diversification. Notwithstanding these favorable impacts, if business competition intensifies or end-market conditions remain weak such that its debt-to-EBITDA ratio remains in excess of 3x, Tech Data's investment-grade rating could be in jeopardy.

Semiconductor sales will grow, primarily from memory

Our outlook for the semiconductor industry broadly aligns with our views for the hardware sector, with slowing PC and server sales depressing demand across the sector, although firms with strong flash storage, optical networking, and automotive offerings are likely to outperform peers, in our view. We expect semiconductor memory sector revenue growth, as improving DRAM pricing and growing NAND demand support significant prospects for top line growth at these firms, including Micron and SK Hynix.

HDD and NAND semiconductor provider Western Digital Corp. is less likely to be upgraded before 2018 due to the sizable debt it incurred to fund its May 2016 acquisition of NAND semiconductor provider SanDisk Corp. We expect its leverage will continue to exceed our 2x trigger for rating upgrade consideration in 2017. The stable rating outlook reflects our expectation that SanDisk's NAND flash memory technologies will enable Western Digital to successfully navigate the threat to its HDD business from SSD substitution.

We expect IT services firms with professional services personnel supporting the cloud transition, such as Accenture, to outgrow competitors whose businesses are more weighted in traditional technology outsourcing. We expect low-single-digit growth for the services subsector overall in 2017.

Key risks and opportunities

Technology

7

Leveraging acquisitions remain likely

We expect firms will continue to prioritize acquisition spending over combined shareholder returns in 2017 as they reshuffle product portfolios to capture growth opportunities, with ongoing weak organic growth environment in mature sectors of the technology industry. Beyond 2017, the merger and acquisition (M&A) growth trajectory may slow for technology companies able to establish solid competitive footing in IOT, software defined solutions, and cloud driven professional services. We expect the development and commercial adoption of 5G wireless communication technology, likely subsequent to 2018, will also bolster overall technology sector operating growth. For 2016 and 2017, however, and as long as capital market conditions are supportive and legacy business pressures persist, M&A will likely remain the global technology sector's leading route for capital deployment. We also expect semiconductor industry consolidation will continue, albeit at an abated pace compared to 2016, supported by a quest by certain companies to achieve scale efficiencies and to reduce exposure to a concentrated set of smartphone OEMs.

In all technology sectors except software, median shareholder returns from share repurchases and dividends have declined as a percentage of free cash flow since 2015, and dividends remain a modest use of free cash flow. We expect tech companies will generally maintain the resources and debt capacity to pursue M&A and other capital deployment choices in 2017. Although we expect public companies rated below 'BB-' to prioritize free cash flow toward debt repayment in 2017, we expect private equity- owned firms will continue to engage in dividend recapitalizations and re-leveraging so long as debt markets tolerate such activity.

Shifting regulatory landscape

Two potential policy changes that may be catalyzed by the Trump Administration—tax relief for foreign cash repatriation and greater trade barriers—could significantly affect the technology industry, although the impact on ratings is uncertain. We generally do not expect major rating actions under scenarios of repatriation tax reform, as we expect that firms with large overseas cash balances will likely continue to manage to conservative financial policy, although surplus cash cushions may potentially decline over time.

The internet of things may revitalize hardware

In spite of significant publicity, the proliferation of internet connected "things," the so-called Internet of Things (IOT), ranging from wearable tech to smart appliances, currently represents a very small share of industry spending. If this sector continues to grow, however, it could revitalize overall tech sector growth beyond 2017.

Leveraging acquisitions remain likely

A significant number of large, leveraged acquisitions have occurred over the past several years in both investment grade and speculative grade technology sectors. We expect this trend to continue through 2017, as the major catalysts for consolidation, accommodative credit markets, and slow organic revenue growth in many subsectors are likely to persist, and we expect management teams will look to acquisitions to grow earnings. While not every such acquisition led to a negative rating action in 2016, technology industry leverage is at the highest level we have seen since 2013 and we may see more firms trip over our financial downgrade triggers over the next year.

To achieve growth, we expect hardware companies will generally remain active acquirers, particularly of software companies, while continuing to moderate share repurchases. That's at least partly a result of the ongoing proliferation of software-based services, including server virtualization and software-defined networking, and the rapid growth of hyperscale cloud services, including Amazon Web Services and Microsoft Corp.'s Azure. These developments will continue to constrain top-line performance of hardware OEMs. Semiconductor sector M&A activity increased in 2016 as organic growth tied to hardware product sales has slowed and potential new growth opportunities, especially IOT technologies, attract spending. In addition, some semiconductor companies have diversified their businesses away from wireless device vendors, notably Apple and Samsung, through M&A. For tech services companies, recurring service fee revenues constitute a majority of their revenues, supporting

their ability to increase leverage, including for M&A. When we consider the deleveraging plans some services firms have, the opportunities for further sector consolidation globally, and the maturity of some services industries (including traditional data center outsourcing), we expect services firms will keep prioritizing M&A and debt repayment above share repurchases and dividend spending in 2016 and 2017.

Beyond 2017, the M&A growth trajectory may slow for technology companies able to establish solid competitive footing in IOT, software defined solutions, and cloud driven professional services. We expect the development and commercial adoption of 5G wireless communication technology, likely subsequent to 2018, will also bolster overall technology sector operating growth. For 2017, however, and as long as capital market conditions are supportive and legacy business pressures persist, M&A will likely remain the global technology sector's leading route for capital deployment.

Shifting regulatory landscape

Although the ultimate form of any legal or regulatory changes caused by the recent U.S. election are unknown at this point, two campaign priorities of the Trump Administration—tax policy and trade— could have a significant impact on the technology industry. Tax relief for repatriation of foreign earnings would have a major impact on several large technology firms with significant overseas cash balances, although we currently do not expect these companies will revise their financial policy aggressively enough to trigger a rating downgrade. As these surplus cash balances play a large role in our leverage calculations, repatriation of cash could nonetheless weaken credit standing to the extent that it is used to repurchase shares or pay dividends.

The impact on the technology industry of changes to trade policy are more ambiguous, however we note that many services firms rely heavily on the H1-B visa program, and could be negatively impacted by any legal effort to limit outsourcing corporate activities to offshore providers. Additionally, very few firms that we rate conduct much domestic manufacturing, and we believe that it would be difficult for the sector to rapidly shift away from reliance on largely Asian-outsourced manufacturing firms such as Hon Hai or TSMC.

The internet of things may revitalize hardware

The recent rapid growth of internet connected wearable devices and increasing penetration of silicon into household appliances and medical devices has attracted significant media attention recently. While we believe that IOT may be a potential source of future growth for a hardware sector that has been weakened by declining PC and server sales, the current impact on revenues and ratings from IOT is limited by the relatively small scope of this field.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook

Cash, debt and returns

Global Technology

Chart 239 - Cash and equivalents / total assets

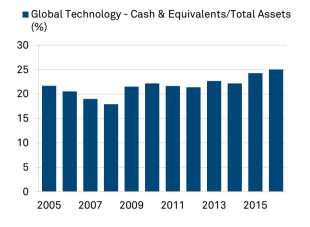


Chart 241 - Fixed versus variable rate exposure

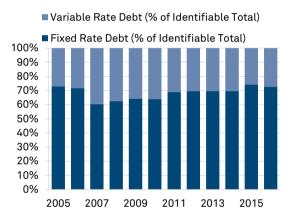
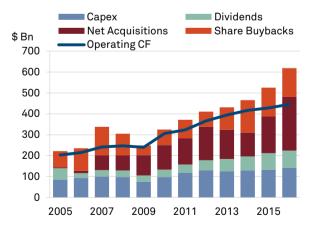


Chart 243 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 240 – Total debt / total assets

Global Technology - Total Debt / Total Assets (%)

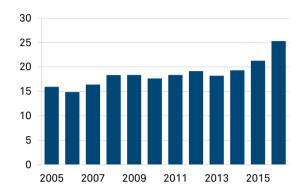


Chart 242 - Long term debt term structure

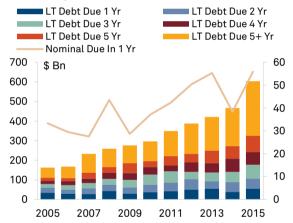
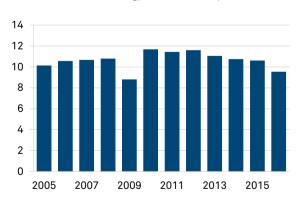


Chart 244 – Return on capital employed

Global Technology - Return On Capital (%)



Industry Top Trends 2017

Telecommunications



Overview

- Ratings Outlook: We believe ratings in the telecom and cable sector will remain steady in 2017. Our proportion of stable outlooks increased last year by 4% to 77%, led by Europe and North America, indicative of established positions and some utility-like attributes for the sector. However, directional outlooks have a negative bias, especially in Latin America (LatAm) and the Asia Pacific (APAC) region where our negative outlooks on several sovereigns cap some of the telecom ratings.
- Forecasts: Our global 2017 base-case forecast is for flat revenues. In the U.S., low-single-digit revenue declines for incumbent telco companies and mid-single-digit revenue growth for cable. In Canada, we expect modest overall revenue growth, with broadband growth offsetting voice and legacy data declines. We expect flat- to low-single-digit top-line growth for Europe's telcos and mid-single-digit growth for cable, with some margin improvement from cost-cutting and synergy realization from prior acquisitions (M&A). In LatAm, metrics are likely to remain stable although Mexico's credit metrics are slightly weaker than last year due to currency depreciation. In APAC, although structural erosion of wireline voice continues, we expect rapidly increasing data consumption revenues to support modest revenue growth and stable profitability.
- Assumptions: Broadly, we assume revenue growth will be due to increasing data demand in wireless with higher volume plans, and in fixed broadband with shift to higher speed connections. In converged markets, this will be enhanced by cross-selling as operators increase their average revenue generating units (RGUs) per customer toward 3x.
- Risks: Offsets to these positive factors are intense competition, aggressive pricing, and expanded mobile data offers for little or no extra cost, as well as structural cord-cutting trends in fixed voice and video. These risks pressure the average revenue per customer (ARPU), notably in markets not benefiting from growing multiplay penetration, weakening EBITDA, and financial ratios. Any policy shift toward more aggressive shareholder returns or (debt funded) M&A could also pressure financial profiles and ratings.
- Industry Trends: We expect M&A interest in mature markets like the U.S. where operators are looking for scale economies to improve margins, and in APAC to find growth avenues in new geographic regions and products to increase in 2017. In the U.S., these aspirations could be enabled by relaxation of regulatory scrutiny under the new administration. This contrasts with other regions, particularly Europe where we think regulation will hamper new deals, and in LatAm where balance sheets are unlikely to support large outlays.



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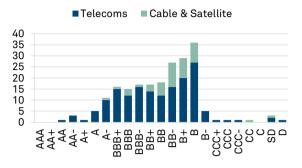
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Ratings trends and outlook

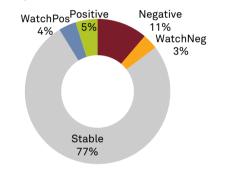
Global Telecommunications

Chart 245 - Ratings distribution



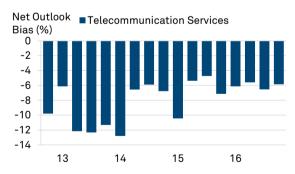
The rating distribution is weighted in the 'B' category, due in part to high leverage to support the capital-intensive nature of telcos and cable. The exceptions are telcos in Europe and APAC which also have clusters in the 'BBB category.

Chart 247 – Ratings outlooks



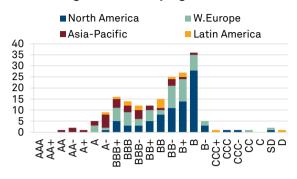
Stable outlooks have increased to 77% from 73% a year ago, mostly on the conversion of positive outlooks, leaving the directional outlooks (positive or negative) with a negative bias.

Chart 249 – Ratings outlook net bias



Our global telecom and cable outlook has had a predominantly negative bias since 2013, but has been improving over the last two years.

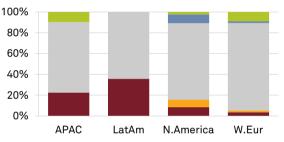
Chart 246 – Ratings distribution by region



The highest incidence of investment-grade ratings is at the 'BBB+' level, supported by entrenched market positions, and relatively modest leverage.

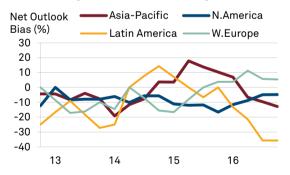
Chart 248 – Ratings outlooks by region





Predominantly stable outlook across all regions, led by Europe where stable outlooks have increased from about 70% to over 80%

Chart 250 - Ratings net outlook bias by region



Our outlook bias has improved in Europe and North America, while a sharp negative move in LatAm's and APAC's outlook bias is primarily the result of negative sovereign outlooks, which cap many of our ratings, as well as higher leverage in LatAm.

Source S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

North America

In North America, we expect broadly stable ratings despite mixed conditions. In the U.S., we have a modest negative outlook bias on aggressive wireless competition, and secular industry declines in the wireline segment. An acceleration of M&A, bolstered by a more open regulatory environment, could also pressure ratings, depending on financing plans. In Canada we expect steady cash flow growth, which combined with disciplined shareholder returns should yield stronger balance sheets, though in line with current ratings.

Europe

Europe is the only region with a positive outlook bias, and the highest portion of stable ratings at over 80%, supported by a continued soft recovery for telcos. However, there is fragility in the picture as balance sheets are stretched at many operators, and our ratings analyses incorporate the benefit of improving trends to provide more financial headroom and help ease leverage pressure. We have a stable outlook for cable ratings as well, where continued topline and EBITDA growth in the mid-single-digit range remain offset by aggressive shareholder returns and M&A appetite.

Latin America

Latin America has the highest negative bias at about 35%, though stable outlooks still predominate at about 65% in the region. We expect lower ARPUs from increased competition in a weak macroeconomic climate, but stable ratings as lower investment spending maintains cash flow and preserves financial profiles. Negative outlooks mainly reflect somewhat high leverage due to currency depreciation in Mexico and the negative outlook on Brazil's sovereign rating.

Asia Pacific

In Asia-Pacific, ratings trends remain stable, supported by steady growth in mobile data consumption and subscriber base. A modest negative outlook bias is mainly due to the negative outlook on the sovereign ratings on several emerging Asian countries and somewhat intensifying competition in the Australian market.

Industry forecasts

Telecommunications – Fixed and Wireless



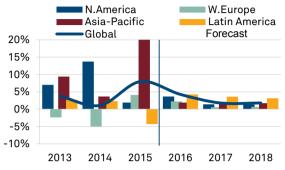
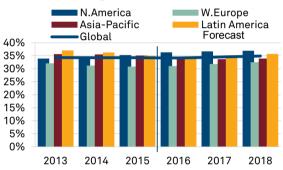
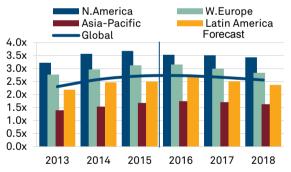
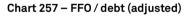


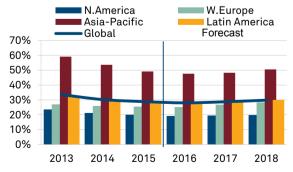
Chart 253 – EBITDA margin (adjusted)











Cable and Satellite

Chart 252 - Revenue growth (local currency)

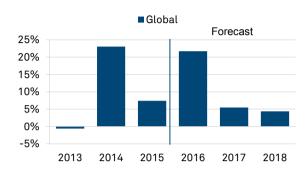


Chart 254 – EBITDA margin (adjusted)

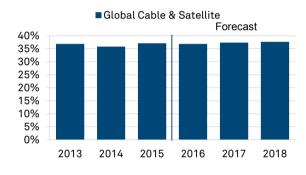
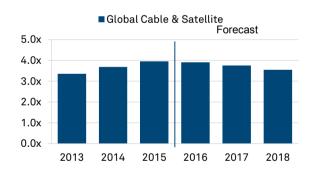
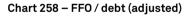
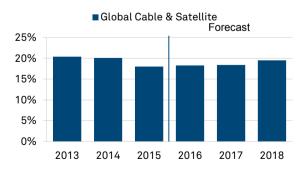


Chart 256 - Debt / EBITDA (median, adjusted)







Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Telecommunications

	Increased data consumption and bundling support modest growth
1	We expect low-single-digit growth on average, driven by continued cable broadband growth, expansion of telco fiber networks, and higher mobile data volumes. In converged markets, cross selling of bundled products will continue to increase ARPU. We also see bundling as having a moderating influence on competition by increasing customer stickiness, lowering churn rates, and blunting the impact of promotional activity.
	But balanced by competition and long-term trends
2	Positive drivers are balanced against entrenched sector challenges, including intense competition, lending fragility to our forecast. We also expect structural cord-cutting trends will continue to hurt telcos, led by ongoing erosion in fixed-voice and video subscriptions.
	Flat to lower capex can help cash flow, but only incrementally
3	With the bulk of 4G network roll outs largely complete, we expect capex will curb in most markets, freeing up incremental cash flow. However, 4G capacity upgrades and catch-up fiber investments in markets like Europe will keep capex from falling back to pre-4G levels, and we expect capex intensity to remain above the historical average, limiting our previously expected growth in free cash flow.

North America

In the U.S., we assume intense competition and pricing pressure for telcos, because of maturing industry conditions and technology shifts, partially offset by growth in data revenue. In fixed, we expect structural cord-cutting on voice as well as erosion in digital subscriber line broadband (DSL BB) because of competition from cable, despite growth from lower margin internet protocol (IP) television and fiber BB services. We also assume weak spending by business customers coupled with a migration to IP-based services from legacy circuit-switched technologies. We expect flat to slightly lower capex as carriers have largely completed their 4G LTE deployments and fiber buildouts, although we believe further fixed network upgrades will be needed to compete with cable for broadband customers. Unlike telcos, cable's strength is supported by BB subscriber gains and growth from commercial services, which is partially offset by modest video customer losses, despite some stabilization of cord-cutting by OTT video subscribers on improved video platforms. We expect stable capex spending as upgrading to data over cable service internet specification (DOCIS) 3.1 begins since costs are relatively low and can be offset by lower customer premises equipment (CPE)-related capex. The potential benefits of lower taxes under the Trump administration is not likely to occur in 2017 but could translate into increased capital spending in 2018 and beyond.

Europe

In Europe, we assume stabilizing mobile prices on more moderate competition, monetization of higher mobile data traffic, scattered price increases in fixed, and increased penetration of multiplay products, supported by improved IPTV and high-speed BB offerings. We assume investment levels similar to 2016, which were down post-4G implementation, but mid-to-upper teens as a percentage of revenue due to increased fixed-line investment to compete with cable, and ongoing mobile capacity upgrades. Meanwhile, cable company growth will rely on BB customer additions and cross-selling of bundled products, but will continue to moderate as the performance advantage over telcos narrows. We also expect 2016's elevated level of cable operator capex spending will be maintained in 2017 as several increase their network footprints with new builds.

Latin America

In Latin America, we think aggressive competition and/or a weak economic climate will lower ARPU in some countries, limit top lines, and hurt some companies' profitability and financial metrics. However, we expect lower capex to compensate for weakened operating conditions and to support cash flow. In Mexico, we believe that EBITDA margins will decrease slightly as a result of a stronger competitive environment, higher subscriber acquisition costs in the wireless segment on account of postpaid subscriber growth, and increased content charges in the pay-TV segment due in part to currency depreciation. In Brazil and Chile, despite some pressures, companies' cost-control measures should allow for stable to increasing profitability.

APAC

In APAC, we assume a boost in mobile-data revenues and moderate GDP growth should help to offset the saturation in developed wireless markets and structural erosion in wireline voice revenues. We estimate overall capex to remain somewhat high mainly because of ongoing investments for mobile spectrum and advanced networks such as 4G and fiber-based broadband. We believe these investments will constrain free cash flows to some extent, but should support business positions.

Key risks and opportunities

Telecommunications

	Competition
1	Aggressive competition, both among telcos and between telcos and cable, remains the primary risk for the sector, limiting revenue and driving churn, while requiring large investments to keep pace with the network performance and content offerings of peer operators. Such investments can be an opportunit for differentiation, particularly in emerging cycles with new technologies or usage patterns, as opposed to late-stage cycles where we typically see a reversion to price competition.
	Technology shifts
2	Long a feature for incumbents dealing with voice customers cutting the cord in favor of wireless, OTT providers introduced similar risks to mobile voice and short-message service (SMS), and now for video providers, notably cable, through a similar disruptive market shift. These technology advances have increased data demand, but commoditization and competition threaten to limit those gains. How telecom companies react to changing usage patterns in terms of pricing and their own content strategy present both a risk and an opportunity. Prudent investment that maximizes their competitive position and pricing that earns a return on their service offerings can mitigate the threat of disruptive technologies like OTT and preserve credit quality. This will be even more important with 5G on the horizon.
	Financial and M&A policies
3	With relatively flat telco conditions globally, financial policy and M&A can have a decisive impact. With leverage already high in Europe, despite growth, decisions on shareholder returns will be a key credit driver. Meanwhile, ripe conditions for M&A in the U.S. and weak operating conditions in LatAm will draw attention to valuations and acquisition funding in the former, and capex reductions in the latter, to maintain financial targets.

Despite our broadly stable outlook, we believe significant uncertainties weigh on the sector. Competition remains aggressive in all regions, weighing on ARPU despite gains in data consumption and bundling, and investment needs remain high in most markets. Secular shifts including fixedvoice cord-cutting and more recent video cord-cutting in favor web-based communication applications and OTT content providers remain a headwind for fixed players, nonconverged cable companies in particular. Data monetization has been positive for the mobile sector worldwide, but as with voice and SMS, maturing products can quickly become commodities with few differentiating features to support pricing. Data appears headed down a similar path with operators in many markets adding ever more gigabytes (Gb) into existing plans at minimal or even no incremental cost, thereby eroding the upside potential of migrating existing customers to larger buckets as consumption rises. In France for example, Free raised their 20 euro 4G data bucket to 50Gb from 20Gb for all existing customers. And despite optimistic forecasts, we question whether data demand can continue to grow at 50% or more per year continually. If data does become a commodity like voice and SMS, we believe the risk of a return to price competition increases. And while bundling allows operators to sell more products, we typically see price erosion per product, requiring continued growth of multiplay penetration to avoid a shrinking pie.

We also see balance sheet risk stemming from investor pressure to increase shareholder returns after several years of weak equity performance. In Europe, this could become acute with balance sheets at the weak end of the existing rating limit for several telcos, and with capex creeping up to constrain free operating cash flow. A rise in shareholder returns that outpaces a rise in cash flow could add more pressure to ratings.

Higher-than-expected mobile spectrum costs remain an ongoing risk for the sector. Competitive pressures, or governments looking to boost revenues, would be the likely drivers of these higher charges. For example, in APAC, while we see a low-to-moderate likelihood of materially higher spectrum charges, the impact would be felt most acutely among the smaller, second-tier players.

Industry developments

M&A

In the U.S., we expect M&A in the wireline sector to accelerate because we believe secular industry declines in fixed voice and aggressive broadband competition from cable incent wireline consolidation to preserve margins and, in some cases, stabilize the top line. The need for scale in cable to offset rising programming expense, changing consumer preferences for video consumption and technology convergence (i.e., increased demand for mobile video platforms) are factors we believe will spur more M&A in 2017 for telecom and cable providers, enabled by a Republican FCC that will likely be more open to consolidation. In late 2016, a number of transactions were announced including **AT&T Inc.**'s proposed acquisition of **Time Warner Cable** for \$85 billion. We placed our 'BBB+' corporate credit rating on AT&T on CreditWatch with negative implications based on potential leverage risks. In Canada, the outcome of the competition bureau review of the pending **BCE Inc.** purchase of **Manitoba Telecom Services Inc.** will set the stage for future M&A in the industry, of which there fewer opportunities of size available.

In Europe, after several years of elevated M&A activity, regulatory authorities have highlighted their competition concerns: first by blocking consolidation in Denmark and the U.K., and then by only allowing the **3 Italia** and **Wind Telecomunicazioni SpA** merger in Italy with steep concessions that will bring **Iliad S.A.** into the market. We think this will make additional large M&A consolidation unlikely, with the possible exception in France where attempts at consolidation were made in 2015 and 2016, and could resume in 2017 after the presidential election in May. In addition, we think a distinction will be drawn for M&A that creates stronger challengers, or accelerates convergence, opening the door to further cable consolidation and defensive fixed-mobile deals. However, we don't see strong market incentives for incumbents in the key remaining countries (the U.K., Germany, and Italy) to aggressively push for large-scale convergence, given the product discounts that typically result. On the other hand, we expect disposals of noncore assets, as well as tower spin-offs, could continue with some operators looking to de-lever, and others looking to redeploy capital to higher return investments.

We don't expect significant M&A activity in LatAm because players are focused on cost-cutting initiatives to mitigate profitability pressures.

In APAC, we expect a moderate uptick in M&A activities as major operators are making efforts to diversify their revenue streams and position themselves for the future. We believe some telecom operators are seeking for integration opportunities with media and content related companies given the accelerating telecom and media convergence trend. Also, we expect some players to try to expand into new geographic markets such as Europe or U.S. in order to find new growth drivers, as seen by Japan-based **SoftBank Group Corp.**'s recent US\$31 billion acquisition of U.K.-based **ARM Holdings**.

Content

As operators continue to push multiplay products like quad-plays in Europe, some have already begun to look for additional products to bundle, such as banking or other financial products, like **Orange S.A.** is doing in France with their acquisition of **Groupama Banque**. Perhaps most notable has been an interest in vertical integration by operators into media content. This idea gained momentum with **AT&T**'s announced acquisition of **Time Warner**, which followed the acquisition of **NBC Universal** by **Comcast** in the U.S. and the buyout of **CTVglobemedia** and **Astral Media Inc**. by **BCE** in Canada. However, we think other markets will trail North America and APAC in this trend because of lower content cost inflation and lower ARPU contributions from video, as well as the stronger influence of free-to-air television and regulatory restrictions on exclusivity. We view the drivers at this stage as limited to diversification and a hedge on content costs. Any benefits from cost and management expertise synergies appear low, in our opinion, and we assume content from combined entities will generally be sold on a nonexclusive or arms-length basis lest the content business end up subsidizing the telecom business.

5G and the IoT

A much discussed but still nascent trend is investment in 5G, a standard that promises faster speeds and lower latency. One of 5G's primary applications would be to support the development of the Internet of Things (IoT) into a wider application of connected devices for location tracking, monitoring, and controlling over telecom operator data networks. But while operators in developed APAC markets like South Korea and Japan, as well as in the U.S., are moving forward with testing, use cases for IoT services requiring 5G are still in their infancy with limited clarity on a profitable business model. We therefore don't expect significant capital investments in 5G over the next one to two years, with the key catalysts being a critical mass of compelling use cases, and the finalization of technological standards, and we don't expect large scale commercial 5G rollout until 2020.

Regulation

On the regulatory front, recent developments should impact all regions. In the U.S., we think that the Republican administration is likely to take a lighter approach, which could mean loosening or reversing policies in such areas as net neutrality, business data services, privacy, and set-top boxes. With respect to Title II, we believe cable providers will have greater freedom to monetize the increasing data consumption on their networks.

In Europe, the phase out of roaming fees will impact 2017 topline growth, though we view this as a one-time hit provided that the accompanying wholesale roaming caps are high enough to cover operator costs. We also believe further relief from market consolidation is unlikely under the current European Commission which has required structural remedies to address competition concerns. We expect a continued regulatory push for investment in rural 4G and next-generation access (NGA) fixed coverage, which remains poor in most European markets, but it remains to be seen how strongly and by what means regulators can spur investment that currently offers little return for operators.

In LatAm, regulation continues to impact telecom companies, specifically in Mexico and Colombia. For example, following the 2014 Telecom Reform in Mexico, consolidation has increased. In 2016, Axtel S.A.B. de C.V. and Alestra S. de R.L de C.V. merged to boost their market and competitive positions. We also saw new participants entering the market, like AT&T, which acquired Mexican wireless providers Nextel Mexico and Iusacell to form AT&T Mexico in 2015, and subsequently announced its intention to further invest to extend its high-speed mobile internet service in Mexico. In Brazil, changes to the regulation of fixed-line concessions should eliminate requirements for investment in fixed-voice, facilitating monetization of this legacy asset to fund greater broadband investment, allowing companies to better meet current demand.

In AsiaPac, we view the regulatory environment as moderate in most markets. However, in our view, regulatory risks are somewhat elevated in countries such as Bangladesh, Pakistan, and Sri Lanka, which could manifest in higher taxes, tariffs, or other adverse regulatory actions. For these countries, telecom services are a key source of tax revenues and deterioration in their sovereign fiscal situation could lead to a higher tax burden on telecom operators.

Financial policy

U.S. telecom providers already have aggressive shareholder-oriented financial policies, which include large dividend payouts and share-repurchase activity. These distributions often consume a large portion of free cash flow. As balance sheets are already stretched, these issuers are funding acquisitions with large equity components in order to preserve credit metrics. However, using equity to fund these deals can constrain discretionary cash flow generation as dividend payouts increase. In cable, higher programming expense and increased demand for mobile video and OTT platforms could drive more consolidation in the industry. We believe that tax reform under the Trump administration is likely to improve free operating cash flow generation for telecom and cable operators although we don't think this will occur until 2018 or so and we expect that that excess cash flow will ultimately be returned to shareholders rather than creditors.

In Europe, balance sheet leverage near our rating limits has kept shareholder remuneration in check at many telcos, especially as high capex has compressed free operating cash flow. However, we think

shareholders who have endured weak equity performance for the past year and a half will push for returns, and we have seen incremental dividend increases in the last reporting periods. A shift to more aggressive financial policy that exceeds improvements in underlying operations could pressure ratings. Hybrid issuance has also continued, though at a decreasing pace as several issuers near their limits for equity consideration. This has led some to look at noncore asset divestments, including tower asset spins to lower leverage and to redeploy capital in higher return investments. Policies at cable companies remain aggressive with high dividends and share repurchases, as well as M&A, keeping leverage at high levels despite growth and strong operating cash flow.

In LatAm, financial policies have been mixed reflecting ratings headroom. We expect companies with low leverage to continue distributing excess cash as dividends to their parents, while companies with high debt levels will remain focused on deleveraging to improve their balance sheets.

In APAC, we expect telecom operators to generally maintain a disciplined approach to shareholder returns and financial policy decisions despite ongoing capital investment in next-generation networks and mobile spectrum. M&A activity however looms as a potential threat to this fiscal discipline, particularly for telecom operators looking to diversify into new revenue streams or geographies.

Under S&P Global Ratings' policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

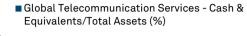
Related research

- Can The Spike In Hybrid Issuance By European Telecoms Continue? Dec. 05, 2016
- Asia-Pac Telecom: Growing Data Usage Spurs Convergence And Technology In Developed Markets, Nov. 22, 2016
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014

Cash, debt and returns

Global Telecommunications

Chart 259 – Cash and equivalents / total assets



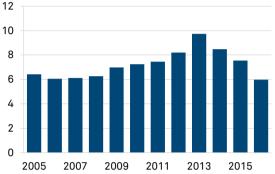


Chart 261 - Fixed versus variable rate exposure

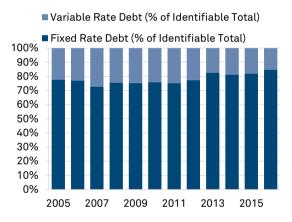
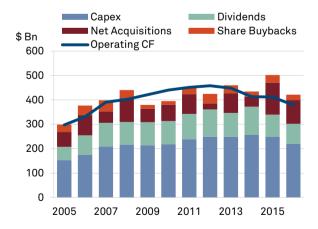
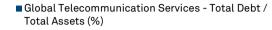


Chart 263 – Cash flow and primary uses



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 260 – Total debt / total assets



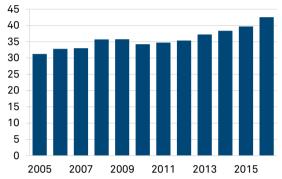


Chart 262 - Long term debt term structure

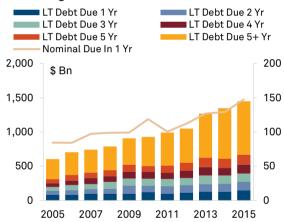
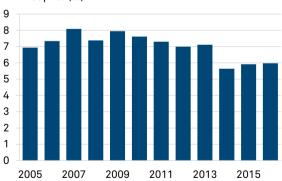


Chart 264 - Return on capital employed

Global Telecommunication Services - Return On Capital (%)



Industry Top Trends 2017

Transportation



Overview

- Ratings Outlook: Rating trends across the transportation industry are mostly stable, though
 there has been an increase in negative bias, which mostly reflects the elevated pricing
 pressure in the shipping sector and the challenges that companies in some developing
 economies are facing as the growth of global trade slows.
- Forecasts: We expect that transportation credit ratios will be generally stable over the next two years, though there will be some variation among the different subsectors. For the railroads, we expect that their revenue should begin to increase once again as the decline in the volume of North American coal shipments slows and their fuel surcharges increase with higher fuel prices. In the air freight and logistics space, there were several large mergers in 2016 and we expect that these companies will see their revenue growth return to historical levels. Meanwhile, the leasing companies and railroads have the highest margins in the sector and we anticipate they will continue to trend upward. As for the airlines, their margins and credit ratios peaked in 2015--aided by low fuel prices--but have slipped a bit since then.
- Assumptions: Our baseline forecast suggests that global GDP growth will increase modestly, supported by an improving U.S. economy. However, there is significant political uncertainty at present--notably regarding policies of the Trump administration and uncertainty about the U.K.'s withdrawal from the European Union (Brexit)--which could hamper world trade, lead to higher interest rates, and further strengthen the U.S. dollar.
- Risks: Reduced global trade, political tensions, and further strengthening of the U.S. dollar are the key risks currently facing the transportation industry. A reduction in the volume of global trade will not only directly affect some transportation companies but could also undermine the economies of countries that rely on commodity exports. A strong dollar could create problems for transportation companies that have to pay for their equipment (e.g., aircraft and marine cargo containers) and fuel in dollars but are currently unhedged and do not generate a significant proportion of their revenue in dollars. Additionally, an uptick in uncertainty--economic, political, or both--could raise risk premiums in the credit, equity, and currency markets, potentially raising costs or reducing the availability of funding.
- Industry Trends: Consolidation continues to be a major theme in some sub sectors, notably the leasing, container shipping, and logistics industries, where market presence and improved economies of scale provide a clear advantage. Mergers in the more labor-intensive and complex industries, such as the airlines and railroads, are more challenging and may be blocked by regulators due to concerns over reduced competition. Environmental regulations have also become a greater focus for the shipping, trucking, and airline sectors.



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Ratings trends and outlook

Global Transportation

Chart 265 – Ratings distribution

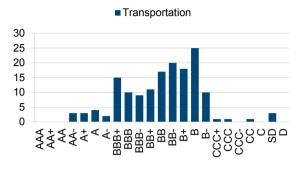


Chart 267 – Ratings outlooks by region

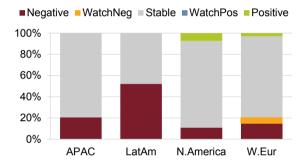


Chart 269 – Ratings outlook net bias by region

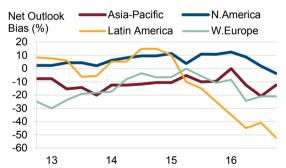


Chart 271 – Ratings outlooks

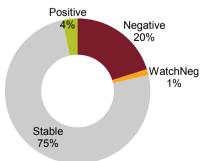


Chart 266 – Ratings distribution by sub sector Air Freight & Logistics Leasing & Other Shipping 30 Bigging Airlines Railroads Trucking Bigging Big

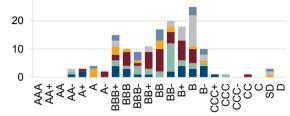


Chart 268 – Ratings outlooks by sub sector



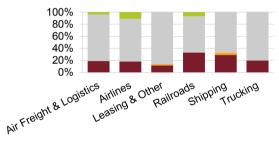
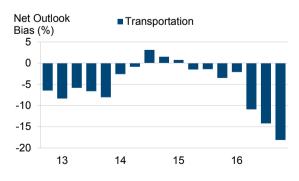


Chart 270 – Ratings net outlook bias by sub sector



Chart 272 – Ratings outlook net bias



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Industry forecasts

Global Transportation

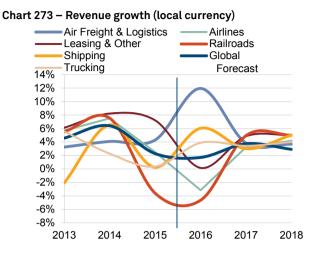
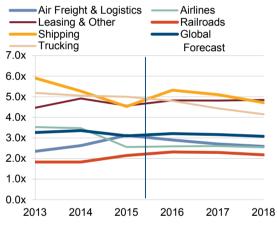


Chart 275 - Debt / EBITDA (adjusted)



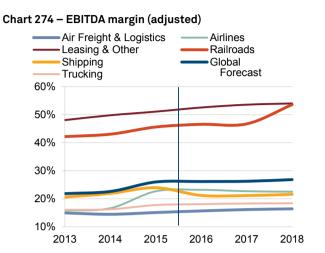
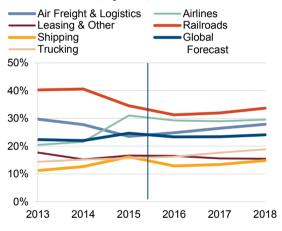


Chart 276 - FFO / Debt (adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

	Global air traffic growth will remain strong at 5%
1	Despite slowing economic growth in some regions and the disruption from numerous geopolitical, security, and labor-related events in Europe and the Middle East, global air traffic growth has remained fairly strong. We expect this trend to continue in 2017 and anticipate that global air traffic growth will likely moderate only slightly to about 5.0% for the year compared with 6.3% in 2016 (per The International Air Transport Association, a global airline industry trade group), supported by an increasing volume of traffic in the higher-growth developing countries. Although the previously widespread concern among investors that a slowing Chinese economy would undermine the aviation sector has eased, air traffic in the region is slowing somewhat and could represent a downside risk to our forecast. Moderately higher oil prices, and the likely response by the airlines to raise their fares to offset them, could also decelerate global air traffic growth.
	Moderately higher fuel prices
2	With oil prices (Brent and West Texas Intermediate [WTI]) higher than during most of last yearour energy team expects oil prices to average around \$50 per barrel this yearairlines will have to face higher jet fuel costs. This should be manageable for the airlines that have done a good job of hedging their fuel costs and for those that mostly generate their revenue in dollars or operate mostly in mature markets where they can reasonably expect to recapture much of the increase through higher fares. However, the cost burden could be more onerous for airlines based in countries whose currencies have depreciated against the dollar (e.g. Mexico)a trend that could worsen if the U.S. decides to raise import tariffs.
	Low cost airlines continue to expand
3	Low cost airlines continue to expand at the expense of the traditional high cost, full-service airlines, particularly in Europe and parts of Asia. In the more mature markets in North America, airline market shares have been more stable and the cost advantage of the larger low-cost airlines is not as pronounced. Some Asian airlines have adapted the low-cost model for long-haul flights, and a few others are pioneering the model on their trans-Atlantic routes. While not considered low-cost airlines in the traditional sense, the rapidly growing Middle Eastern airlines have a sizeable cost advantage on their established European and Asian competitors and have captured substantial market share on certain routes.

Shipping

7

Dry-bulk shipping rates will likely bottom out gradually

We believe that dry-bulk ship operators will continue to face tough industry conditions, aggravated by the considerably--and sustainably--diminished level of commodity imports in Asia, which is by far the largest global importer of iron ore and coal. In our view, the recent notable improvement in charter rates in the fourth quarter of 2016 (albeit following record lows in early 2016) remains particularly vulnerable to uncertainty about future demand from China. Nevertheless, our expectations for slowing global fleet expansion, ongoing vessel scrapping, and sustained low single-digit trade growth will likely trigger a moderate overall improvement in average time charter rates this year.

The tanker market will likely soften amid accelerated supply

We expect that oil and oil-product shipping conditions will be generally supportive over the next 12 months and anticipate that tanker time charter rates will remain well above their operating cost breakeven rates. Nevertheless, we forecast that average rates will come down this year--from relatively strong levels in 2015 and the first half of 2016--owing to the accelerated delivery of new tonnage that will outstrip the growth in tanker demand. We think that crude tanker ton-mile demand will soften following announcements by OPEC and non-OPEC producers that they will slash oil output this year, which will likely have a knock-on effect on export volumes. Meanwhile, oil-product inventory levels appear to be elevated, which will likely constrain demand to some extent.

Overcapacity is here to stay and will impede the container ship segment

We believe that container ship charter rates will remain depressed in 2017, reflecting the sector's overcapacity and the weak demand for container ships from container liners, which are facing volatile freight rates and are struggling to remain profitable (and have therefore taken measures to cut the cost of their chartered-in tonnage). With persistently high scrapping, no stimulus to place new orders (with limited contracting activity since late 2015), and capital constraints, the imbalance between demand and supply in the container ship segment will likely ease somewhat as we move into late-2017 and 2018. Consequently, while we do not anticipate that there will be any rebound in average container ship rates in 2017, rates will likely recover gradually in 2018. Meanwhile, the container liners could face a recalibration of freight rates on some major trade lanes to more sustainable levels in 2017 on improving trade dynamics, higher bunker fuel prices, and supply-side adjustments, which will be partly offset by the persistent and rapid deliveries of ultra-large containerships that were ordered in previous years.

Railroads

Moderate revenue growth as volumes (and prices) slowly rise After two years of declining revenue due to the combined impact of the soft energy markets and a strong dollar, the North American freight railroads are starting to see a reprieve, stimulated by increased grain movements (due to the record U.S. fall grain harvest and related increase in crop shipments), a pick-up in intermodal traffic (driven by improving service levels and increasing consumer spending), and the bottoming out of coal shipment volumes (due to natural gas price increases and growth in the demand for metallurgical coal exports). Canadian railroads could benefit from the strong U.S. dollar, which makes exports from Canada to the U.S. or overseas more competitive. Shareholder rewards are creeping back up, but capital spending (as a percentage of revenue) continues to decline We expect the trend of declining railroad capital spending to continue over the next year. Improving productivity and operating efficiency and lower volumes mean that most companies' equipment needs 7 are not as great as previously thought. As such, locomotive and freight car orders are being pushed out, reducing some of the year's planned spending. Other capital spending uses include the installation of Positive Train Control (which has declined as the regulatory deadline approaches), ongoing track maintenance, and expansion projects. Depending on the business and tax outlook for the industry, which is currently unclear, the railroads may take advantage of rising free cash flow to increase their share repurchases. Rising fuel prices are net neutral to earnings Fuel prices have started to rebound due to OPEC's recent agreement to cut production, and we expect oil prices to remain above 2016 levels over the next year (S&P Global's forecast for WTI is \$50/bbl for 2017). We expect this to have a net neutral impact on the railroads because most of the benefits from fuel surcharge increases will be offset by the rising fuel costs. However, recent advances in fuel and operating efficiency should help offset some of the increase in fuel costs.

Transportation Equipment Leasing

7

Diverging supply and demand trends

Aircraft lessors continue to enjoy strong demand for their narrow-body aircraft, though there has been some pressure on the lease rates for larger wide-body planes. Low oil prices did not weaken the demand for new, fuel-efficient aircraft (though the lease rate premium they command versus older planes has narrowed) and we do not expect that the recent modest rebound in fuel prices will have a large impact either. In contrast, marine cargo container lessors have suffered from overcapacity and lower lease rates due to weak global trade volumes and the bankruptcy of a large shipping line. The risk of elevated import tariffs or trade wars related to the new U.S. Administration's future plans could further exacerbate this problem. The declining volume of coal and crude oil shipments has placed added pressure on some railcar lease rates, and we do not predict a fundamental reversal of this decline even with the potentially less-restrictive environmental regulations promised by the Administration.

Continued access to low-cost financing

We forecast that lessors will maintain their access to capital at favorable rates, even with our expectation for gradually rising interest rates. The assets of most lessors are typically easy to finance, either on a secured or unsecured basis. These companies generally have committed bank facilities and enjoy ready access to the public capital markets. We believe that the lessors will be able to pass through any increases in funding costs to their customers by raising their lease rates when interest rates increase, absent a weak supply and demand balance in the market for each type of leased equipment.

Continued mergers and acquisitions

Lessors in many sectors were quite active in undertaking mergers and acquisitions (M&A) during 2016. In January 2016, Bohai acquired aircraft lessor Avolon and--later in the year--Avolon agreed to acquire CIT's aircraft leasing business (the transaction is expected to close in the first half of 2017) to form the world's third largest aircraft lessor. Additionally, marine cargo container lessors TAL and Triton combined in mid-2016 to form the largest marine cargo container lessor. In the railcar leasing sector, Japanese bank SMBC announced that it intends to acquire American Railcar Leasing. The ability to improve their economies of scale and market coverage and the relatively small number of staff at these companies make leasing mergers especially attractive, just as long as the buyer does not overpay. We expect that there will be continued M&A activity in this industry in 2017, although the size of the transactions will likely be smaller than those seen in 2016.

Key risks and opportunities

Airlines	
	A strong dollar and other rising costs
1	If the U.S. dollar continues to strengthen because of higher tariffs or rising interest rates, it could place renewed pressure on airlines in developing countries that have limited dollar revenue but must pay fuel and aircraft ownership costs in dollars. Exchange rates have also shifted significantly among the currencies of the major developed economies, though rated airlines in these regions (particularly Europe) tend to be fairly well hedged. Rising labor costs are also an issue, specifically for the big U.S. airlines, and a shortage of pilots is a long-term concern that is affecting the entire industry.
	Trade wars could slow the global economy and discourage travel
2	Brexit, a new U.S. presidential administration, and the political reactions that these events might provoke among certain trading partners remain a concern to the extent that they could slow the pace of global economic growth. Furthermore, changing policies on trade and immigration could impact the long-standing trend toward globalization that has hugely benefited the airlines. We do not foresee a dramatic impact from these issues, absent a global recession, though even a change at the margin could lead to empty seats and trigger a new round of fare discounting until airlines are able to react to the weakening demand by adjusting their capacity.
	Geopolitical risk and terrorism remain ongoing threats
3	Multiple security events in Europe have somewhat slowed the volume of air traffic to certain destinations. Business travelers tend to react more quickly to these events than leisure travelers because they generally book their tickets closer to the time of travel and companies are more likely to institute targeted travel bans out of safety concerns. However, both kinds of travel tend to recover fairly quickly after such an incident, as has been the case in Europe. Still, if these events escalate, or if authorities respond by increasing security measures such that it makes travel to certain destinations less attractive, it could lead to a more serious disruption.

Shipping

	The demand outlook is increasingly uncertain
1	A slowdown in trade volumes, which is the key engine of global shipping growth, would be detrimental to the already oversupplied shipping industry. We forecast that solid trade volume growth, particularly in the developing economies, will stimulate global trade during the coming year, though there are clear risks to the demand outlook. A sharper slowdown in consumption in China would harm the global shipping industry, which has aggressively invested in new tonnage over the past few years believing that China's increasing consumption would deliver consistently solid economic growth. Further risks to our forecast include the uncertainty surrounding the negotiations over the U.K.'s withdrawal from the European Union and a possible shift in U.S. trade policy, which could negatively affect international trade relationships and cross-border investment flows.
	The appetite for shipping loans continues to diminish
2	Further weakness in the appetite for shipping lending poses another possible downside risk. Amidst rising provisions for bad debt, escalating debt restructurings, depressed ship values, and prolonged fragile shipping prospects, banks may become even less willing and more selective about who they lend to, which could make financing more expensive in the year ahead. That said, we expect lending to remain accessible for shipping companies that have solid balance sheets, good operating track records, and/or time charter coverage backed by reputable counterparties, although at potentially higher rates and with stricter terms than before. Conversely, tighter lending conditions could prove to be a useful brake on the pace of new orders and fleet expansion.
	Heavy scrapping is critical to correct excess capacity
3	Global fleet statistics indicate that the continued heavy scrapping of older tonnage is a critical supply- side measure to help correct excess capacity and restore charter rates to commercially viable levels, especially for bulk-carrier and container ship owners. With gloomy industry prospects, new regulations, and ageing fleets, we believe that conditions are suitable for yet another wave of scrapping following a record year in 2016. We are nevertheless mindful that the pace of demolition slowed towards the end of last year, which typically happens when owners perceive possibly better times ahead. If aggressive ordering resumes or scrapping slows, it will interrupt the industry's rebalancing and could limit any improvement in charter rates.

Railroads

Risk from uncertainty surrounding new U.S. Administration
The new Administration's focus on domestic manufacturing carries risks for some U.S. companies (e.g., auto original equipment manufacturers (OEMs) or suppliers) that have shifted their production to Mexico. Specifically, the Administration's plans to renegotiate the North American Free Trade Agreement (NAFTA), raise a tax on imports, and build a border wall between Mexico and the U.S. present several risks for the North American freight railroads. These decisions will be especially significant for Kansas City Southern (KCS), as the company's Mexican franchise accounts for about half of its revenue. Although such measures present more risk for KCS than its peers, all railroads stand to suffer from these actions as about 30% of U.S. carloads are tied to international trade (per the Association of American Railroads). Canadian railroads are also at risk because a border tax on Canadian products coming into the U.S. would be very detrimental to their business (cross border traffic between the U.S. and Canada accounts for around 30% of Canadian National Railways' and Canadian Pacific's revenue).
Opportunities from new U.S. Administration uncertainty
The greatest potential benefits for the railroads may come from the Administration and Congress' potential tax policies and fiscal stimulus plans, particularly the potential changes in corporate taxation. A reduction of the U.S. corporate tax rate and the faster write-off of capital expenditures could help the railroads improve their net earnings, though they already carry substantial deferred tax liabilities and cash tax rates are currently close to Congressional Republican's proposed 20% rate (book taxes are higher at around 37%). Increased infrastructure investment could also boost the movement of aggregates and other building products across North America (including those associated with building a border wall with Mexico). More broadly, the railroads should benefit to the extent that any fiscal stimulus boosts the U.S.' near-term economic growth. Regulatory and energy policies that favor coal could also help at the margin, though we do not foresee a major resurgence in coal production because low natural gas prices are the major reason that utilities are switching from coal.
Capturing market share from trucking
The rebound in fuel prices and the elevated costs of regulatory mandates on trucking (e.g., electronic logging devices and hours of service limits) could provide an opening for railroads to chip away at trucking's share of the freight market in North America. Trucking also faces longer-term challenges from a driver shortage, which the new regulations will exacerbate.

Transportation Equipment Leasing

A stronger U.S. dollar

Lease rentals for aircraft and marine cargo containers (the two global leasing sectors) are usually denominated in U.S. dollars. The stronger U.S. dollar could negatively affect customers in these sectors, particularly as oil (and thus fuel costs) is also generally denominated in dollars. Although aircraft lease payments would become costlier for airlines that do not generate a substantial portion of their revenue in dollars, the alternative option of purchasing aircraft will be similarly affected. The more serious issue is the financial viability of the lessors' customers and thus their ability to continue to make payments. Expenses related to bad debt have historically not been a significant problem for equipment leasing companies, though lease rates (and thus their revenue) will suffer if they have to repossess equipment and lease it out to other customers in a weak market.

Reduced global trade

The risk of rising tariffs and trade wars could take a toll on already soft global trade volumes, which would hurt container lessors. Aircraft lessors may be indirectly affected to the extent that reduced trade and overseas investment dampens the growth of business air travel. If less trade translates into slower global GDP growth, both business and leisure travel will be affected, as will most transportation sectors and the leasing companies that serve them.

Capital markets disruption

Leasing is a capital-intensive business and higher debt costs or reduced access to capital would hurt transportation equipment leasing companies. Recently, there has been an abundance of capital in the aircraft leasing sector from various sources, including the public capital markets, and on attractive terms. Other sectors (such as, railcars, truck lessors, and car renters) have also taken advantage of the capital markets, mainly to refinance their debt. We don't expect that modestly higher interest rates will have a material impact on transportation equipment lessors' access to capital. The equipment that the transportation lessors own is generally considered good collateral and can support borrowing, albeit at lower advance rates and higher interest rates during periods of stress. Any disruption in the capital markets would be equally negative for the transportation equipment lessors' customers, particularly those in the largely speculative-grade transportation sectors, such as airlines, shipping, and trucking, potentially boosting the demand for leasing as a financing alternative.

Industry developments

Rising interest rates will increase costs in the capital-intensive and fairly highly leveraged transportation sector. Still, we do not see believe that this will have a materially negative effect as long as any increase is gradual and expected. Most balance sheet debt is fixed rate (see Chart 15 below) and off-balance-sheet leases are also overwhelmingly fixed rate. Pension liabilities represent a significant debt-like liability for some transportation companies and rising rates should cause reported pension liabilities (and thus deficits) to shrink, though these levels are also affected by many other factors. Equipment leasing companies carry the greatest debt burden, though these companies are generally careful to use debt with terms at least as long as that of their leases and avoid fixed/floating rate mismatches. Higher interest rates tend to correlate with higher lease rates (as leasing is an alternative to secured borrowing), though rates are also a function of the supply and demand balance of a given type of equipment.

Financial policy

Most transportation companies have significant ongoing capital expenditure needs, which leave them with little free cash flow. Still, some--mostly those rated investment grade--companies have boosted their dividends and share buybacks as their operating cash flow has increased in recent years (see Chart 17 below). This is most common among the North American freight railroads, where the largest seven companies are all rated in the investment-grade category and most have substantial dividend and buyback programs.

Under Standard & Poor's policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Related research

- The ICAO's Global Airline Emission Agreement Will Have Little Near-Term Credit Impact But Could Potentially Lead To Long-Term Costs, Oct. 11, 2016
- Brexit Adds To Ongoing Challenges For U.K. Exposed Rated Airlines, But Strong Credit Metrics Offer Some Protection, July 26, 2016

Cash, debt and returns

Global Transportation

Chart 277 - Cash and equivalents / Total assets



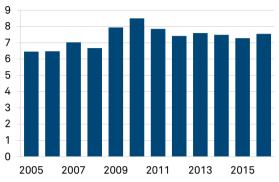


Chart 279 – Fixed versus variable rate exposure

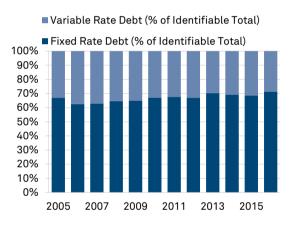
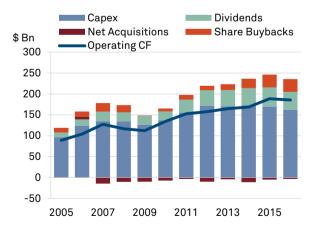


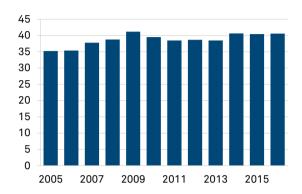
Chart 281 – Cash flow and primary uses

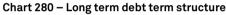


Source: S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 278 – Total debt / Total assets

Global Transportation - Total Debt / Total Assets (%)





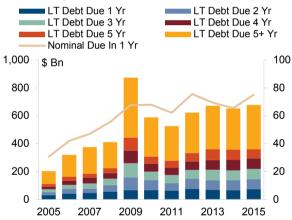
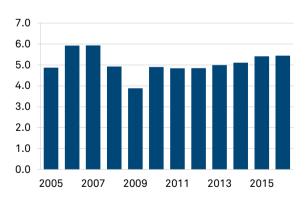


Chart 282 – Return on capital employed

Global Transportation - Return On Capital (%)



Industry Top Trends 2017 Utilities



Overview

- Ratings Outlook: Rating trends across regulated utilities remain mostly stable supported by stable regulatory oversight, slow but steady demand for utility services, and tempered by aggressive capital spending that will keep credit metrics from improving. Emerging new political trends in historically stable regions like Europe and the U.S. may have farreaching effect on utilities over time, but S&P Global Ratings sees little immediate influence from those factors in 2017. Sovereign rating developments can influence utility ratings in some countries and we expect them to vary in different parts of the globe.
- Forecasts: Credit ratios are likely to be stable in 2017 with some slight downside risk as revenue growth will be modest in most regions in keeping with the slow demand growth in regions where the utility industries are mature. In contrast, growth can be higher in countries and regions where utility services have not fully penetrated the market offset by large investment needs. We expect margins across the industries globally to be flat to improving slightly as operating conditions and favorable fuel cost trends are maintained.
- Assumptions: Sales growth at most utilities is closely tied to the general economic outlook in its service territory, which can vary considerably from utility to utility. We project solid regulatory support for utility earnings and cash flow, with the occasional exception due to specific political or policy issues at the local level. Capital spending will continue to be elevated in most areas, with substantial infrastructure needs.
- Risks: Transformative risks abound in utility industries. Corporate transformations (M&A) are an ever-present risk to ratings. Electric generation transformation is ongoing as carbon concerns and other environmental considerations lead utilities to change the mix of fuel sources. Grid transformation is becoming more prominent as utilities react to technological advances and the need for greater attention to cyber security.
- Industry Trends: The utility industry in most regions is stable, consistent with our general ratings outlook and the nature of the essential products and services utilities sell. The unsettled state of the world economy, buffeted by political volatility and uncertain capital flows as international trade and tax reform emerge as urgent issues, could spill over into the utility space. However, the industry as a whole is well positioned to withstand mild shocks, and we see steady growth and stable credit quality overall.

S&P Global Ratings

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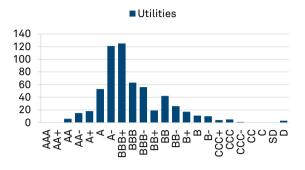
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Ratings trends and outlook

Global Utilities

Chart 283 – Ratings distribution



The industry remains largely investment-grade.

Chart 285 – Ratings outlooks

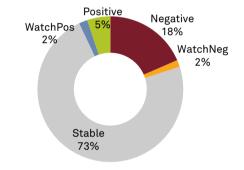
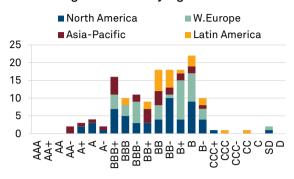
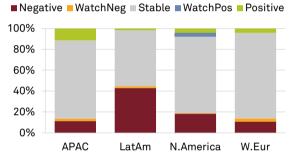


Chart 284 – Ratings distribution by region



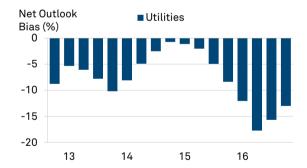
Ratings are distributed mostly the same, with a notable shift in EMEA toward the lower end of investment grade.

Chart 286 - Ratings outlooks by region



Mostly stable, but a little more tilt toward the negative than last year.

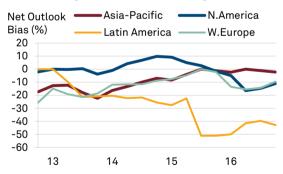
Chart 287 – Ratings outlook net bias



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending December 31, 2016

Very consistent, with slightly less negative bias in North America and EMEA, and more positive outlooks in EMEA and APAC

Chart 288 - Ratings net outlook bias by region



Industry forecasts

Global Utilities

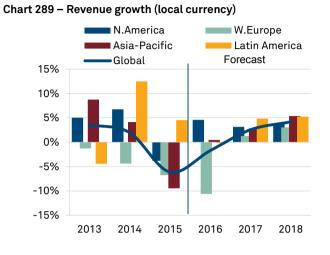
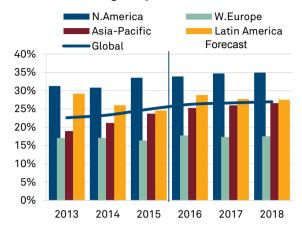


Chart 290 – EBITDA margin (adjusted)



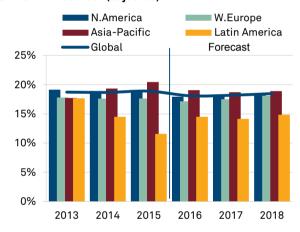
Stable margins across all regions

Chart 291 – Debt / EBITDA (adjusted)



A little more stable than last year's projections

Chart 292 - FFO / Debt (adjusted)



This has been remarkably stable globally, and we project a rebound in regions where there's been some deterioration.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Global Utilities

Industry demand growth broadly linked to economic growth

Historically, demand for electricity, natural gas, and other utility services has correlated broadly with overall economic growth. In regions where market penetration is low the growth can outpace the economy. In mature markets where appliance and industrial efficiency has advanced through the years, load growth has slackened and lagged the performance of the broader economy. In **Europe**, we expect most economies to have low but improving economic growth and inflation slightly increasing from commodity prices. Moderate inflation in the U.K. and the Eurozone support earnings growth for regulated utilities whose remuneration is linked to the consumer price index or retail prices index. This is particularly true for the U.K. utilities. In North America's economies, the ability of utilities to maintain a growth profile alongside the economy has faltered in what has been a long-term trend, and we assume low growth for most utilities. In Canada the downturn in energy prices has had a knock-on effect on load in combination with continued conservation initiatives. Latin American revenues will remain constrained by the overall sluggish economic activity, especially in Brazil, although a pick-up in commodity prices could help. We expect a mixed trend in APAC, with few Asian countries such as India and Indonesia likely to see revenue growth outpace economic growth due to increasing capacities to bridge power needs and government policies to move towards 100% electrification. In other parts of Asia-Pacific, we expect modest to sedate growth.

Regulation supports earnings and cash flow

Regulatory behavior is notoriously difficult to predict, but the political and economic conditions in many regions have enabled utility regulators to sustain a long period of supportive cost recovery through rates and support for capital improvements to bolster service reliability and quality, which has translated into earnings and cash flow stability. In **APAC**, some markets are going through or experiencing some form of industry restructure, although the regulatory environment is largely stable and supportive. Abrupt changes, if any, driven by political or socioeconomic reasons are not anticipated in our base assumptions but also difficult to predict. Stability has held in **North America**, where commodity and financing costs have steadied the regulatory environments as rate increases have been mild. In **Europe**, recent regulatory reviews (France and Italy notably) have led to generally lower remuneration of the asset base, reflecting the overall lower cost of capital, but it was manageable and generally did not hamper the affected credit quality. We view regulatory frameworks in **Latin America's** main economies as relatively stable, with utilities being able to recover its costs while presenting adequate returns.

Capital spending elevated to meet infrastructure needs

We assume that capital spending will remain a focus of most utility managements and strain credit metrics. It provides growth when sales are diminished by ongoing demanded efficiency from regulators and other trends, and it is welcomed by policymakers that appreciate the economic stimulus and the benefits of safer, more reliable service. The speed with which the regulatory process turns the new spending into higher rates to begin to pay for it is an important factor in our assumptions and the forecast. Any extended lag between spending and recovery can exacerbate the negative effect on credit metrics and therefore ratings. As for last year, the main drive for high investments will remain integration of new renewables capacity and decentralized generation / micro grids, which require new connections and significant network upgrades to manage a less predictable demand -supply curve. Some distribution networks are also responsible for smart meter deployment, which can represent a significant share of the capital investments. Investments in Latin America should remain focused on the expansion of networks and quality of services and there are important projects in transmission that are currently in progress. Increasing generation capacity to meet the growing needs of the population should continue to drive the construction of new power generation facilities. Asian markets should see elevated investments leading to some weakness in metrics until the new projects are commissioned, while the mature markets of Australia and New Zealand should see investments in line with past few years.

Key risks and opportunities

Global Utilities

Corporate transformation

In order to respond to the sector challenges, we expect M&A activity to remain strong in 2017. On the one side, we see utilities spinning off some of their more mature networks given the attractive prices they can obtain, supported by the strong appetite of infrastructure funds eager to invest in defensive assets generating decent yields. In **Europe**, we see Italy, France, and the U.K. as recent examples, for which selling prices were well above the regulated asset base. The proceeds of such disposals would in turn be primarily used to remunerate shareholders and to finance the growing regulated network activities, where significant upgrades are needed and investments may be substantial. We also see execution of disposal programs for some integrated utilities as paramount for the maintenance of their credit quality this year. Targeted assets include the more volatile thermal and merchant generation assets, oil and gas upstream activities, and non-core, non-domestic assets. In **APAC**, offshore investments mainly by Chinese entities are likely to remain the theme although certain restrictions can see some softening of the trend. Japan, China, and some other Asian countries are seeing some industry reforms that can lead to tariff reforms or the dismantling of integrated entities, which could have a bearing on the credit quality over the next few years.

North American utilities have been focusing on cross-industry (gas utilities buying electric utilities) or cross-border (**Canadian** holding companies buying U.S. utilities) combinations and using historically low interest rates and strong stock prices and plentiful leverage to justify paying large multiples. Cost of capital has been rising but is still well below historical averages, so 2017 could bring more transactions before higher interest rates start to dissuade purchasers. Transactions outside the utility space, which are typically more credit-negative because of added risk, have been less prevalent but could accelerate if growth on the utility side slows. In **Latin America**, we view Brazil to remain attractive to investors despite the still weak economic activity, as some integrated entities resort to asset sales aiming to reduce leverage and improve liquidity, amid tight credit markets. Participants from Europe and the region were active in 2016, but expect the activity to slow down as rated participants integrate recent acquisitions in 2017.

In order to meet increasingly tough efficiency targets set by regulators and to face IT challenges associated with smart technologies and the integration of renewables in the network management, we see sector consolidation as a key theme for 2017 in certain areas. This could vary across markets driven by local policies. In **Italy** for example, we see the sector consolidation as a key theme given the high number of small-scale municipal networks. A similar trend is emerging in **Canada** in the province of Ontario with the merger of several municipal distribution companies. We also see investments in quasi-regulated/midstream assets as being a hot topic for the regulated utilities sector, as some of them try to search for new growth drivers outside of their core markets. These include notably investments in optic fiber, long-term contracted pipelines, liquefied natural gas (LNG) assets and storage businesses.

In such an environment, we will focus on effective execution of disposal programs, appetite for growth and change in financial policies towards potential high leverage--especially in a context of low interest rate environment.

Generation transformation

As in previous years, and notably following the COP 21 in late 2015 and the following adherence to the Paris Agreement at the national level during the course of 2016, the more stringent environmental targets globally will continue to reshape the generation mix towards an accelerated penetration of renewable energies, notably solar and wind. In some regions, we also see growth in gas assets (both gas-fired power plants and LNG facilities) as driving new infrastructure developments to distribute power in the respective areas. In **Canada** the Alberta government has mandated the complete replacement of coal generation with gas assets and renewables by 2030. We believe significant push for renewable power will increase share of renewables in the energy-mix for countries like **India**. However, coal is likely to remain the mainstay in the fuel-mix and power generation there and in **Indonesia** due to significant capacity additions.

The significant amount of new projects will require new connections and new transmission lines, which we believe will be a key driver for the asset base and revenue growth for the sector. This is notably because new connections may be complex and expensive (notably for offshore wind) and because the location of new generation sites may be quite remote from the end-users given potential land constraints as well as geographic or weather characteristics. Beyond the political push, we believe the development of renewable energies is also driven by significant progress in technologies and cost. Wind and solar have indeed seen their cost reducing significantly in recent years (by about 60% for solar between 2009 and 2016, according to the International Renewable Energy Agency (IRENA) and efficiencies have increased (as measured through load factors and wind turbine capacity notably). These significant manufacturing and technology progress make their value proposition economically more acceptable and therefore more financeable. Some studies show that technology parity versus efficient thermal assets can be reached between 2020 and 2025, while recent auctions (notably in Latin America) reflected the more competitive nature of renewable projects.

Similar themes are seen to varying degree in the **Asian** markets given the big gap between demand and supply. While a number of Asian countries, such as India, China, Thailand, and Australia are increasingly looking at renewable projects, coal and gas are likely to remain the mainstay for most Asian countries. Associated with growing renewables is the need for investment to manage intermittency which can lead to a different approach to grid management and cost recovery. We believe this is an evolving space. Potential easing of environmental regulation in the U.S. may allow East Asia-based electric and gas utility companies to further stabilize fuel costs due to improved U.S. shale gas supplies.

Grid Transformation

The inherent intermittency of the generation profile for renewable assets requires in many cases a significant upgrade of the networks to manage such complex and somewhat less predictable power inflow. We also believe that the growth of renewable energies goes together with the development of so-called micro grids, which aim at increasing consumption of locally produced energy. With increasing decentralized production and self-consumption, systems need to forecast and manage a much more dense and complex network, which requires significant big data management and sophisticated forecasting tools, which we believe represent significant IT investments.

This goes alongside with a push for the penetration of smart meters, to better measure and control the network. The digitalization of the network represents in our view a significant opportunity for network operators to optimize their cost structure (given the more centralized control of the network, avoiding physical intervention). Where the network operators are also in charge of the roll-out of such smart meters, we believe it will also boost the regulated asset base and allowed revenues.

Yet both the need for optimized balancing of the flows and digitalization of the networks require evolving roles and responsibilities of the network operators, and a potential change in their remuneration scheme in the near future. In this context, we believe not all players are well prepared for such transition and we may see increasing differentiation in operating performance (and ultimately cash flows) between network operators. We further believe that while increasing responsibilities may push for higher allowed revenues, we see a potential risk that such additional remuneration may not fully compensate for the additional costs and risks associated with these new responsibilities. This is notably because of the lack of track record when transitioning to these unchartered territories driven by new technologies. What's more, in an increasingly digitalized environment, we see cyber security as an increasing threat to the sector. Beyond the obvious risk of blackout associated to cyber piracy, we see data security (given the big data management model associated to the generally large customer base) as another major threat. This ultimately may result in reputation risk for the networks; and unforeseen financial consequences.

Industry developments

Corporate strategy and diversification

With some notable exceptions, utilities are experiencing a secular slowdown in growth prospects. This is especially true in regions and countries where the provision of electricity and natural gas and water is well-established and has broadly penetrated the relevant market. The causes are many and center mainly around significant past investments based on economic growth rates (and power and gas consumption) that did not materialize, slowing population growth, and increasing efficiency in end-use products that use natural gas and power. A furnace that is twice as efficient as the one it replaces may encourage the customer to stay a little warmer by raising the thermostat, but it's still not going to make up for the fact that it uses half as much fuel as its predecessor. Industrial usage offers the same story.

Another factor that is intruding on the ability of utilities to grow, prevalent mostly in electric markets, is the popularity of customers providing their own commodity and depriving the utility of the margins for that service and cutting down topline growth. In electricity it's called self-generation or distributed generation. Solar panels on individual customer roofs is the most recent and dramatic manifestation of this phenomenon, but it's been a long-standing trend for large commercial and industrial customers going back decades with "cogeneration" plants and outright leaving the grid (often called "behind-the-fence" projects) as industrial firms looked for ways to lower costs.

Firms facing low growth potential may find it more difficult to attract equity investors, and the natural impulse of any corporation and its managers to desire to grow to satisfy stockholders adds to the imperative to look for alternatives to their core utilities to invest in. This activity often goes in cycles,

seemingly as constant as the ocean tide, ebbing and flowing as utility managers hear the irresistible siren call of growth and greater profits – most of the time away from regulated activities. With that kind of growth comes risk, of course, and thus pressure on ratings.

Many **APAC** utilities still have traditional investment and integrated operations. Australia could see more asset privatization and potentially some consolidation. Market reforms in China and Japan are likely to occur over the next few years which may take few years to reflect in how the industry shapes up. Companies' ability to adapt to such reforms and maintain their balance sheet profile will be key to their credit quality. In **Latin America**, corporate groups still have opportunities to grow by expanding their coverage and improving basic service, and acquisition opportunities remain, particularly in Brazil. The energy reform in Mexico will also offer opportunities to build new generation capacity (mainly gas) and to provide services to the national utility to improve the country's transmission and distribution infrastructure.

We think we may be on the cusp of another cycle in some areas. In **North America**, utilities have been practicing a "back-to-basics" approach for many years in the wake of a difficult period of diversification efforts that accompanied deregulation of first natural gas and then electricity. While corporate strategic moves for the past decade or so have been mainly inside the industry (utilities combining with other utilities) to assist growth, the attractiveness of that strategy could wane if interest rates and other costs begin to rise and harm M&A economics. In **Europe**, international expansion (notably in Latin America) is privileged to build a new growth story. Also on the radar are midstream assets (pipelines, storage, and regasification plants, for example), which utilities see as having business similarities.

Alternative financing, private equity, and infrastructure funds

Corporate transformation (see Key Risks and Opportunities) and the diversification discussion immediately above suggest that M&A transactions and other corporate-level reformations will continue to be a feature of utility credit quality considerations in 2017. Corporate finance techniques outside of the usual debt/equity playbook have risen in popularity, especially as transactions have become more expensive and more creative avenues are needed to make the numbers work. Increased regulatory costs of being a public company has also contributed in the past to some utilities, especially small ones, "going private" to escape the cost and other burdens of full securities regulation. Institutional investors' appetite for secured, above-average-yield assets remains significant for utilities, and as mentioned above prices paid for such assets often come with significant premiums over the regulated asset base.

APAC utilities are likely to see dominant group and government ownership, particularly in Asia. Private equity firms have not been very active in the utilities space and we see limited prospects due to significant presence of industry super funds, dominant corporate groups and national wealth funds. Strong growth and investment in renewables could attract private equity, but interest seems to be low. We expect infrastructure funds to remain a dominant force in the market as also sovereign wealth funds (such as from Singapore, UAE) and private investors like SoftBank of Japan providing sufficient financial flexibility to fund large projects. Asset pooling to diversify risks across countries/ sites and resources like hydro /wind/ solar is also expected to gain momentum.

In **Europe**, such pricing environment has recently led some utilities to sell their lower-growth networks, and we see the trend continuing in 2017. Proceeds first aim at offering the excess returns to shareholders and then to partly fund the capital expenditures on the higher-growth part of the network. In the transactions we have seen so far, little, if any, has been allocated to debt reduction. Funding in **Latin America** should continue to be dominated by bank and capital markets financing. However, some alternative financing structures are emerging in selected markets like Mexico, where entities similar to U.S. master limited partnerships have been recently launched in the infrastructure space.

Hybrid securities, whether in the form of preferred stock or some sort of subordinated debt with interest deferral permitted, are commonly used in M&A deals (as in last year's acquisition of TECO Energy by Emera Inc.), as well as other types of hybrids such as mandatory convertible debt that provides for equity support a few years after the merger.

Less associated with M&A is the use of unconventional corporate structures, which are invariably undertaken for tax reasons to reduce the issuer's cost of capital. While it's challenging to generalize about the myriad structures that exist, the details of which are limited only by the imaginations of tax attorneys and investment bankers, they do exhibit common attributes that can affect credit quality. In **Europe**, the sophistication of corporate structures is also significant in order to maximize the debt and benefit from a still low interest rate environment. We notably see more transactions that favor a tranche of subordinated debt with a holding company level, above the regulatory perimeter and sometimes with some ring-fencing structures. To understand the robustness of such structures, we generally take in consideration not only the documentation and financial structure, but also the legal and regulatory frameworks in which the utility operates.

In **North America** we see master limited partnerships and "yieldcos" as archetypes of this kind of entity. As tax-driven vehicles, they are frequently pass-through entities (so the tax man can get his share somewhere), so the ability of these issuers to retain earnings and build equity to provide creditors with a cushion is limited. The tax advantages mostly benefit shareholders, though some crumbs do accrue to creditors. Because their allure for equity investors is mostly in a steady but growing dividend, the structures often compel issuers to emphasize growth through acquisitions that carry extra risk. Consequently, we believe non-standard corporate structures connote lesser credit quality, although we always evaluate each entity on its merits and do not let the structure govern our opinion. Their use may change over time if tax reform takes hold, as is possible in the **U.S.**, but history tells us they will never disappear.

Operating efficiency through digitalization and cost control

Although utilities are sometimes viewed as staid, bureaucratic organizations in a mature industry that contains no technological challenges, indifferent to all the changes occurring around them, the reality is quite different. Putting aside the advanced techniques and tools needed to operate, maintain, and monitor pipelines and power plants (the "pigs" that travel through a pipeline are hightech marvels, not to mention nuclear plants and continent-wide electric grids), utilities spend considerable time and effort to leverage digital technology and the latest cost-control tools to push efficiency measures throughout their systems. If indeed utilities begin to experience greater cost pressures outside their control-capital costs, commodity costs, etc.-the need to implement more stringent cost-cutting efforts will become acute to improve operating efficiency and avoid putting undue pressure on the regulatory environment to sustain ratings performance. The digitalization of the network includes the significant deployment of sensors and remotely-controlled substations across the network. The technology allows for more centralized problem diagnostics and maintenance - limiting the physical presence needed to resolve network issues. Further, we have seen drones widely used for active network surveillance and access to difficult areas. Digitalization of the networks improves problem prevention, shortens response time, and reduces or optimizes utilization of human capital.

In the **Asia-Pacific** market, remote control apps, smart metering, consolidation of control room functions, and integrated outsourcing of operations and maintenance are avenues that will continue to lower the cost profile of utilities. With cost efficiency at the forefront of regulatory decisions, we expect increasing shift to incentive-based regulation. This could lead to optimal reliability and availability standards that could optimize investment in the networks. Cost profile of most Asian utilities remains relatively high and we don't expect an immediate change in the composition of their cost base. This is partly a reflection of their scale and integrated operations, high investment phase, and socio economic obligation under government ownership,

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Cash, debt and returns

Global Utilities

Chart 293 - Cash and equivalents / Total assets



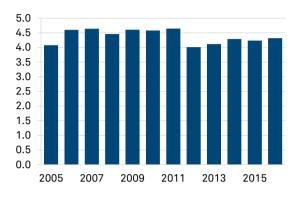


Chart 295 - Fixed versus variable rate exposure

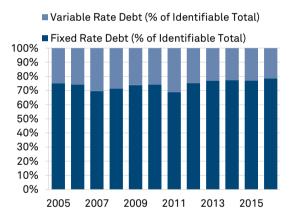
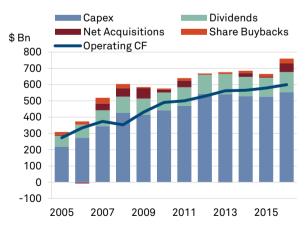


Chart 297 – Cash flow and primary uses



Source S&P Global Market Intelligence, S&P Global Ratings calculations

Chart 294 – Total debt / Total assets

Global Utilities - Total Debt / Total Assets (%)

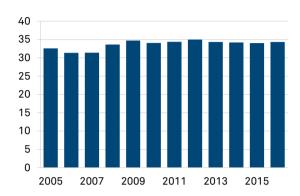


Chart 296 - Long term debt term structure

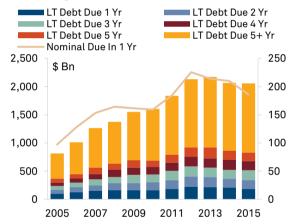
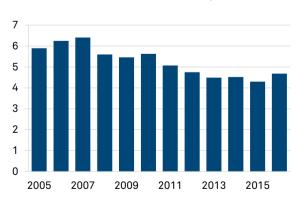


Chart 298 – Return on capital employed





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