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**CASH FLOW TRENDS AND THEIR FUNDAMENTAL DRIVERS:  
A STUDY OF THE S&P 500 NON-FINANCIALS**

**EXECUTIVE SUMMARY**

This report examines cash flow trends for the S&P 500 non-financials and the drivers behind those trends. Included are data on selected cash flow measures and their drivers, insights to the cash cycle and recent earnings quality indicator trends. Among the findings noted for the four-quarters ended June 30, 2006 relative to March 31, 2006:

- Core operating cash flow and operating cash flow continued to increase, driven by revenue increases and an improvement in the operating cushion %. The cash cycle, however, lengthened slightly, in-line with seasonal trends.
- Free cash flow declined, even as operating cash flow increased, due to an increase in capital spending.
- The Earnings Quality Indicator declined due to an increase in earnings at a rate that was faster than the observed increase in operating cash flow. Year-end data, calculated to exclude seasonal factors, should be reviewed carefully for definitive trends.

Data for this research was provided by Cash Flow Analytics, LLC., [www.cashflowanalytics.com](http://www.cashflowanalytics.com).  
Charles Mulford is a principal in Cash Flow Analytics, LLC.

Dec, 2006

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**Georgia Tech Financial Analysis Lab**

The Georgia Tech Financial Analysis Lab conducts unbiased stock market research. Unbiased information is vital to effective investment decision-making. Accordingly, we think that independent research organizations, such as our own, have an important role to play in providing information to market participants.

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

A recurring theme in our work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. We define earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, our research may look into reporting practices that affect either earnings or cash flow, or both. At times, our 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: A Study of the S&P 500

### Introduction

The objective of this research report is to provide readers with an update on the financial performance of the S&P 500 non-financials. We focus on cash flow, presenting certain cash flow measures that are analyzed using selected fundamental drivers. Our interest is in determining whether cash flow is growing or declining and what factors are driving that change. For example, if cash flow is growing, is that success the result of increasing sales or expense reductions? Are working capital investments increasing or declining? How are capital expenditures faring? Answers to questions like these are critical for investors and can help form a foundation for evaluating the financial health of an industry or company.

The lab is also interested in the correlation between cash flow growth and earnings growth. Are current increases in earnings supported with increases in cash flow? And what does this imply for future earnings potential? A look at the Earnings Quality Indicator will shed some light on such developments.

Below is a summary of findings for the four quarters ended June 2006 relative to March 2006:

- Core operating cash flow and operating cash flow continue to increase – a trend that began in Dec 2005.
- Drivers of these increases include revenue increases and an improvement in the operating cushion %.
- The improvement in operating cushion is explained by a small gross margin improvement and a decrease in SG&A expenditures. R&D spending increased.
- The cash cycle increased slightly due to a decrease in accruals days, even as receivables days and inventory days declined and payables days increased. These changes were all consistent with seasonal trends observed in previous periods.
- Even as operating cash flow increased, free cash flow declined, explained by increases in capital spending.
- The Earnings Quality Indicator saw a decrease, indicating that increases in earnings are not fully supported by increases in operating cash flow.

The body of the report highlights our findings and includes charts. Supporting data are presented in accompanying appendices.

### Data and Methodology

Our data is provided by Cash Flow Analytics, LLC.<sup>1</sup> Each data amount is for a rolling four-quarter period ending with the date in question. For example, cash flow amounts for June 30,

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

2006, represent amounts for the four-quarters (year) ended June 30, 2006. Each cash flow measure and cash flow driver represents a value-weighted average calculated using data for the non-financials of the S&P 500.

### ***Deriving Cash Flow Amounts***

It is important to note that the cash flow amounts reported here, such as core operating cash flow and operating cash flow, are calculated measures. We do not use company-reported cash flow measures. We use each company's income statement, cleaned up for items that can be identified as nonoperating or nonrecurring, and period-to-period changes in each company's balance sheet, to compute our own cash flow measures. We do this because we think that we can derive a more meaningful measure of cash flow, especially operating cash flow and free cash flow, using such a balance-sheet change approach than by using each company's actual reported operating cash flow.

Consider, for example, capital expenditures that do not entail a cash payment. Such capital expenditures, which may entail either capital lease financing or finance proceeds provided by a lender directly to an equipment vendor, are not included in company-reported capital expenditures. They are excluded from capital expenditures even though the related assets and debt appear on the reporting company's balance sheet. Our balance-sheet change approach will include these amounts in capital expenditures. Consider too short-term investments classified as trading securities. While, according to GAAP, purchases and sales of such investments are included in operating cash flow, our approach instead classifies them as part of investing cash flow. Our approach also adjusts for acquisitions, which can give a nonrecurring boost to operating cash flow through the disposal of acquired inventory and receivables, or can understate capital expenditures through the inclusion of acquired equipment in cash payments for acquisitions. Through a balance-sheet change approach, acquired operating working capital, items such as receivables, inventory and prepaids, less deferred revenue, payables and accruals, are included in the calculation of operating cash flow. Similarly, acquired property, plant and equipment accounts are included in capital expenditures.

Without manually reviewing each company's financial statements, we cannot adjust for every item that we think may misstate a company's sustainable operating or free cash flow. However, with limited resources, performing such a feat and covering such a large sample of firms on a timely basis is impractical. So we employ what we think is a useful and meaningful alternative.

### ***Cash Flow Definitions***

Our primary focus is on the fundamental drivers underlying the following three measures of cash flow :

- 1) Core operating cash flow - cash flow generated by core or central operations. It is measured before other income such as interest or dividend income, interest paid on borrowed funds, and before income taxes paid.
- 2) Operating cash flow - cash flow from operations after interest charges and income taxes, and includes sustainable sources of other income such as interest or dividend income. It is defined in a manner consistent with the GAAP definition of cash provided by operating activities, but is

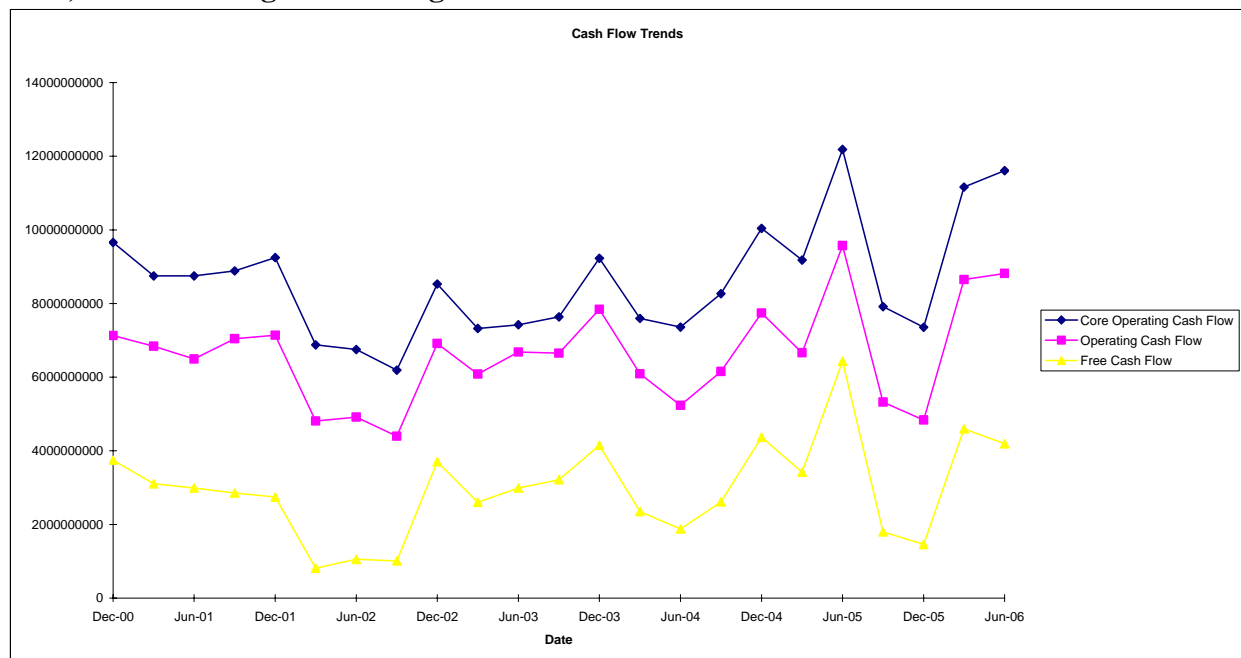
calculated using the income statement and changes in balance sheet accounts. Accordingly, operating cash flow will differ from the GAAP definition. However, we think that our calculated operating cash flow measure will give a more sustainable and meaningful measure of cash flow.

3) Free cash flow - 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.

We begin by presenting in Table 1 these three measures of cash flow - core operating cash flow, operating cash flow and free cash flow – calculated using a value-weighted average of the non-financials of the S&P 500 for each annual, four-quarter ending period since the four quarters ending December, 2000. We then supplement the data with a closer look at the fundamental drivers behind the cash flow measures.

## Cash Flow Measures

**Exhibit 1. Core Operating Cash Flow, Operating Cash Flow and Free Cash Flow, 1995 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



See Appendix A data details.

### Cash flow measures for four quarters ending June 2006 compared with four quarters ending March 2006:

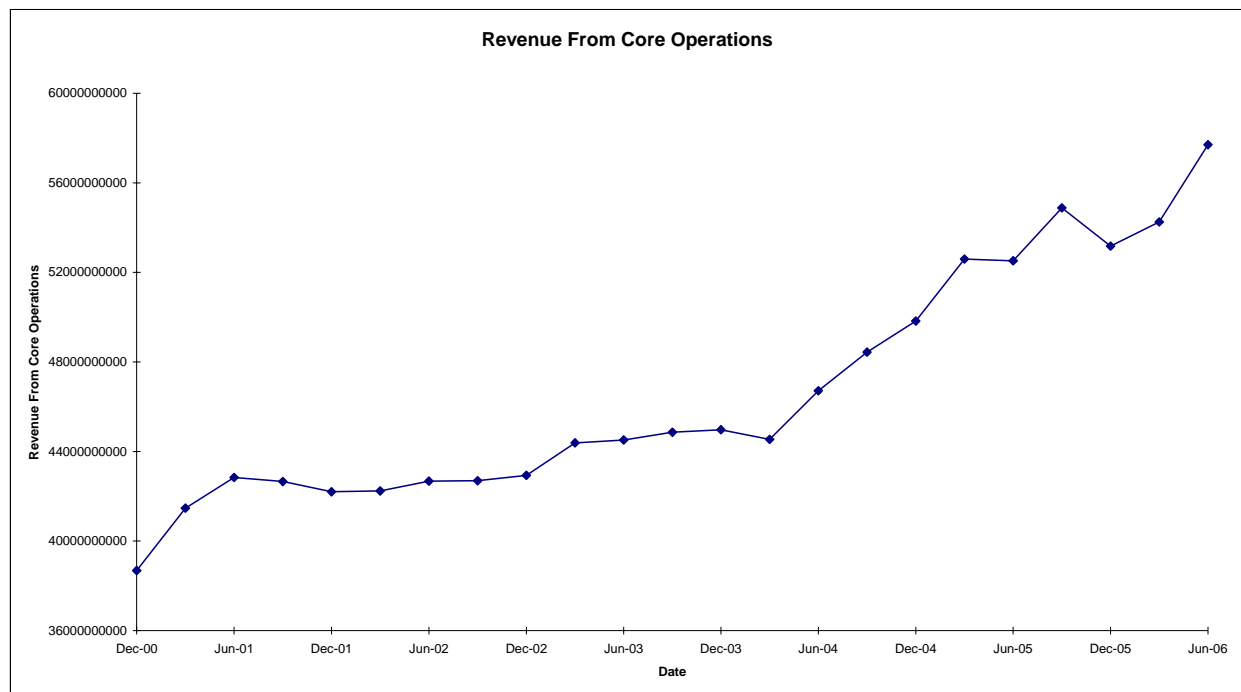
- **Core Operating Cash Flow – \$11.6 billion up 4%**
- **Operating Cash Flow – \$8.8 billion up 2.0%**
- **Free Cash Flow – \$4.1 billion down 8.9%**

The cash flow measures started trending upward March 2006 ending a downward trend that began in June of the previous year. This upward trend continued for the four quarters ending in June 2006 with the exception of free cash flow, which was down nearly nine percent. Reasons for the trends in the three cash flow measures, also known as cash flow drivers, are provided in the paragraphs that follow.

## Cash Flow Drivers

There are certain fundamental drivers that have direct effects on core operating cash flow, operating cash flow and accordingly, free cash flow. These drivers capture the essence of profitability and efficiency, and through them, we can get a clearer picture on the sustainability of cash flow.

**Exhibit 2. Revenue from Core Operations, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



See Appendix E for data details.

## Revenue - \$57.7 billion up 6.4% during the four quarters ended June 2006.

At the heart of any firm's cash flow generation is revenue from core operations. Increases or decreases in revenue, absent changes in profit margins, working capital needs or capital spending, will translate directly into similar changes in core operating cash flow, operating cash flow and free cash flow.

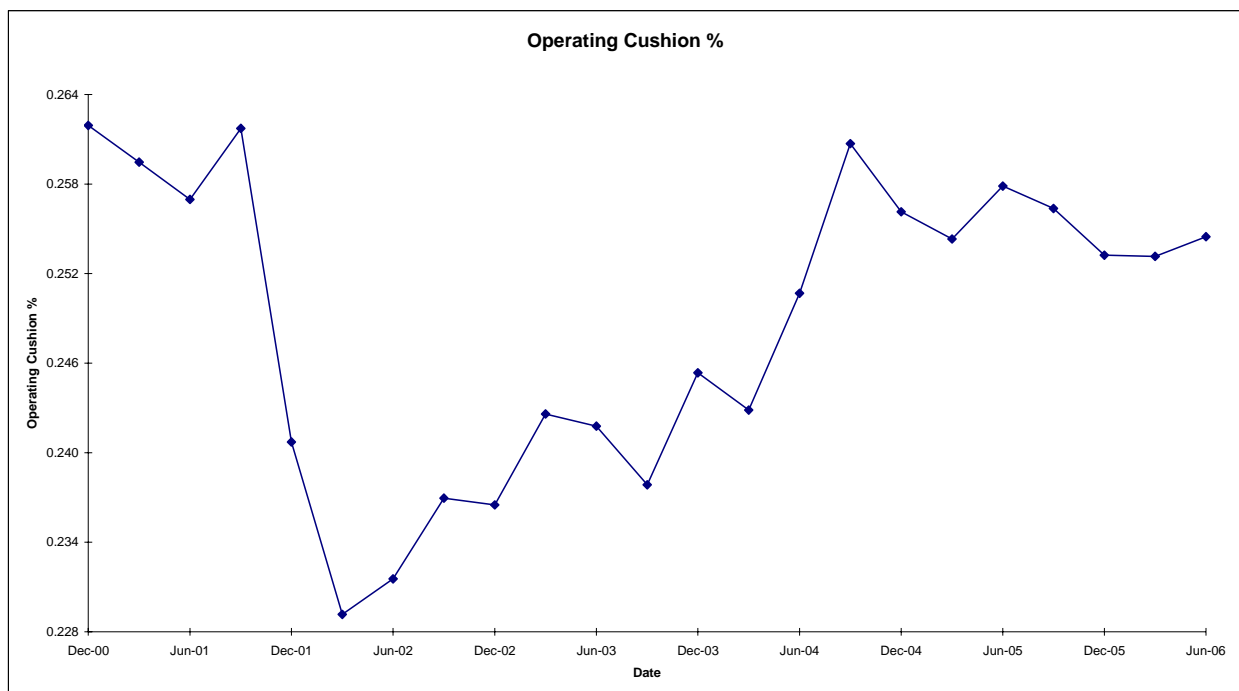
As noted in Exhibit 2, an increase in revenue helped to explain the increases in core operating cash flow and operating cash flow during the June 2006 period. In recent periods, cash flow trends have loosely followed revenue trends.

## Operating Cushion – 25.4%

The operating cushion % is the contribution of each revenue dollar to operating profit *before* the non-cash expenses of depreciation and amortization. It is calculated by dividing operating profit (revenue less cost of goods sold and other operating expenses such as SG&A and R&D) before depreciation and amortization by revenue. The operating cushion % for a cash business, that is, a company without operating working capital needs, would show the contribution of each dollar of sales to core operating cash flow. Exhibit 3 presents a graph of the operating cushion %.

In the four quarters ending March 2006, the ratio reached 25.4%, up from 25.3% in the March 2006 period. The current trend indicates that, relative to revenue, the average company's costs declined slightly during the period, contributing to an increase in cash flow.

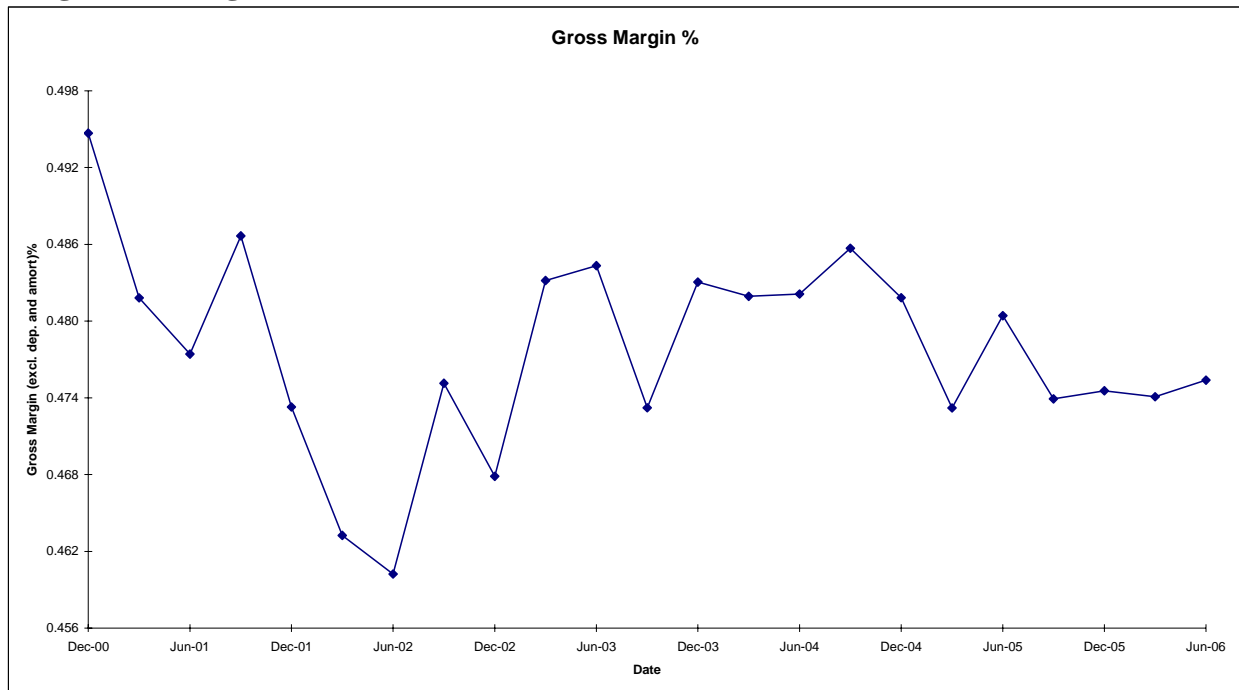
### Exhibit 3. Operating Cushion %, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.



See Appendix C for data details.

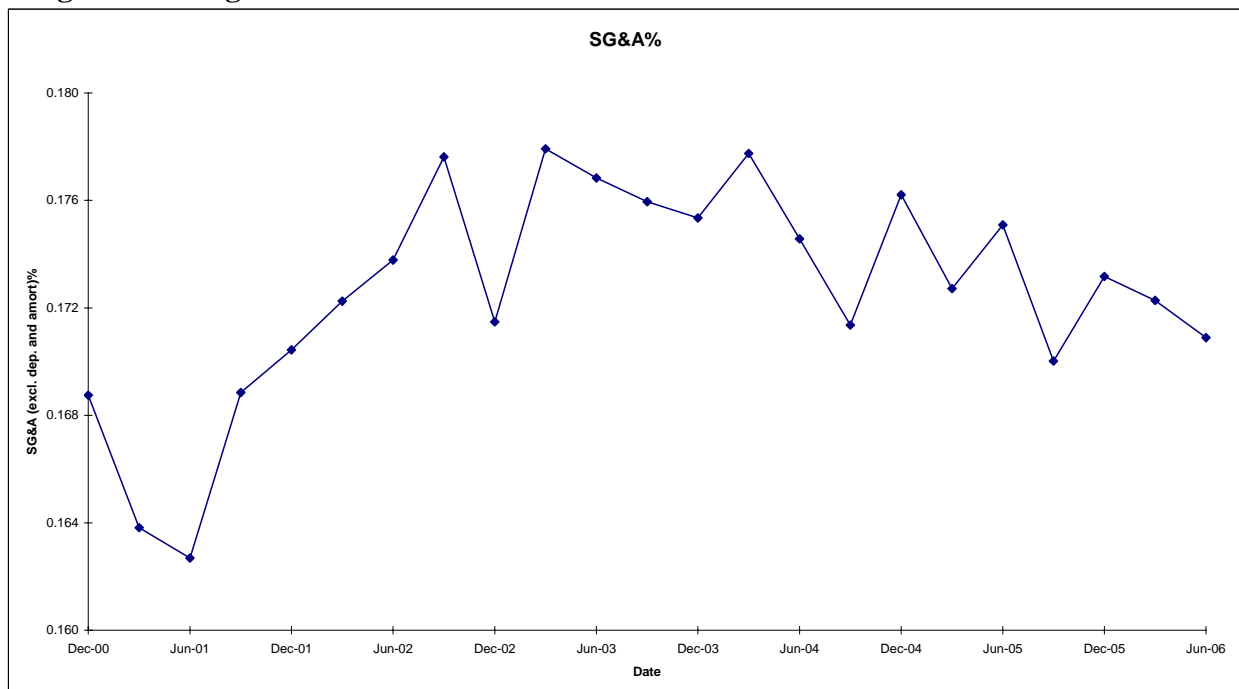
The operating cushion % consists of the gross margin % less the SG&A % and R&D %, all calculated before depreciation and amortization expense. More insight into changes in the operating cushion % can be gained by examining trends in all of its components. Graphs of the component measures of operation cushion % are presented in Exhibits 4, 5 and 6.

**Exhibit 4. Gross Margin % (before depreciation and amortization), 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



See Appendix C for data details.

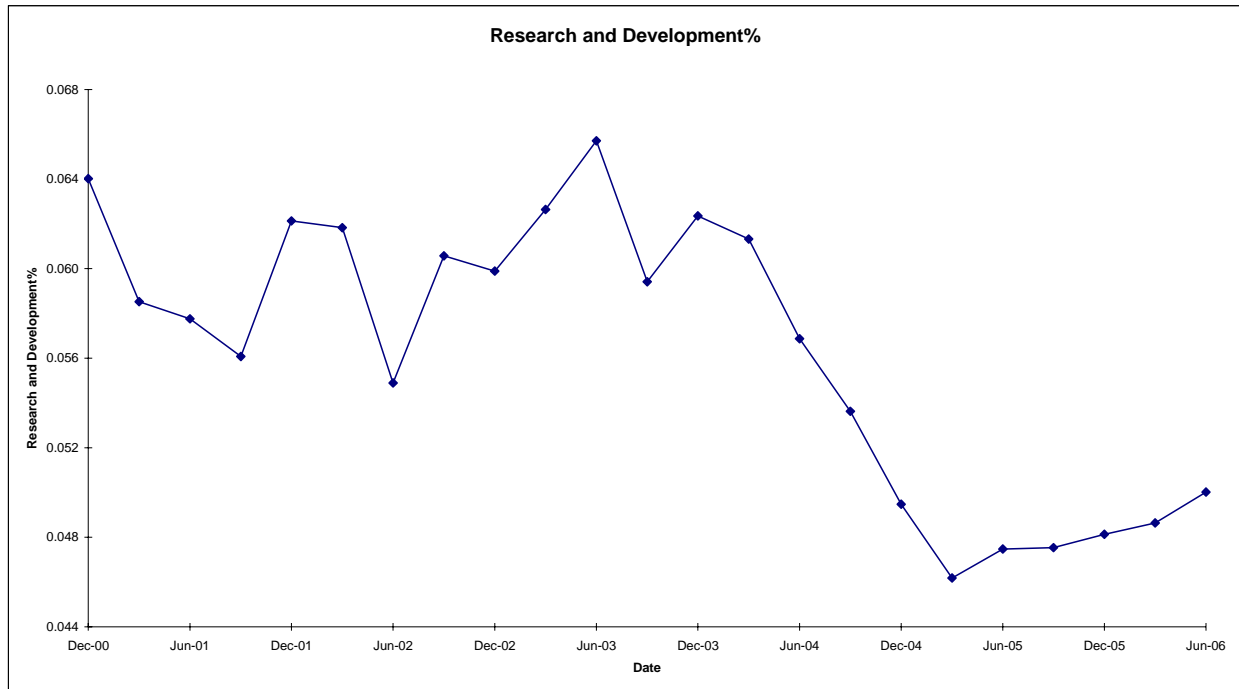
**Exhibit 5. SG&A % (before depreciation and amortization), 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



See Appendix C for data details.



**Exhibit 6. R&D %, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



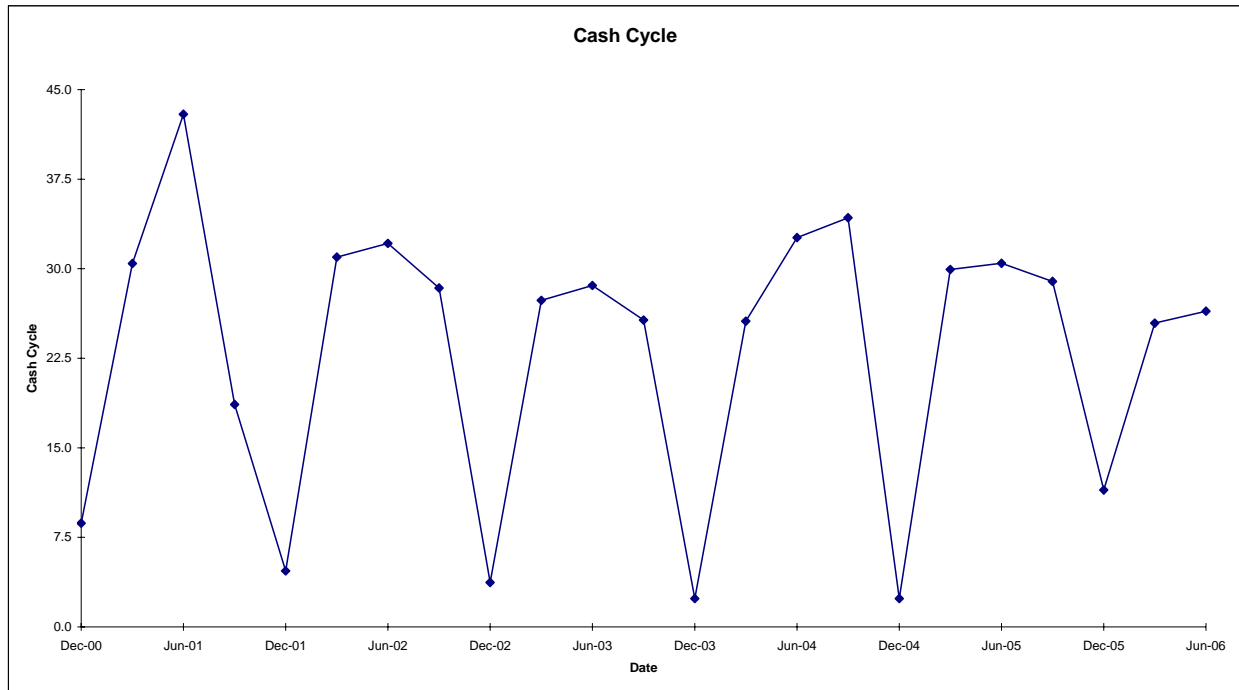
See Appendix C for data details.

In examining Exhibits 4, 5, and 6 we see that the slight increase in operating cushion in the June 2006 time period was derived from a slight increase in Gross Margin and decrease in the SG&A%. The R&D% saw an increase during the June period.

## Cash Cycle

The operating cushion % does not include operating working capital needs, which clearly require uses of cash. As revenues grow, firms must invest increasing amounts in such operating working capital accounts as accounts receivable, inventory, prepaid expenses, less accounts payable, accrued expenses payable and deferred revenue. The cash cycle, measured in revenue days, is one overall measure of a firm's operating working capital requirements. It measures the number of revenue days a firm's cash is tied up in operating working capital. Recent cash cycle trends for the S&P 500 are presented in Exhibit 7.

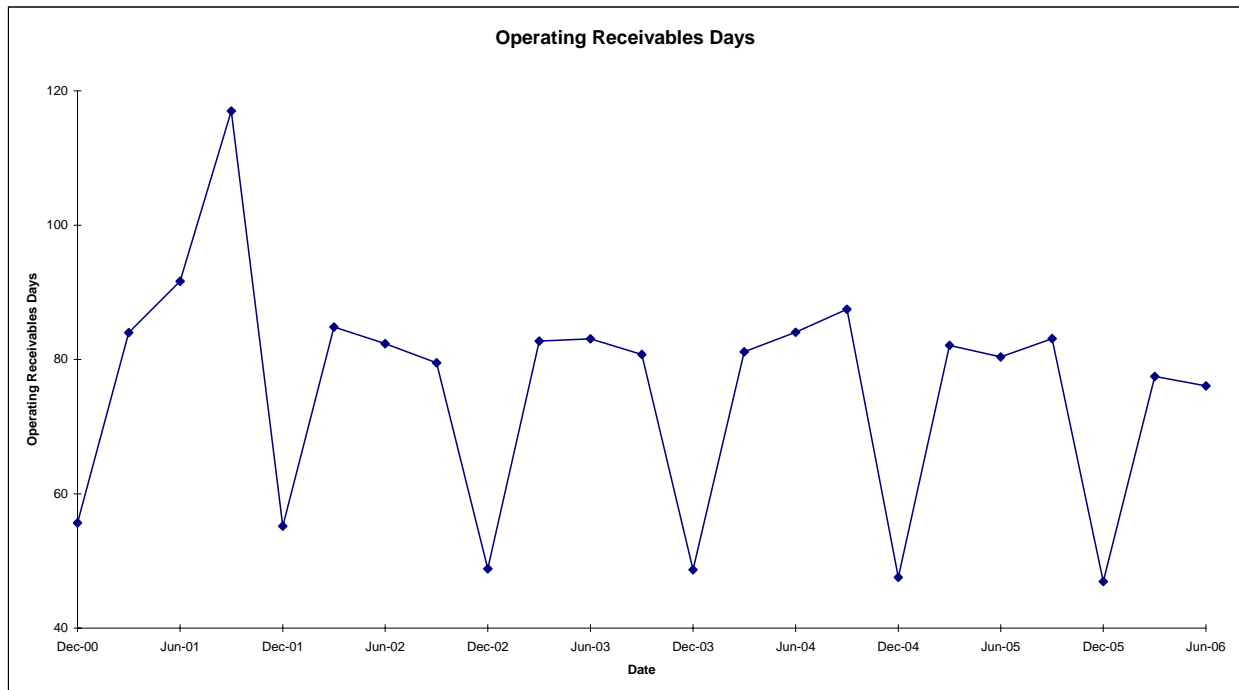
**Exhibit 7. Cash Cycle, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



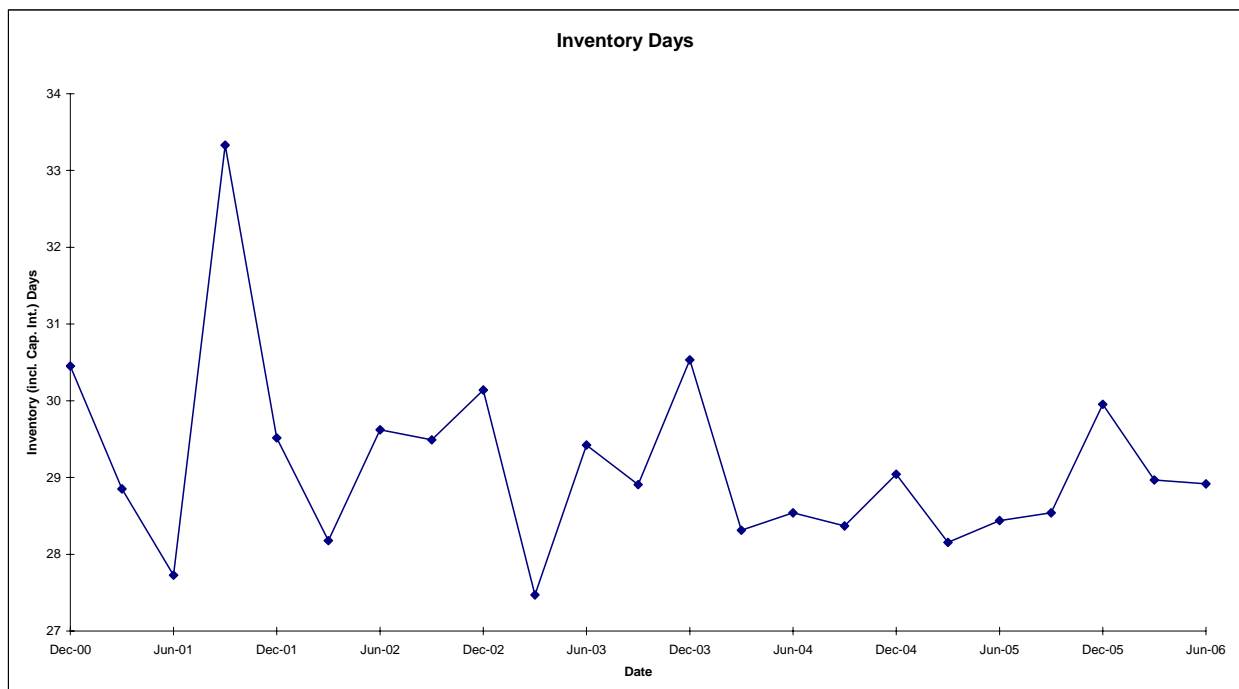
*See Appendix D for data details.*

As noted in Exhibit 7, there was a small increase (one day, from 25 days to 26 days) in the cash cycle between the four quarters ending March 2006 and the four quarters ended June 2006. The cash cycle, which is very cyclical, did drop in December 2005 but not into single digits as it has in the past. Since December 2005, cash cycle numbers appear comparable to previous periods.

It is important to understand the causes for an increase in the cash cycle. As seen in Exhibit 8-10, it cannot be attributed to accounts receivable, inventory or accounts payable.

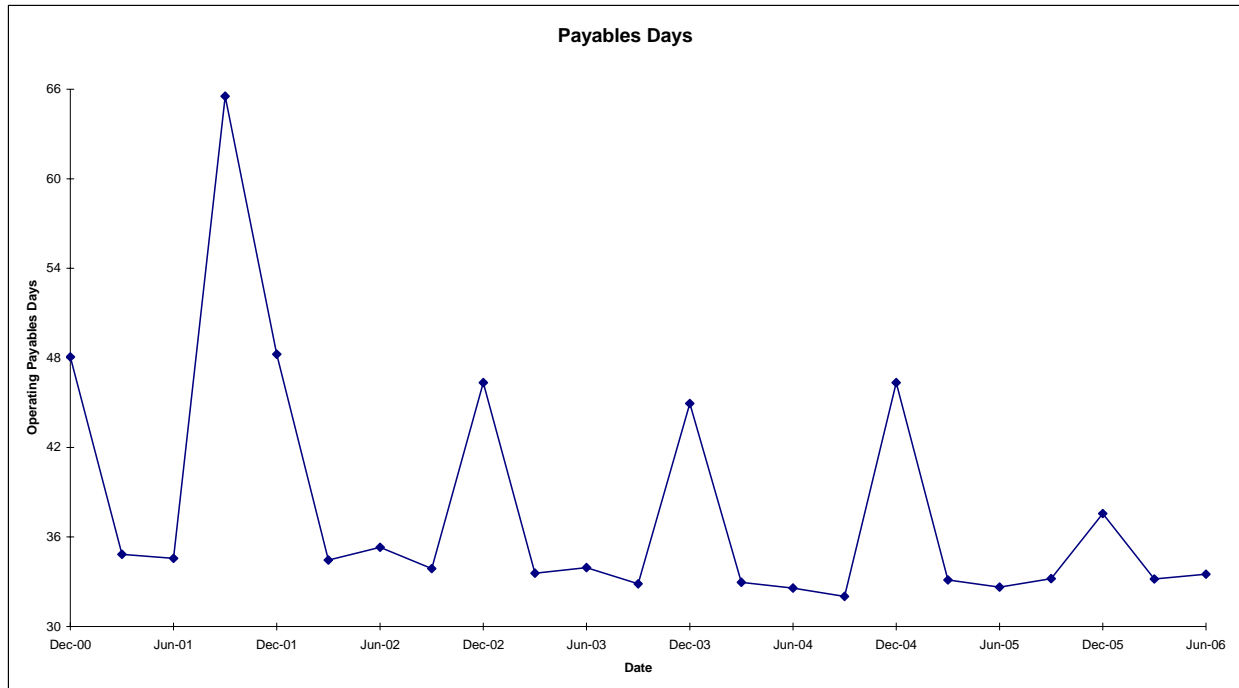
**Exhibit 8. Receivables Days, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**

See Appendix D for data details.

**Exhibit 9. Inventory Days, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**

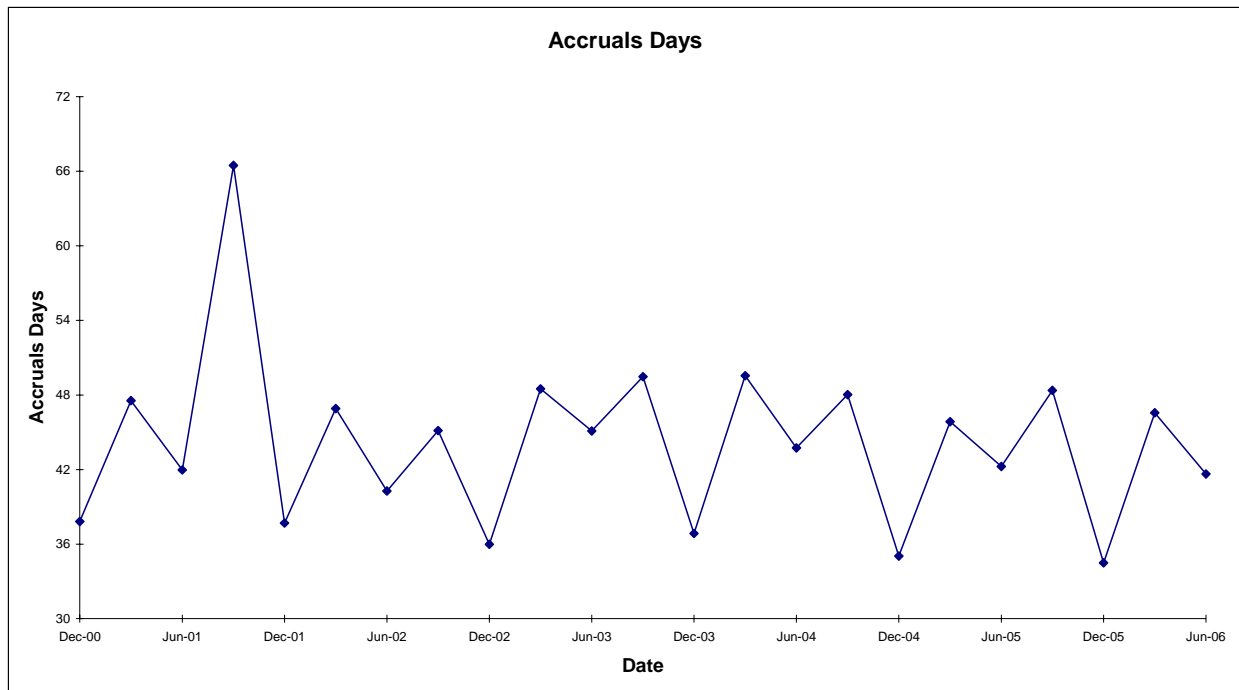
See Appendix D for data details.

**Exhibit 10. Payables Days, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



*See Appendix D for data details.*

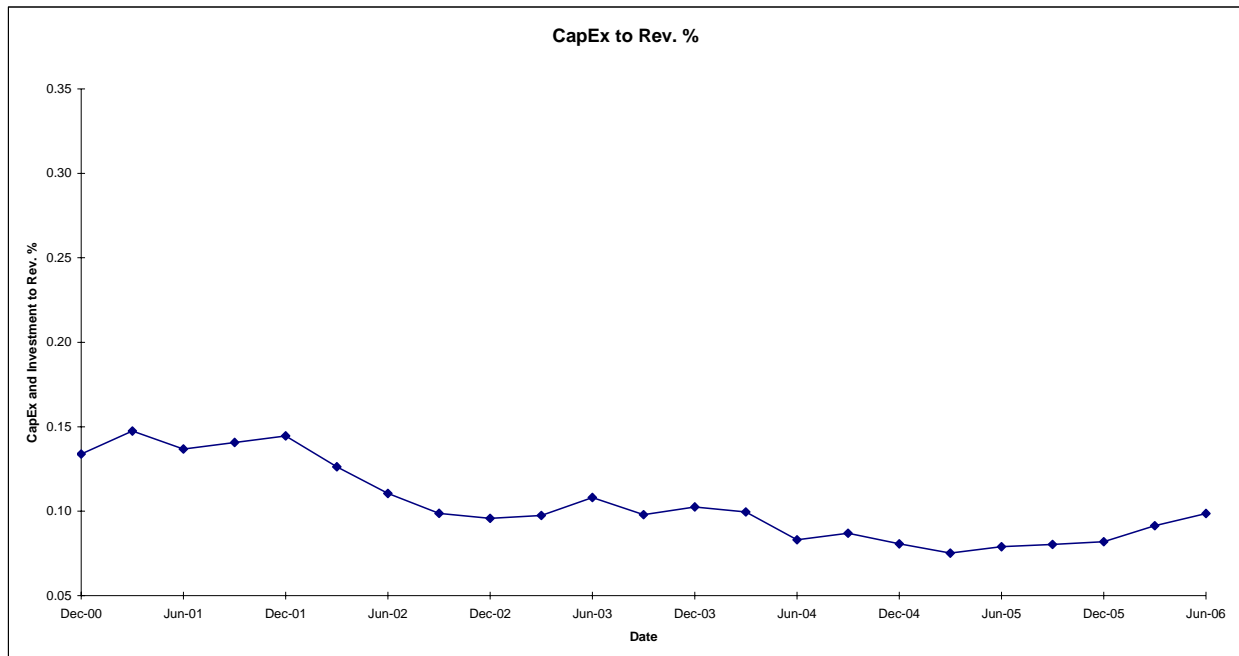
Exhibits 8 and 9 show a slight decrease in receivable days and inventory days while Exhibit 10 shows a slight increase in payables days, which would all cause the cash cycle to decrease. However, after digging deeper into the financials we discovered a decrease in accrual days, the length of time taken to satisfy such accrued expenses as wages, benefits and other operating costs. The decline in accruals days, as seen in Exhibit 11, helped to drive the cash cycle higher.

**Exhibit 11. Accrual Days, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.****Capital Expenditures**

The main difference between free cash flow and operating cash flow is capital expenditures. Even when core operating cash flow and operating cash flow are declining, firms can grow free cash flow by reducing capital expenditures. However, increases in free cash flow achieved in this manner are not sustainable and are subject to reversal when capital spending is increased once again.

Exhibit 12 presents a graph of capital expenditures as a percentage of revenue. This exhibit gives a clear picture of the level of capital spending for the S&P 500.

**Exhibit 12. Capital Expenditures to Revenue %, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**



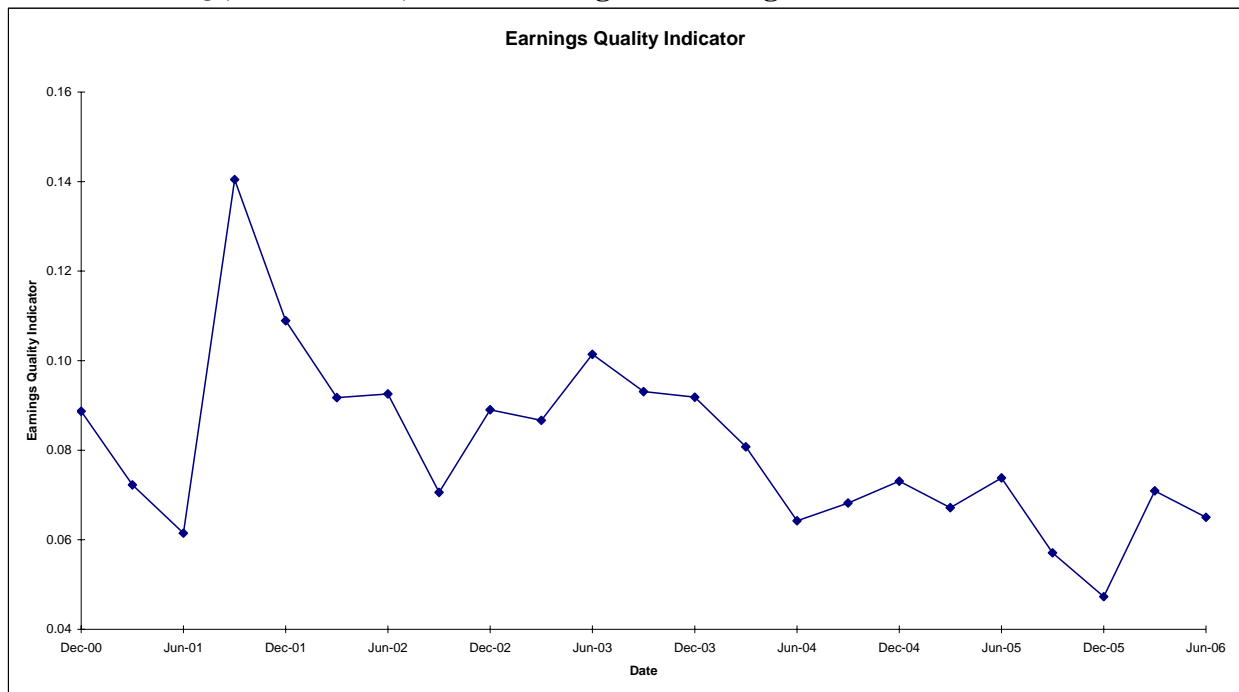
See Appendix B for data details.

The percentage of capital expenditures to revenue saw only a slight increase from the four quarters ending in March 2006 to the four quarters ending in June 2006. This metric does help to explain why free cash flow declined even as operating cash flow increased.

### Earnings Quality Indicator (EQI)

The EQI is an interpretive ratio used to measure the relationship between operating cash flow and net income. The ratio measures the excess of operating cash flow over net income, adjusted for known items of nonrecurring income or expense, all as a percentage of revenue.

It is a measure of the extent to which earnings are realized through cash flow. Earnings that are not realized as cash flow are at risk for decline. A graph of EQI is presented in Exhibit 13.

**Exhibit 13. EQI, 2000 – 2006, A Value-Weighted Average of the S&P 500 Non-Financials.**

See Appendix F for data details.

As noted in Exhibit 13, there is a downward trend in the EQI that reversed in March 2006 but continued again in June 2006. This development indicates that, relative to revenue, earnings are once again growing faster than operating cash flow. At present, however, the trend is too short to draw definitive conclusions and will need to be watched carefully – especially with year-end data that excludes seasonal factors.

## Conclusion

The current study looks at selected measures of cash flow and their fundamental drivers calculated using a value-weighted average of the non-financial firms in the S&P 500. During the four quarters ended June 2006, we observed an upward trend in operating cash flow while free cash flow declined. Driving operating cash flow higher was an increase in revenue and an improvement in the operating cushion %, caused by an increase in gross margin and a decline in the SG&A%. R&D spending increased. Limiting the increase in operating cash flow was an increase in the cash cycle. Even as receivables days and inventory days declined and payables days increased, the increase in the cash cycle was caused by a decline in accruals days. The decline in free cash flow that accompanied the observed increase in operating cash flow was the result of increased capital spending.

The Earnings Quality Indicator measures operating cash flow growth relative to earnings growth. The decline observed in the EQI indicates that even as operating cash flow increased during the four quarters ended June 2006, that increase was outpaced by the growth in earnings. The measure is, however, sensitive to seasonal factors and a closer look at the ratio using year-end data is warranted.

**Appendix A – Cash Flow Measures. A Value-Weighted Average of the S&P 500 Non-Financials. Data for four quarters ending. (Amounts in dollars)**

Date	Core Operating Cash Flow	% Change	Sustainable Operating Cash Flow	% Change	Sustainable Free Cash Flow	% Change
12/31/00	9,657,114,411		7,127,852,205		3,743,687,801	
3/31/01	8,751,343,620	-9.38%	6,838,183,547	-4.06%	3,104,670,170	-17.07%
6/30/01	8,748,343,499	-0.03%	6,492,323,352	-5.06%	2,991,503,423	-3.65%
9/30/01	8,886,093,318	1.57%	7,042,516,868	8.47%	2,853,624,892	-4.61%
12/31/01	9,245,442,264	4.04%	7,140,879,861	1.40%	2,741,211,914	-3.94%
3/31/02	6,878,667,365	-25.60%	4,811,137,579	-32.63%	813,893,766	-70.31%
6/30/02	6,752,569,112	-1.83%	4,915,785,223	2.18%	1,055,221,834	29.65%
9/30/02	6,191,644,688	-8.31%	4,395,182,784	-10.59%	1,005,274,568	-4.73%
12/31/02	8,526,856,831	37.72%	6,911,881,625	57.26%	3,702,923,849	268.35%
3/31/03	7,321,699,532	-14.13%	6,085,682,857	-11.95%	2,601,324,870	-29.75%
6/30/03	7,424,040,827	1.40%	6,683,945,330	9.83%	2,987,632,493	14.85%
9/30/03	7,639,457,450	2.90%	6,652,996,691	-0.46%	3,215,966,094	7.64%
12/31/03	9,225,639,673	20.76%	7,841,109,462	17.86%	4,147,137,515	28.95%
3/31/04	7,595,579,488	-17.67%	6,091,068,286	-22.32%	2,351,435,091	-43.30%
6/30/04	7,357,524,738	-3.13%	5,235,568,734	-14.05%	1,876,136,978	-20.21%
9/30/04	8,267,224,473	12.36%	6,151,638,952	17.50%	2,612,968,125	39.27%
12/31/04	10,040,174,636	21.45%	7,740,093,957	25.82%	4,368,207,737	67.17%
3/31/05	9,178,532,912	-8.58%	6,660,753,748	-13.94%	3,418,344,377	-21.74%
6/30/05	12,185,095,817	32.76%	9,572,734,374	43.72%	6,433,440,824	88.20%
9/30/05	7,914,849,175	-35.04%	5,323,506,718	-44.39%	1,799,706,736	-72.03%
12/31/05	7,355,854,207	-7.06%	4,838,726,407	-9.11%	1,458,071,609	-18.98%
3/31/06	11,159,905,742	51.71%	8,647,428,601	78.71%	4,596,726,949	215.26%
6/30/06	11,609,876,452	4.03%	8,816,564,319	1.96%	4,189,079,248	-8.87%



**Appendix B – Expenditures. A Value-Weighted Average of the S&P 500 Non-Financials.  
Data for four quarters ending.**

<b>Date</b>	<b>Income Taxes Pd to Rev%</b>	<b>% Change</b>	<b>CapEx and Investment to Rev. %</b>	<b>% Change</b>
12/31/2000	5.29%		13.38%	
3/31/2001	5.03%	-4.89%	14.75%	10.18%
6/30/2001	4.71%	-6.46%	13.68%	-7.21%
9/30/2001	0.02%	-99.64%	31.98%	133.70%
12/31/2001	2.98%	17417.65%	14.46%	-54.80%
3/31/2002	3.21%	7.69%	12.63%	-12.60%
6/30/2002	3.45%	7.70%	11.05%	-12.52%
9/30/2002	3.42%	-1.13%	9.87%	-10.69%
12/31/2002	2.85%	-16.54%	9.57%	-3.04%
3/31/2003	1.80%	-36.91%	9.75%	1.90%
6/30/2003	0.54%	-70.02%	10.81%	10.80%
9/30/2003	1.66%	207.98%	9.79%	-9.37%
12/31/2003	2.54%	53.13%	10.25%	4.70%
3/31/2004	3.06%	20.26%	9.96%	-2.88%
6/30/2004	4.25%	39.16%	8.30%	-16.62%
9/30/2004	4.10%	-3.62%	8.70%	4.75%
12/31/2004	4.13%	0.83%	8.07%	-7.27%
3/31/2005	4.12%	-0.36%	7.52%	-6.76%
6/30/2005	4.34%	5.41%	7.89%	4.92%
9/30/2005	4.24%	-2.44%	8.04%	1.84%
12/31/2005	4.05%	-4.39%	8.20%	1.99%
3/31/2006	4.43%	9.28%	9.14%	11.47%
6/30/2006	4.66%	5.22%	9.86%	7.97%

**Appendix C – Profitability. A Value-Weighted Average of the S&P 500 Non-Financials.**  
**Data for four quarters ending.**

Date	Operating Cushion %	% Change	Gross Margin%	% Change	SG&A%	% Change	R&D%	% Change
12/31/00	26.19%		49.47%		16.88%		6.40%	
3/31/01	25.95%	-0.94%	48.18%	-2.60%	16.38%	-2.92%	5.85%	-8.58%
6/30/01	25.70%	-0.96%	47.74%	-0.91%	16.27%	-0.69%	5.78%	-1.32%
9/30/01	26.17%	1.85%	48.67%	1.93%	16.89%	3.79%	5.61%	-2.91%
12/31/01	24.07%	-8.03%	47.33%	-2.75%	17.04%	0.94%	6.21%	10.79%
3/31/02	22.92%	-4.80%	46.32%	-2.12%	17.23%	1.06%	6.18%	-0.48%
6/30/02	23.16%	1.04%	46.02%	-0.65%	17.38%	0.89%	5.49%	-11.21%
9/30/02	23.70%	2.33%	47.51%	3.24%	17.76%	2.21%	6.06%	10.33%
12/31/02	23.65%	-0.19%	46.79%	-1.53%	17.15%	-3.46%	5.99%	-1.12%
3/31/03	24.26%	2.58%	48.32%	3.27%	17.79%	3.76%	6.26%	4.59%
6/30/03	24.18%	-0.34%	48.43%	0.24%	17.68%	-0.61%	6.57%	4.90%
9/30/03	23.79%	-1.63%	47.32%	-2.29%	17.60%	-0.50%	5.94%	-9.57%
12/31/03	24.54%	3.15%	48.31%	2.08%	17.54%	-0.34%	6.24%	4.95%
3/31/04	24.29%	-1.01%	48.19%	-0.23%	17.78%	1.37%	6.13%	-1.67%
6/30/04	25.07%	3.22%	48.21%	0.04%	17.46%	-1.79%	5.69%	-7.26%
9/30/04	26.07%	4.00%	48.57%	0.74%	17.14%	-1.84%	5.36%	-5.70%
12/31/04	25.61%	-1.75%	48.18%	-0.79%	17.62%	2.83%	4.95%	-7.74%
3/31/05	25.43%	-0.71%	47.32%	-1.79%	17.27%	-1.98%	4.62%	-6.67%
6/30/05	25.79%	1.39%	48.04%	1.53%	17.51%	1.37%	4.75%	2.82%
9/30/05	25.64%	-0.58%	47.39%	-1.36%	17.00%	-2.90%	4.75%	0.13%
12/31/05	25.32%	-1.22%	47.46%	0.13%	17.32%	1.85%	4.81%	1.24%
3/31/06	25.32%	-0.03%	47.41%	-0.10%	17.23%	-0.51%	4.86%	1.06%
6/30/06	25.45%	0.52%	47.54%	0.27%	17.09%	-0.81%	5.00%	2.84%

**Appendix D – Efficiency. A Value-Weighted Average of the S&P 500 Non-Financials. Data for four quarters ending.**

Date	Cash Cycle	% Change	Inv Days	% Change	Receivables Days	% Change	Payables Days	% Change
12/31/00	9		30		56		48	
3/31/01	30	250.09%	29	-5.26%	84	50.89%	35	-27.50%
6/30/01	43	41.12%	28	-3.89%	92	9.10%	35	-0.81%
9/30/01	19	-56.62%	33	20.20%	117	27.71%	66	89.61%
12/31/01	5	-74.78%	30	-11.44%	55	-52.85%	48	-26.39%
3/31/02	31	559.11%	28	-4.53%	85	53.77%	34	-28.58%
6/30/02	32	3.74%	30	5.13%	82	-2.91%	35	2.48%
9/30/02	28	-11.62%	29	-0.44%	80	-3.46%	34	-4.05%
12/31/02	4	-86.91%	30	2.19%	49	-38.61%	46	36.80%
3/31/03	27	636.12%	27	-8.85%	83	69.46%	34	-27.55%
6/30/03	29	4.55%	29	7.10%	83	0.42%	34	1.11%
9/30/03	26	-10.10%	29	-1.75%	81	-2.79%	33	-3.21%
12/31/03	2	-90.75%	31	5.62%	49	-39.72%	45	36.76%
3/31/04	26	976.51%	28	-7.27%	81	66.69%	33	-26.65%
6/30/04	33	27.37%	29	0.80%	84	3.59%	33	-1.17%
9/30/04	34	5.12%	28	-0.60%	87	4.07%	32	-1.72%
12/31/04	2	-93.08%	29	2.38%	48	-45.64%	46	44.76%
3/31/05	30	1162.92%	28	-3.06%	82	72.65%	33	-28.53%
6/30/05	30	1.74%	28	1.01%	80	-2.09%	33	-1.45%
9/30/05	29	-4.97%	29	0.36%	83	3.40%	33	1.74%
12/31/05	11	-60.38%	30	4.95%	47	-43.55%	38	13.13%
3/31/06	25	121.88%	29	-3.29%	77	65.12%	33	-11.68%
6/30/06	26	3.96%	29	-0.18%	76	-1.83%	34	0.96%

**Appendix E – Other Valuation Metrics. A Value-Weighted Average of the S&P 500 Non-Financials. Data for four quarters ending. (Amounts in Dollars)**

Date	Revenue	% Change	Market Capitalization	% Change	Cash and Short-Term Investments	% Change	Dividends on Common Stock	% Change
12/31/00	38,685,660,647		128,629,081,295		3,908,627,294		1,202,463,688	
3/31/01	41,473,133,835	7.21%	114,133,994,824	11.27%	3,943,227,953	0.89%	1,237,688,842	2.93%
6/30/01	42,840,078,706	3.30%	122,878,352,767	7.66%	4,434,890,260	12.47%	1,303,517,105	5.32%
9/30/01	42,655,892,164	-0.43%	107,051,725,795	12.88%	4,323,551,464	-2.51%	1,353,162,730	3.81%
12/31/01	42,203,773,195	-1.06%	113,276,504,041	5.81%	5,032,068,856	16.39%	1,313,359,050	-2.94%
3/31/02	42,239,176,555	0.08%	109,622,619,760	-3.23%	4,666,079,035	-7.27%	1,325,166,869	0.90%
6/30/02	42,678,109,167	1.04%	91,882,313,899	16.18%	4,711,520,998	0.97%	1,351,662,205	2.00%
9/30/02	42,697,783,485	0.05%	77,516,687,137	15.63%	5,105,752,088	8.37%	1,352,857,605	0.09%
12/31/02	42,932,901,796	0.55%	83,782,018,159	8.08%	5,590,969,729	9.50%	1,346,919,673	-0.44%
3/31/03	44,385,005,281	3.38%	85,869,198,920	2.49%	6,032,101,188	7.89%	1,431,031,325	6.24%
6/30/03	44,515,947,938	0.30%	91,592,703,949	6.67%	5,901,304,184	-2.17%	1,432,321,402	0.09%
9/30/03	44,855,831,209	0.76%	91,849,217,779	0.28%	6,413,905,120	8.69%	1,402,101,917	-2.11%
12/31/03	44,968,282,475	0.25%	96,021,724,881	4.54%	6,565,819,035	2.37%	1,491,206,594	6.36%
3/31/04	44,543,902,148	-0.94%	91,651,774,568	-4.55%	6,601,252,159	0.54%	1,481,558,290	-0.65%
6/30/04	46,718,318,210	4.88%	95,828,689,313	4.56%	7,145,897,244	8.25%	1,530,303,625	3.29%
9/30/04	48,439,863,682	3.68%	93,474,138,183	-2.46%	7,677,602,113	7.44%	1,620,782,688	5.91%
12/31/04	49,826,729,208	2.86%	95,053,312,927	1.69%	6,923,701,404	-9.82%	2,688,778,600	65.89%
3/31/05	52,596,512,819	5.56%	95,939,972,084	0.93%	6,801,033,440	-1.77%	2,696,458,240	0.29%
6/30/05	52,523,884,002	-0.14%	91,558,949,632	-4.57%	6,671,495,345	-1.90%	2,813,862,886	4.35%
9/30/05	54,883,872,364	4.49%	93,276,912,902	1.88%	6,750,966,398	1.19%	2,737,947,068	-2.70%
12/31/05	53,178,643,342	-3.11%	89,422,288,740	-4.13%	6,719,084,010	-0.47%	1,768,168,460	35.42%
3/31/06	54,250,485,892	2.02%	89,272,087,917	-0.17%	6,388,369,264	-4.92%	1,805,972,882	2.14%
6/30/06	57,706,267,563	6.37%	93,315,537,705	4.53%	8,174,919,628	27.97%	1,883,518,776	4.29%

**Appendix F – Other Performance Metrics. A Value-Weighted Average of the S&P 500 Non-Financials. Data for four quarters ending.**

<b>Date</b>	<b>Earnings Quality Indicator™</b>	<b>% Change</b>	<b>Earnings Sustainability</b>	<b>% Change</b>	<b>Cash Flow Sustainability™</b>	<b>% Change</b>
12/31/00	0.089		0.003		0.023	
3/31/01	0.072	-18.53%	0.040	1283.79%	0.010	-56.01%
6/30/01	0.062	-14.91%	0.061	53.05%	0.008	-22.15%
9/30/01	0.140	128.39%	0.052	-15.81%	0.021	157.27%
12/31/01	0.109	-22.46%	0.075	45.58%	0.010	-51.97%
3/31/02	0.092	-15.77%	0.045	-40.63%	0.013	31.95%
6/30/02	0.093	0.90%	0.020	-55.63%	0.002	-86.70%
9/30/02	0.071	-23.77%	0.026	28.74%	0.011	548.55%
12/31/02	0.089	26.16%	0.042	65.77%	0.008	-28.88%
3/31/03	0.087	-2.64%	0.034	-19.52%	0.009	11.65%
6/30/03	0.101	16.99%	0.038	11.74%	0.027	202.13%
9/30/03	0.093	-8.17%	0.028	-27.06%	0.019	-30.83%
12/31/03	0.092	-1.35%	0.020	-28.64%	0.015	-19.76%
3/31/04	0.081	-12.08%	0.017	-12.06%	0.004	-74.50%
6/30/04	0.064	-20.48%	0.013	-27.04%	0.012	206.30%
9/30/04	0.068	6.24%	0.017	35.64%	0.004	-69.15%
12/31/04	0.073	7.14%	0.017	0.06%	0.004	4.44%
3/31/05	0.067	-8.13%	0.016	-8.52%	0.001	-76.33%
6/30/05	0.074	9.93%	0.020	28.71%	0.014	1446.07%
9/30/05	0.057	-22.71%	0.018	-11.72%	0.000	-96.80%
12/31/05	0.047	-17.12%	0.010	-42.44%	0.011	2475.00%
3/31/06	0.071	50.01%	0.009	-17.25%	0.018	55.52%
6/30/06	0.065	-8.37%	0.008	-7.26%	0.011	-35.70%