Georgia Tech Financial Analysis Lab
800 West Peachtree Street NW
Atlanta, GA 30308-0520
404-894-4395
http://www.scheller.gatech.edu/finlab

Dr. Charles W. Mulford, Director
Invesco Chair and Professor of Accounting
charles.mulford@scheller.gatech.edu

Allan Mathis
Graduate Research Assistant
allan.mathis@gatech.edu

Cash Flow Trends and Their Fundamental Drivers: Comprehensive Review (Quarter 1, 2018)

Free Cash Margin Index:

0.99%, 3.45%	**4.17%**	**6.88%**
Recession Lows	**Current**	**Recent High**
(Dec. 2000, Dec. 2008)	**(Mar. 2018)**	**(Dec. 2009)**

Median free cash margin decreased to 4.17% for the twelve months ended March 2018, compared with 4.59% for the twelve months ended December 2017 and 5.28% in March 2017. This metric has declined in each of the last five reporting periods, but is still aligned with pre- and post-recession norms. While median revenues declined slightly to $1,284.30 million in the March 2018 reporting period from the $1,320.15 million in the December 2017 reporting period, revenue growth is still intact as median revenues are up 13.46% year-over-year.

In the twelve months ended March 2018, gross margin before depreciation increased slightly to 37.65%, up from 37.61% from the December 2017 reporting period and up from 37.38% from the March 2017 reporting period. Selling, general, and administration spending before depreciation fell for the fourth consecutive quarter. Median SG&A as a percent of revenue was 17.17% in the March 2018 reporting period, compared to 17.26% in December 2017 and 18.38% in March 2017. The cash cycle fell from 52.16 days in the twelve months ended December 2017 to 50.01 days in the twelve months ended March 2018. This was driven by a decline in inventory days from 24.61days December 2017 to 23.06 days in March 2018 and an increase in payables days from 25.50 days to 26.37 days during this time. Receivables days increased slightly to 53.32 days in the March 2018 reporting period, up from 53.05 days in the December 2017 period. Due to tax reform, income taxes as a percentage of revenue continued to fall, reaching an all-time low of 0.72% for the March 2018 reporting period, following a previous all-time low of 0.80% for the December 2017 reporting period.

All else being equal, with lower corporate tax rates, one would generally higher levels of capital expenditures. That said, capital expenditures as a percentage of revenue was 3.71% for the twelve month period ended March 2018, which lags behind pre- and post-recession norms. Rather than using their tax cut windfall to invest in capital projects, firms are largely spending their money dividends and stock repurchases, which, as a percentage of revenue continued to climb, reaching 1.65% in the March 2018 reporting period, compared to 1.59% in the twelve months ended December 2017 and 1.55% in the twelve months ended March 2017.

Data for this research were provided by S&P's Capital IQ's Compustat database. **August 2018**

Georgia Tech Financial Analysis Lab
Scheller College of Business
Georgia Institute of Technology
Atlanta, GA 30332-0520

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.

Contact Information

Charles Mulford	Invesco Chair, Professor of Accounting and the Lab's Director Phone: (404) 894-4395 Email: Charles.mulford@scheller.gatech.edu
Anna Babinets	Graduate Research Assistant and MBA Student
Mark Jacobson	Graduate Research Assistant and MBA Student
Allan Mathis	Graduate Research Assistant and MBA Student

Website: http://www.scheller.gatech.edu/finlab

Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Quarter 1, 2018)

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Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Quarter 4, 2017)

Free Cash Margin Index*:

0.99%, 3.45%	4.17%	6.88%
Recession Lows (Dec. 2000, Dec. 2008)	Current (Mar. 2018)	Recent High (Dec. 2009)

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

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 2018. 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 2,548 companies. Please see page 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, 2018 represent amounts for the twelve months (four quarters) ended March 31, 2018.

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
2540	Media
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
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 Stapes (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 4.17% for the twelve months ended March 2018, compared with 4.59% for the twelve months ended December 2017 and 5.28% in March 2017.

Factors impacting free cash margin were operating cushion, or operating profit before depreciation, which increased to 14.54% during the twelve months ended March 2018 from 14.45% in December 2017, and was up from 14.39% in March 2017, which has mitigated the decline in free cash margin. Income taxes as a percentage of revenue were down slightly while capital expenditures as a percentage of revenue remained largely flat for the twelve months ending March 2018 compared with the twelve months ending December 2017.

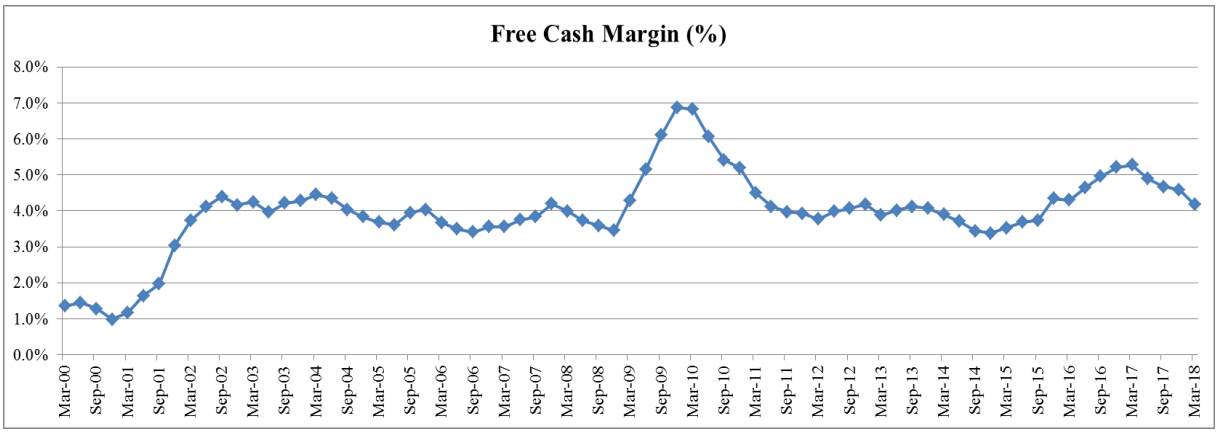
Median revenues fell to $1,284.30 in March 2018 from $1,320.15 million in December 2017, but revenue growth is still strong as median revenues are up 13.5% year-over-year from $1,131.96 in March 2017.

Drivers of Free Cash Margin

ALL NON-FINANCIAL INDUSTRIES	Q1 2018 (Mar 2018)	Q4 2017 (Dec 2017)	Q1 2017 (Mar 2017)	Effect on FCM (Q1 2018 vs. Q1 2017)
Revenue (millions)	**1,284.30**	**1,320.15**	**1,131.96**	**UP 13.46%**
Free Cash Flow (millions)	**43.78**	**50.69**	**50.11**	**DOWN 12.65%**
Free Cash Margin	**4.17%**	**4.59%**	**5.28%**	**DOWN 20.94%**
Operating Cushion %	14.54%	14.45%	14.39%	Driving **UP**
Gross Margin % (before depreciations)	37.65%	37.61%	37.38%	Driving **UP**
SGA% (before depreciation)	17.17%	17.26%	18.38%	Driving **UP**
Cash Cycle (rev days)	50.01	52.16	50.31	Driving **UP**
Accounts Receivable (rev days)	53.32	53.05	50.59	Driving **DOWN**
Inventory (rev days)	23.61	24.61	24.51	Driving **UP**
Accounts Payable (rev days)	26.37	25.50	24.80	Driving **UP**
Income tax to Rev %	0.72%	0.80%	1.34%	Driving **UP**
Cap Exp. to Rev %	3.71%	3.70%	3.77%	Driving **UP**

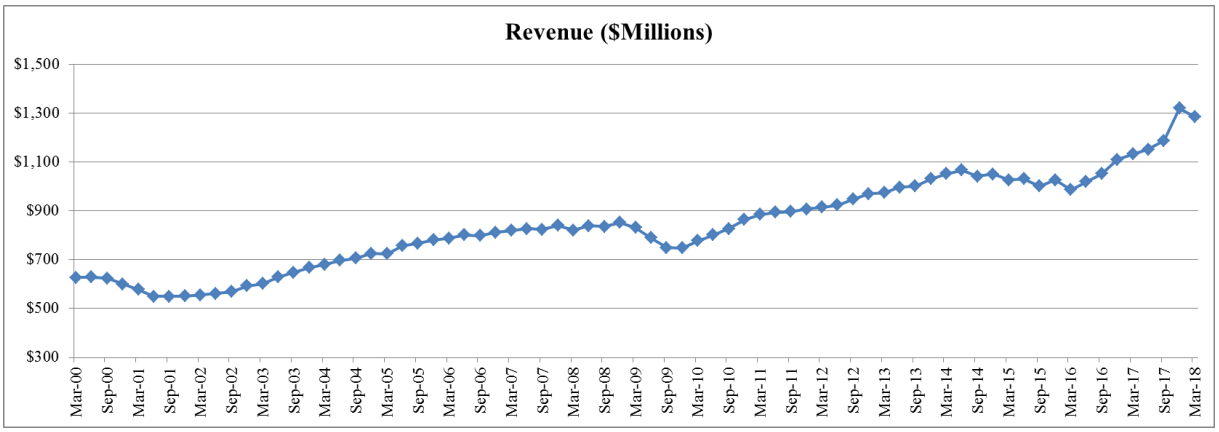
In the exhibits below we present graphs of free cash margin and several of its underlying drivers. These exhibits were constructed with data from the complete sample of 2,548 non-financial companies. For more details on each of the 20 individual industry groups included, please refer to the individual industry spreadsheets and supporting charts that are available on our website (www.scheller.gatech.edu/finlab).

All Non-financials, Q1 2000 – Q1 2018



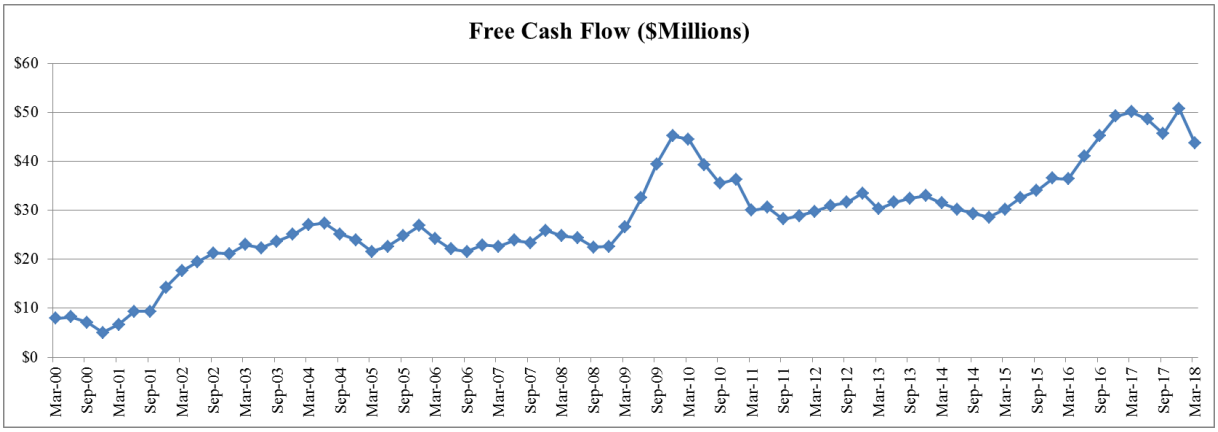
Free cash margin continues to sit in the middle of its historical range of between 3.00% and 4.50%.

All Non-financials, Q1 2000 – Q1 2018



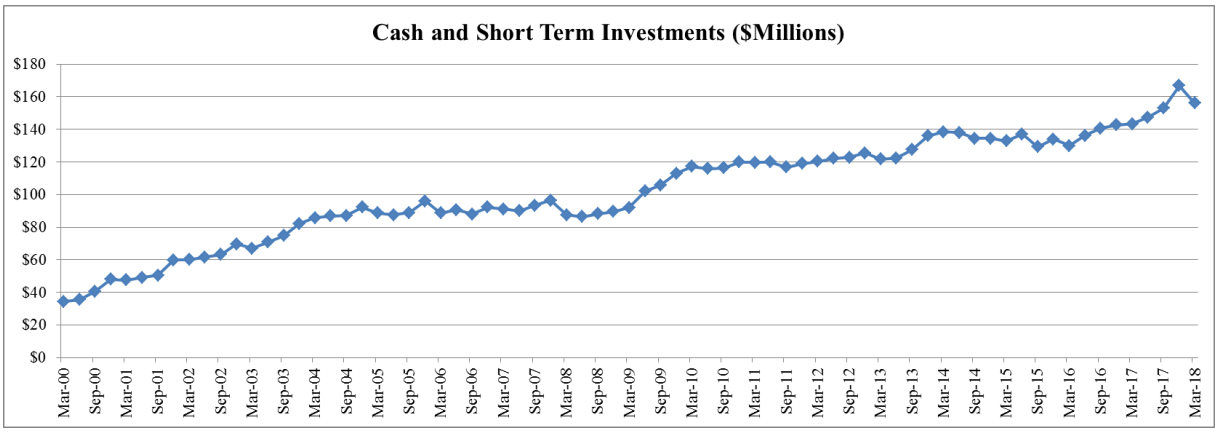
While median revenues ticked downwards to $1,284.30 million from the all-time high in December 2017 reporting period, they are still up 13.5% year-over-year.

All Non-financials, Q1 2000 – Q1 2018



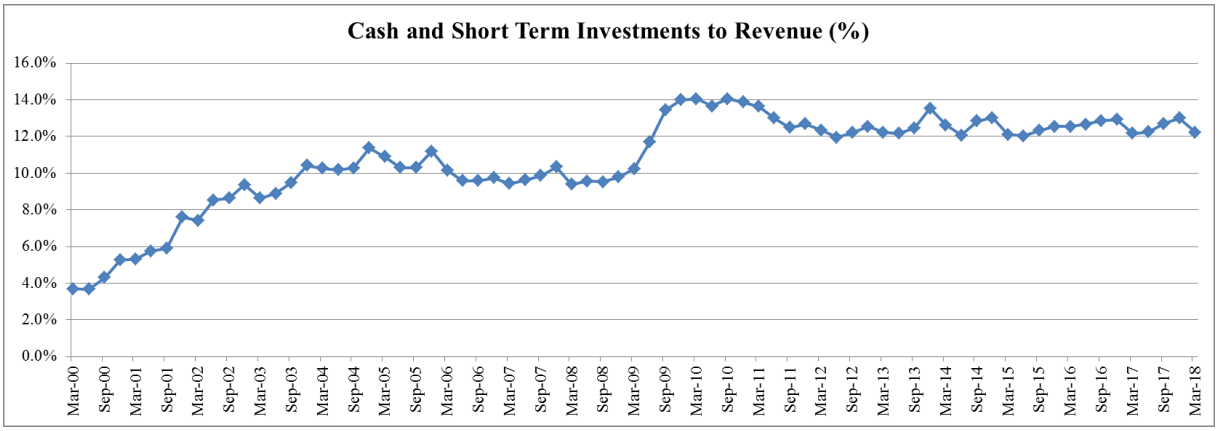
Median free cash flow declined to $43.78 million for the twelve months ended March 2018.

All Non-financials, Q1 2000 – Q1 2018



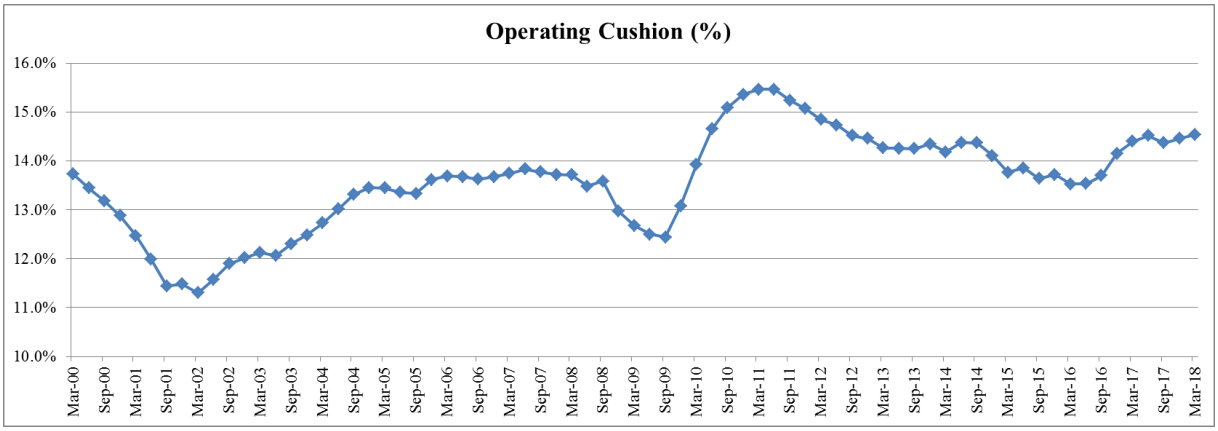
Median cash and short-term investments fell to $156.00 million from its all-time high of $166.79 million in December 2017, and are up 8.8% from $143.33 million reported in March 2017.

All Non-financials, Q1 2000 – Q1 2018



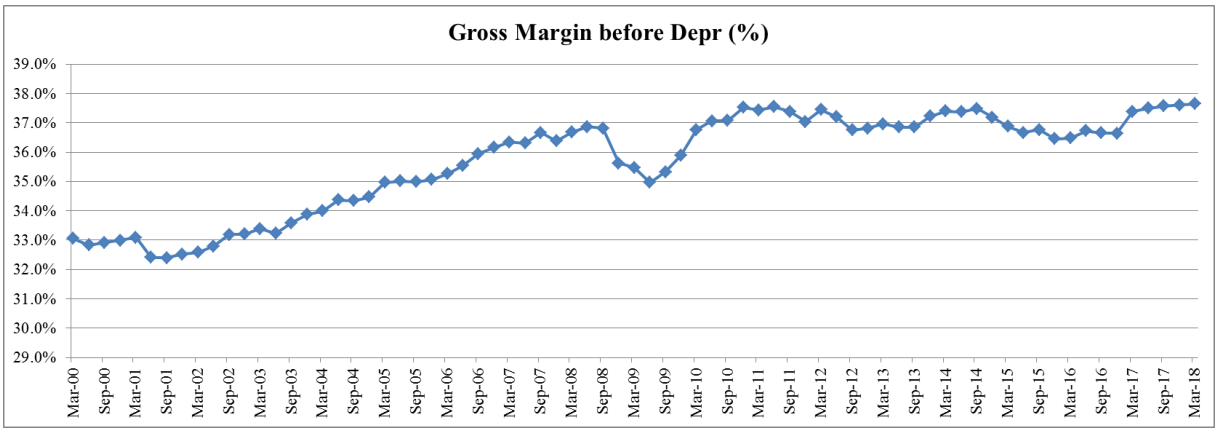
Cash and short-term investments to revenue decreased to 12.23% in March 2018 from 13.01% in December 2017, and are up year-over-year from 12.16% in March 2017. Prior to the recession, cash and short-term investments were approximately 10% of revenue.

All Non-financials, Q1 2000 – Q1 2018



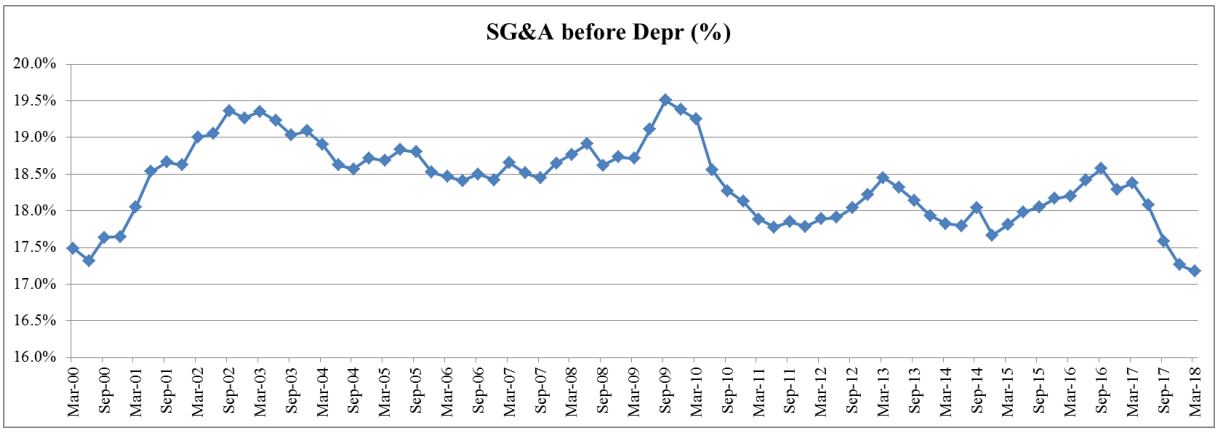
Median operating cushion increased to 14.54% in the reporting period ended March 2018, up slightly from 14.45% in December 2017 and up from 14.39% in March 2017.

All Non-financials, Q1 2000 – Q1 2018



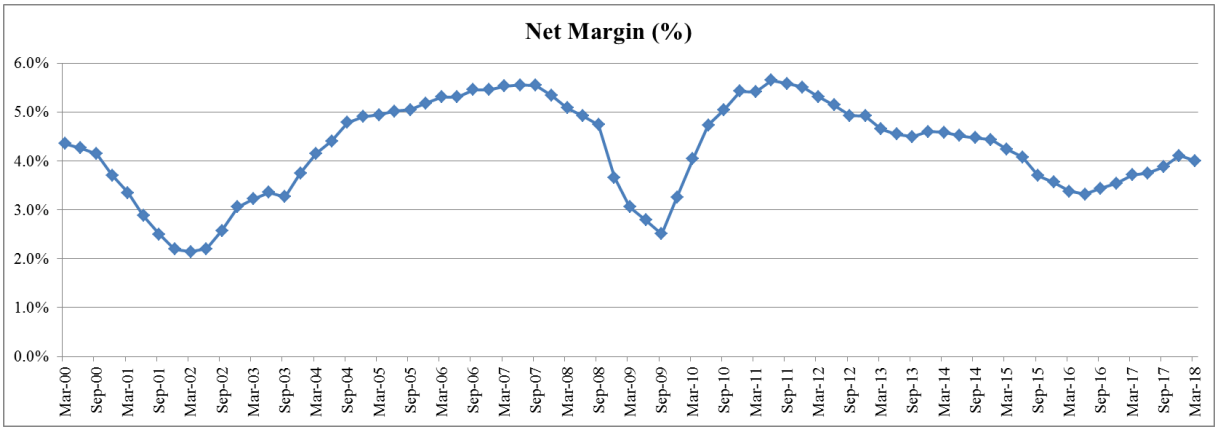
Median gross margin before depreciation increased slightly to 37.65% for the twelve months ending March 2018 versus 37.61% in December 2017 and 37.38% in March 2017.

All Non-financials, Q1 2000 – Q1 2018



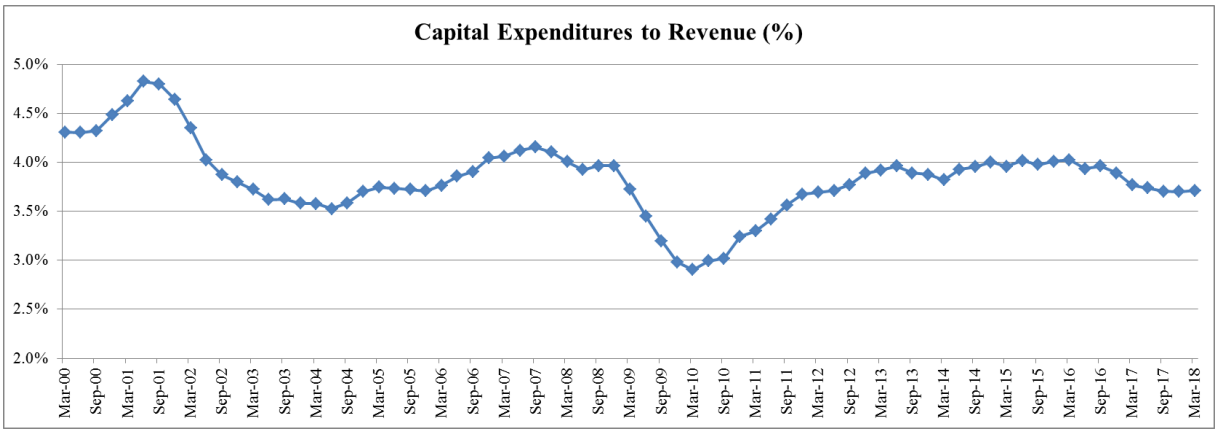
Median selling, general, and administrative expense (before depreciation) as a percent of revenue decreased to 17.17% in March 2018, down from 17.26% in December 2017 and 18.38% in March 2017.

All Non-financials, Q1 2000 – Q1 2018



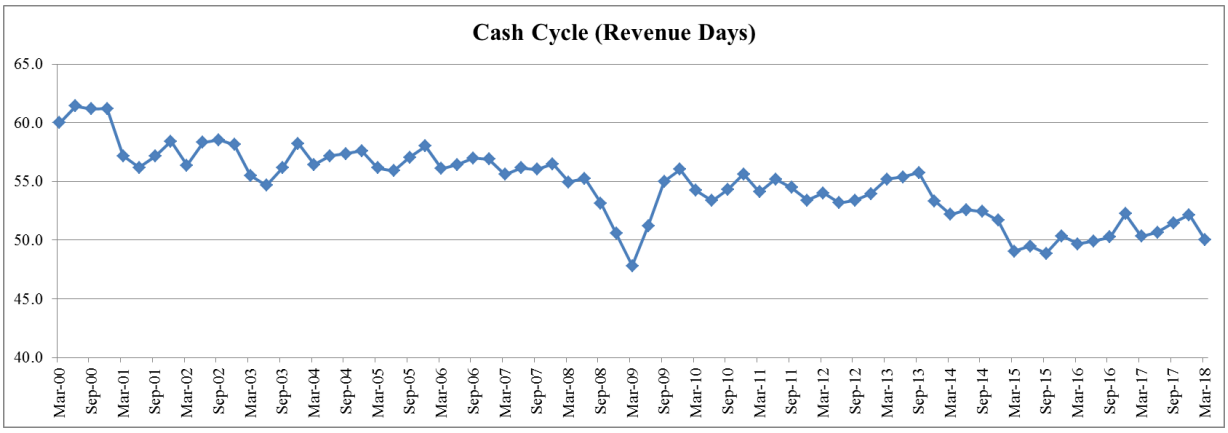
Median net margin decreased to 4.00% for the March 2018 reporting period, down from 4.11% for the December 2017 period, but is ahead of the 3.71% reported in March 2017.

All Non-financials, Q1 2000 – Q1 2018



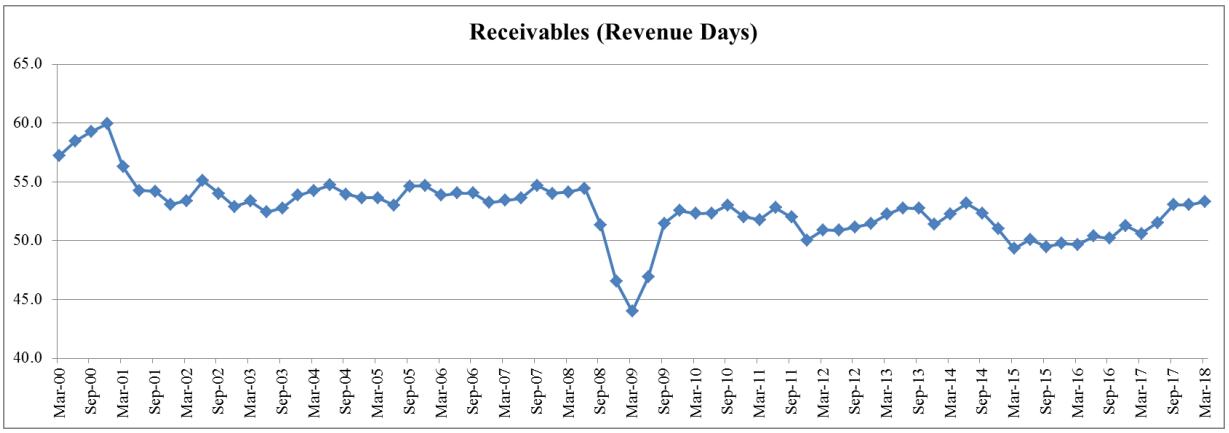
Capital expenditures as a percentage of revenue remained flat at 3.71% in the March 2018 reporting period, compared to 3.70% from the September 2017 period through the December 2017 reporting period, and is down from 3.77% in March 2017. This low level of capital expenditures continues to be a trend worth monitoring, as spending remains well-below the level of investment needed to replace capital expenditures lost during the recession.

All Non-financials, Q1 2000 – Q1 2018



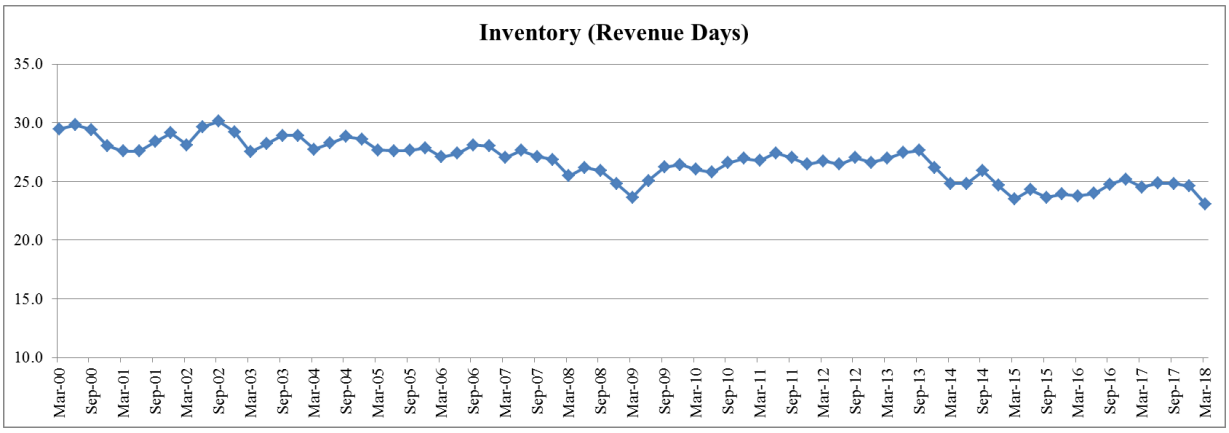
The cash cycle measures the proportion of operating cash flow carried in working capital and is measured by receivables days plus inventory days less payables days. The metric decreased to 50.01 days for the period ended March 2018 from 52.16 days for the period ending December 2017, and is below the 50.31 days recorded during the period ended March 2017.

All Non-financials, Q1 2000 – Q1 2018



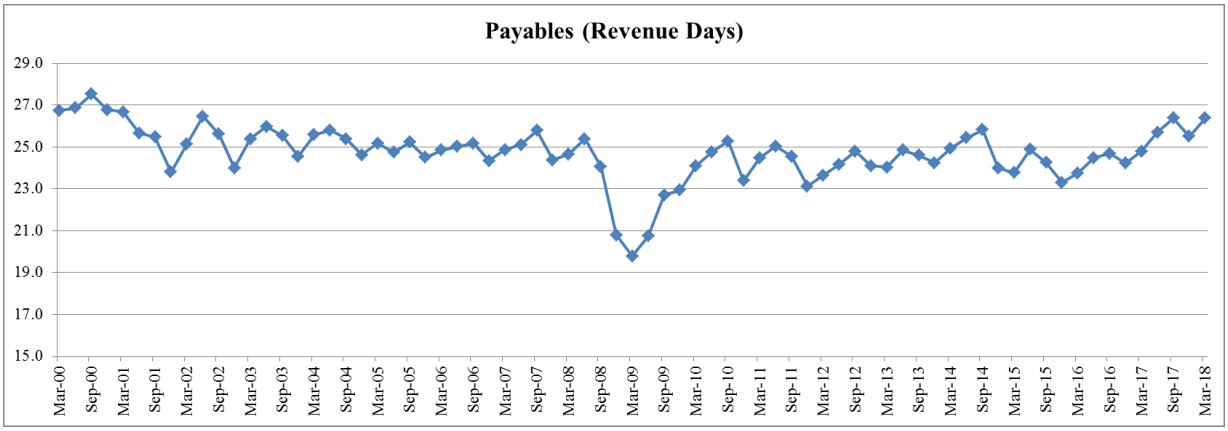
Median accounts receivable days increased to 53.32 days in the March 2018 reporting period from 53.05 days in December 2017, and is also above the 50.59 days seen in December 2016.

All Non-financials, Q1 2000 – Q1 2018



Median inventory days decreased to 23.61 days in March 2018 from 24.61 days in December 2017, and is below the 24.51 days recorded in March 2017.

All Non-financials, Q1 2000 – Q1 2018



Accounts payable days increased to 26.37 days in the March 2018 reporting period from 25.50 in December 2017, and was also above the 24.80 days in the period ending March 2017.

Individual Industry Results

During the twelve months ended March 2018, recent industry trends evidenced a moderate to substantial improvement in free cash margin in **6** industries, relatively stable free cash margin in **3** industries, 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		
2540	Media		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		
5510	Utilities	X		
	Total	**6**	**3**	**11**

The following table compares Free Cash Margin for the 20 industry groups in the period ending September 2017 (Q3 2017) with the June 2017 and September 2016 reporting periods.

GICS	Sector/Industry Group	Q1 2018	Q4 2017	Q1 2017
1010	Energy	-0.63%	0.60%	1.34%
1510	Materials	5.13%	5.39%	6.00%
2010	Capital Goods	3.32%	4.38%	4.97%
2020	Commercial & Prof Services	6.08%	7.17%	7.10%
2030	Transportation	1.33%	1.68%	1.54%
2510	Automobiles & Components	2.91%	2.85%	2.66%
2520	Consumer Durables & Apparel	5.26%	5.99%	6.55%
2530	Consumer Services	5.80%	5.61%	5.95%
2540	Media	8.28%	8.42%	7.97%
2550	Retailing	2.92%	3.37%	4.19%
3010	Food & Staples Retailing	1.37%	1.07%	1.19%
3020	Food, Beverage, & Tobacco	6.57%	5.58%	6.00%
3030	Household & Personal Products	11.36%	11.19%	9.58%
3510	Health Care Equipment & Services	5.98%	6.18%	6.42%
3520	Pharmaceuticals, Biotech, & Life Sciences	-34.75%	-32.32%	-10.58%
4510	Software & Services	8.95%	10.05%	8.93%
4520	Technology Hardware & Equipment	4.37%	5.65%	5.58%
4530	Semiconductors & Equipment	12.49%	12.30%	11.31%
5010	Telecommunication Services	5.07%	3.21%	4.56%
5510	Utilities	0.67%	-0.02%	-0.16%
	All Industries Median	**4.17%**	**4.59%**	**5.28%**

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.

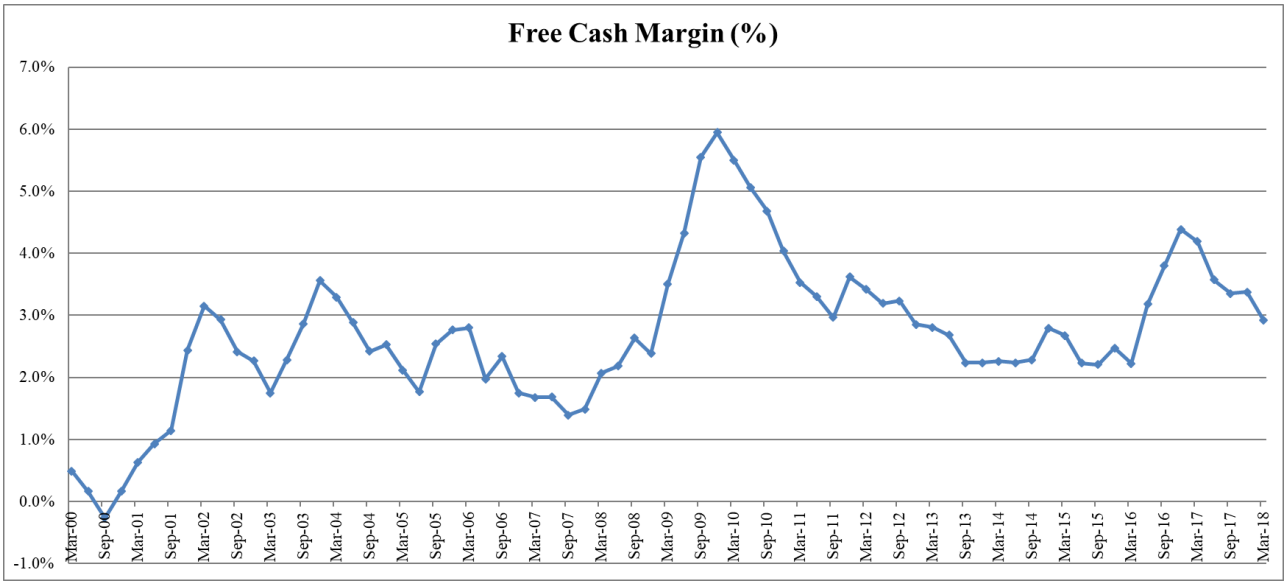
On the efficiency front, increases in receivables and inventory consume free cash flow. Increases in accounts payable provide free cash flow. The combination of receivables days plus inventory days less payables days is a firm's cash cycle. Reductions in the cash cycle provide free cash flow, while increases 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 ended March 20187, eleven industries saw free cash margin decline: Energy; Materials; Capital Goods; Commercial & Professional Services; Transportation; Consumer Durables & Apparel; Retailing; Health Care Equipment & Services; Pharmaceuticals, Biotech, & Life Sciences; Software & Services; and Technology Hardware & Equipment. In the following paragraphs we take a closer look at an industry with declining free cash margin: Retailing.

Retailing, Q1 2000 – Q1 2018



Drivers of Free Cash Margin

Retailing	Q1 2018 (Mar 2018)	Q4 2017 (Dec 2017)	Q1 2017 (Mar 2017)	Effect on FCM (Q1 2018 vs. Q1 2017)
Revenue (millions)	**2,415.73**	**2,875.45**	**2,866.25**	**DOWN 15.72%**
Free Cash Flow (millions)	**50.063**	**82.748**	**92.525**	**DOWN 45.89%**
Free Cash Margin	**2.92%**	**3.37%**	**4.19%**	**DOWN 8.48%**
Operating Cushion %	8.49%	8.78%	8.30%	Driving **UP**
Gross Margin % (before depreciations)	36.29%	36.24%	36.23%	Driving **UP**
SGA% (before depreciation)	28.16%	27.83%	27.72%	Driving **DOWN**
Cash Cycle (rev days)	39.05	36.70	37.11	Driving **DOWN**
Accounts Receivable (rev days)	6.50	6.88	6.55	Driving **UP**
Inventory (rev days)	57.44	56.04	56.32	Driving **DOWN**
Accounts Payable (rev days)	24.88	26.23	25.76	Driving **DOWN**
Income tax to Rev %	0.85%	1.17%	1.49%	Driving **UP**
Cap Exp. to Rev %	2.33%	2.47%	2.67%	Driving **UP**

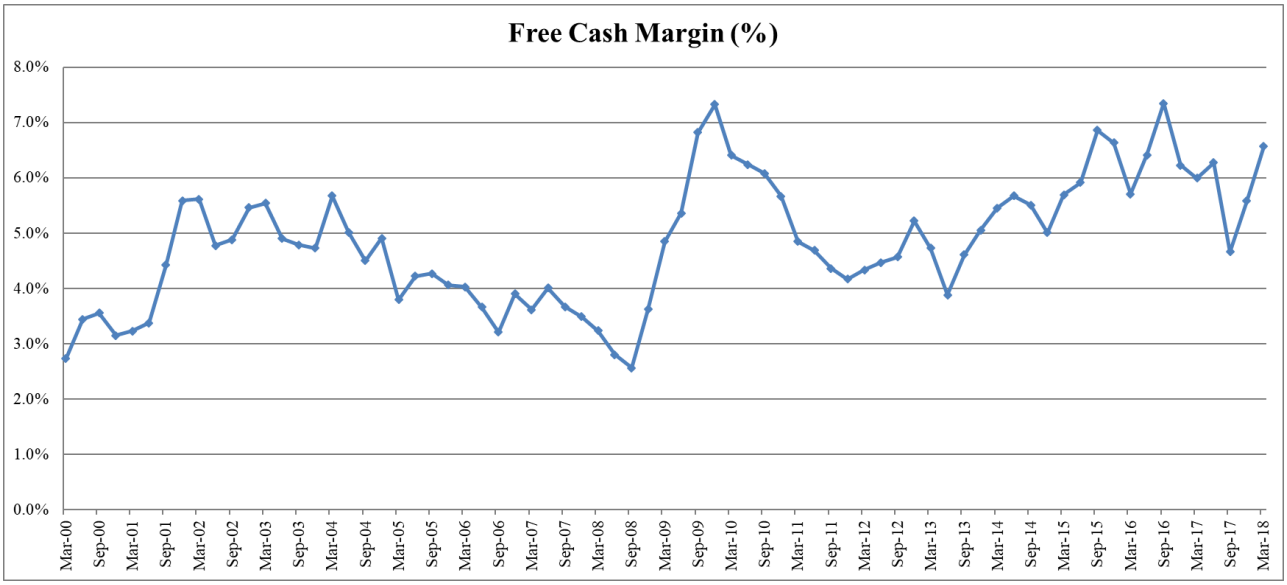
Analysis

Free cash margin for the Retailing industry has dropped significantly over the previous year, due to an inefficient cash cycle and a higher percentage of selling, general, and administration expenses. Accounts payables revenue days and inventory revenue days have primarily driven this decline.

Industries with Improving Free Cash Margin

In the twelve month period ended December 2017, six industries enjoyed improving free cash margin: Consumer Services; Food & Staples Retailing; Food, Beverage & Tobacco; Semiconductors & Equipment; Telecommunication Services; and Utilities. In the following paragraphs we take a closer look at an industry with improving free cash margin: Food, Beverage & Tobacco.

Food, Beverage & Tobacco, Q1 2000 – Q4 2017



Drivers of Free Cash Margin

Food, Beverage & Tobacco	Q1 2018 (Mar 2018)	Q4 2017 (Dec 2017)	Q1 2017 (Mar 2017)	Effect on FCM (Q1 2018 vs. Q1 2017)
Revenue (millions)	**3,293.00**	**3,305.78**	**3,001.59**	**UP 9.71%**
Free Cash Flow (millions)	**121.4235**	**130.9935**	**128.75**	**DOWN 5.69%**
Free Cash Margin	**6.57%**	**5.58%**	**6.00%**	**UP 9.57%**
Operating Cushion %	16.65%	16.81%	17.35%	Driving **DOWN**
Gross Margin % (before depreciations)	35.41%	37.34%	38.55%	Driving **DOWN**
SGA% (before depreciation)	16.48%	17.03%	18.05%	Driving **UP**
Cash Cycle (rev days)	50.85	45.21	50.19	Driving **DOWN**
Accounts Receivable (rev days)	37.21	34.51	34.34	Driving **DOWN**
Inventory (rev days)	41.59	37.62	41.46	Driving **DOWN**
Accounts Payable (rev days)	27.94	26.92	25.61	Driving **UP**
Income tax to Rev %	0.49%	1.92%	2.47%	Driving **UP**
Cap Exp. to Rev %	3.82%	3.78%	4.39%	Driving **UP**

Analysis

Improving free cash margin for the Food, Beverage & Tobacco is being driven by an improved SG&A spending as a percent of revenue, as well as a decrease in capital expenditures and income taxes paid as a percent of revenue. A smaller operating cushion and gross margin and a longer cash cycle limited this effect, however.

Conclusions

The cash flow data reporting through the first quarter of 2018 largely suggests a continuation of the generally positive economic outlook from the previous quarter. That said, despite strong revenue figures, growing gross margins, a shorter cash cycle, and lower taxes, capital expenditures remain disconcertingly low.

Median free cash margin decreased for the fourth consecutive quarter in the March 2018 reporting period, but it is still in-line with historical averages. Median revenues dipped slightly to $1,284.30 million, which is behind only the December 2017 figure in the entire dataset and is up 13.5% year-over-year from $1,131.96 in March 2017.

The recently passed US tax reform legislation could potentially lead to firms putting excess capital to use in ways that would stimulate economic growth. And while it should be noted that the passage of the tax reform law only covers the most recent quarter, firms do not yet appear to be spending this extra cash flow on capital projects. Capital expenditures as a percentage of revenue have remained remarkably stable over the last three quarters, at 3.71% in the March 2018 period compared 3.70% figure experienced in the September and December 2017 periods. It appears that instead of investing in capital projects, firms are distributing their capital to their shareowners through dividends and stock repurchases. Dividends and stock repurchases as a percentage of revenue increased in the March 2018 period, up 4.3% from the December 2017 period and up 6.3% year-over-year from the March 2017 period.

Firms may be reluctant to invest in long term capital projects due to larger economic concerns. The imposition of tariffs and a potentially looming trade war could be adding significant market uncertainty that would reduce firms' appetite for capital investments.