

# Georgia Tech Scheller College of Business

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## Cash Flow Trends and Their Fundamental Drivers: Comprehensive Review (Quarter 1, 2019)

### Free Cash Margin Index:

**0.99%, 3.45%**  
Recession Lows  
(Dec. 2000, Dec. 2008)

**3.90%**  
Current  
(Mar 2019)

**6.88%**  
Recent High  
(Dec. 2009)

Median free cash margin decreased to 3.90% for the twelve months ending March 2019, compared to 4.39% for the twelve months ending December 2018 and 4.17% in March 2018. Median free cash margin dropped from the previous quarter after increasing for the first time in December 2018 since March 2017. Median revenues have also decreased to \$1,234.73 million in March 2019 compared to \$1,248.26 million in December 2018.

Driving the fall in free cash margin was a decrease in median operating cushion, which fell to 14.09% in the March 2019 reporting period compared to 15% in the December 2018 reporting period and 14.53% in the March 2018 reporting period. This decrease in median operating cushion was driven by a drop in gross margin to 37.27% in March 2019 from 37.42% in December 2018 and 37.65% in March 2018 and a rather sharp increase in SG&A spending as a percentage of revenue, which increased to 17.68% in March 2019, up from 16.29% in December 2018 and 17.17% in March 2018. An increase in the cash cycle further favored this period's fall in free cash margin. The cash cycle rose to 50.81 days in the March 2019 reporting period compared to 47.77 days in December 2018 and 50.01 days in March 2018. This increase in the cash cycle was driven primarily by an increase in inventory days, which rose from 20.60 in December 2018 to 22.72 in March 2019. Receivables days increased and payables days slightly declined from the previous quarter.

Capital expenditures also decreased to 3.64% in the current quarter compared to 3.79% in December 2018. Tax payments moderately decreased from 0.96% in December 2018 to 0.92% in March 2019. Dividends and stock buybacks as a percent of revenue also fell from 2.15% in December 2018 to 2.06% in March 2019 but were up year-over-year from 1.65% in March 2018.

Data for this research were provided by the Wharton Research Data Services database.

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**Georgia Tech Financial Analysis Lab**

The Georgia Tech Financial Analysis Lab conducts research on issues of financial reporting and analysis. Unbiased information is vital to effective investment decision-making. Accordingly, the Lab thinks that independent research organizations, such as this Lab, have an important role to play in providing information to market participants.

Because the Lab is housed within a university, all of its research reports have an educational quality, as they are designed to impart knowledge and understanding to those who read them. Its focus is on issues that it believes will be of interest to a large segment of stock market participants. Depending on the issue, it may focus its attention on individual companies, groups of companies, or on large segments of the market at large.

A recurring theme in the work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. The Labs defines earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, its research may look into reporting practices that affect either earnings or cash flow, or both. At times, its research may look at stock prices generally, though from a fundamental and not technical point of view.

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## Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Quarter 1, 2019)

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## Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Quarter 1, 2019)

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<b>Free Cash Margin Index*:</b>		
<b>0.99%, 3.45%</b>	<b>3.90%</b>	<b>6.88%</b>
<b>Recession Lows</b> (Dec. 2000, Dec. 2008)	<b>Current</b> (Mar. 2019)	<b>Recent High</b> (Dec. 2009)

The **\*Free Cash Margin Index** is free cash flow measured as a percentage of revenue for the trailing twelve-month period.

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### Introduction

This research report is part of a continuing series that examines cash flow trends and the underlying drivers that are causing changes in those trends. The current study contains a review of the cash flow performance of all non-financial companies for a series of rolling twelve-month periods from the first quarter of 2000 through the first quarter of 2019. Additionally, it looks at individual industry results and focuses its attention on the drivers that pushed free cash margin higher or lower in those industries. All companies with total assets of \$100 million or more are included, resulting in a total sample of 2,615 companies. Please see pages 5 and 6 for a list of industries included. That list is followed by a summary of the findings.

Measured as free cash flow divided by revenue, free cash margin is a cash flow profit margin. It indicates what percent of revenue is left for shareholders in the form of free and discretionary cash flow. If the company sells its products or services for a dollar, free cash margin tells how many cents the shareholders can take home without reducing the company's ability to generate more. Thus, as the report looks at cash flow trends and their underlying drivers, its particular interest is on how those factors impact free cash margin.

### Continuous Focus on Cash Flow

Corporate financial success is dependent not only on a company's ability to generate revenues and earnings, but also cash flow, especially free cash flow. It is free cash flow and growth in free cash flow, that discretionary stream of cash that a company can put to use for acquisitions, debt retirement, dividends and stock buybacks that works with growing earnings to drive firm value

higher. Because it is “free,” free cash flow comes with no strings attached. It is truly discretionary. Spending it does not impact the company’s ability to generate more. A company with revenue growth will eventually lose the favor of investors if it never finds a way to generate earnings. In a similar way, a company with profits that is unable to generate cash will also experience waning investor enthusiasm. It may take a while. Investors are patient with profitable, growing companies. Ultimately, however, a company must show an ability to generate free cash flow.

Companies that consume cash must continually seek new sources of capital – whether debt or equity. At some point, those sources of capital will dry up or become prohibitively expensive if the firm does not show at least some progress toward getting closer to positive cash generation. Worse, if cash flow does not back a company’s earnings, ultimately those earnings themselves may become suspect, necessitating write-downs of the resulting non-cash assets. Net losses will likely accompany those write-downs.

When free cash margin is positive, a firm is covering all ongoing claims and is able to pay dividends, reduce debt or simply add to its cash coffers. When free cash margin turns negative, ongoing claims are not being met. Cash and short-term investments can be used to meet the shortfall. However, on-hand cash and short-term investments are not an unlimited source of funds. Firms can borrow money to meet their needs. However, even if this were an option, increasing debt levels add new, unwanted risks. Equity issues provide another avenue, but capital markets can be painfully dilutive when share prices are depressed for firms that are seemingly unable to generate cash.

During periods of growth, firms may have problems generating cash as profits are consumed with growth-related investments in working capital and property, plant and equipment needed to support that growth. During recessions, cash generation can be particularly problematic as revenues and profits decline, draining the economic engine that supports cash generation. Regardless of the economic environment, however, free cash margin serves as an important measure of long-term financial health for individual companies, industries and the economy as a whole. The Lab thinks that by periodically examining their cash generating ability, readers will gain insight into the overall financial health of important segments of U.S. firms. With all “nonfinancial firm industry” data dating back to 2000, it is possible to see how the cash-generating performance of these firms presently compares with their performance during previous periods of economic contraction (e.g., 2001 and 2008-2009) and economic expansion.

## Cash Flow Definitions

Free cash flow is the cash flow equivalent of the income statement “bottom line”. Like net income, free cash flow is available for shareholders after all prior claims have been satisfied. However, also like net income, which, to facilitate analysis, can be divided into certain sub-measures of performance, like gross profit and operating profit, free cash flow can be similarly divided. Thus, while the primary focus of the report is on free cash flow and free cash margin, or free cash flow as a percentage of revenue, it analyzes the fundamental drivers underlying two distinct, but also closely related, measures of cash flow:

- 1) Operating cash flow and operating cash margin - cash flow from operations after interest charges and income taxes. Operating cash margin is operating cash flow divided by revenue.
- 2) Free cash flow and free cash margin - cash flow available for common shareholders that can be used for such discretionary purposes as stock buybacks and dividends without affecting the firm's ability to grow and generate more. This measure is calculated as operating cash flow less preferred dividends and net capital expenditures. Free cash margin is free cash flow divided by revenue.

## Data and Methodology

The data is provided by Compustat through a license with the Wharton Research Data Services. As noted, each data amount is for a rolling twelve-month period ending with the quarter end in question. For example, cash flow amounts for March 31, 2019 represent amounts for the twelve months (four quarters) ended March 31, 2019.

The 20 analyzed industry groups are as follows:

GICS	Industry Group
1010	Energy
1510	Materials
2010	Capital Goods
2020	Commercial & Professional Services
2030	Transportation
2510	Automobiles & Components
2520	Consumer Durables & Apparel
2530	Consumer Services
2550	Retailing
3010	Food & Staples Retailing
3020	Food, Beverage, & Tobacco
3030	Household & Personal Products
3510	Health Care Equipment & Services
3520	Pharmaceuticals, Biotech, & Life Sciences
4510	Software & Services
4520	Technology Hardware & Equipment
4530	Semiconductors & Equipment
5010	Telecommunication Services
5020	Media
5510	Utilities

The 20 industry groups use the four-digit Global Industrial Classification System (GICS) and represent 10 overall sectors. The ten sectors with industry groups included in parentheses are: Energy (Energy), Materials (Materials), Industrials (Capital Goods, Commercial & Professional Services, and Transportation), Consumer Discretionary (Automobiles & Components, Consumer Durables & Apparel, Consumer Services, Media and Retailing), Consumer Staples (Food & Staples Retailing, Food, Beverage & Tobacco and Household & Personal Products), Health Care (Health Care Equipment & Services and Pharmaceuticals, Biotech & Life Sciences), Information Technology (Software & Services, Technology Hardware & Equipment and Semiconductors & Equipment), Telecommunications (Telecommunication Services) and Utilities (Utilities).

### Summary of Results for All Non-Financial Companies

Median free cash margin decreased to 3.90% for the twelve months ending March 2019, compared with 4.39% for the twelve months ending December 2018 and 4.17% in March 2018.

Factors impacting free cash margin were operating cushion, or operating profit before depreciation, which decreased to 14.09% during the twelve months ending March 2019 from 15.00% in December 2018 and 14.53% in March 2018. An increase in the cash cycle, which increased to 50.81 days in March 2019, from 47.77 days in December 2018 and 50.01 days in March 2018, also contributed in the decrease in cash margin. Accounts receivable days and inventory days both increased from the last quarter whereas payables days fell from the last quarter. A decrease in capital spending served to increase free cash margin.

Median revenues also decreased to \$1,234.73 million from \$1,248.26 million in the December 2018 reporting period and from \$1,284.30 million in the March 2018 reporting period. While revenues still remain high relative to historical standards, the rate of growth in revenues seen in recent quarters has stopped.

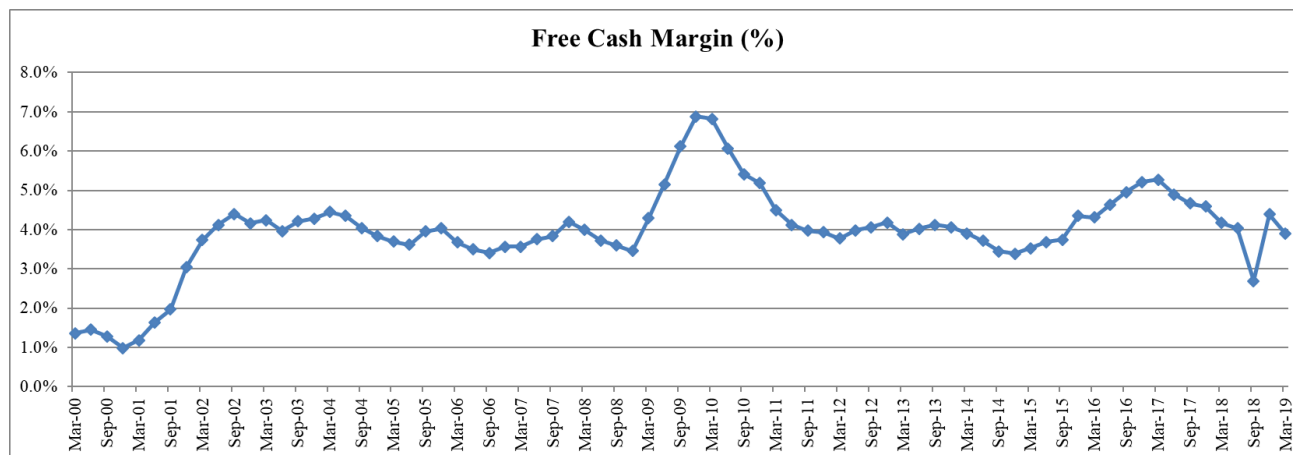
### Drivers of Free Cash Margin

ALL NON-FINANCIAL INDUSTRIES	Q1 2019	Q4 2018	Q1 2018	Effect on FCM
	(Mar 2019)	(Dec 2018)	(Mar 2018)	(Q1 2019 vs. Q1 2018)
Revenue (millions)	\$1,234.73	\$1,248.26	\$1,284.30	<b>DOWN 3.89%</b>
Free Cash Flow (millions)	\$40.21	\$47.35	\$43.78	<b>DOWN 8.15%</b>
Free Cash Margin	3.90%	4.39%	4.17%	<b>DOWN 6.47%</b>
Operating Cushion %	14.09%	15.00%	14.53%	Driving <b>DOWN</b>
Gross Margin % (before depreciations)	37.27%	37.42%	37.65%	Driving <b>DOWN</b>
SGA% (before depreciation)	17.68%	16.29%	17.17%	Driving <b>DOWN</b>
Cash Cycle (rev days)	50.81	47.77	50.01	Driving <b>DOWN</b>
Accounts Receivable (rev days)	53.87	52.97	53.32	Driving <b>DOWN</b>
Inventory (rev days)	22.72	20.60	23.06	Driving <b>DOWN</b>
Accounts Payable (rev days)	25.77	25.81	26.37	Driving <b>DOWN</b>
Income tax to Rev %	0.92%	0.96%	0.72%	Driving <b>DOWN</b>
Cap Exp. to Rev %	3.64%	3.79%	3.71%	Driving <b>UP</b>

In the exhibits below we present graphs of free cash margin and several of its underlying drivers. These exhibits were constructed with data from the complete sample of 2,615 non-financial companies. For more details on each of the 20 individual industry groups included, please refer to the individual industry spreadsheets and supporting charts that are available on our website ([www.scheller.gatech.edu/finlab](http://www.scheller.gatech.edu/finlab)).

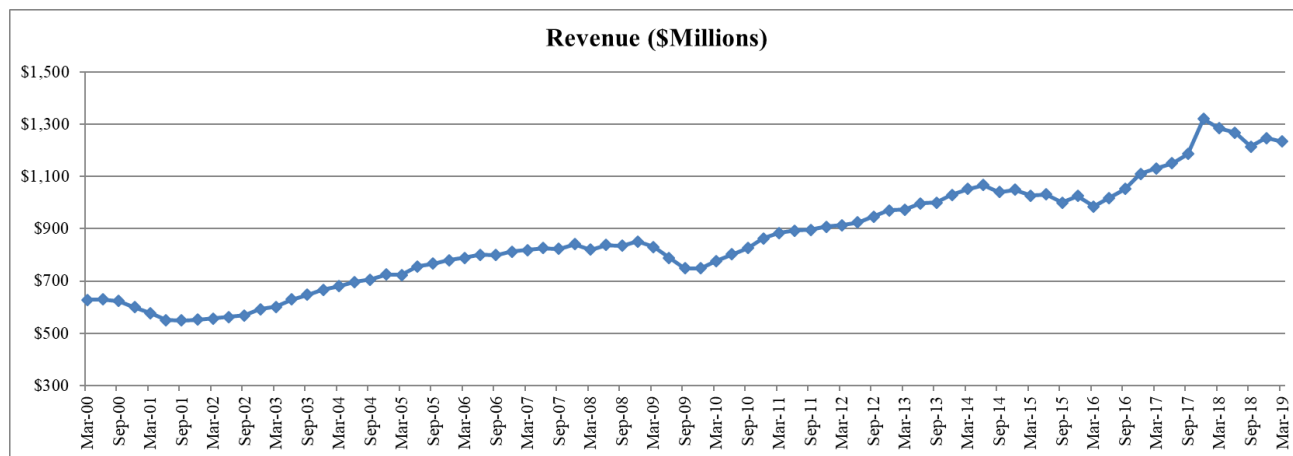


**All Non-financials, Q1 2000 – Q1 2019**



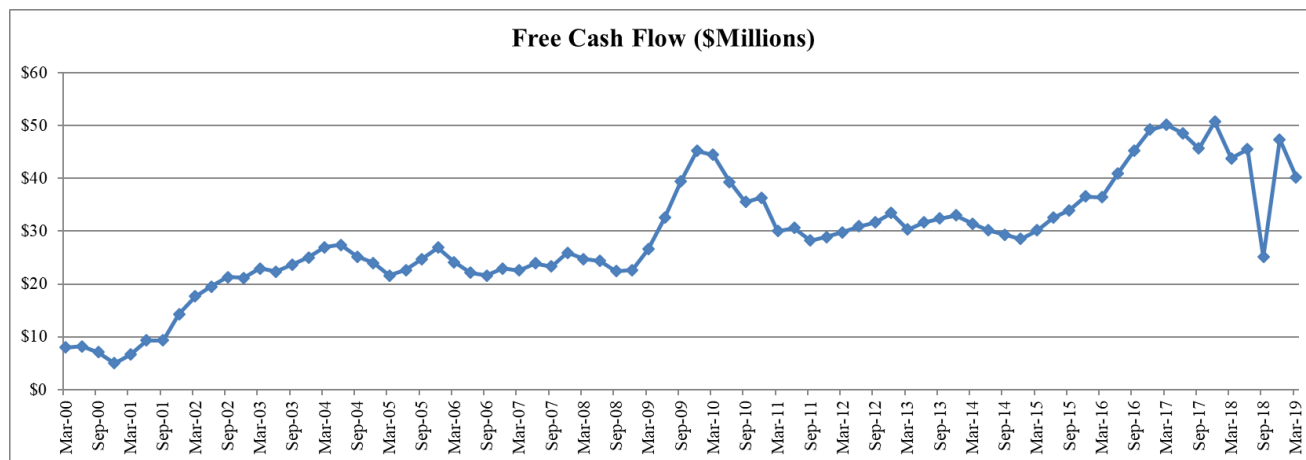
Free cash margin has decreased since the previous quarter ending December 2018 after increasing for the first time since March 2017.

**All Non-financials, Q1 2000 – Q1 2019**



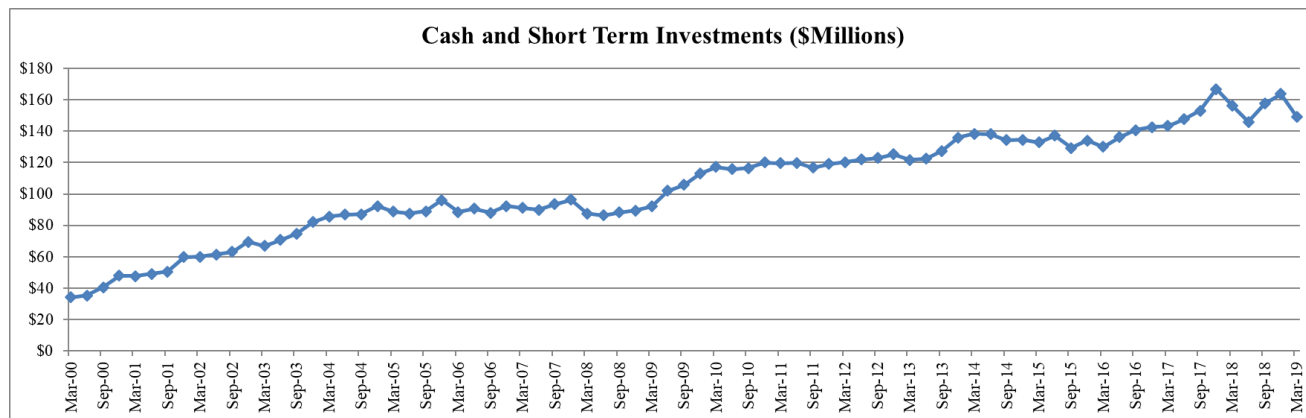
Median revenues decreased to \$1,234.73 million in the current period from \$1,248.26 million in December 2018 and \$1,284.30 million in March 2018.

**All Non-financials, Q1 2000 – Q1 2019**



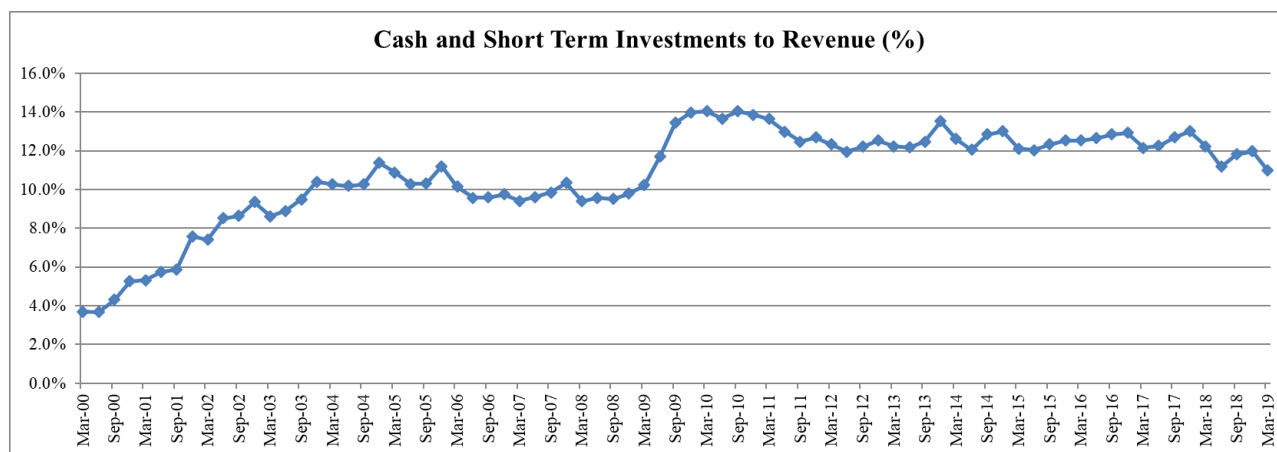
A modest decrease in revenues pulled median free cash flow lower for the March 2019 reporting period.

**All Non-financials, Q1 2000 – Q1 2019**



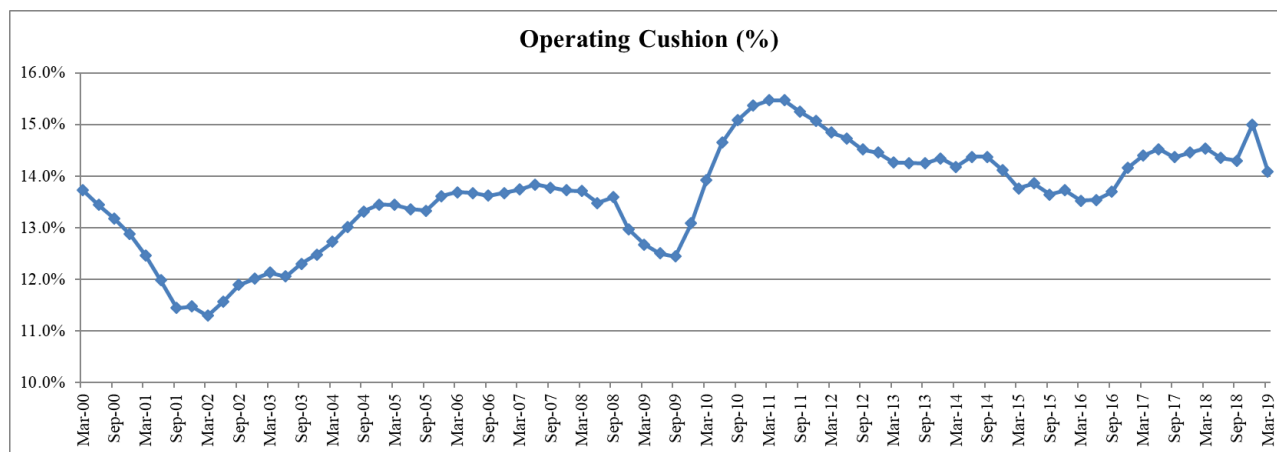
Median cash and short-term investments decreased to \$149.29 million in March 2019, down from \$163.77 million in December 2018 and \$156 million in March 2018.

**All Non-financials, Q1 2000 – Q1 2019**



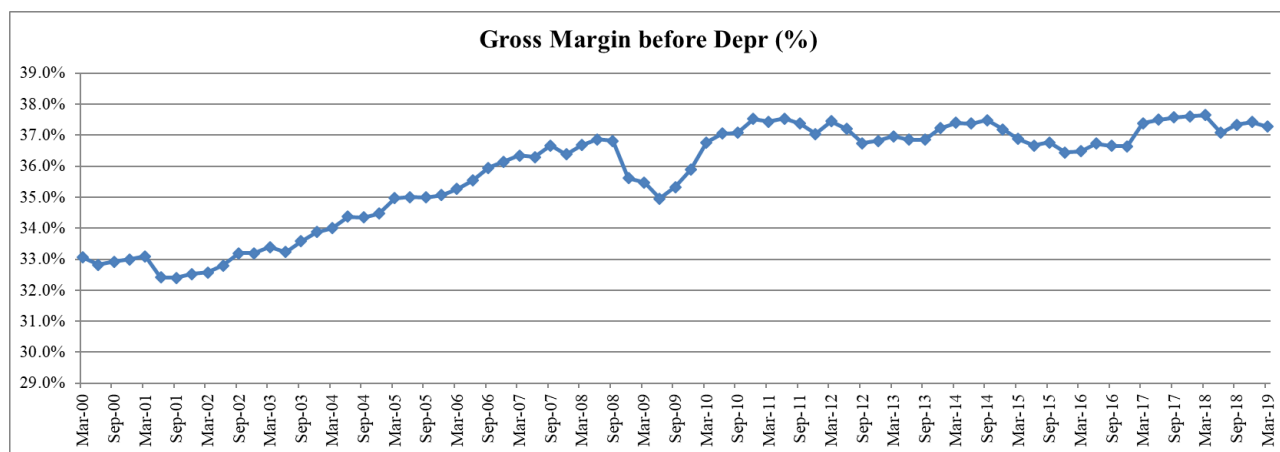
Cash and short-term investments to revenue decreased to 10.99% in March 2019 from 11.98% in December 2018 and are down year-over-year from 12.23% in March 2018. Prior to the recession, cash and short-term investments were approximately 10% of revenue, so scaled for revenue, the excess cash balances we’ve seen in previous periods is dissipating.

**All Non-financials, Q1 2000 – Q1 2019**



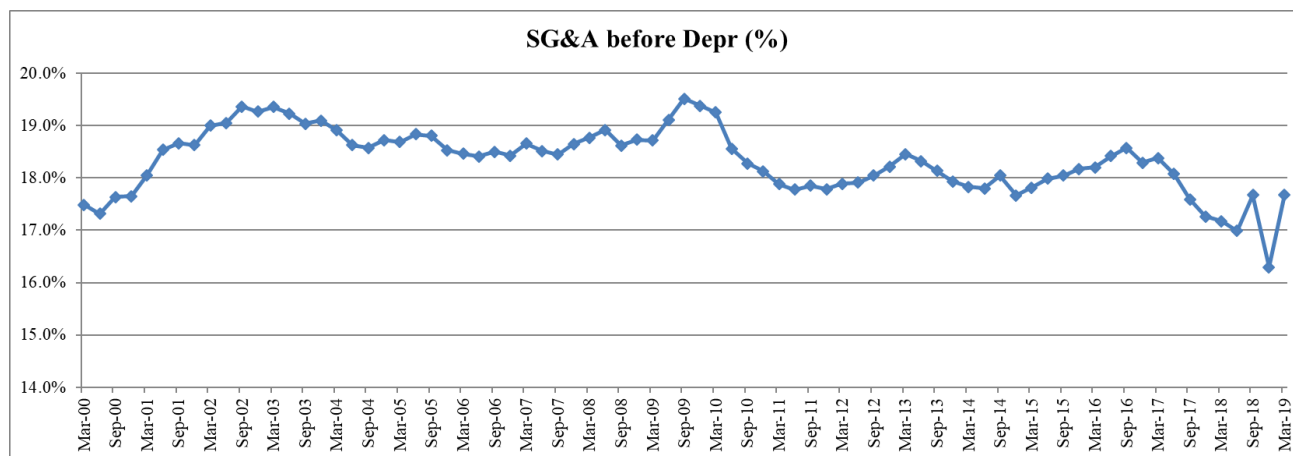
Median operating cushion decreased to 14.09% in the current reporting period from 15.00% in the reporting period ending December 2018. The decline was driven by a decrease in gross margin and an increase in SGA%.

**All Non-financials, Q1 2000 – Q1 2019**

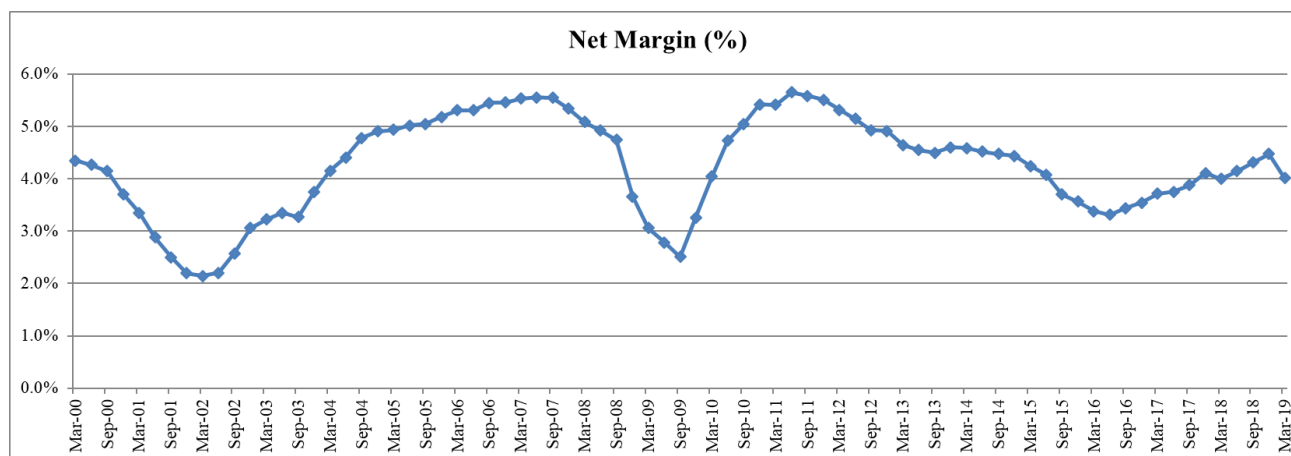


Median gross margin before depreciation marginally decreased to 37.27% for the twelve months ending March 2019 compared to 37.42% for the twelve months ending December 2018.

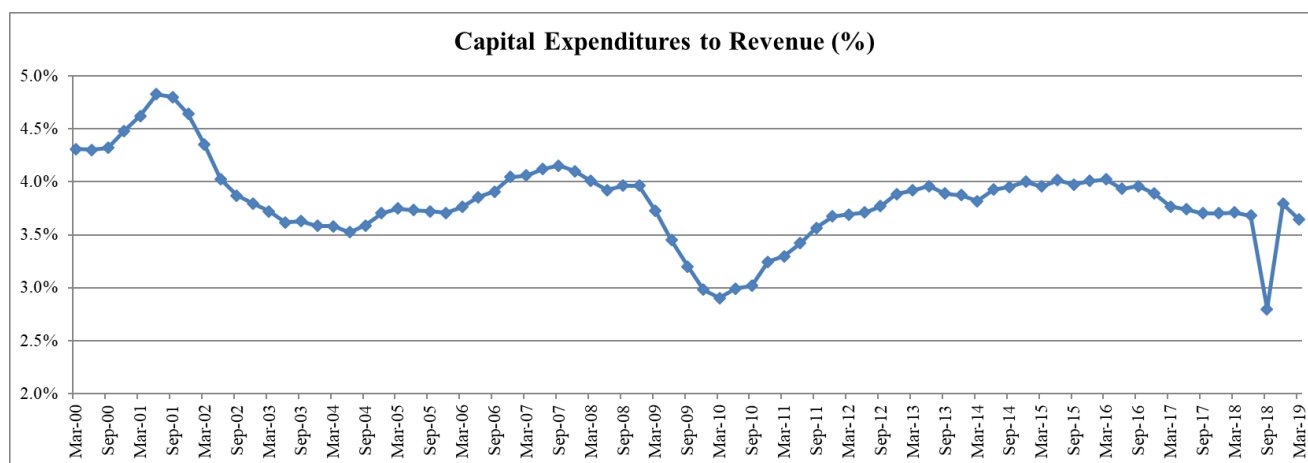
**All Non-financials, Q1 2000 – Q1 2019**



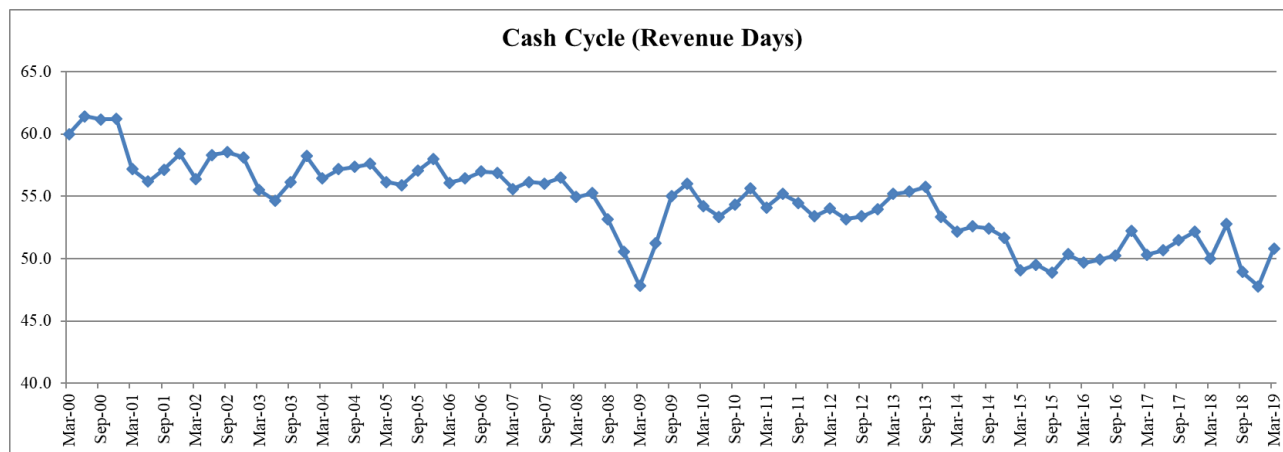
Median selling, general, and administrative expense (before depreciation) as a percent of revenue increased to 17.68% in March 2019, up from 16.29% in December 2018 and 17.17% in March 2018.

**All Non-financials, Q1 2000 – Q1 2019**

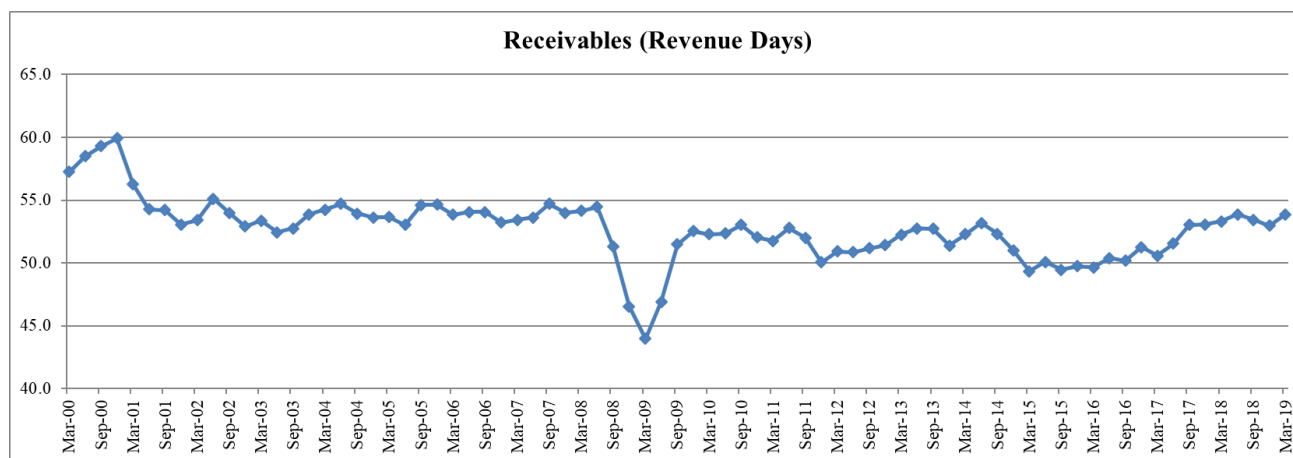
Median net margin decreased to 4.01% in March 2019 period, down from 4.48% for the December 2018 period, and marginally up from 4.00% for the March 2018 reporting period.

**All Non-financials, Q1 2000 – Q1 2019**

Capital expenditures as a percentage of revenue decreased to 3.64% in the March 2019 reporting period, down from 3.79% in the December 2018 and 3.71% in the March 2018 reporting period. The intent of tax reform was to encourage increased capital spending, a development that has not materialized.

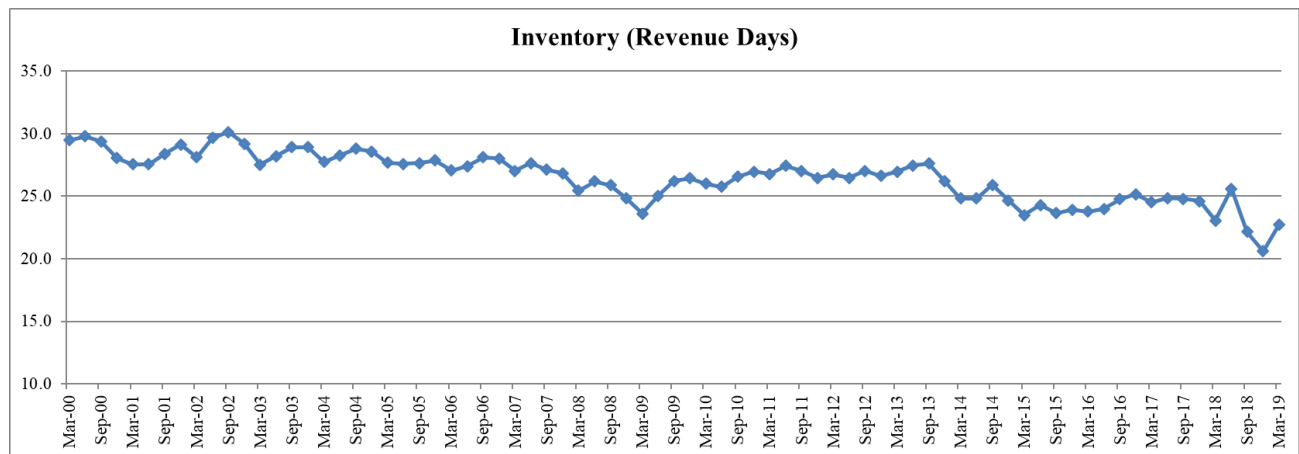
**All Non-financials, Q1 2000 – Q1 2019**

The cash cycle measures the proportion of operating cash flow carried in working capital and is measured by receivables days plus inventory days less payables days. The metric increased to 50.81 days for the period ending March 2019 compared to 47.77 days for the period ending December 2018 and 50.01 days from March 2018. The increase was driven by increased in accounts receivable days and inventory days and by a decrease in accounts payable days.

**All Non-financials, Q1 2000 – Q1 2019**

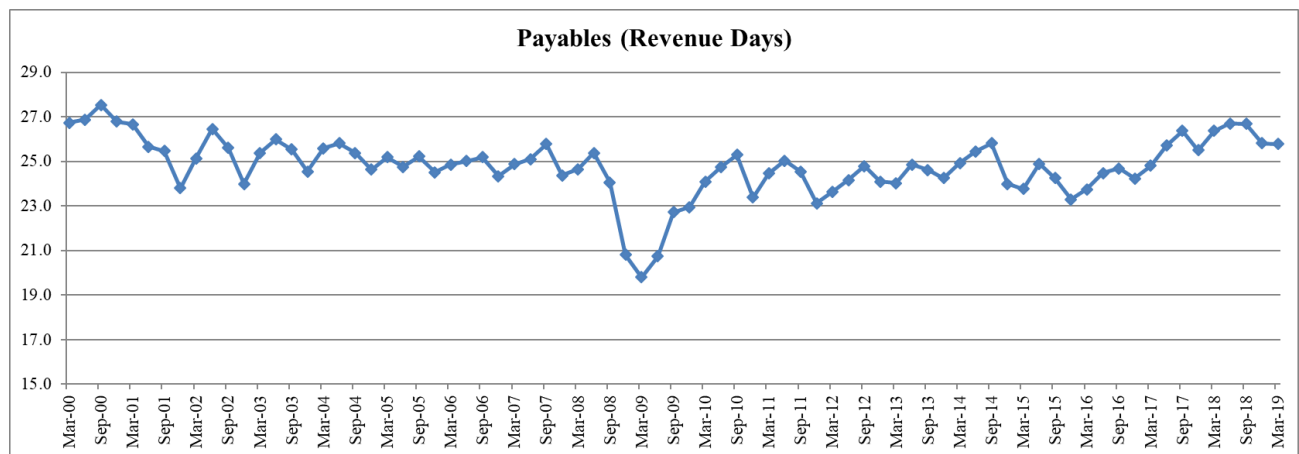
Median accounts receivable days increased to 53.87 days in the March 2019 reporting period from 52.97 days in the December 2018 reporting period from 53.32 days in March 2018.

**All Non-financials, Q1 2000 – Q1 2019**



Median inventory days increased to 22.72 days in March 2019 from 20.60 days in December 2018 and was down from 23.06 days in March 2018.

**All Non-financials, Q1 2000 – Q1 2019**



Accounts payable days declined slightly to 25.77 days in March 2019 from 25.81 days in December 2018 from 26.37 days in the March 2018 reporting period.

## Individual Industry Results

During the twelve months ended March 2019, recent industry trends evidenced a moderate to substantial improvement in free cash margin in **8** industries, relatively stable free cash margin in **1** industry, and a declining free cash margin in **11** industries.

Please refer to the individual industry spreadsheets, available on our website, for charts and further details on each of the 20 industry groups outlined in the following tables.

### Industry Trends in Free Cash Margin

GICS	Industry Group	Increasing	Stable	Declining
1010	Energy	X		
1510	Materials			X
2010	Capital Goods	X		
2020	Commercial & Prof Services		X	
2030	Transportation	X		
2510	Automobiles & Components			X
2520	Consumer Durables & Apparel			X
2530	Consumer Services	X		
2550	Retailing			X
3010	Food & Staples Retailing			X
3020	Food, Beverage, & Tobacco	X		
3030	Household & Personal Products			X
3510	Health Care Equipment & Services			X
3520	Pharmaceuticals, Biotech, & Life Sciences	X		
4510	Software & Services			X
4520	Technology Hardware & Equipment			X
4530	Semiconductors & Equipment			X
5010	Telecommunication Services	X		
5020	Media	X		
5510	Utilities			X
	<b>Total</b>	<b>8</b>	<b>1</b>	<b>11</b>



The following table compares Free Cash Margin for the 20 industry groups in the period ending March 2019 (Q1 2019) with the December 2018 and March 2018 reporting periods.

GICS	Sector/Industry Group	Q1 2019	Q4 2018	Q1 2018
1010	Energy	0.68%	0.18%	-0.63%
1510	Materials	4.30%	5.12%	5.13%
2010	Capital Goods	4.50%	4.40%	3.32%
2020	Commercial & Prof Services	6.03%	6.04%	6.08%
2030	Transportation	2.98%	2.86%	1.33%
2510	Automobiles & Components	2.14%	3.28%	2.91%
2520	Consumer Durables & Apparel	4.46%	4.53%	5.26%
2530	Consumer Services	4.44%	4.28%	5.80%
2550	Retailing	3.32%	3.37%	2.92%
3010	Food & Staples Retailing	1.41%	1.50%	1.37%
3020	Food, Beverage, & Tobacco	5.69%	4.80%	6.57%
3030	Household & Personal Products	9.19%	11.32%	11.36%
3510	Health Care Equipment & Services	5.18%	5.44%	5.98%
3520	Pharmaceuticals, Biotech, & Life Sciences	-48.17%	-57.17%	-34.75%
4510	Software & Services	9.51%	11.29%	8.95%
4520	Technology Hardware & Equipment	3.69%	4.81%	4.37%
4530	Semiconductors & Equipment	10.42%	10.89%	12.49%
5010	Telecommunication Services	6.64%	4.79%	5.07%
5020	Media	7.04%	6.52%	8.28%
5510	Utilities	-1.55%	-0.08%	0.67%
	<b>All Industries Median</b>	<b>3.90%</b>	<b>4.39%</b>	<b>4.17%</b>

### The Standouts: A Closer Look

The drivers of improvements or declines in free cash margin consist of factors that impact profitability and efficiency. On the profitability front, operating cushion measures operating profit, exclusive of the non-cash expenses, depreciation and amortization. Factors impacting operating cushion consist of gross margin (excluding depreciation and amortization), and SG&A% (excluding depreciation and amortization). Also impacting profitability and a firm's ability to generate free cash flow, but excluded from operating cushion, is income taxes paid, which is measured as a percent of revenue. Capital expenditures do not impact profitability directly, but through depreciation on fixed asset additions. However, these expenditures are subtracted in computing free cash flow. It is also important to look at capital expenditures because these are

investments in fixed assets that will likely improve a company's ability to generate revenue, and subsequent profit, in the future. Like operating expenses and taxes, capital expenditures are measured as a percent of revenue.

On the efficiency front, increases in receivables and inventory consume free cash flow. Increases in accounts payable provide free cash flow. The combination of receivables days plus inventory days less payables days is a firm's cash cycle. Reductions in the cash cycle provide free cash flow, while increases in the cash cycle consume free cash flow. All of these factors are evaluated when analyzing changes in free cash margin for the standout firms discussed in this section.

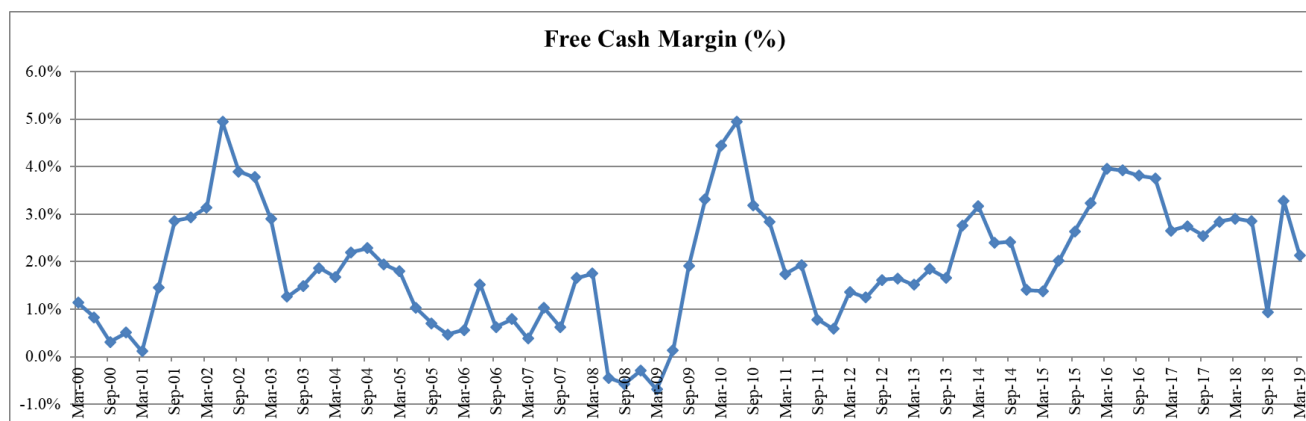
Graphs of free cash margin for select industries studied in the reporting period are provided below. With each graph we provide a short summary of the primary drivers or factors that are behind the observed changes in free cash margin for the selected industries. For more details regarding the industries, please refer to the separate industry spreadsheets found on our website.

### Industries with Declining Free Cash Margin

In the twelve-month period ending March 2019, eleven industries saw free cash margin decline: Materials; Automobiles & Components; Consumer Durables & Apparel; Retailing; Food & Staples Retailing; Household & Personal Products; Health Care Equipment & Services; Software Services; Technology Hardware & Equipment; Semiconductors & Equipment; and Utilities.

In the following paragraphs we take a closer look at an industry with declining free cash margin: Automobiles & Components.

#### Automobiles & Components, Q1 2000 – Q1 2019



## Drivers of Free Cash Margin

Automobiles & Components	Q1 2019	Q4 2018	Q1 2018	Effect on FCM
	(Mar 2019)	(Dec 2018)	(Mar 2018)	(Q1 2019 vs. Q1 2018)
Revenue (millions)	\$2,866.36	\$3,772.61	\$3,150	<b>DOWN 9.01%</b>
Free Cash Flow (millions)	\$55.55	\$76.95	\$66.50	<b>DOWN 16.46%</b>
Free Cash Margin	2.14%	3.28%	2.91%	<b>DOWN 26.4%</b>
Operating Cushion %	10.13%	11.01%	11.81%	Driving <b>DOWN</b>
Gross Margin % (before depreciations)	20.89%	22.04%	22.50%	Driving <b>DOWN</b>
SGA% (before depreciation)	9.58%	9.60%	9.96%	Driving <b>UP</b>
Cash Cycle (rev days)	51.42	45.30	46.27	Driving <b>DOWN</b>
Accounts Receivable (rev days)	65.42	57.11	67.17	Driving <b>UP</b>
Inventory (rev days)	39.15	35.43	36.23	Driving <b>DOWN</b>
Accounts Payable (rev days)	53.15	47.24	57.13	Driving <b>UP</b>
Income tax to Rev %	0.83%	1.29%	2.02%	Driving <b>UP</b>
Cap Exp. to Rev %	4.73%	4.76%	4.56%	Driving <b>DOWN</b>

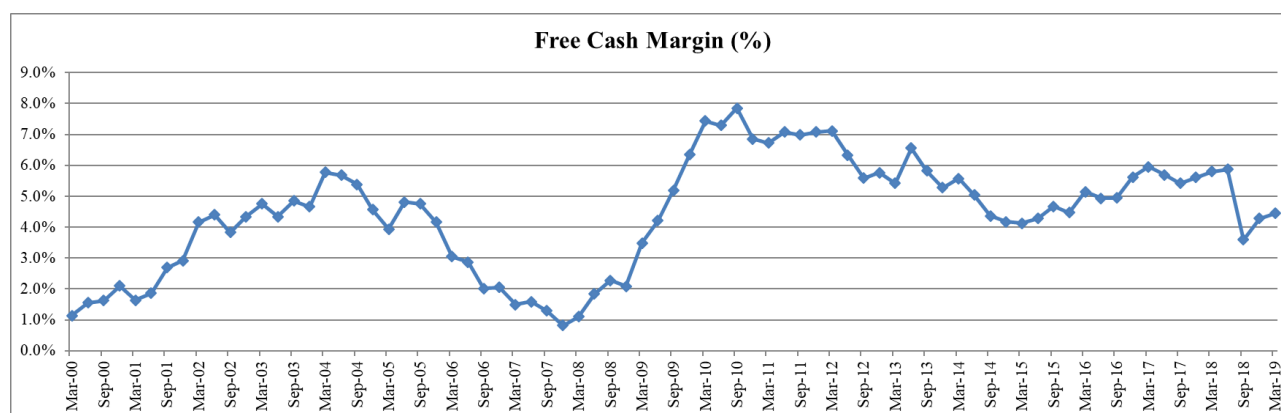
### Analysis

Free cash margin for the Automobiles & Components industry declined significantly in March 2019, due to a myriad of factors. Operating cushion declined, driven by a decline in gross margin, and the cash cycle increased, caused by an increase in inventory days.

### Industries with Improving Free Cash Margin

In the twelve-month period ending March 2019, eight industries enjoyed improving free cash margin: Energy; Capital Goods; Transportation; Consumer Services; Food, Beverage, & Tobacco; Pharmaceuticals, Biotech, & Life Sciences; Telecommunication Services and Media. In the following paragraphs we take a closer look at an industry with improving free cash margin: Consumer Services.

## Consumer Services, Q1 2000 – Q1 2019



## Drivers of Free Cash Margin

	Q1 2019 (Mar 2019)	Q4 2018 (Dec 2018)	Q1 2018 (Mar 2018)	Effect on FCM (Q1 2019 vs. Q1 2018)
<b>Consumer Services</b>				
Revenue (millions)	\$1,005.86	\$977.92	\$1,001.61	UP 0.42%
Free Cash Flow (millions)	\$36.31	\$41.09	\$43.19	DOWN 15.93%
Free Cash Margin	4.44%	4.28%	5.80%	DOWN 23.44%
Operating Cushion %	17.24%	15.41%	16.99%	Driving UP
Gross Margin % (before depreciations)	41.53%	42.29%	42.39%	Driving DOWN
SGA% (before depreciation)	18.80%	18.24%	15.64%	Driving DOWN
Cash Cycle (rev days)	4.92	7.33	5.05	Driving UP
Accounts Receivable (rev days)	15.57	16.14	13.81	Driving DOWN
Inventory (rev days)	2.95	3.11	3.16	Driving DOWN
Accounts Payable (rev days)	13.60	11.92	11.92	Driving UP
Income tax to Rev %	1.56%	1.31%	0.13%	Driving DOWN
Cap Exp. to Rev %	4.99%	5.05%	5.28%	Driving UP

## Analysis

Improving free cash margin for the Consumer Services industry is being driven by an increase in operating cushion, as well as a decline in the cash cycle and a decrease in capital expenditures as a percent of revenue. An increase in taxes paid as a percentage of revenue limited the cash margin improvement, however.

## Conclusions

The cash flow data reported through the first quarter of 2019 provides us with new insight into the U.S. economy. The ratios suggest a slightly economic downturn with declining revenue, downward free cash margin trends and decreasing capital spending.

Median free cash margin decreased during the March 2019 reporting period after increasing in the December 2018 reporting period. Median revenues also decreased to \$1234.73 million in the current quarter from \$1,248.26 million in December 2018 and \$1,284.30 million in March 2018. Cash and short-term investments are down from the previous quarter and year-over-year.

The tax reform legislation passed in 2017 targeted increased business investment to spur economic growth. We witnessed that the desired result began to materialize in 2018, as median capital expenditures as a percentage of revenue increased in the four quarters ending December 2018 after falling for three consecutive quarters. However, capital spending was lower in the March 2019 reporting period. Median capital expenditures as a percentage of revenue decreased to 3.64% in the March 2019 period compared to 3.79% of revenue in the December 2018 period and 3.71% in the March 2018 period. We are beginning to see a slight slump in the capital spending, as revenues decline, and the percentage of revenues devoted to capital expenditures decreases. It appears that uncertainty surrounding tariffs and the threat of a trade war with China is hurting business confidence and, in turn, capital spending.

With a decrease in free cash margin came a decrease in dividends and stock repurchases. Measured as a percent of revenue, dividends and stock repurchases decreased to 2.06% in March 2019. This was the first time this metric has decreased after increasing for five consecutive quarters.

We are in the late stages of the current expansion. As is typical at this stage of an expansion, we are seeing declining margins as costs rise and discounting occurs as a means to support sales increases. As noted earlier, during this reporting period we saw a slump in free cash margin driven, in part, by a decrease in operating cushion (reflecting a deteriorating operating margins) as gross margin declined and SG&A expense as a percentage of revenue increased. A declining gross margin with declining revenues suggests that we are seeing widespread discounting. Further, the rise in inventory days, which increased the cash cycle and decreased free cash margin, suggests that companies are not as efficient as they have been in prior reporting periods.

Whether the uncertainties that have accompanied the tariff battles subsides and permits an increase in business confidence and new investments in capital assets, remains to be seen. We will continue to watch and report.