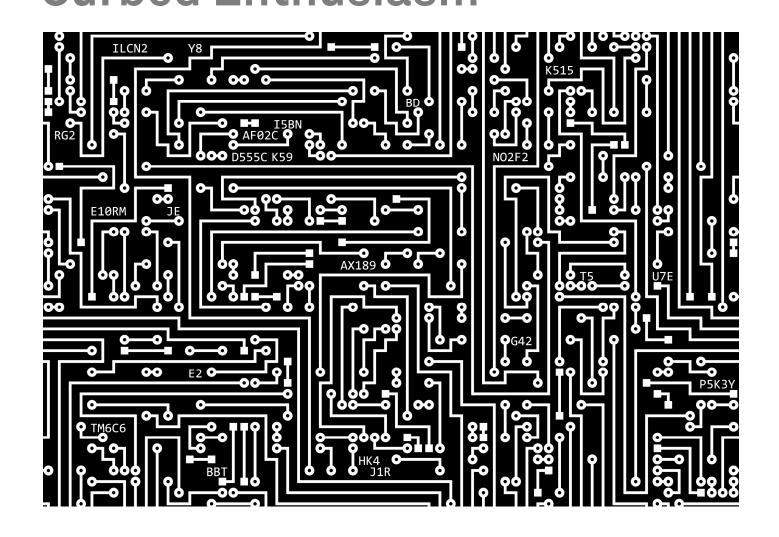
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Global Corporate Capex Survey 2019 Curbed Enthusiasm





Global Non-Financial Corporate Capex Growth Forecasts For 2019

Table 1

Global Capex Growth By Region And Sector In 2019 (YOY%, USD)

Sector	Global	APAC ex Japan	Japan	Latin America	North America	W. Europe
	3.5	-1.0	7.4	22.8	2.1	4.3
Consumer	3.2	-3.9	2.9	12.5	3.3	7.0
Energy	3.6	10.8	19.6	31.3	-4.9	1.6
Healthcare	1.5	-10.4	-1.6	N.M.	2.5	1.9
Industrials	5.2	0.0	12.5	29.1	2.1	6.0
IT	-4.4	-12.2	-3.4	N.M.	4.1	3.2
Materials	7.8	5.5	24.9	34.9	-5.4	7.5
Communications	3.6	2.2	3.9	7.0	5.8	-1.4
Utilities	5.4	-2.8	7.7	12.0	11.0	5.9

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. N.M.--Not meaningful.

Chart 1



Note that size of bars is not equal across regions – bars are scaled to show range of forecasts for industry and region.

Global Capex: Curbed Enthusiasm

June 19, 2019

Key Takeaways

- The mini capex boom is fading fast. Global corporate capex grew a mere 2% last year and we expect a similarly feeble 3% expansion in 2019. This is thin gruel after years of stimulus and means that capex will not offer much help in sustaining the current economic cycle.
- The details reveal a more nuanced and in some ways optimistic picture. Growth prospects in Latam, Japan and EMEA and for many sectors are healthier than the headlines suggest.
- The global picture is dominated by trends in North America where growth has slumped and Asia-Pacific ex Japan where capex is expected to shrink again. A sharp downturn in Asia-Pacific IT spending and cuts to U.S. oil capex are key contributory factors.
- Waning capex growth may also reflect a redirection to other forms of growth investment (R&D, acquisitions) and higher shareholder returns. The share of cash flow directed to capex versus these other uses is at its lowest ebb since 2007.
- Digital disruption is boosting capex in sectors like retail but reflects the battle for dominance rather than growth. Decreasing reliance on physical products and environmental concerns may mean that future capex cycles will be more subdued.
- An extended analysis of 950 U.K. companies suggests a resumption of capex growth in 2019, but this may not materialize if political uncertainty and negative forecast revisions continue.

The mini boom in global corporate capex is fading fast...

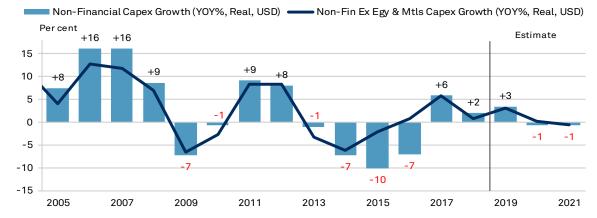
This is the sixth edition of S&P Global Ratings' annual corporate capital expenditure (capex) survey and one that points to a decidedly mixed outlook for capital spending. Our latest estimates – which combine public company guidance with S&P Global Ratings analysts' forecasts and market consensus projections – suggest that the mini boom in capex that began in 2017 is waning rapidly.

Global corporate capex increased by a mere 2% last year, and is estimated to expand only 3% in 2019 (see chart 2). Forecasts further out need to be treated with caution, given that our analysis has shown a tendency for market analysts to underestimate capex beyond the first forecast year, but current projections point to a 1% decline in spending for 2020 and 2021.

While the detail of the survey reveals a complex and varied prognosis by sector and region – with positive trends in some regions and many sectors - the broader reality is that corporate capex has been a perennial disappointment in this economic cycle, and all the more so given large and sustained monetary stimulus, cuts in corporate taxation, and plentiful balance sheet cash. Less pronounced cycles are a feature across many macroeconomic trends, in developed markets at least, but the hoped-for unleashing of a corporate capex boom remains elusive and seemingly unlikely in the next couple of years.

Chart 2

Global Non-Financial Corporate Capex Growth

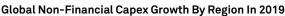


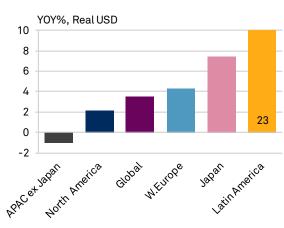
...although there are significant regional and sector variations

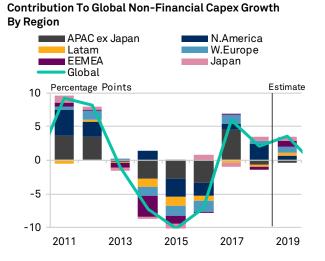
Nevertheless, the capex outlook remains positive if lackluster. All regions, bar Asia-Pacific ex Japan, are expected to see positive capex growth in 2019 (see chart 3). Western Europe is ticking over nicely at 4% growth, Japan better still at over 7%, and Latin America is set to break a six-year run of declining capex with a large commodity bounce back of 23%. The North American outlook is much more disappointing, with last year's 9% surge fading to a mere 2% projected for 2019. Asia-Pacific ex Japan is the one region expected to see capex cut, falling an estimated 1% in 2019 after the prior year's 2% decline. In contribution terms (see chart 4), the loss of positive momentum from North America is the most notable change from 2018. Fortunately, improving growth in EMEA and Latin America does compensate for this.

Chart 4









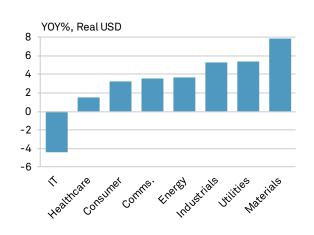
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

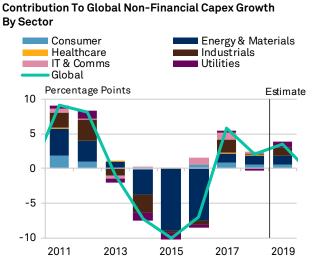
Sector trends show a similar pattern, with all expected to increase spending with the exception of IT (see chart 5). Materials is the most exuberant, with just under 8% growth expected, but elsewhere the picture is one of low-single-digit growth rates. In terms of contribution to overall growth (see chart 6), energy and materials have the biggest positive impact but 2019 growth, however modest, is broad-based and not overly reliant on one or two sectors.

Chart 6

Chart 5







Fundamentals remains supportive but sentiment is wilting

Capex growth correlates closely with revenue and profitability trends (see chart 7), which sheds some light on this positive, but subdued, outlook. Lower rates of revenue and EBITDA growth in 2018 explain some of the loss of capex momentum, but arguably the reduction in growth is greater than one might expect based on prior cycles, particularly given that profit margins have also improved sharply (see chart 8). Causality may run the other way, with reduced capex being used to help improve short-term profitability, but the weakness of capex does pose something of a puzzle given positive operating trends.

Chart 7

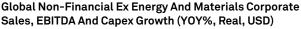
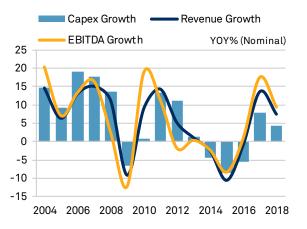
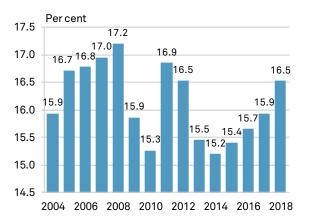


Chart 8

Sales, EBITDA And Capex Growth (YOY%, Real, USD)





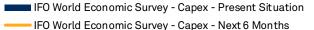
Global Non-Financial Corporate EBITDA Margin (%)

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

One thing that is clear is that capex spending surveys have shown a very marked deterioration in the past few quarters, both in terms of current spending and forward intentions (see chart 9). This has happened across all regions, with the exception - as also seen in our growth forecasts - of Latin America (see chart 10). No doubt this downturn was influenced by market volatility late last year and concerns for the fragility and durability of the current cycle. While sentiment may yet shift, our analysis suggests little reason to expect that capital spending might provide rejuvenation for an aging economic cycle.

Chart 9

IFO World Economic Survey – Capex All Countries



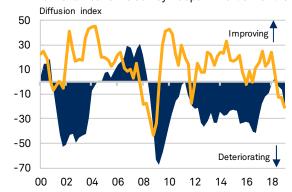


Chart 10 IFO World Economic Survey – Capex





Source: Thomson Reuters Datastream, IEO World Economic Survey

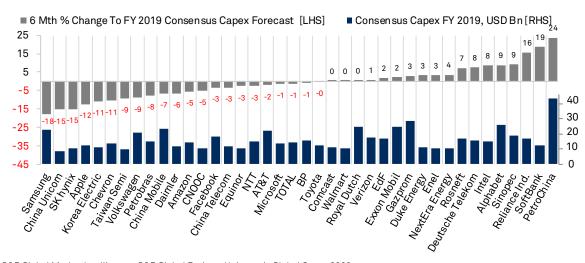
The scale of the regular quarterly questions ranges from -100 points to +100 points and the answers are expressed as balance values. The mid-range in the new scale lies at 0 point, where the share of positive and negative answers is equal. There are three possible replies: good/better/higher (+) for a positive assessment representing improvement, satisfactory/about the same/no change (=) for a neutral assessment and bad/worse/lower (-) for a negative assessment representing deterioration. The individual replies are combined for each country without weighting as an arithmetic mean of all survey responses in the respective country.

S&P Global Ratings

Consensus forecast trends show a mixed picture

While survey intentions are indicative of changes in sentiment, revisions to market consensus forecasts for individual companies give a more tangible sense of how these shifts are translating to spending. Chart 11 shows how capex estimates have changed over the past six months for the 40 companies that were expected to spend the most this year. Just over half have seen estimates reduced, marrying up with the mixed picture we are seeing overall. What is striking here is the preponderance of technology and communications companies in the group seeing estimates fall. The large downward forecast revisions for some of Asia-Pacific's largest memory and semiconductor manufacturers – Samsung Electronics, SK Hynix, and Taiwan Semiconductor – point to a capacity cycle at play in IT hardware.

Chart 11



Revisions To 2019 Consensus Capex Forecasts In Last Six Months For Major Capex Spenders

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Only includes companies for which an S&P Capital IQ consensus estimate is available. Shows top 40 based on USD value of initial forecast.

APAC ex Japan and U.S. capex spending dominate the capex outlook

To understand why the overall capex outlook is so muted despite healthy growth expectations for EMEA, Japan, and Latin America, it is worth highlighting how the composition of our Global Capex 2000 universe has shifted over the past 10 years. Charts 12 and 13 are shown by company count and tell a dramatic tale: Western Europe has shrunk from accounting for 26% of the list in 2008 to only 17% now. Japan has slipped from 13% to 10%. North America has held steady at 24%, while Asia-Pacific ex Japan is now the dominant region making up 40% of the list (from 27%). North America and Asia-Pacific ex Japan now account for 64% of Global Capex 2000 companies versus 51% a decade ago. If companies in these two regions are curbing spending then global capex will be under pressure, irrespective of trends elsewhere.

Chart 12

Share Of Global Capex 2000 Constituents By Region In 2008 (Count)

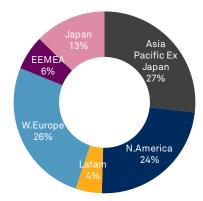
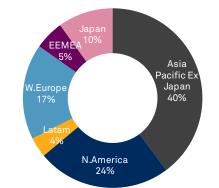


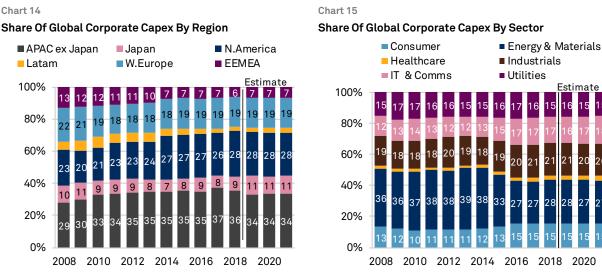
Chart 13

Share Of Global Capex 2000 Constituents By Region In 2018 (Count)



Global Corporate Capital Expenditure Survey 2019

Charts 14 and 15 show how the shares of global capex have evolved since 2008 for both regions and sectors, this time by value. North America has a slightly higher weight on this basis (28%), but the same message is clear: these two regions are the ones that matter. For sectors, the mid-decade dominance of energy and materials has ended with the collapse of the commodity boom, but they remain the sectors with the greatest weight in overall growth.



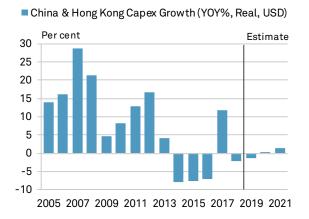
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Evidence of trade disputes hurting capex directly is limited

The weak 2019 capex outlook for both North America and Asia-Pacific ex Japan begs the question of how much this is due to escalating trade tensions between the U.S. and China. For the Chinese companies within the Global Capex 2000 universe, corporate capex growth fell back sharply in 2018, declining 2% after a 12% rise the year before, and is expected to contract a further 1% this year (see chart 16). Chinese forecast revision trends (for those companies where a consensus is available) also deteriorated from August last year, which coincides with the release of a second, escalated, round of tariffs from the U.S. and China. Even so, it is difficult to look at either forecast growth rates or revisions and see an unambiguous link between capex intentions and trade conflict. Chinese corporate capex was already under pressure from the ending of the commodity boom and attempts to lessen the country's reliance on investment-led growth.

Chart 16









YOY Change In 12m Forward Consensus Capex Forecast

S&P Global Ratings

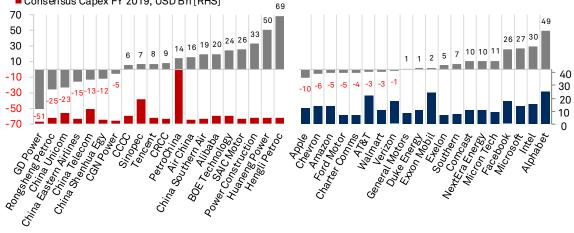
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Revision trends are unweighted indices of monthly local-currency consensus capex forecast changes.

Global Corporate Capital Expenditure Survey 2019

Moreover, if we look at revision trends since March 28, 2018 (when the trade dispute started in earnest) for the 20 U.S. and 20 Chinese companies expected to undertake the greatest amount of capex this year, the majority (25) have seen forecasts rise over the period. Some Chinese forecasts have seen large percentage cuts, but there have been large percentage increases too. On balance, while trade disputes have triggered periods of market volatility and are undoubtedly a factor in the erosion of corporate confidence and concerns around the longer term viability of globalized supply chains, it is not yet clear that U.S. and Chinese corporate capex has eroded as a direct result.

Chart 18

Consensus Capex Revision Trends Show Limited Evidence Of U.S.-China Tariff Conflict Hurting Spending



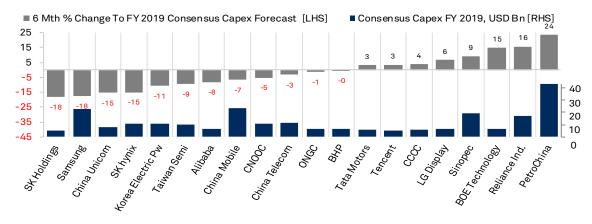
Percentage change to FY 2019 consensus capex forecasts since Tariff conflicts began on March 28, 2018 [LHS]
 Consensus Capex FY 2019, USD Bn [RHS]

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Only includes companies for which an S&P Capital IQ consensus estimate is available. Shows top 20 per country based on USD value of initial forecast.

With regard to the sharp reduction in U.S. corporate capex growth from11% in 2018 to 3% this year, other factors are at play including the fading stimulus from the 2017 Tax Cuts and Jobs Act and industry-specific factors, such as a throttling back of capex by shale oil companies and an easing off in technology investment. In Asia-Pacific, China's transition to a lower pace of expansion and de-prioritization of investment has been reflected in lower rates of corporate capex growth for some years. That said, the biggest marginal change to forecasts for Asia-Pacific ex Japan for this year has been sharp reductions in capex forecasts for many of the largest regional tech players (see chart 19). This is where there may be a significant indirect effect from trade tensions on capex. Semiconductor manufacturers were already wrestling with weak DRAM and NAND flash memory prices stemming from overcapacity and this has been exacerbated by the impact of trade tensions on consumer confidence and spending, and uncertainties around the rollout of technologies like 5G in the wake of the Huawei dispute.

Chart 19

Revisions To 2019 Consensus Capex Forecasts In Last Six Months For Major Asia-Pacific Ex Japan Capex Spenders



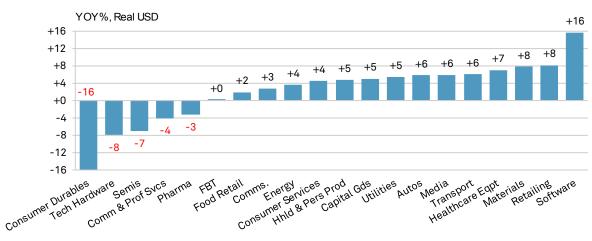
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Only includes companies for which an S&P Capital IQ consensus estimate is available. Shows top 20 based on USD value of initial forecast.

IT hardware spending is in a sharp down cycle...

This downturn in IT hardware capex is apparent in our estimates of global capex growth by industry group (see chart 20), a picture reinforced by revision trends, which show two-thirds of the largest capex spenders in the sector seeing 2019 capex estimates cut in the past six months (see chart 21). 5 out of 20 industries are expected to see a fall in capex this year, with consumer durables, business services, and pharmaceuticals joining the two IT hardware industries in cutting investment. In contrast to hardware, software companies are expected to see the biggest improvement in spending this year.

Also interesting is retail's position as the No. 2 industry in terms of prospective capex growth. Despite and because of part of the industry's difficulties and cash flow pressures from digital disruption, it is still having to invest to try and compete. Ominously, the disruptors Amazon.com and Alibaba top the cash ranking of retail capex spending in 2018, and are expected to retain this position through 2021.

Chart 20

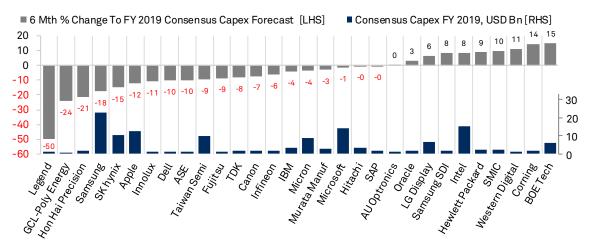




Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Chart 21

Revisions To 2019 Consensus Capex Forecasts In Past Six Months For Major IT Capex Spenders



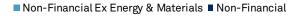
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Only includes companies for which an S&P Capital IQ consensus estimate is available. Shows top 30 based on USD value of initial forecast.

...and there's little sign of commodity capex returning to boom times

In the same way that corporate capex trends in Asia-Pacific ex Japan and North America dominate the global picture, it is still the case that the energy and materials sectors spend the most on capex, despite the collapse in spending that we focused on at great lengths in previous surveys. Chart 22 illustrates how large these sectors remain – together they make up the difference between the two series – even after the global commodity capex collapse from 2012-2016.

Chart 22

Global Non-Financial Corporate Capex



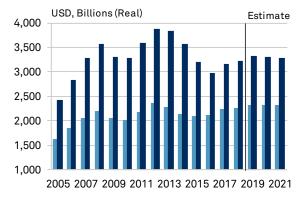
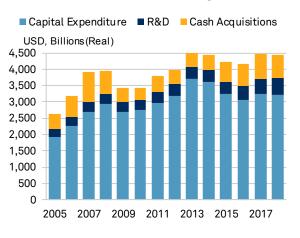


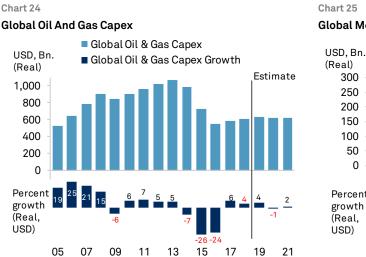
Chart 23

Global Non-Financial Corporate Spending On Future Growth

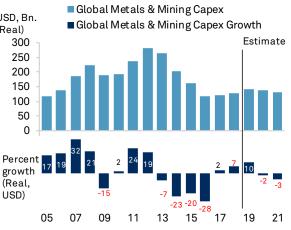


Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Both sectors returned to positive capex growth in 2017, albeit at much reduced rates of growth (see charts 24 and 25). Latest estimates suggest that oil and gas capex will rise 4% in 2019. That improvement is not apparent across all subsectors, with energy equipment and services expected to cut capex sharply for another year. Materials spending is projected to rise 10% in 2019, with the strongest contributions from metals and mining companies who are starting to ramp up investment again.



Global Metals And Mining Capex



Other uses of cash are competing for attention

While a detailed analysis of capex spending does point to specific areas of weakness that are curbing capex growth – the semiconductor cycle, broader U.S. and Asia-Pacific capex caution, and a subdued oil and gas capex recovery – another factor at play is the degree to which capex is being deprioritized in favor of other uses of cash. Capital spending is not the only type of investing for growth. R&D is another form of self-sourced growth and acquisitions an external route. Interestingly, R&D spending by the companies whose capex we are tracking increased 7% in 2018 (see chart 26), versus 2% for capex. As digital disruption intensifies, the dematerialization of growth – a decreasing reliance on physical products – may imply that capex growth cycles will be more subdued. Environmental concerns suggest similar constraints.

The use of acquisitions to effectively buy growth actually declined for Global Capex 2000 companies in 2018 (see chart 27), but two areas that absorbed substantially more cash were rewards to equity investors – share buybacks and dividends. Whatever the motivations for using cash to invest for future growth or to provide returns for investors, it is striking that the relative proportion of cash used for capex versus dividends, buybacks, acquisitions, and R&D was at its lowest (46%) level since 2007 (45%).

Chart 26

Global Non-Financial R&D Spending (YOY%, Real, USD)

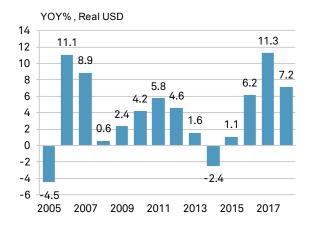
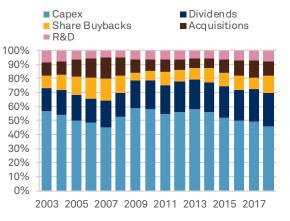


Chart 27

Global Non-Financial Corporates' Uses Of Cash Flow



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Health care is a sector that, while steadily increasing capex, relies far more on R&D and acquisitions to grow (see chart 28). Since 2015, cash acquisitions have become dominant over the other two sources of growth. Communication services is a more traditional capex-intensive sector that also has been steadily increasing capex (see chart 29) but where the balance of spending has shifted in recent years toward R&D and acquisitions.

Chart 28

Global Health Care Spending On Future Growth

Capital Expenditure R&D Cash Acquisitions

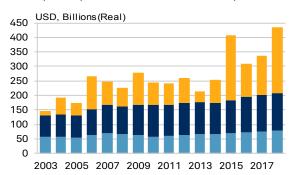
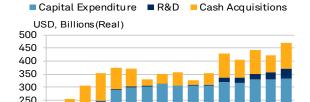
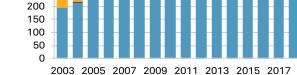


Chart 29 Global Communication Se

Global Communication Services Spending On Future Growth



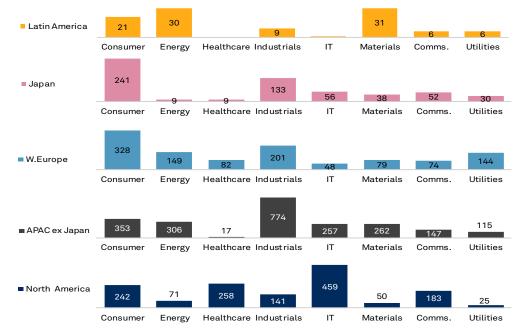


Cash balances remain high, but are unlikely to drive capex growth higher

As we have written about extensively in these reports, an absence of cash has rarely been a constraint to capex in recent years. The companies in our universe collectively hold just under \$6 trillion of cash (see charts 30, 31, and 32) on their balance sheets, 9.7% of total assets. This is down from 2017, but still very high in relation to inflation-adjusted levels seen since 2003. Why companies have not lowered cash balances significantly when interest rates are close to zero remains a mystery, but possible explanations include concerns around fragile banking systems, access to liquidity in a crisis, and a desire to maintain a buffer against the disruption affecting many industries. It remains the case that, in some regions, industries with the most cash are less likely to use it for capex – for example, IT and health care in North America are more focused on R&D and acquisitions. An additional factor here is the prevalence of Asia-Pacific is the region with the largest corporate cash balance. For 2018, companies in Asia-Pacific ex Japan had cash/total assets of 11.5% versus 8.8% for North America and 8.3% for Western Europe.

Chart 30



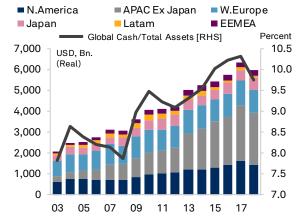


Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000.

Note that size of bars is not equal across regions – bars are scaled to show largest holdings of cash by industry per region.

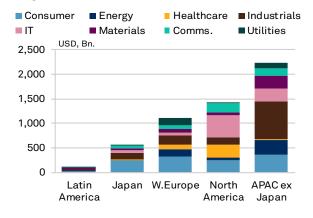
Chart 31

Global Non-Financial Corporate Cash And Cash / Total Assets



Global Non-Financial Corporate Cash By Region And Sector – FY 2018

Chart 32



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. All figures are inflation-adjusted to 2018 prices.

S&P Global Ratings

U.K. capex and Brexit – good news, bad news

Finally, we come to Brexit. To address the question of whether and how U.K. investment trends are being affected by the decision to leave the EU and the ongoing uncertainty as to the manner of leaving, we have constructed an additional capex universe of all U.K. non-financial companies with current capex data available on S&P Capital IQ. This provides a sample of 950 U.K. companies and, as with the main survey, forecasts are taken from a combination of company guidance, S&P Global Ratings analysts' forecasts, and S&P Capital IQ market consensus estimates. There are limitations to this in terms of assessing the impact of Brexit on capex: it doesn't include non-U.K. companies who in some cases spend significant capex in the U.K. and may be more reluctant to invest amid uncertainty. Also, many of the U.K. companies included will spend a significant proportion of their capex overseas, reflecting their multinational status. Nevertheless, this universe gives a detailed barometer of U.K. PLC and its investment intentions.

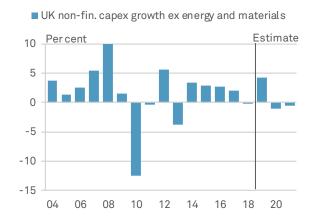
U.K. corporate capex growth – excluding energy and materials - was marginally down in 2018 (-0.3%), the first annual decline since 2013 (see chart 33). Between 2014 and 2017, real growth averaged 2.7%, so last year's decline did represent a notable drop from even the modest real growth rates seen before then. However, current estimates for 2019 are for capex to increase by 4.2%, which if delivered would be the best growth rate since 2012. Is this likely?

The positive case is that many of the bigger spenders are U.K. multinationals whose capex intentions are more likely to be determined by global economic trends, where our base case suggests 2019 growth will remain supportive. There are also domestically focused companies who are not particularly exposed to European trade, who are likely to sustain investment plans barring a severe U.K. recession, which again is not our base case. The negative case would be that these forecasts are predicated on a world where the U.K. had already left the EU via a negotiated treaty and that continuing delays, uncertainty, or even a nodeal exit in October would lead to a significant reversal. Chart 34 also shows how 12-month forward consensus forecasts have seen a modest decline since the start of the year, reflecting the travails of the May government. It is fair to say that the healthy bounce back suggested by current forecasts is an indicator of suppressed capex needs that could emerge forcefully once the U.K. has ended this period of uncertainty and exited the EU.

Chart 33

Chart 34







UK Ex Energy and Mtls Monthly 12m Fwd

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

Universe is 950 U.K. companies with 2018 capex data available on S&P Capital IQ.

Revision trends are unweighted indices of monthly local-currency consensus capex forecast changes.

The main focus of discussion has excluded energy and materials trends because this provides a better barometer of U.K. trends given that most energy-related investment by U.K. companies is non-domestic now that North Sea oil and gas production is declining. As is the case globally, U.K. energy and materials companies represent a significant proportion of total U.K. corporate capex. Charts 35 and 36 show inflation-adjusted level values for capex and the growth rates with and without energy and materials. The positive picture for 2019 is echoed in the overall total, the main difference being the sustained contraction from 2013-2017, in line with commodity trends globally.

Global Corporate Capital Expenditure Survey 2019

Chart 35

U.K. Non-Financial Corporate Capex

UK non-financial capex

UK non-fin. Capex ex energy and materials

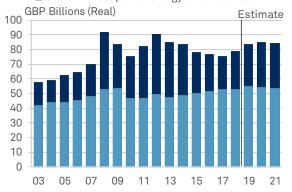
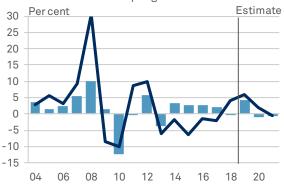


Chart 36

U.K. Non-Financial Corporate Capex Growth



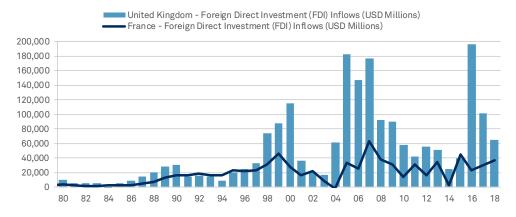


Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is 950 U.K. companies with 2018 capex data available on S&P Capital IQ.

A final piece of the jigsaw is the recently published United Nations Conference on Trade and Development (UNCTAD) data on global Foreign Direct Investment (FDI) flows, which provides a measure of external investment into the U.K. The data have been revised (favorably from a U.K. perspective) since last year, and show U.K. ranking No. 6 as a host economy in terms of 2018 inflows, slipping from No. 4 in 2017. Inflows have been declining since their 2016 peak, but 2018's \$64.4 billion inflow was still higher than any single year between 2010 and 2015 (see chart 37). The chart also shows FDI inflows for France, a useful peer comparison, and suggests that the U.K. has, to date, maintained its position as a leading destination for FDI. Where the data are less positive is in greenfield investment – establishment of new operations by foreign firms. Analysis by fDi Markets, which is owned by the FT and used by UNCTAD, shows U.K. greenfield investment dropping by 30% in the three years to the first quarter of 2019.

Chart 37

Foreign Direct Investment Inflows 1980-2018 – U.K. And France



Source: UNCTAD, *World Investment Report 2019* (https://unctad.org/en/PublicationsLibrary/wir2019_en.pdf). FDI estimations are based primarily on quarterly FDI data derived from the (extended) directional principle, though there are some countries for which the asset/liability data are used for estimation.

Related Research

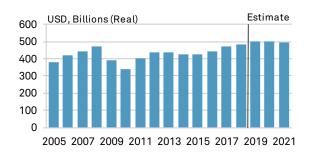
- Ready For Takeoff Global Corporate Capex Survey 2017, July 31, 2017
- Global Capex: Where Are We Now? March 17, 2016
- Global Corporate Capital Expenditure Survey 2015, Aug. 3, 2015
- Global Corporate Capital Expenditure Survey 2014, June 30, 2014
- Global Corporate Capital Expenditure Survey 2013, July 10, 2013
- Cash, Caution and Capex Why a Trillion Euro Cash Pile Is Unlikely To Drive A European Capex Boom, Feb. 5, 2013

S&P Global Ratings

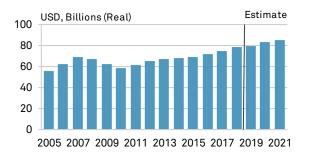
Global Capex By Sector

Chart 38

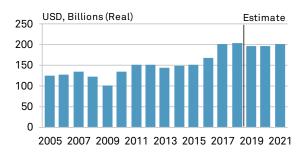
a) Global Consumer Products Capex



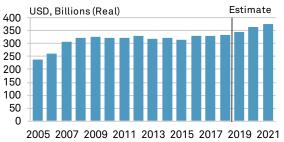
c) Global Healthcare Capex



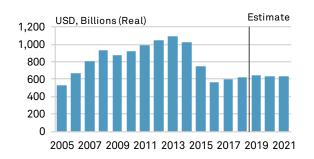
e) Global Information Technology Capex



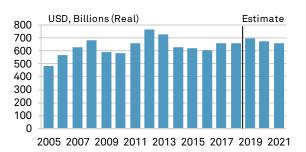
g) Global Communications Services Capex



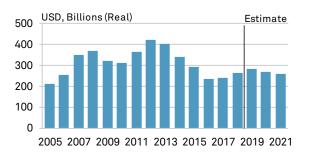
b) Global Energy Capex



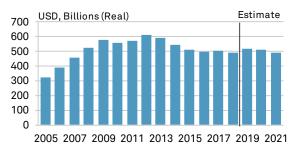
d) Global Industrials Capex



f) Global Materials Capex



h) Global Utilities Capex



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. All figures are inflation-adjusted to 2018 prices.

The Top-60 Global Capex Spenders

The table below shows the top-60 global non-financial capex spenders contained in our universe, who together invested \$936 billion over the past year. They are ranked in descending order by their nominal U.S. dollar spending for the past full fiscal year.

Energy remains the most heavily represented sector with 18 companies, although much reduced from the 27 that made this list in 2015. Communications (formerly telecoms) remains the No. 2.

Asian-Pacific is the most heavily represented region, with 22 companies versus 18 from North America and 14 from Western Europe. It also provide the largest individual spender for five out of the six sectors represented here (China Mobile, Toyota Motor, CNPC, Samsung Electronics, and State Grid China). Only in industrials (Deutsche Bahn) is a company outside of Asia-Pacific the largest spender.

On an individual country basis, the U.S. still has the largest number of capex heavy-hitters (18), but China's growing prominence means that it provides 12 of the list, including the two biggest individual spenders.

Table 2

Top-60 Non-Financial Capex Spenders – Global

Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
State Grid China	China	Utilities	57.5	NTT	Japan	Communications	12.3
CNPC	China	Energy	45.2	China Telecom	China	Communications	12.2
Saudi Arabian Oil	Saudi Arabia	Energy	35.1	Microsoft	U.S.	I.T.	11.6
Toyota Motor	Japan	Consumer	33.9	Equinor	Norway	Energy	11.4
China Mobile	Hong Kong	Communications	28.0	Reliance Industries	India	Energy	11.4
Samsung Electronics	South Korea	I.T.	26.5	Petrobras	Brazil	Energy	11.4
Gazprom	Russia	Energy	25.6	PETRONAS	Malaysia	Energy	11.3
General Motors	U.S.	Consumer	25.5	Korea Electric Power	South Korea	Utilities	11.0
Alphabet (Google)	U.S.	Communications	25.1	Network Rail	U.K.	Industrials	11.0
Royal Dutch Shell	U.K./Neth.	Energy	23.0	Deutsche Telekom	Germany	Communications	10.5
AT&T Inc.	U.S.	Communications	21.3	HNA Group	China	Industrials	10.4
Exxon Mobil	U.S.	Energy	19.6	Taiwan Semiconductor	Taiwan	I.T.	10.3
Electricité de France	France	Utilities	18.5	Comcast	U.S.	Communications	10.2
Kuwait Petroleum	Kuwait	Energy	17.8	Walmart	U.S.	Consumer	10.1
Nissan Motor	Japan	Consumer	17.2	Eni	Italy	Energy	10.1
TOTAL	France	Energy	17.1	Telefónica	Spain	Communications	10.0
BP	U.K.	Energy	16.7	SoftBank	Japan	Communications	10.0
Verizon Communications	U.S.	Communications	16.7	Duke Energy	U.S.	Utilities	9.4
Volkswagen	Germany	Consumer	15.7	Charter Communications	U.S.	Communications	9.1
Intel	U.S.	I.T.	15.2	BMW	Germany	Consumer	8.9
China Southern Power Grid	China	Utilities	14.6	Micron Technology	U.S.	I.T.	8.9
SK hynix	South Korea	I.T.	14.4	Russian Railways	Russia	Industrials	8.9
Facebook	U.S.	Communications	13.9	SPIC	China	Utilities	8.8
Chevron	U.S.	Energy	13.8	China Energy Investment	China	Energy	8.8
Rosneft Oil	Russia	Energy	13.5	Orange	France	Communications	8.7
Amazon.com	U.S.	Consumer	13.4	CNOOC	China	Energy	8.7
Apple	U.S.	I.T.	13.3	Daimler	Germany	Consumer	8.6
SinoPec	China	Energy	13.0	POWERCHINA	China	Industrials	8.6
NextEra Energy	U.S.	Utilities	13.0	China Unicom	China	Communications	8.3
Deutsche Bahn	Germany	Industrials	12.9	The Southern Company	U.S.	Utilities	8.0

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

Asia-Pacific Ex Japan

The regional outlook is gloomy with spending projected to fall 1.0% in 2019. IT plays a big part with significant capex cuts from the likes of Samsung and Taiwan Semi in response to memory chip overcapacity. The malaise is wider though with five out of eight sectors projecting falls.

Table 3

Top-20 Non-Financial Capex Spenders – Asia-Pacific Ex Japan

Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
State Grid China	China	Utilities	57.5	Korea Electric Power	South Korea	Utilities	11.0
CNPC	China	Energy	45.2	HNA Group	China	Industrials	10.4
China Mobile	Hong Kong	Communications	28.0	Taiwan Semiconductor	Taiwan	I.T.	10.3
Samsung Electronics	South Korea	I.T.	26.5	SPIC	China	Utilities	8.8
China Southern Power Grid	China	Utilities	14.6	China Energy Investment	China	Energy	8.8
SK hynix	South Korea	I.T.	14.4	CNOOC	China	Energy	8.7
SinoPec	China	Energy	13.0	POWERCHINA	China	Industrials	8.6
China Telecom	China	Communications	12.2	China Unicom	China	Communications	8.3
Reliance Industries	India	Energy	11.4	BOE Technology	China	I.T.	7.9
PETRONAS	Malaysia	Energy	11.3	LG Display	South Korea	I.T.	7.1

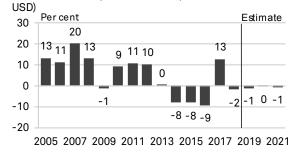
Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

Asia-Pacific Ex Japan – Capex Outlook

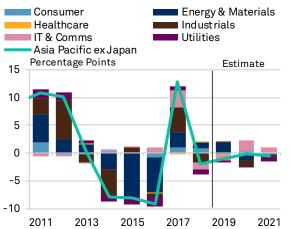
Chart 39

A) Non-Financial Corporate Capex Growth

Asia-Pacific Ex Japan Non-Fin. Capex Growth (YOY%, Real,



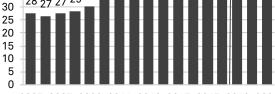




B) Share Of Global Corporate Capex

Asia Pacific Ex Japan - Share of Global Corporate Capex





2005 2007 2009 2011 2013 2015 2017 2019 2021



D) YOY Change In 12m Forward Consensus Capex Forecast

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Consensus revisions are unweighted local currency.

Japan

2018's capex upturn is expected to persist this year with growth of 7.4%. Notable contributions include the largest auto OEMs who are continuing to increase spending steadily. The biggest positive sector contribution comes from energy and materials where capex is rising sharply.

Table 4

Top-20 Non-Financial Capex Spenders – Japan

Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
Toyota Motor	Japan	Consumer	33.9	Panasonic	Japan	Consumer	3.7
Nissan Motor	Japan	Consumer	17.2	KDDI	Japan	Communications	3.4
NTT	Japan	Communications	12.3	Kyushu Electric Power	Japan	Utilities	3.3
SoftBank	Japan	Communications	10.0	Hitachi	Japan	I.T.	3.3
East Japan Railway	Japan	Industrials	5.4	DENSO	Japan	Consumer	3.3
Tokyo Electric Power	Japan	Utilities	5.3	Chubu Electric Power	Japan	Utilities	3.1
Aeon	Japan	Consumer	4.4	Murata Manufacturing	Japan	I.T.	2.9
Honda Motor	Japan	Consumer	3.9	Tohoku Electric Power	Japan	Utilities	2.7
Nippon Steel	Japan	Materials	3.8	Central Japan Railway	Japan	Industrials	2.6
Kansai Electric Power	Japan	Utilities	3.7	Mitsubishi	Japan	Industrials	2.6

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

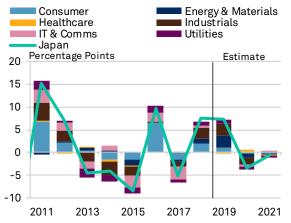
Japan – Capex Outlook

Chart 40

A) Non-Financial Corporate Capex Growth

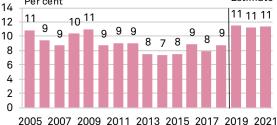




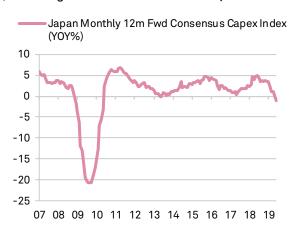


B) Share Of Global Corporate Capex

Japan - Share of Global Corporate Capex (%)
Per cent
Estimate



D) YOY Change In 12m Forward Consensus Capex Forecast



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000 Consensus revisions are unweighted local currency.

Latin America

After years of decline, the region is expected to see a strong capex surge in 2019 with growth of 23%. While led by a big upturn in energy and materials spending (e.g. Petrobras, Vale), all sectors in our universe are forecast to increase spending. The recovery is expected to continue to 2021.

Table 5

Top-20 Non-Financial Capex Spenders - Latin America

Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
Petrobras	Brazil	Energy	11.4	Norte Energia	Brazil	Utilities	1.2
América Móvil	Mexico	Communications	7.3	EPM	Colombia	Utilities	1.1
Petróleos Mexicanos	Mexico	Energy	4.8	FEMSA	Mexico	Consumer	1.1
CODELCO	Chile	Materials	3.9	AntarChile	Chile	Industrials	1.1
Vale	Brazil	Materials	3.6	Cablevisión	Argentina	Communications	1.1
Ecopetrol	Colombia	Energy	2.6	Telecom Argentina	Argentina	Communications	1.1
YPF	Argentina	Energy	2.3	Peñoles	Mexico	Materials	1.0
Telefônica Brasil	Brazil	Communications	2.2	Televisa	Mexico	Communications	0.9
Grupo México	Mexico	Materials	1.7	Raízen	Brazil	Consumer	0.9
Nuevo Sur	Argentina	Industrials	1.4	Alfa	Mexico	Industrials	0.8

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

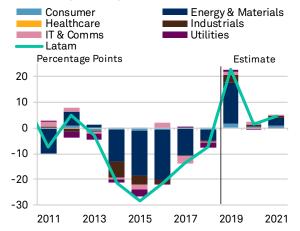
Latin America – Capex Outlook

Chart 41

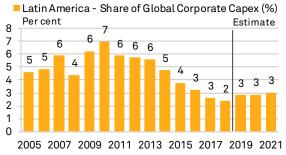
A) Non-Financial Corporate Capex Growth



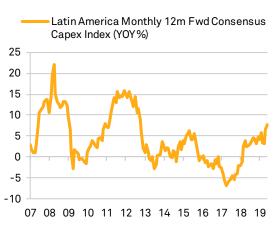




B) Share Of Global Corporate Capex



D) YOY Change In 12m Forward Consensus Capex Forecast



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Consensus revisions are unweighted local-currency.

North America

After a strong 2018, the North American capex expansion is running out of steam with only 2.1% expansion expected this year. Utilities are expected to raise capex substantially but most sectors are seeing spending growth slow while energy and materials are likely to cut aggregate spending.

Table 6

Top-20 Non-Financial Capex Spenders - North America

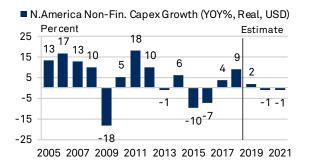
Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
General Motors	U.S.	Consumer	25.5	NextEra Energy	U.S.	Utilities	13.0
Alphabet (Google)	U.S.	Communications	25.1	Microsoft	U.S.	I.T.	11.6
AT&T	U.S.	Communications	21.3	Comcast	U.S.	Communications	10.2
Exxon Mobil	U.S.	Energy	19.6	Walmart	U.S.	Consumer	10.1
Verizon Communications	U.S.	Communications	16.7	Duke Energy	U.S.	Utilities	9.4
Intel	U.S.	I.T.	15.2	Charter Communications	U.S.	Communications	9.1
Facebook	U.S.	Communications	13.9	Micron Technology	U.S.	I.T.	8.9
Chevron	U.S.	Energy	13.8	Southern	U.S.	Utilities	8.0
Amazon.com	U.S.	Consumer	13.4	Ford Motor	U.S.	Consumer	7.8
Apple	U.S.	I.T.	13.3	Exelon	U.S.	Utilities	7.7

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

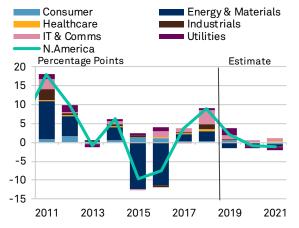
North America – Capex Outlook

Chart 42

A) Non-Financial Corporate Capex Growth

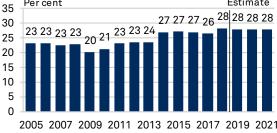






B) Share Of Global Corporate Capex

North America - Share of Global Corporate Capex (%)
Per cent
Estimate



North America Monthly 12m Fwd Consensus Capex Index (YOY%)

D) YOY Change In 12m Forward Consensus Capex Forecast



Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Consensus revisions are unweighted local-currency.

Western Europe

Europe is expected to see a third consecutive year of capex growth with spending up 4.3% in 2019. All sectors bar communication services are expected to raise capex modestly. Of the biggest spenders, Volkswagen, BP, Equinor, and DT have a meaningful positive impact on growth.

Table 7

Top-20 Non-Financial Capex Spenders - Western Europe

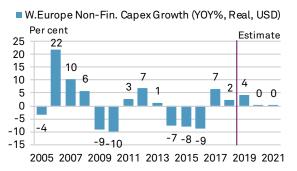
Company	Country	Sector	Capex FY18 (USD Billion)	Company	Country	Sector	Capex FY18 (USD Billion)
Royal Dutch Shell	U.K./Neth.	Energy	23.0	Telefónica	Spain	Communications	10.0
Electricité de France	France	Utilities	18.5	BMW	Germany	Consumer	8.9
TOTAL	France	Energy	17.1	Orange	France	Communications	8.7
BP	U.K.	Energy	16.7	Daimler	Germany	Consumer	8.6
Volkswagen	Germany	Consumer	15.7	Enel	Italy	Utilities	7.9
Deutsche Bahn	Germany	Industrials	12.9	ENGIE	France	Utilities	7.1
Equinor	Norway	Energy	11.4	Iberdrola	Spain	Utilities	6.2
Network Rail	U.K.	Industrials	11.0	Vodafone	U.K.	Communications	6.1
Deutsche Telekom	Germany	Communications	10.5	Ferrovie dello Stato Italian	e Italy	Industrials	6.0
Eni	Italy	Energy	10.1	AerCap	Ireland	Industrials	5.9

Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Shows data for last complete fiscal year.

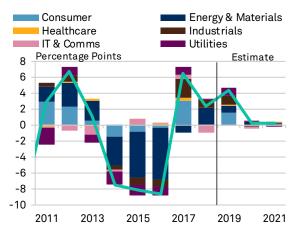
Western Europe - Capex Outlook

Chart 43

A) Non-Financial Corporate Capex Growth



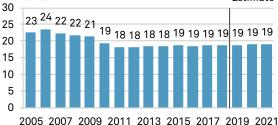




Source: S&P Global Market Intelligence, S&P Global Ratings. Universe is Global Capex 2000. Consensus revisions are unweighted local currency.

B) Share Of Global Corporate Capex

Western Europe - Share of Global Corporate Capex (%)
Per cent
Estimate



D) YOY Change In 12m Forward Consensus Capex Forecast

Western Europe Monthly 12m Fwd Consensus Capex Index (YOY%)

Appendix: Methodology

Our survey assesses capex trends for a rolling universe of the 2,000 companies that spend the most globally. It covers public and private companies, rated and unrated, and extends the analysis into the subsidiaries that often account for most spending in some regions. All financial data is sourced from S&P Capital IQ and is adjusted into real terms to allow for meaningful long-term and cross-country analysis.

Data sources Financial data All financial data used in this report has been derived from S&P Capital IQ. This includes financial statement line items, country and sector identifiers, ratings data and currency adjustments. Growth rates, ratios and real-terms adjustment have then been calculated by S&P Global Ratings.

Economic data	Inflation data comes from the IMF World Economic Outlook (WEO) database
	via Thomson Reuters Datastream. Purchasing Power Parity (PPP)
	adjustments, where used, are also from the IMF's WEO.
	adjustments, where used, are also from the IMF'S WEU.

Universe selection

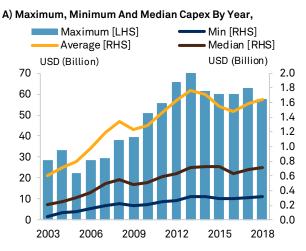
Universe selection				
Ranking	The selected universe represents – for each fiscal year – the top 2,000 ranking companies globally in terms of U.S. dollar-denominated capex. Currency conversion is performed on a historical basis (i.e., using the exchange rate applicable at the date of the financial statement).			
Item definition	Capex is defined as Capital IQ standardized capex taken from the cash flow statement.			
Size of the universe	We have chosen a constant universe of 2,000 with a view to ensuring breadth of geographic coverage and a deep enough coverage to capture meaningful global, country and industry trends. Chart 44A shows the maximum, minimum, and median capex undertaken by universe constituents between 2003 and 2018.			
Global coverage	A universe of this size also ensures broad and representative geographic coverage. Chart 44B shows the proportion of companies headquartered in each region for the index in 2018. North America and Asia-Pacific are the dominant regions by numbers of companies, followed by Europe. But there are also meaningful numbers of companies representing Latin America, Emerging Europe, the Middle East, and Africa too.			
Weighting	All figures are aggregated on a summed basis (rather than being equally- weighted or averages). The biggest capex spenders will have the most bearing on overall growth rates. Chart 44C gives an illustration of the cumulative value of capex from the biggest spenders to the smallest in our universe. For example, the top-100 companies account for 37% of total capex and the top 500 account for 70%.			
Type of company	The selection universe includes both publically listed and private non- financial companies. It also covers both operating companies and subsidiaries. Including subsidiaries raises the risk of double-counting, as dual listings often refer to the same financial data. However, there are a significant number of large companies where the overall operating or holding company provides no financial information, with the capex recorded at the subsidiary level. There are many examples of this in China. Consequently we have included both types of company and have taken care to exclude duplicating operations on a case-by-case basis.			

Calculations

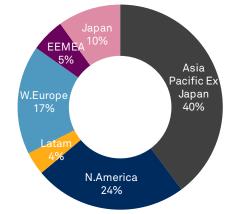
Real-terms adjustment	When looking at longer-term trends, particularly including economies where relatively high inflation rates are prevalent, it is important to express values in real terms. We have done this by restating all individual corporate financial items in present-value terms using the IMF's annual inflation series for the country of incorporation. The difference this makes to annual growth rates is illustrated in chart 44D.
Forecasts	Forward-looking estimates have been constructed from a combination of company guidance, S&P Global Ratings analysts' forecasts and the S&P Capital IQ consensus from sell-side analysts. If company guidance for capex been issued or reiterated since March, we have used that in the projection; otherwise we have used S&P Global Ratings analysts' forecasts where available and the S&P Capital IQ market consensus otherwise.

Global Capex 2000 Constituent Analysis

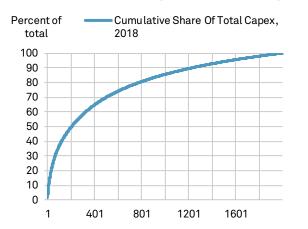
Chart 44



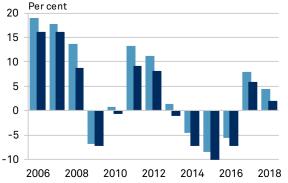




C) Cumulative Share Of Total Capex Of Constituent Companies D) Real And Nominal Global Non-Fin. Corporate Capex Growth



Non-Financial Capex Growth (YOY%, Nominal, USD) ■ Non-Financial Capex Growth (YOY%, Real, USD)



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