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## Cash Flow Trends and Their Fundamental Drivers: Comprehensive Review (Quarter 3, 2012)

#### Free Cash Margin Index:

 2.43%, 3.96%
 4.72%
 7.18%

 Recession Lows
 Current
 Recent High

 (Mar. 2001, Dec. 2008)
 (Sep. 2012)
 (Mar. 2010)

In Q3 2012, median free cash margin increased, reaching 4.72% for the twelve months ended September 2012, up from 4.55% for the twelve months ended June 2012 and 4.41% for the twelve months ended September 2011. Free cash margin appears now to have stabilized at pre-recession levels of between 4.5% and 5.0%. As free cash margin has stabilized, spending patterns have gradually returned to more normal, pre-recession levels, as we observed increased spending on operating expenses, inventories and capital assets.

Growth continues for the U.S. economy and we are observing an ongoing return to normalcy for operating indicators, particularly when compared with pre-recession levels of September 2007. Our data show no obvious evidence of arrested growth as a result of corporate restraint associated with negotiations associated with the so-called fiscal cliff, the debt ceiling or budget sequestration. On the contrary, we saw healthy revenue growth and improving free cash flow even with the increase in spending that is expected in a recovery.

Looking at individual industries, during the September 2012 reporting period free cash margin was stable in 23 industries, increased in fifteen and declined in six. Included in this report is a closer look at four separate industries: Wholesale and Automobiles & Trucks with increasing free cash margins and Non-metallic & Industrial Metal Mining and Personal Services with decreasing free cash margins.

Data for this research were provided by Cash Flow Analytics, LLC., <u>www.cashflowanalytics.com</u>. Charles Mulford is a principal in Cash Flow Analytics, LLC.

January, 2013

# 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.

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# Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Quarter 3, 2012)

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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 third quarter of 2012. 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 a current market capitalization of \$50 million or more are included, resulting in a total sample of 2,848 companies. Please see page 7 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.

For more detail, the industry spreadsheets that identify trends in free cash margin and its underlying drivers for 44 separate industries for all available reporting periods through the third quarter of 2012 have been posted. The spreadsheets, which are updated quarterly, can be found on the Lab's website at <a href="https://www.mgt.gatech.edu/finlab">www.mgt.gatech.edu/finlab</a>.

#### **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 "non-financial 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 submeasures 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 Cash Flow Analytics, LLC<sup>1</sup>. 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 September 30, 2012 represent amounts for the twelve months (four quarters) ending September 30, 2012.

The 44 analyzed industries are as follows:

CICS	Industry	CICS	Industry
1	Agricultural	23	Automobiles and Trucks
2	Food Products	24	Aircraft
3	Candy and Soda	25	Shipbuilding and railroad equipment
4	Beer and Liquor	26	Defense
5	Tobacco Products	27	Precious metals
6	Recreation	28	Non-metallic and industrial metal mining
7	Entertainment	29	Coal
8	Printing and Publishing	30	Petroleum and natural gas
9	Consumer Goods	31	Utilities
10	Apparel	32	Communications
11	Healthcare	33	Personal services
12	Medical Equipment	34	Business services
13	Pharmaceutical Products	35	Computer hardware
14	Chemicals	36	Computer software
15	Rubber and Plastic Products	37	Electronic equipment
16	Textiles	38	Measuring and control equipment
17	Construction Materials	39	Business supplies
18	Construction	40	Shipping containers
19	Steel Works, etc.	41	Transportation
20	Fabricated Products	42	Wholesale
21	Machinery	43	Retail
22	Electrical Equipment	44	Restaurants hotels motels

## **Summary of Results for All Non-financial Companies**

Median free cash margin increased this quarter, improving to 4.72% of revenue for the twelve months ended September 2012, up from 4.55% and 4.41%, respectively, for twelve months ended June 2012 and September 2011.

<sup>1</sup> Cash Flow Analytics, LLC, 1727 Malvern Place, Duluth, Georgia, 30097. www.cashflowanalytics.com. Charles Mulford is a principal in Cash Flow Analytics, LLC.

This latest increase in free cash margin is consistent with a continued gradual recovery in the U.S. economy. After a large increase and subsequent decline during the global financial crisis (see chart), free cash margin is now positioned close to the 5% level that historically has characterized a stable economic environment.

## **Drivers of Free Cash Margin**

ALL INDUSTRIES	Q3 2012	Q2 2012	Q3 2011	Effect on FCM
ALL INDUSTRIES	(Sep. 2012)	(Jun. 2012)	(Sep. 2011)	(Q3 2012 vs. Q2 2012)
Revenue (millions)	776.47	753.35	675.82	<b>UP</b> 3.07%
Free Cash Flow (millions)	26.25	25.21	21.76	<b>UP</b> 4.13%
Free Cash Margin	4.72%	4.55%	4.41%	<b>UP</b> 0.17%
Operating Cushion %	14.39%	14.67%	16.02%	Driving <b>DOWN</b>
Gross Margin % (before depreciations)	43.07%	43.58%	43.26%	Driving <b>DOWN</b>
SGA% (before depreciation)	21.37%	21.32%	20.31%	Driving <b>DOWN</b>
Cash Cycle (rev days)	50.98	48.66	50.10	Driving <b>DOWN</b>
Accounts Receivable (rev days)	51.25	50.31	51.99	Driving <b>DOWN</b>
Inventory (rev days)	24.78	23.38	23.86	Driving <b>DOWN</b>
Accounts Payable (rev days)	25.05	25.03	25.75	Driving <b>UP</b>
Income tax to Rev %	1.09%	1.09%	1.13%	Driving <b>DOWN</b>
Cap Exp. to Rev %	3.57%	3.51%	3.29%	Driving <b>DOWN</b>

In terms of growth, median revenues for the twelve months ended September reached their highest level since 2000, hitting \$776.47 million, up 3.1% from the previous record of \$753.35 million attained during the twelve months ended June 2012 and up 14.9% from \$675.82 million reached during the year-ago twelve-month reporting period ended September 2011. Median revenues now stand 3.4% above the pre-recession peak of \$751.15 million reached during the twelve months ended September 2008.

Operating profitability did decline in the September 2012 reporting period. Operating cushion (operating profit before depreciation) dropped to 14.39% during the twelve months ended September 2012 from 14.67% in June 2012 and 16.02% in September 2011. The decline was derived from a reduction in gross margin before depreciation, which declined to 43.07% in September 2012 from 43.58% in June 2012 and 43.26% in September 2011. Selling, general and administrative expense as a percentage of revenue remained relatively flat at 21.37% during the September 2012 reporting period, a negligible difference with respect to June 2012 but up from 20.31% in September 2011.

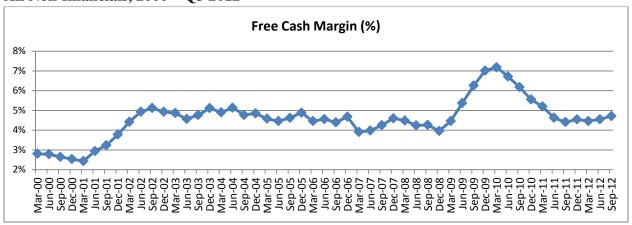
We continue to observe increased spending on inventory and capital investments. The cash cycle increased during the twelve months ended September 2012 to 50.98 revenue days, up from 48.66 days in June 2012 and 50.10 days in September 2011. The primary driver behind the increase in

the cash cycle was an increase in inventory days, which rose to 24.78 days in September 2012, from 23.38 days in June 2012 and 23.86 days in September 2011. Managers are apparently expecting future revenue increases and are gradually increasing stocks to accommodate those anticipated higher sales.

Capital expenditures continued their post-recession ascent, rising to 3.57% of revenue during the twelve months ended September 2012 from 3.51% in June 2012 and 3.29% in September 2011. As a percentage of revenue, capital expenditures now stand 36.8% higher than they were at the low point reached during the twelve months ended March 2010. Further, that higher capital expenditure percentage is calculated on a revenue amount whose median has since then grown by 47.1%.

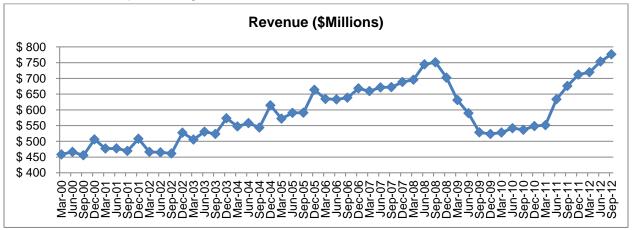
In the exhibits below we present graphs of free cash margin and several of its underlying drivers. These exhibits were constructed with data from the complete sample of 2,848 non-financial companies. For more details on each of the 44 individual industries included, please refer to the individual industry spreadsheets that are available on our website (www.mgt.gatech.edu/finlab).

#### **All Non-financials, 2000 – Q3 2012**



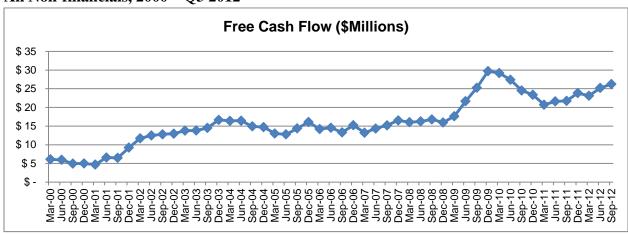
Median free cash margin increased this quarter to 4.72% during the twelve months ended September 2012, following a similar slight increase the previous quarter. As such, free cash margin continues to stabilize around the pre-crisis levels of between 4.5% and 5%.





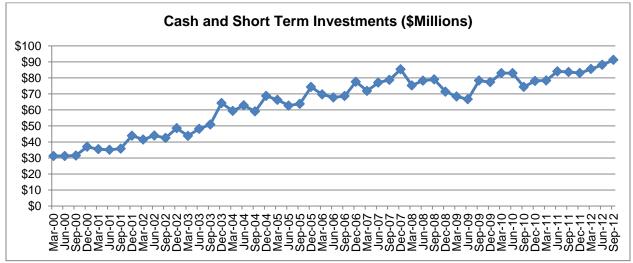
Median revenues continue to grow, reaching record levels this quarter. They have now eclipsed the pre-crisis peak of \$751.15 million reached in the reporting period ended September 2008, and are the highest seen in the dataset. In the twelve months ended September 2012 median revenues increased 3.1% from the \$753.35 million reported for the twelve months ended June 2012.

## All Non-financials, 2000 - Q3 2012



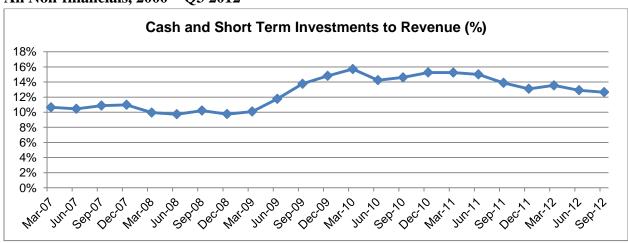
Median free cash flow increased by 4.1% for the twelve months ended September 2012 over the June 2012 period. Median free cash flow is up 20.6% over the September 2011 reporting period.





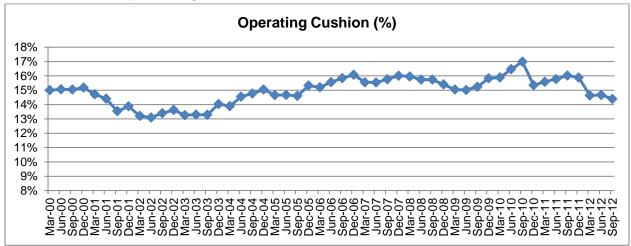
Median cash and short-term investments have been growing steadily for the past two years, and increased by an additional 3.5% over the previous quarter to \$91.25 million.

## **All Non-financials, 2000 – Q3 2012**



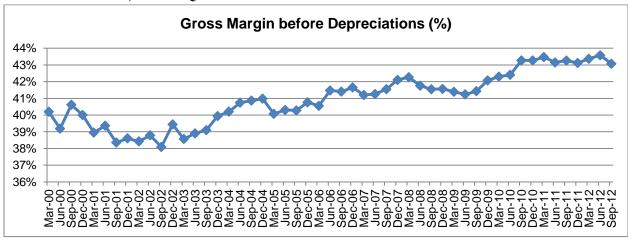
As median revenues grow, cash and short-term investments as a percent of revenue continues its decline, decreasing to 12.65% for the twelve months ended September 2012.





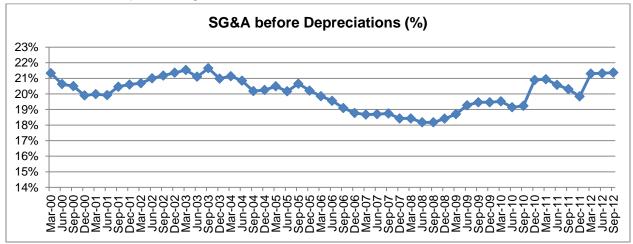
Operating cushion declined marginally after stabilizing for the period ended June 2012. It fell slightly to 14.39%, reflecting a reduction in gross margin. Selling, general and administrative expense as a percent of revenue was little changed.

### **All Non-financials, 2000 – Q3 2012**



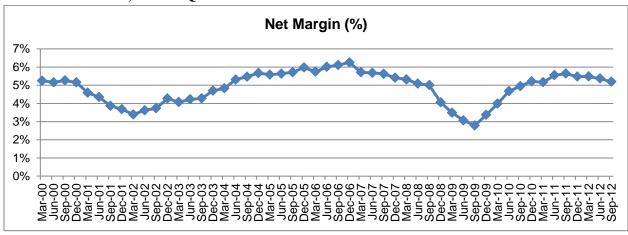
Gross margin before depreciation fell for this reporting period to 43.07%, down from 43.58% in June 2012, and lower than 43.26% for the period ending September 2011.





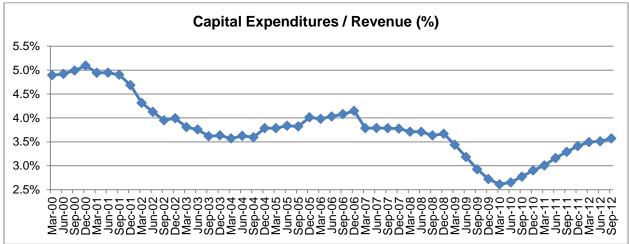
SG&A (before depreciation) remained flat for this reporting period. It rose 0.2% to 21.37% in the September reporting period, from 21.32% for the June 2012 reporting period. SG&A% is at pre-recession levels after a period of diminished spending during the financial crisis.

#### **All Non-financials, 2000 – Q3 2012**



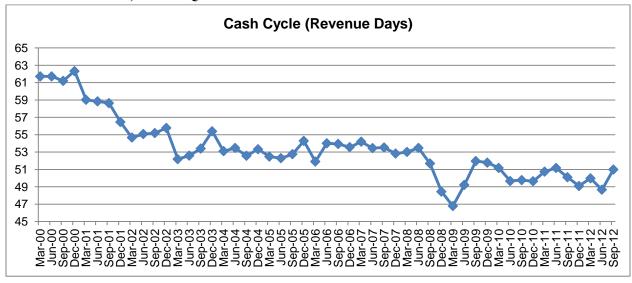
Median net margin continued a recent marginal decline to 5.19% for the September 2012 period from 5.37% for the June 2012 reporting period. It has been declining slowly for the past year.





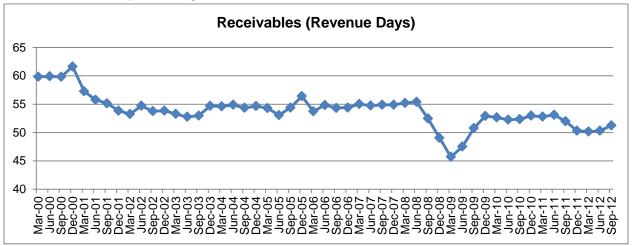
Continuing recent trends, capital expenditures as a percentage of revenue increased to 3.57% from 3.50% for June 2012, continuing its increase towards pre-recession levels that are closer to 4.0%.

#### **All Non-financials, 2000 – Q3 2012**



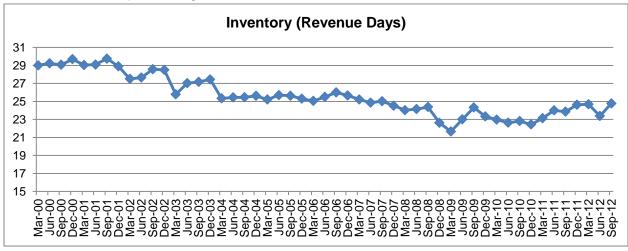
The cash cycle measures the proportion of operating cash flow carried in working capital and is measured by receivables days plus inventory days less payables days. The metric increased by 2.3 days for the period ended September 2012, rising to 50.98 days, after decreasing by 1.3 days in the prior period. The September 2012 increase was driven largely by an increase in inventory days, though receivables days also increased.



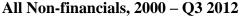


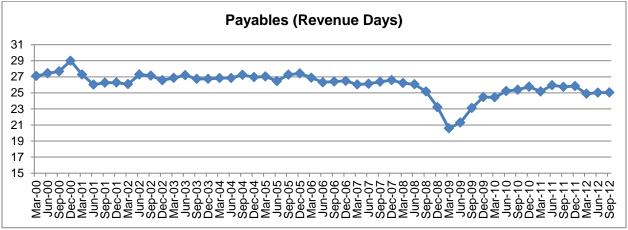
Accounts receivable days increased by almost one day in the September 2012 reporting period, as compared to the period ending June 2012, contributing to the increase in cash cycle. Receivables days is, however, slightly lower than the reading observed in September 2011.

## **All Non-financials, 2000 – Q3 2012**



Inventory days increased by 1.4 days to 24.78 days in the September 2012 reporting period over the June 2012 reporting period, driving much of the increase in the cash cycle. The metric is also higher than it was in September 2011.





Accounts payable days barely changed in this reporting period, increasing by 0.02 days. As such, it had a negligible impact on the cash cycle.

## **Individual Industry Results**

During the twelve months ended September 2012, compared with recent industry trends, there was a moderate to substantial <u>improvement</u> in free cash margin in <u>15</u> industries, relatively <u>stable</u> free cash margin in <u>23</u> industries, and <u>6</u> industries with <u>declining</u> free cash margin.

Please refer to the individual industry spreadsheets, available on our website, for charts and further details on each of the 44 industries outlined in the following tables.

## **Industry Trends in Free Cash Margin**

CICS	Industry	Increasing	Stable	Declining
1	Agricultural		X	
2	Food Products	X		
3	Candy and Soda		X	
4	Beer and Liquor		X	
5	Tobacco Products		X	
6	Recreation			X
7	Entertainment			X
8	Printing and Publishing	X		
9	Consumer Goods	X		
10	Apparel	X		
11	Healthcare	X		
12	Medical Equipment	X		
13	Pharmaceutical Products	X		
14	Chemicals		X	
15	Rubber and Plastic Products		X	
16	Textiles	X		
17	Construction Materials	X		
18	Construction		X	
19	Steel Works		X	
20	Fabricated Products		X	
21	Machinery		X	
22	Electrical Equipment		X	
23	Automobiles and Trucks	X		
24	Aircraft		X	
25	Shipbuilding and railroad equipment		X	
26	Defense	X		
27	Precious metals		X	
28	Non-metallic and industrial metal mining			X
29	Coal		X	
30	Petroleum and natural gas		X	
31	Utilities			X
32	Communications	X		
33	Personal services			X
34	Business services		X	
35	Computer hardware		X	
36	Computer software		X	
37	Electronic equipment		X	
38	Measuring and control equipment		X	
39	Business supplies	X		
40	Shipping containers	X		
41	Transportation		X	
42	Wholesale	X		
43	Retail		X	
44	Restaurants hotels motels			X
	Total	15	23	6

The following table compares Free Cash Margin for the 44 industries in September 2012 (Q3 2012) with September 2011 (Q3 2011) and June 2012 (Q2 2012)

**Industry Trends in Free Cash Margin** 

CICS	Industry	Q3 2011	Q2 2012	Q3 2012
1	Agricultural	2.06%	1.90%	2.49%
2	Food Products	3.01%	3.68%	4.63%
3	Candy and Soda	7.78%	4.52%	5.32%
4	Beer and Liquor	13.06%	12.67%	14.10%
5	Tobacco Products	12.58%	13.10%	12.50%
6	Recreation	5.44%	3.57%	3.84%
7	Entertainment	9.33%	6.15%	4.24%
8	Printing and Publishing	9.55%	10.55%	11.52%
9	Consumer Goods	4.31%	5.06%	5.71%
10	Apparel	2.11%	5.47%	6.40%
11	Healthcare	4.53%	4.52%	5.47%
12	Medical Equipment	5.55%	7.76%	7.30%
13	Pharmaceutical Products	4.60%	7.86%	10.40%
14	Chemicals	3.68%	4.80%	4.32%
15	Rubber and Plastic Products	4.48%	3.20%	4.12%
16	Textiles	1.94%	2.76%	3.19%
17	Construction Materials	2.59%	2.14%	3.60%
18	Construction	0.71%	0.34%	0.86%
19	Steel Works	0.39%	1.55%	1.62%
20	Fabricated Products	1.87%	6.13%	4.07%
21	Machinery	4.81%	4.96%	3.83%
22	Electrical Equipment	3.90%	5.78%	4.77%
23	Automobiles and Trucks	1.17%	2.30%	2.63%
24	Aircraft	2.83%	3.15%	2.95%
25	Shipbuilding and railroad equipment	4.01%	4.34%	4.51%
26	Defense	5.53%	5.58%	6.69%
27	Precious metals	11.96%	10.74%	11.82%
28	Nonmetallic and industrial metal mining	8.57%	6.45%	4.07%
29	Coal	8.05%	2.98%	3.22%
30	Petroleum and natural gas	0.11%	0.14%	0.00%
31	Utilities	2.32%	0.02%	0.16%
32	Communications	8.89%	9.16%	9.56%
33	Personal services	7.24%	5.04%	5.10%
34	Business services	7.21%	6.75%	7.14%
35	Computer hardware	6.91%	6.91%	6.85%
36	Computer software	11.27%	10.61%	11.40%
37	Electronic equipment	5.64%	5.18%	5.16%
38	Measuring and control equipment	8.10%	8.16%	8.14%
39	Business supplies	3.45%	4.88%	5.11%
40	Shipping containers	3.01%	3.39%	4.01%
41	Transportation	2.11%	2.22%	2.30%
42	Wholesale	1.07%	1.56%	2.61%
43	Retail	3.00%	3.22%	2.88%
44	Restaurants hotels motels	6.61%	5.60%	4.93%

## 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.

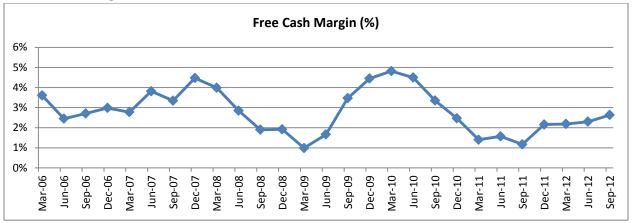
#### **Industries with Improving Free Cash Margin**

In the twelve month period ended September 2012, fifteen industries enjoyed improving free cash margin: Food Products; Printing and Publishing; Consumer Goods; Apparel; Healthcare; Medical Equipment; Pharmaceutical Products; Textiles; Construction Materials; Automobiles and Trucks; Defense; Communications; Business supplies; Shipping containers; and Wholesale.

Here we look more closely at two of these: Automobiles & Trucks and Wholesale.

#### **Automobiles and Trucks**

Free Cash Margin, 2000 – Q3 2012



## **Drivers of Free Cash Margin**

AUTOMOBILES AND TRUCKS	Q3 2012 (Sep. 2012)	Q2 2012 (Jun. 2012)	Q3 2011 (Sep. 2011)	Effect on FCM (Q3 2012 vs. Q2 2012)
Free Cash Margin	2.63%	2.30%	1.17%	
Operating Cushion %	8.76%	8.49%	8.53%	Driving <b>UP</b>
Gross Margin % (before depreciations)	20.16%	19.50%	20.54%	Driving <b>UP</b>
SGA% (before depreciation)	9.85%	9.54%	10.18%	Driving <b>DOWN</b>
Cash Cycle (rev days)	61.33	58.09	62.30	Driving <b>DOWN</b>
Accounts Receivable (rev days)	56.23	56.82	58.99	Driving <b>UP</b>
Inventory (rev days)	41.78	41.25	43.31	Driving <b>DOWN</b>
Accounts Payable (rev days)	36.68	39.97	40.0	Driving <b>DOWN</b>
Income tax to Rev %	1.13%	1.00%	0.89%	Driving <b>DOWN</b>
Cap Exp. to Rev %	3.01%	3.00%	3.23%	Driving <b>DOWN</b>

#### **Analysis**

Free cash margin for the Automobiles and Trucks industry continued a steady increasing trend, and increased to 2.63% for the twelve months ended September 2012, up from 2.30% for the twelve months ending June 2012 and 1.17% for the twelve months ending September 2011. The largest single factor behind this improvement was an increase in Gross Margin before depreciation, which increased 3.4% to 20.16% in September 2012 from 19.50% in June 2012. Working against the improvement in free cash margin, however, was a three day increase in the cash cycle, to 61.33 days for the period ending September 2012 from 58.09 days in June 2012, driven primarily by a decline in payable days.

#### **Wholesale Industry**

## Free Cash Margin, 2006 – Q3 2012



#### **Free Cash Margin Drivers**

WHOLESALE	Q3 2012	Q2 2012	Q3 2011	Effect on FCM
WHOLESALE	(Sept. 2012)	(Jun. 2012)	(Sept. 2011)	(Q3 2012 vs. Q2 2012)
Free Cash Margin	2.61%	1.56%	1.07%	
Operating Cushion %	6.96%	6.52%	6.89%	Driving <b>UP</b>
Gross Margin % (before depreciations)	21.94%	22.33%	23.29%	Driving <b>DOWN</b>
SGA% (before depreciation)	13.33%	14.40%	14.88%	Driving <b>UP</b>
Cash Cycle (rev days)	57.15	53.89	56.78	Driving <b>DOWN</b>
Accounts Receivable (rev days)	44.49	45.48	46.58	Driving <b>UP</b>
Inventory (rev days)	39.78	37.73	39.51	Driving <b>DOWN</b>
Accounts Payable (rev days)	27.12	29.33	29.31	Driving <b>DOWN</b>
Income tax to Rev %	1.12%	1.22%	1.10%	Driving <b>UP</b>
Cap Exp. to Rev %	1.00%	0.90%	1.08%	Driving <b>DOWN</b>

#### **Analysis**

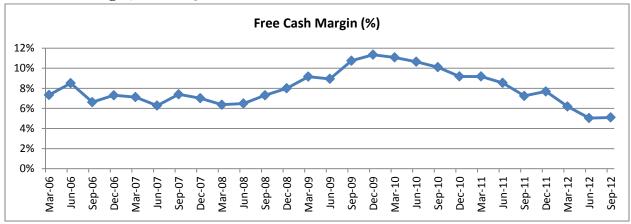
Free Cash margin in the Wholesale industry increased to 2.61% for the twelve months ending September 2012, up from 1.56% for the twelve months ending June 2012. This improvement was driven primarily by an improvement in operating cushion, resulting from a decline in the SGA%. A reduction in Receivables Days was offset by an increase in Inventory days and decreases in Payables days, all resulting in an increase in the cash cycle.

#### **Industries with Declining Free Cash Margin**

In the following paragraphs we take a closer look at two industries with declining free cash margin: the Personal services industry, and Non-metallic and industrial metal mining.

#### **Personal Services Industry**

## Free Cash Margin, 2000 - Q3 2012



#### **Free Cash Margin Drivers**

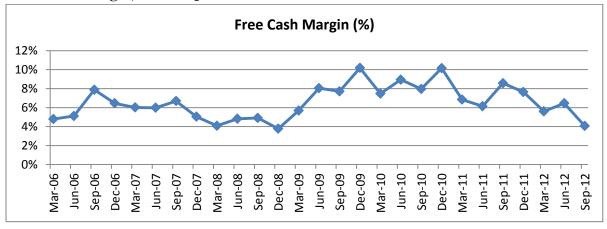
PERSONAL SERVICES	Q3 2012	Q2 2012	Q3 2011	Effect on FCM
I ERSONAL SERVICES	(Sep. 2012)	(Jun. 2012)	(Sep. 2011)	(Q3 2012 vs. Q2 2012)
Free Cash Margin	5.10%	5.04%	7.24%	
Operating Cushion %	16.27%	16.42%	20.13%	Driving <b>DOWN</b>
Gross Margin % (before depreciations)	51.22%	49.73%	53.94%	Driving <b>UP</b>
SGA% (before depreciation)	33.46%	31.29%	27.65%	Driving <b>DOWN</b>
Cash Cycle (rev days)	14.46	14.82	7.31	Driving <b>UP</b>
Accounts Receivable (rev days)	32.15	30.12	25.35	Driving <b>DOWN</b>
Inventory (rev days)	0.0	0.0	0.0	Driving <b>DOWN</b>
Accounts Payable (rev days)	17.7	15.3	18.04	Driving <b>UP</b>
Income tax to Rev %	2.36%	1.99%	4.22%	Driving <b>DOWN</b>
Cap Exp. to Rev %	4.55%	4.60%	4.85%	Driving UP

#### **Analysis**

Free cash margin for the Personal services industry increased slightly quarter over quarter, but has declined more than 2% year-over-year for the 12 months ending September 2012. The main driver was an increased proportion of administrative expenses, and a significant year-over-year increase in the cash cycle. The cash cycle almost doubled to 14.46 from 7.31 days, driven by an increase accounts receivable days.

## Non Metallic and Industrial Metal Mining Industry

Free Cash Margin, 2000 – Q3 2012



## Free Cash Margin Drivers

NON METALLIC AND INDUSTRIAL	Q3 2012	Q2 2012	Q3 2011	Effect on FCM
METAL MINING	(Sept. 2012)	(Jun. 2012)	(Sept. 2011)	(Q3 2012 vs. Q2 2012)
Free Cash Margin	4.07%	6.45%	8.57%	
Operating Cushion %	28.55%	31.12%	26.82%	Driving <b>DOWN</b>
Gross Margin % (before depreciations)	42.92%	42.91%	46.26%	Driving <b>UP</b>
SGA% (before depreciation)	9.07%	9.47%	8.77%	Driving <b>UP</b>
Cash Cycle (rev days)	54.25	53.69	60.77	Driving <b>DOWN</b>
Accounts Receivable (rev days)	44.94	40.22	45.44	Driving <b>DOWN</b>
Inventory (rev days)	50.45	51.13	58.89	Driving UP
Accounts Payable (rev days)	41.15	37.66	43.57	Driving UP
Income tax to Rev %	2.34%	2.93%	1.93%	Driving <b>UP</b>
Cap Exp. to Rev %	18.27%	15.23%	10.34%	Driving <b>DOWN</b>

## **Analysis**

Free cash margin for Non Metallic and Industrial Metal Mining declined to 4.07% for the twelve months ending September 2012 from 6.45% for the twelve months ending June 2012. The two main drivers for the decrease in free cash margin were a decline in operating cushion to 28.55% in September 2012 from 31.12% in June, and an increase in capital expenditures as a percentage of revenue to 18.27% in September 2012 from 15.23% in June.

#### **Conclusions**

For the twelve months ended September 2012, free cash margin increased to 4.72% from 4.55% for the twelve months ended June 2012 and 4.41% for the twelve months ended September 2011. After a significant upward pull in free cash margin observed during the recession and a marked decline thereafter, free cash margin appears now to have stabilized at pre-recession levels of between 4.5% and 5.0%. As free cash margin has stabilized, spending patterns have gradually returned to more normal, pre-recession levels. Even as we have witnessed improvements in free cash margin, spending on selling, general and administrative expenses, inventories and capital assets have increased. As a percentage of revenue, selling, general and administrative expense increased to 21.37% during the twelve months ended September 2012 from 21.32% for the twelve months ended June 2012 and 20.31% for the twelve months ended September 2011. Similarly capital expenditures as a percentage of revenue increased to 3.57% during the twelve months ended September 2012, up from 3.51% for the twelve months ended June 2012 and 3.29% for the twelve months ended September 2011. Inventories, measured in revenue days, increased to 24.78 days at September 2012, up from 23.38 days in June 2012 and 23.86 days in September 2011.

During the twelve months ended September 2012 we also witnessed healthy growth in revenues. Median revenues increased to \$776.47 million, up from \$753.35 million for the twelve months ended June 2012 and \$675.82 million for the twelve months ended September 2011. As such, year-over-year, median revenues have increased 14.9%. With growing revenues and improving free cash margin, median free cash flow also increased during the September 2012 reporting period. For the twelve months ended September 2012, median free cash flow increased to \$26.25 million, up from \$25.21 million for the twelve months ended June 2012 and \$21.76 million for the twelve months ended September 2011. Year-over-year, that is a 20.6% increase.

We appear to be entering a virtuous cycle of sorts, where increased revenues accompanied with improving free cash margin are working to increase free cash flow, even as companies increase spending on operating expenses (i.e., selling, general and administrative expenses), inventories and capital improvements. The levels we are seeing for spending on operating expenses and inventories are in-line with levels observed prior to the recession. Capital expenditures, however, are still about six percent below where they were in September 2007, a point that was prior to the start of the credit-related recession. As cash balances, as reflected in cash and short-term investments, have grown, and companies have generated increased amounts of free cash flow, we see no reason why capital spending cannot continue to increase in future periods.

There has been much talk about the risk to growth of corporate restraint spawned by negotiations, or the lack thereof, related to the so-called fiscal cliff, the debt ceiling, or budget sequestration. Our data show no obvious evidence of such restraint, as we saw healthy revenue growth and increased spending on operating expenses, inventories and capital assets. We will continue to watch these metrics in an effort to glean meaning from observed trends.