**Equity Research** 

27 September 2018

### #ustaxpolicy

U.S. Equity Strategy

# Tax law driven changes in corporate cash spending patterns

We show that companies have used newly accessible overseas cash and tax savings resulting from the 2017 Tax Cuts and Jobs Act mainly to pay off their existing debt and partially to return capital to shareholders via buybacks. Although capex has increased marginally, it is not being driven by changes in the tax code. Since 1990, companies have shifted their use of cash from capex to buybacks. Rather than pessimism about future growth, in our opinion, this trend reflects a switch to a more "asset-lite" business model.

We estimate that S&P 500 ex-Financials now have direct access to \$1.4T in unrepatriated earnings but have only repatriated ~\$500B during 1H18. By contrast, the savings from the corporate tax cut are more modest, at \$72B for 2018.

We find that since 1990, normalized by cash flow from operations (CFO), companies have replaced capex with buybacks. In order to precisely analyze changes in corporate cash spending, we re-aggregate the typical Statement of Cash Flows into three Sources and five Uses for Cash across the S&P 500 ex-financials and each sector. While it is tempting to attribute this trend to pessimism about future growth, we think an equally strong driver is that, in aggregate, U.S. companies have become more "asset-lite" by shifting from manufacturing to services and by outsourcing to non-U.S. suppliers.

During 1H2018, there has been a remarkable drop in debt issuance and sharp drawdown of cash accompanied by a moderate increase in CFO, buybacks, and capex. We find that companies with the highest levels of overseas cash reduced their debt issuance and increased buybacks. Buybacks were also elevated for companies with larger tax cut savings. Thus, companies that could not previously access their overseas cash had issued debt and are now in effect returning cash to both debt and equity stakeholders. Given the substantial amount of un-repatriated cash, we expect the trends during the first half to continue for the rest of the year.

In contrast, we find no relationship between the increases in capex and overseas cash holdings or tax cut savings. This dovetails with the idea that the decline in capex was not driven by lack of funds but by a fundamental shift in business models; thus, simply an increased availability of cash is unlikely to spur further capex. While the shift to services is unlikely to be reversed by policy decisions, to the extent that the decline in capex was a result of outsourcing to non-U.S. companies, higher trade barriers could result in more capex. While this would be negative for companies doing the spending (since this would be more expensive), it would benefit the companies that actually help build the fixed assets.

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#### **MACRO STRATEGY**

**U.S. Equity Strategy** 

#### **U.S. Equity Strategy**

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#### Introduction

In this note, we examine the impact of the Tax Cuts & Jobs Act of 2017 on corporate cash spending patterns. We show that companies have used newly accessible un-repatriated earnings and tax savings to mainly pay off their existing debt and partially return capital to shareholders via buybacks. Although capex has increased marginally it is not being driven by changes in the tax code. We expect these trends to continue for the rest of year although escalating trade war could lead to higher capex.

We estimate that S&P 500 ex-Financials now have direct access to \$1.4T in un-repatriated earnings but have only repatriated \$500B during 1H18. By contrast, the savings from the corporate tax cut are more modest at \$72B for 2018.

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During 1H2018, there has been a sharp drop in debt issuance and drawdown of cash accompanied by a moderate increase in CFO, buybacks, and capex. We find that companies with the highest levels of overseas cash reduced debt issuance and increased buybacks. Buybacks were also elevated for companies with larger tax cut savings. Thus companies who could not previously access their overseas cash had issued debt and are now in effect returning cash to both debt and equity stakeholders.

In contrast, we find no relationship between the increases in capex on overseas cash holdings or tax cut savings. This dovetails with the idea that the decline in capex was not driven by lack of funds but a fundamental shift in business models. While the shift to Services is unlikely to be reversed by policy decisions, to the extent that the decline in capex was a result of outsourcing to non-U.S. companies, higher trade barriers could result in more capex. While this would be negative for companies doing the capex (since this would be more expensive) it would be beneficial for companies who actually help build the fixed assets.

### Impact of the U.S. Tax Cuts and Jobs Act of 2017

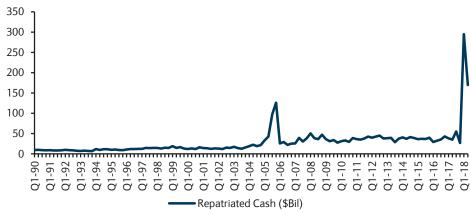
The 2017 Tax Cuts and Jobs Act provided U.S. companies with two sources of additional accessible cash: 1) higher operating cash flow through lower corporate tax rates and 2) access to overseas cash with a one-time repatriation tax rate of 15.5%.

Under the old U.S. worldwide taxation system, companies paid U.S. taxes on repatriated foreign earnings taxed at the difference of U.S. and foreign effective tax rates. This allowed and incentivised multinationals with high foreign earnings to keep a significant portion of those earnings in tax havens either off-balance sheet (in the form of indefinitely reinvested foreign earnings), which they never intend to repatriate, or on-balance sheet as unremitted foreign earnings as deferred tax liabilities (DTL). We estimate the total amount of unrepatriated earnings to be ~\$2.6T for S&P 500 companies based on the companies' 2017 10-K reports. By enacting a one-time deemed repatriation of all deferred foreign profits; the tax reform legislation taxed all such un-repatriated foreign income — 15.5% on liquid securities and 8% on the rest. This means that companies no longer have any incentive to keep cash abroad and are likely to repatriate it.

The key question is how much of these unremitted earnings are in cash/short-term securities versus working capital and long-term assets. Since only a few companies report the amount of foreign earnings in liquid securities, we assume that if the company's total cash and marketable securities are less than all unremitted foreign earnings, then all of that cash is domiciled outside the U.S. and if all unremitted foreign earnings are less than the company's total cash and marketable securities, then only cash in the amount of the unremitted foreign earnings is domiciled outside the U.S. Note that this is an upper bound on cash available since our default assumption is that all the un-repatriated earnings are in cash. Based on this approximation, we estimate such total cash and marketable securities available at the end of 2017 for repatriation to the U.S. to be ~\$1.7T for S&P 500 companies (\$1.4T for ex-Financials). Note that ~50% of this is in the Technology sector.

Based on Bureau of Economic Analysis (BEA) balance of payments data, U.S. corporations repatriated  $\sim$ \$300B and  $\sim$ \$179B in the first two quarters of 2018 (Figure 1). Thus, only a third of the overseas cash has been repatriated so far.

FIGURE 1
U.S. companies have repatriated ~\$500B in cash over the last two quarters



Source: Haver Analytics, Bureau of Economic Analysis

To estimate the impact of the corporate tax reform on operating cash flows, we use our estimated impact of tax reform on net Income of all S&P 500 companies and assume that all gains to net income translate to operating cash flows ("Special Report: Assessing the Impact of US Tax Reform on US Equities," 19 December 2017). Based on this assumption, we estimate that the tax bill would have increased operating cash flow for S&P ex-Financials by \$36B in the first two quarters of 2018 (Figure 2). It should be noted that while the estimated gains from corporate tax reform account for ~40% of increases in operating cash flows (Figure 3), many sectors saw CFO gains beyond the impact of corporate tax reform.

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FIGURE 2
Operating cash flow has risen in nearly all sectors...

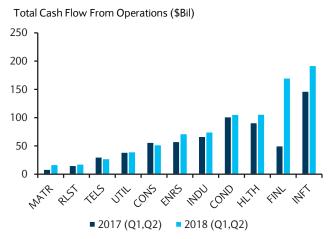
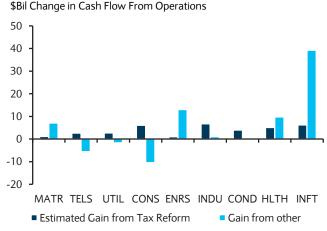


FIGURE 3

...with estimated gains from tax reform driving almost half the increase



Source: Barclays Research, Thomson Reuters

Source: Barclays Research, Thomson Reuters

We next examine the impact of these two developments on corporate cash allocation decisions.

### Tracing the Sources and Uses of Cash: Methodology

In order to precisely map out how corporations are generating and using cash, it is best to use the Statement of Cash Flows, since it reports all the actual cash flows for a company and is not subject to accounting discretion.

The Statement of Cash Flows is usually divided into Cash from Operating, Investing and Financing activities, but for our purpose, it is more convenient to divide it into Sources and Uses of Cash by rearranging and aggregating the line items. We divide the Statement of Cash Flows into three Sources of Cash: 1) Cash Flow from Operations (CFO), 2) Debt Net Issuance, and 3) Equity Issuance, and five Uses of Cash: 1) Net Capex, 2) Buybacks, 3) Dividends, 4) Acquisitions, and 5) Change in Cash. The precise definition of each of these metrics is shown in Figure 4 in terms of the original line items sourced from Compustat. While most of the line items are taken "as is" from the Statement of Cash Flows, there are two items for which we do a significant amount of aggregation: Debt Net Issuance and Cash Change.

Technically, a line item that results in positive (or negative) cash flow should be labelled a Source (or Use) of cash, respectively. However, in many instances it is natural and useful to combine a Source and a Use into a Net line item that is less volatile and hence allows us to glean long-term trends. Of course, a Net line item is not guaranteed to be positive. We label a Net line item as a Source or Use of Cash depending on whether it is positive or negative most of the time historically.

Thus, since the majority of debt issuance is simply a refinancing of retiring debt, it is more convenient to analyze Debt Issuance net of Debt Reduction. Our Debt Net Issuance line-item also includes "Other Investing Activities" which is perhaps un-conventional. "Other Investing Activities", as defined by Compustat, is mostly divestitures of businesses, but also include miscellaneous investing activities. While this is usually a small number, its magnitude spiked during the mid 2000s when several companies (e.g., Sears and Avis) divested their subsidiaries and the associated debt. Including it with Debt Net Issuance makes this series less volatile.

Our Cash Change line item is defined as the sum of the "Change in Cash and Cash Equivalents" and all other short term and long term investments and other miscellaneous line items. We classify this as a Use of Cash since this tends to be positive on average but clearly it is possible that it can become negative if companies drawn down their cash or investments.

We emphasize that by construction the total Sources and Uses for a company are equal in any given quarter. This allows us to clearly examine how companies are generating and using cash.

We next construct aggregate line items for S&P 500 ex-Financials stocks and the individual sectors (except for Financials) by aggregating the reported line items for the stocks in the corresponding universe during each calendar quarter. In order to account for changes in the constituents of the universe, we construct per index-share line items and then multiply by the corresponding index divisor.

FIGURE 4

Definition of Sources & Uses of Cash

Line Item	Definition
Sources of Cash	
Cash from Operations (CFO)	Operating Activities Net Cash Flow
Debt Net Issuance	Issuance Long-Term Debt - Reduction Long-Term Debt + Changes in Current Debt + Other Investing Activities
Equity Issuance	Sale of Common and Preferred Stock
Uses of Cash	
Cash Change	Increase in Investments - Sale of Investments + Increase In Cash and Cash Equivalents - Change In Short-Term Investments - Exchange Rate Effect - Other Financing Activities
Buybacks	Purchase of Common and Preferred Stock
Net Capex	Capital Expenditures - Sale of Property
Acqusitions	Acquisitions
Dividends	Cash Dividends

Source: Barclays Research, Compustat

Figure 5 illustrates our calculated values for each line item for the last six quarters for S&P ex-Financials. We clearly see that there have been substantial changes in several of the highlighted metrics during the first half of 2018. In particular, among the Sources of Cash, the CFO has increased substantially but the most significant development is the large drop in debt net issuance. Similarly, among the Uses of Cash, while buybacks and net capex have increased, the most significant change is the significant draw-down in cash.

FIGURE 5

#### SPX exFIN Sources and Uses of Cash

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018H1 - 2017H1
Sources of Cash							
CFO	272	328	372	382	309	380	89
Debt Net Issuance	99	128	53	70	57	-23	-192
Equity Issuance	14	17	17	11	18	17	5
Uses of Cash							
Cash Change	28	85	71	44	-50	-70	-234
Buybacks	103	86	93	98	146	150	108
Net Capex	121	127	136	158	145	147	44
Acqusitions	51	87	50	72	54	58	-26
Dividends	83	87	91	90	89	90	9

Source: Barclays Research, Thomson Reuters

Before analyzing these short term changes in detail, we first examine their long term trend. This allows us to put the recent changes in perspective.

### Sources and Uses of Cash: A long-term perspective

In this section, we focus on the long-term trends in the Sources and Uses of Cash. To smooth the series, we first make two adjustments:

Removal of extraordinary episodes: First, there are large fluctuations for a few quarters
that are driven by the idiosyncratic corporate actions of a single corporation. In order to
focus on broader trends, we treat these episodes as extraordinary and simply drop the
contributions of these companies for those particular quarters. Figure 6 lists these
episodes with a brief description of the corresponding corporate action.

FIGURE 6

#### Extraordinary corporate actions which we remove items

Date	Ticker	Reason for Removal: Corporate Action
2018Q2	Т	Use of ~\$40Bn cash to fund single acqusition of TWX
2013Q3	VZ	Debt Issue of ~\$50Bn to fund acqusition of Vodafone's indreict stakes in Verizon
2006O4 & 2006O3	GM	Fluctuations in Debt due to GMAC

Source: Barclays Research, Thomson Reuters, Bloomberg

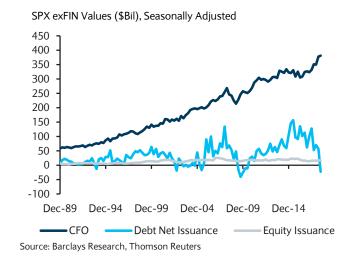
Seasonality adjustment: Second, there is a strong seasonality component, especially in
the CFO and Cash Change and Net Capex. Hence we seasonally adjust all the eight
series. The resulting seasonally adjusted Total Sources and Uses are not guaranteed to
equal each other but there are no systematic trends in the error term.

Figure 7 shows the evolution of the three Sources of Cash (CFO, Debt Net Issuance and Equity issuance) since 1990. Figure 8 plots the latter two metrics as a percentage of CFO.

 We see that the dominant source of cash is of course the Cash Flow from Operations (CFO) and its dollar value as steadily increased over this time period as the companies have become larger in size.

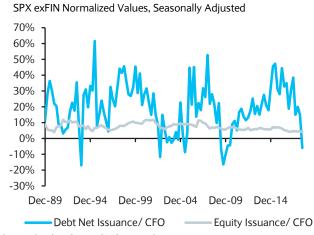
#### FIGURE 7

#### Net Cash from Operations is the dominant source of cash



#### FIGURE 8

As a percentage of CFO, Debt Net Issuance is quite cyclical; the recent drop is unusual for an expansionary period

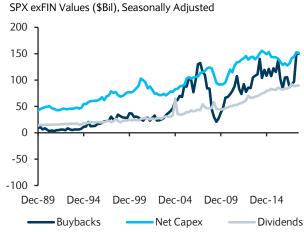


Source: Barclays Research, Thomson Reuters

- Equity Issuance as a percentage of CFO has remained fairly consistent (median value of 6.6%) but has dipped to below 5% post the 2008 crisis.
- Debt Net Issuance is quite cyclical and even goes negative during recessionary periods.
   Although its dollar value during expansions has steadily increased over time as companies have become larger its normalized value during expansions has stayed fairly constant at around 30%. The drop this year is quite unusual in that it is happening during an expansionary period.

#### FIGURE 9

#### All the Uses of Cash have trended up over time...



Source: Barclays Research, Thomson Reuters Note: Dollar values are calculated by multiplying the Seasonally Adjusted Per Share Values by the Index Divisor

#### FIGURE 10

#### ... There was a sharp drawdown in cash this year

SPX exFIN Values (\$Bil), Seasonally Adjusted

200 150 100 50 0

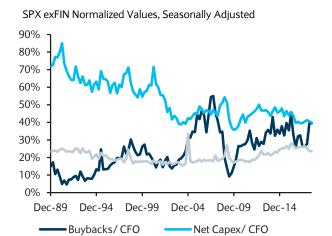
Source: Barclays Research, Thomson Reuters Note: Dollar values are calculated by multiplying the Seasonally Adjusted Per Share Values by the Index Divisor

We next examine the long-term trends in the five uses of cash. To avoid clutter, Figure 9 shows the trends in buybacks, dividends, and net capex and Figure 10 shows acquisitions and cash change.

Given the steady increase in cash flow from operations, all the nominal values of the uses of cash have of course also trended up. In order to get a better sense of their relative contributions, Figure 11 and Figure 12 show the same trends but now normalized by cash flow from operations.

#### FIGURE 11

On a normalized basis, companies have replaced capex with buybacks...

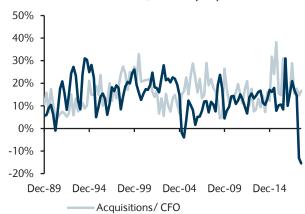


Source: Barclays Research, Thomson Reuters Note: Dollar values are calculated by multiplying the Seasonally Adjusted Per Share Values by the Index Divisor

#### FIGURE 12

...while normalized cash and acquisitions remained range bound over the long-term





Source: Barclays Research, Thomson Reuters

Note: Dollar values are calculated by multiplying the Seasonally Adjusted Per
Share Values by the Index Divisor

We see that normalized dividends, acquisitions, and cash change have remained fairly range bound over this time period. However, over time, and in aggregate, companies have been shifting their usage of CFO from net capex to buybacks. In the early 1990s, capex accounted for ~60% of CFO but this percentage has steadily declined and is now half of the original level. By contrast, buybacks have increased significantly and now equal net capex in magnitude. Normalized buybacks increased significantly after 2000. After dipping significantly during the 2008 crisis, they have rebounded but not to mid-2000 levels. Thus, if we include dividends, corporations are returning the majority of their cash flow to investors.

Corporations are returning the majority of their cash flow to investors.

How pervasive are these trends across sectors? Since the most significant shift occurred after 2000, in Figure 13 we show the median values of the normalized capex and buybacks from 1990-2005 and 2005-Current across sectors. We also show the weight of the CFO for each sector in the S&P 500 ex-FIN index to get a sense of the relative importance of the sector. We see several interesting trends:

- In order of increasing normalized net capex, the more service-oriented sectors such as
  Health Care and Information Technology as might be expected are at the top with
  the least normalized capex. Utilities are at the bottom with the highest normalized capex
  given their capex-intensive business model, preceded by Energy, Telecom and Materials.
- The decline in normalized capex is consistently around 20% across sectors other than for Energy and Utilities.
- The increase in normalized buybacks is not as consistent in magnitude but in the same direction except for Telecoms, in addition to Energy and Utilities.

FIGURE 13

The decrease in normalized capex and increase in buybacks is a cross sector phenomenon

	Net Capex/ CF	0		Buybacks/	CFO		CFO/ SPX e		
Sector	1990 - 2005	2005 - present	Difference	1990 - 2005	2005 - present	Difference	1990 - 2005	2005 - present	Difference
HLTH	37%	17%	-20%	23%	41%	18%	8%	12%	4%
INFT	45%	22%	-23%	28%	42%	14%	13%	21%	8%
CONS	43%	31%	-12%	25%	37%	12%	11%	10%	-1%
INDU	51%	35%	-16%	16%	36%	21%	16%	12%	-4%
COND	63%	44%	-20%	14%	44%	29%	19%	13%	-6%
MATR	71%	51%	-20%	11%	19%	8%	7%	3%	-3%
TELS	75%	58%	-17%	4%	2%	-2%	11%	7%	-4%
ENRS	72%	78%	6%	6%	18%	12%	14%	17%	3%
UTIL	109%	103%	-6%	2%	3%	1%	1%	6%	6%
SPXexFIN	61%	45%	-16%	17%	33%	16%	100%	100%	-

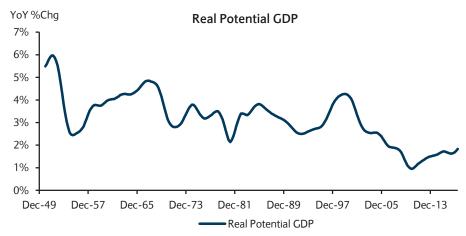
Source: Barclays Research, Thomson Reuters

Note: Data is based on medians of quarterly ratios. Values are seasonally adjusted.

How should we understand this remarkable shift in the use of cash? It is tempting to conclude that companies are perhaps not seeing growth opportunities; i.e., they subscribe to the "secular stagnation" thesis that the decline in U.S. potential GDP is here to stay. Figure 14 shows the Congressional Budget Office's estimate of the potential GDP that has declined quite significantly since the mid-1990s. This has also led to a corresponding decline in trend real rate ("r-star"). If this is the primary driver, it has profound implications for long-term valuations and equity risk premium in general.

However, in our opinion, two other factors are perhaps more important to understanding the decline in normalized capex: 1) a shift of the U.S. economy from manufacturing to services, and 2) the outsourcing of capex to non-U.S. companies.

FIGURE 14
Potential GDP for the U.S. has declined over the past three decades

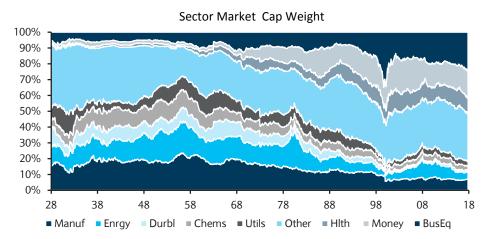


Source: Barclays Research, Bloomberg, Congressional Budget Office

As is well documented, the shift from manufacturing to services for the U.S. economy is part of a long-term trend. Figure 15 shows the relative market capitalization of different sectors over the past 90 years. We see the dramatic increase in the importance of the

Information Technology, Health Care and Financial sectors at the expense of others. We can also see this in Figure 13 by looking at the increase in contribution of the Health Care and Information Technology sectors to overall CFO, which rose from 20% to 32% over this time period. The normalized capex for these sectors is lower than the other more manufacturing-oriented sectors, which should lower the capex needs for the full index.

FIGURE 15
Relative importance of capex-intensive industries has declined over time



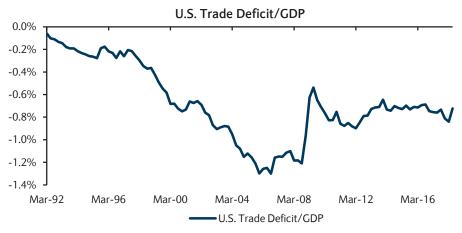
Source: Barclays Research, Kenneth French Database Note: Money = Financials, BusEq = Information Technology

A second broader well-known development has been the increasing use of global supply chains by U.S. companies, which has increased the U.S. trade deficit for the entire economy. Figure 16 plots the overall U.S. trade deficit as a fraction of GDP, and we see that this has increased since the 1990s. This also includes trade flows from foreign subsidiaries of U.S. companies, and hence the trade flows due to outsourcing by U.S. companies to their foreign counterparts is somewhat lower than what we see in the figure.

This outsourcing of production costs to other companies increases overall net income margins but essentially swaps capex for cost of goods sold in the long run. For example, consider a U.S. company that previously owned a factory that was producing components and a second plant that was assembling them into a finished product. Now suppose the company outsources the production of components to a Chinese manufacturer to take advantage of lower manufacturing costs in China and closes its component factory. From an Income Statement perspective, depreciation costs decline but COGS likely increases, as it now includes the cost of sourcing components from the Chinese manufacturer and therefore also includes the Chinese manufacturer's fixed capital costs and profit margins. Assuming the outsourcing is economically sensible, its net income margins go up. However, from a Statement of Cash Flow perspective, the cash flow from operations declines (due to the higher COGS), but the decline in capex leads to higher total cash flow. As a result, the normalized capex declines and the majority of the CFO must now be returned to the shareholders.

Clearly, in this scenario it is not the case that the company sees less potential growth. Rather, it has simply adopted a more "asset-lite" business model. This is true only if the outsourcing is done to a non-U.S. company (or to a non-listed U.S. company), since otherwise the aggregate capex for the entire index will not change.

FIGURE 16
U.S. companies are outsourcing their manufacturing to other countries



Source: Barclays Research, Bloomberg

The shift from manufacturing to services is probably a permanent shift, and is unlikely to be reversed by government policy. However, an escalation of trade war would likely at least partially reverse the outsourcing trend.

### Recent changes in Sources and Uses of Cash

The above graphs clearly show that there were some quite dramatic moves during 2018. The five line items which show dramatic shifts are the Debt Net Issuance and CFO from the Sources side and Net Capex, Buybacks and Cash Change from the Uses side. Equity Issuance, Dividends and Acquisitions have not changed materially. Figure 17 shows the YoY changes for the first two quarters of 2018 and the aggregate numbers for the first half.

From the Sources of Cash perspective, the most significant change is that Debt Net Issuance has turned slightly negative. This is a big change relative to robust debt issuance over the past few years resulting in \$192B drop in 1H2018. It should be noted that the impact on the total debt levels of the SPX ex Financials is marginal (Figure 18).

The CFO also increased by \$89B for 1H2018. Although this is part of an upward trend, there does appear to be some acceleration (Figure 7) that can partially be explained by savings from cuts in the corporate tax. Based on our reading of the tax bill, we estimate that the savings for S&P ex-Financials from the tax cuts are likely to be ~\$72B for 2018, which would amount to ~\$36B for 1H2018 (see *Special Report: Assessing the Impact of US Tax Reform on US Equity*, 12/19/2017). This estimate lines up well with how companies are estimating their taxes so far. The change in effective tax rates implies a savings of \$31B. It is important to note that while the tax savings is a significant fraction of net income, it is much smaller than the change in debt net issuance.

From the Uses of Cash perspective, the most significant change has been the sharp drawdown in cash, which declined by \$234B during 1H2018. Buybacks and capex also increased, but the magnitudes were relatively modest (\$108B and \$44B, respectively).

FIGURE 17

# While buybacks and net capex have risen from a year ago, change in cash & investment has fallen sharply

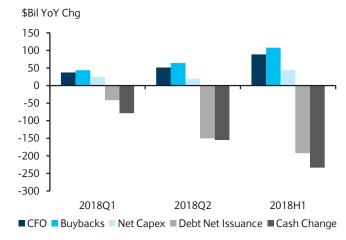


FIGURE 18

While SPX exFIN total debt has decline slightly, it is still very elevated



Source: Barclays Research, Thomson Reuters

Source: Barclays Research, Thomson Reuters

A simple narrative that explains the changes during 2018 is as follows:

- Companies had built up a large amount of un-repatriated earnings overseas since they wanted to avoid paying the higher U.S. tax.
- Instead of using these un-repatriated foreign earnings, companies issued debt in the U.S. market. The resulting cash proceeds were used across different segments of Uses of Cash but primarily this was used for buybacks.
- As part of the tax bill, the un-repatriated earnings were immediately subject to a tax and hence it was no longer necessary to keep it abroad and it became accessible.
- Therefore it was no longer necessary for the companies to refinance part of their existing debt. The newly accessible cash was used to retire the existing debt as it matured. This explains the sharp drawdown in cash during 2018 and the drop in debt issuance.
- The accessible cash and the extra windfall from the cut in corporate tax were also used for buybacks and capex.

While this narrative makes intuitive sense, we next seek to validate it by doing a cross-sectional analysis across sector and single stocks.

Figure 19 shows the change in the raw and normalized values for the five metrics that have been most volatile. We broadly see that while in dollar terms the Technology sector dominates the changes in net capex and cash change, from a normalized perspective changes in other sectors are also quite large. Further, the change in normalized capex and cash change are quite correlated across sectors.

FIGURE 19

While Tech is responsible for a large part in the shifts in Net Debt Issued, Net Capex, and Buybacks, there have been similar patterns among the majority of sectors

2017 H1 vs 2018 H1 Change										Current Values
Sector	Net Capex	Normalized Net Capex	Cash Change	Normalized Cash Change	Debt Net Issuance	Normalized Debt Net Issuance	Buybacks	Normalized Buybacks	CFO	Overseas Cash
INFT	11.2	6.0%	-72.3	-85.4%	-48.6	-60.2%	34.7	27%	22.8	772.5
HLTH	1.4	0.4%	-4.0	-5.0%	-17.6	-36.7%	10.4	14%	7.4	270.2
INDU	1.1	-1.4%	-14.4	-37.5%	-7.3	-22.9%	5.8	11%	3.9	150.0
CONS	-0.5	0.4%	8.8	35.0%	14.3	57.1%	-3.8	-11%	-2.1	83.2
COND	2.9	3.9%	-12.7	-24.9%	-5.5	-11.2%	0.8	0%	2.1	68.1
ENRS	5.6	2.6%	-5.8	-16.9%	-2.6	-9.9%	4.1	10%	7.0	42.6
MATR	1.3	-25.6%	-4.7	-67.9%	-8.7	-199.1%	1.7	8%	4.1	28.7
UTIL	1.5	4.1%	4.1	20.3%	1.0	3.4%	0.2	1%	0.5	5.1
TELS	-2.7	-12.2%	-15.9	-104.5%	-21.0	-138.5%	-0.2	-1%	-1.4	2.3
SPXexFIN	21.8	1.0%	-116.9	-36.4%	-96.1	-32.8%	53.8	12%	44.3	1422.7

Source: Barclays Research, Thomson Reuters

Note: All non-normalized values in \$B. Overseas cash values are based on 2017 overseas cash reported in 10-K filings. Market Cap as of 9/26/2018.

We next do a full cross-sectional analysis across the companies in our universe by examining the dependence of the changes in debt net issuance as a function of cash change and non-repatriated earnings. Since the magnitude of these metrics will of course scale with the size of the companies, we normalize them by LTM sales (we use sales instead of CFO since for some companies the CFO can be negative).

For reference, Figure 20 lists the top 20 companies with the highest levels of normalized overseas cash.

FIGURE 20 Select companies with high normalized overseas cash

High Normalized Overseas Cash Companies, 1H2018 YoY Change (\$Bn)											
Ticker	Sector	МСАР	Overseas Cash	Cash Change	Buy backs	Net Capex	Debt Net Issuance	CFO	Tax Cut Impact		
AAPL	INFT	1065	233	-50.7	29.5	2.21	-26.95	8.73	5.29		
MSFT	INFT	874	133	-15.9	2.3	2.94	-12.20	1.90	1.04		
GE	INDU	99	82	-8.7	-2.7	0.42	-15.21	-0.55	-0.09		
CSCO	INFT	221	70	-14.0	8.5	-0.08	-5.57	-0.66	0.66		
ORCL	INFT	196	55	-11.1	7.9	-0.30	-3.46	0.81	0.67		
QCOM	INFT	105	39	-11.2	0.6	0.10	-12.08	1.67	0.00		
AMGN	HLTH	134	37	-12.6	12.4	-0.01	-0.45	0.12	0.53		
GILD	HLTH	98	32	-3.9	0.8	0.27	-0.10	-2.61	0.78		
КО	CONS	195	22	-13.7	-0.9	-0.24	-13.73	-0.71	0.79		
ABT	HLTH	128	19	3.1	0.0	0.05	-10.19	0.43	0.07		
V	INFT	304	13	2.4	0.5	0.03	0.57	2.52	1.17		
BDX	HLTH	70	10	-12.7	0.0	0.06	-7.88	0.13	-0.32		
EBAY	INFT	33	7	-5.2	1.2	0.03	-3.21	-0.41	0.10		
NTAP	INFT	22	4	-1.1	0.1	-0.21	-1.60	0.31	0.14		
SYMC	INFT	13	4	-1.6	-0.5	0.02	-4.31	0.03	0.03		
XLNX	INFT	20	3	-0.4	0.1	0.02	-0.16	-0.08	0.04		
WAT	HLTH	15	3	-1.4	0.4	0.00	-0.93	-0.07	0.02		
CA	INFT	18	3	0.4	0.1	0.00	-0.82	0.09	0.11		
KLAC	INFT	16	3	-0.3	0.1	0.02	-0.20	0.04	0.09		
VRSN	INFT	19	1	-1.3	0.0	0.00	-1.26	-0.04	0.03		

Source: Barclays Research, Bloomberg, Thomson Reuters

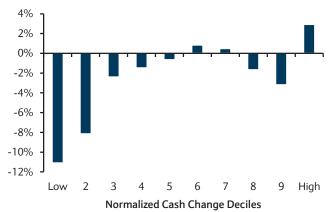
Note: Overseas cash values are based on 2017 overseas cash reported in 10-K filings. Market Cap as of 9/26/2018.

The results of the analysis are shown in Figure 21 and Figure 22. Thus, we see that the companies with high drawdown in cash and the ones with high overseas cash are precisely the ones that are also reducing their debt.

#### FIGURE 21

# Companies with high cash drawdowns are using the cash to retire debt

Average Normalized Debt Net Issuance (1H2018 YoY)

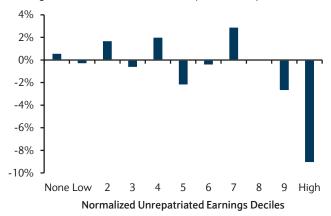


Source: Barclays Research, Thomson Reuters
Note: Deciles are formed across the SPX ex Financials with constituents as of 6/30/2018.

#### FIGURE 22

# Companies with high overseas cash are seeing the highest levels of debt retirement

Average Normalized Debt Net Issuance (1H2018 YoY)



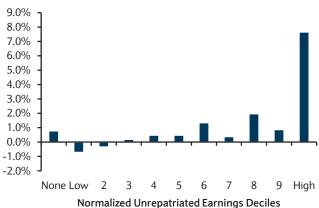
Source: Barclays Research, Thomson Reuters
Note: Overseas cash values are based on 2017 overseas cash reported in the 10-K filings normalized by Sales LTM. Deciles are formed across the SPX ex
Financials with constituents as of 6/30/2018.

In a similar vein, we find that companies with high overseas cash and high benefit from corporate tax reform have been buying back stock at higher rates.

#### FIGURE 23

# Companies with high overseas cash are buying back more stocks...

Average Normalized Buybacks (1H2018 YoY)

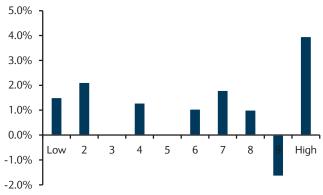


Source: Barclays Research, Thomson Reuters
Note: Overseas cash values are based on 2017 overseas cash reported in the 10K filings normalized by Sales LTM. Deciles are formed across the SPX ex
Financials with constituents as of 6/30/2018.

#### FIGURE 24

# $\ldots$ as are companies that have benefitted the most from tax reform

Average Normalized Buybacks (1H2018 YoY)



Normalized Tax Reform Benefit Deciles

Source: Barclays Research, Thomson Reuters

Note: Tax Benefit is defined as the Net Income gained from corporate tax reform. Deciles are formed across the SPX ex Financials with constituents as of 6/30/2018.

However, when we extend the analysis to capex, we find that while net capex has been increasing, there hasn't been a strong relationship with either overseas cash or benefit from tax reform. In other words, the changes in tax policy do not appear to have directly affected capex. Digging deeper into which sectors have increased capex from H1 2017 to H1 2018 in Figure 19, we find that from a dollar perspective, the increase in capex has been strongest in Information Technology, Energy and Consumer Discretionary. The increase for Energy is

clearly related to the rebound in oil prices but the deeper analysis above shows that the increase in capex for Information Technology is a coincidence. Indeed, digging deeper, we find that the increase in capex in Information Technology and Consumer Discretionary is mainly driven by Alphabet/Google (+\$7.5B), Facebook (+\$3.6B), Microsoft (+\$2.9B), and Amazon (+\$1.8B) as they further build out their cloud infrastructure. This is clearly a secular trend and not related to the Tax Cuts and Jobs Act.

FIGURE 25

Quintile of overseas cash vs Net capex

2 3

Financials with constituents as off 6/30/2018.

None Low

Average Normalized Net Capex (1H2018 YoY)

### 

Source: Barclays Research, Thomson Reuters
Note: Overseas cash values are based on 2017 overseas cash reported in the 10K filings normalized by Sales LTM. Deciles are formed across the SPX ex

5

Normalized Unrepatriated Earnings Deciles

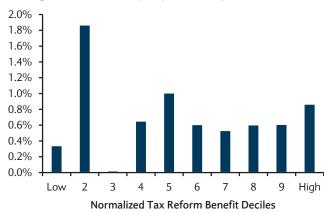
6 7

8

High

# FIGURE 26 Quintile of tax benefit vs Net capex





Source: Barclays Research, Thomson Reuters
Note: Tax Benefit is defined as the Net Income gained from corporate tax reform
Deciles are formed across the SPX ex Financials with constituents as off
6/30/2018.

Weaker capex reflects the fact that U.S. companies have transitioned to a more "assetlite" business model.

0.4%

0.2%

0.0%

This reinforces the insight that we had gleaned from our long-term analysis. In other words, companies were not refraining from capex because they did not have requisite funds to do so. The weaker capex was simply a reflection of the fact that in aggregate, U.S. companies have transitioned to a more "asset-lite" business model. As a result, the extra windfall from corporate tax cuts and the newly accessible cash is unlikely to incentivise higher levels of capex. On the other hand, to the extent that the decline in capex was a result of outsourcing to non-U.S. companies, higher trade barriers could result in more capex. While this would be negative for companies doing the spending (since this would be more expensive), it would benefit the companies that actually help build the fixed assets.

Given that only a fraction of the overseas cash has been repatriated, we expect the trends observed in 1H2018 to continue; i.e., companies with high overseas cash should continue to use it to reduce debt and conduct more buybacks.

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