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A Look at Cash Flow and Earnings Growth for the S&P 100

Executive Summary

Excess Cash Margin, ECM, calculated by dividing by revenue the difference between adjusted operating cash flow and adjusted operating earnings, provides useful insight into the relationship between cash flow and earnings. When ECM declines in a consistent manner it indicates that earnings are growing faster or declining more slowly than cash flow. As a result, relative to the scale of operations, increasing levels of non-cash accounts are accumulating on the balance sheet. Earnings generated in this manner, that is, with declining cash flow confirmation, are not sustainable and are at risk for decline. When ECM increases consistently it indicates that operating cash flow is either growing faster or falling more slowly than earnings. As a result, relative to the scale of operations, the balance sheet is being liquidated. Operating cash flow generated in this manner, that is, without consistent earnings support, is not sustainable and is at risk for decline. The better, more sustainable relationship between operating cash flow and earnings is when the two measures grow at consistent rates, resulting in a constant ECM through time.

This study calculates ECM for the non-financial firms of the S&P 100 for the years 2000, 2001, 2002, and 2003 and provides commentary on the results. Insights are provided into firms with a declining ECM, an increasing ECM and a stable ECM.

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Georgia Tech Financial Analysis Lab

The Georgia Tech Financial Analysis Lab conducts independent stock market research. Independent and 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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A Look at Cash Flow and Earnings Growth for the S&P 100

Over time, companies should be expected to grow operating cash flow at a rate that is commensurate with the rate of growth in earnings. When the two grow at different rates, reasons for the disparity should be investigated carefully.

One way to measure whether operating cash flow and earnings are growing at consistent rates to is to find Excess Cash Margin, ECM, calculated as the difference between operating cash flow and income from continuing operations divided by revenue. Before the calculation is made, however, operating cash flow, (OCF), the GAAP-defined cash flow provided by operating activities, is adjusted for nonrecurring and non-operating items. Similarly, income from continuing operations is adjusted for known nonrecurring items, yielding operating earnings (OE). Such adjustments remove noise from the calculated metric and make inherent changes in its value more meaningful.

In the calculation of ECM, we divide the difference between operating cash flow (OCF) and operating earnings (OE) by revenue (REV) so that changes in each can be read relative to changes in the scale of operations. For example, while the difference between OCF and OE may be growing, that difference takes on added significance when it is growing at a rate that is different from the rate of growth in revenue. In addition, the difference between OCF and OE that has been scaled by revenue can be more readily compared across firms than a similarly calculated difference that has not been scaled. Thus, we state ECM as:

$$\text{Excess cash margin} = (\text{Operating cash flow} - \text{Operating earnings}) / \text{Revenue, or}$$

$$\text{ECM} = (\text{OCF} - \text{OE}) / \text{REV}.$$

So that ECM is not expressed in decimals, it is multiplied by 100, which expresses it in percentage terms. We refer to the ECM ratio as excess cash margin because it measures the excess of operating cash flow over operating earnings as a margin, a percent of revenue, much like operating cash flow might be measured as a percent of revenue (i.e., cash margin), or operating earnings might be measured as a percent of revenue (i.e., net margin). Viewed in this manner, excess cash margin is the excess of cash margin over net margin, expressed in percentage terms.

Because operating earnings are measured after depreciation and amortization and operating cash flow is measured before depreciation and amortization, generally we expect firms to exhibit ECM that is above zero. Using this reasoning, more capital intensive firms with higher depreciation charges and firms that have invested heavily in intangibles subject to amortization will generally exhibit levels of ECM that are higher than other firms.

Of course, such generalizations do not always hold. For example, younger growth firms may consume cash from operations and exhibit a negative ECM as investments are made in such working capital accounts as accounts receivable and inventory. Later, as growth slows and the firm matures, the ECM would be expected to turn positive.

While there is information in the level of a firm's ECM and how it compares with other firms, especially in its own industry, for purposes of this report our interest in ECM is more on changes in the ratio through time. That is, changes in ECM measures changes in a company's ability to generate operating cash flow relative to its operating earnings. Analysts should look carefully at the causes of both declines and increases in ECM as they have implications for the sustainability of earnings and operating cash flow.

Declines in ECM

ECM will decline when operating earnings grow more quickly or decline more slowly than operating cash flow. As a result there will be increasing levels of non-cash accounts building up on the balance sheet. Such build-ups usually take the form of increases in assets, such as accounts receivable, inventory, other assets, or property, plant and equipment. Declines in ECM indicate that these non-cash assets are growing faster than revenue.

Over extended periods such balance sheet developments are not sustainable. Ultimately these non-cash accounts must be realized, boosting operating cash flow faster than earnings and raising ECM. If they are not realized they will likely become value impaired, necessitating a write-down and a reduction in earnings. It is this latter development, a write down of assets and its concomitant reduction in earnings, that a careful analysis of declines in ECM can help investors avoid.

Certainly the explanation for a decline in ECM may be benign. For example, a cyclical company may generate more operating cash flow than operating earnings during a business slow down as the balance sheet is liquidated. Then when business picks up again, earnings may grow for a while at a rate that is faster than the rate of growth in operating cash flow as liquidated accounts are replenished. Also a fundamental change in the stage of a firm in its life cycle, for example, a transition from growth to maturity or maturity to decline, can alter the relationship between earnings and operating cash flow.

Even in the absence of such cyclical or life-cycle changes the relationship between operating earnings and operating cash flow may be altered. For example, large sales on open account may boost earnings but may not be collected until a subsequent year. An extensive build up in inventory in anticipation of an increase in sales will reduce operating cash flow only to increase it again as the purchased inventory is sold in future periods.

In the end, careful analysis is required to determine if a build-up in assets caused by earnings growth at a rate that is faster than the rate of growth in operating cash flow will ultimately lead to future operating cash flow or to an asset write-down and related loss.

Increases in ECM

Like declines in ECM, consistent increases in ECM, where operating cash flow grows faster than operating earnings, are also not sustainable. Increases in ECM are the result of operating cash flow that is either consistently growing more quickly or falling more slowly than operating earnings. Such developments are typically due to reductions in working capital - either operating-related current assets are being reduced or current liabilities are being increased. For example, accounts receivable, inventory and other assets are being converted to cash at a rate that is faster than earnings can replenish them. Or operating cash flow is being provided through increases in such liabilities as accounts payable or accrued expenses payable. Such developments should not be unexpected during a business slow down. Importantly, however, operating cash flow generated in this manner is not sustainable because assets cannot be reduced or liabilities increased indefinitely.

Loss firms that report positive operating cash flow or such firms whose operating loss is larger than its consumption of operating cash flow will report a positive ECM. For example, a company that reports positive operating cash flow of $100 and negative operating earnings of $160 on revenues of say $1,000 will report positive ECM of ($100 minus -$160) / $1,000, or $260 / 1,000, which equals 26.0 (in percentage terms). Given the company's operating loss position, its positive operating cash flow is not sustainable because it does not have earnings support.

Long-term cash flow growth requires earnings support. When it is lacking, earnings growth must pick up or operating cash flow will begin a more rapid decline. Thus, a continued increase in ECM may indicate that operating cash flow cannot be maintained at existing levels without increases in earnings. Either operating cash flow will decline relative to earnings or operating earnings must increase relative to operating cash flow.

Stable ECM

A stable relationship through time between operating cash flow and operating earnings is a useful indicator of the sustainability of the two measures. When ECM is stable, earnings are being realized and are manifest as operating cash flow, the ultimate confirmation. Importantly, non-cash assets are not building on the balance sheet at a rate that is faster than the rate of growth in operations, keeping the risk of an asset impairment charge in check. In addition, when ECM is stable, operating cash flow can better be maintained through support provided by operating earnings.

ECM and the S&P 100

We calculated ECM for the 86 non-financial firms found in the S&P 100 for the years 2000, 2001, 2002, and 2003. We excluded the financial firms because operating cash flow is a less reliable indicator of operating performance for them than it is for the non-financials.

We calculated ECM by dividing by revenue the difference between adjusted operating cash flow and adjusted income from continuing operations. The resulting quotient was then multiplied by 100, which expressed it in percentage terms.

Our adjustments to operating cash flow are described in our October 2004 report titled, *Calculating Sustainable Cash Flow: A Study of the S&P 100 Using 2003 Data*. Common adjustments included such nonrecurring items as the tax benefits from stock options, cash provided by the sale or securitization of accounts receivable, restructuring and severance payments, litigation awards and payments, extended vendor payment terms, cash provided or used from discontinued operations, and capitalized operating costs, among others. We also removed such significant nonrecurring items as restructuring charges and litigation and merger-related items from reported income from continuing operations.

Ranking Based on ECM

With four years of data, we sought a quick and insightful way for ranking the sample firms based on their ECM performance. We accomplished this ranking by comparing ECM in 2003 with its mean value across the four-year period, 2000 through 2003. We calculated the percent that the 2003 ECM was above or (below) the four-year mean. The firms were ranked based on this percent statistic.

Firms whose ECM was significantly above or below the four-year ECM mean were identified for more careful scrutiny. However, much judgment was needed in reviewing the data and the percent measures. Companies with a very high or low income or operating cash flow in any one year potentially will have a four-year mean that is biased either high or low. Also, firms with particularly volatile earnings or cash flow will generate less meaningful four-year mean ECM results.

Thus, we were particularly interested in applying judgment to identify firms whose ECM measure was moving consistently in one direction, either upward or downward.

ECM Results

Our ECM results are presented in two tables. Table 1 presents ECM for 2000, 2001, 2002 and 2003, along with the four-year mean ECM and the percent that 2003 ECM was above or (below) the four-year mean. The data are ranked from most negative to most positive when ECM in 2003 was compared with the four-year mean ECM.

Table 2 provides adjusted operating cash flow, adjusted operating earnings and revenue data for the three years, 2000, 2001, 2002, and 2003. These data are needed to better understand the reasons for changes in ECM over time.

In reviewing the results in Table 1, it must be remembered that the purpose of ECM is not to identify firms whose operating cash flow or operating earnings are growing or falling, but rather to focus on those firms where changes in one are not consistent with changes in the other. When that happens consistently, a careful review of the causes and their implications for future earnings and cash flow is needed. Because of our interest in a consistent trend in ECM, we are less interested in companies such as Halliburton Company or American Express Company, which had two of the largest negative deviations in ECM from the mean, or H. J. Heinz Company or Sears, Roebuck and Co., which had the largest positive deviations from the mean. ECM will move about from one year to the next, sometimes significantly. However, there is more information in a consistent trend in ECM through time than in a single year deviation.

Results: Falling ECM

A large number of firms exhibited a declining ECM over the sample period. Among them we identified four for more careful scrutiny, United Technologies Corp., PepsiCo, Inc., The Walt Disney Company, and International Paper Company.

At United Technologies Corp. adjusted operating cash flow fell -19.3% over the sample period while adjusted operating earnings rose 36.6% on a 16.7% increase in revenue. ECM decreased from 2.4 in 2000 to -1.6 in 2003. The company's cash flow problems were due mainly to outsized voluntary contributions to the company's pension plans of $530 million in 2002, and $994 million in 2003. As the funded status of the company's plan is restored, such large contributions should not be needed and the company's operating cash flow should improve.

At PepsiCo, Inc., adjusted operating earnings increased 43.5% across the four-year sample period while adjusted operating cash flow declined by 2.5% and revenue increased 5.9%. As a result, ECM decreased from 7.6 in 2000 to 2.6 in 2003. While a modest increase in accounts and notes receivable hurt the company's adjusted operating cash flow in 2002 and 2003, like United Technologies, the primary reason for its drop off in adjusted operating cash flow generation was a sizable increase in its contribution to the company's pension plans from $103 million in 2000, to $446 million in 2001, to $820 million in 2002, and $535 million in 2003.

A special comment regarding ECM and the effects of additional pension funding is in order. ECM will decline as a result of an increase in pension funding. Whether this additional funding has negative implications for future earnings depends on whether a firm must become more conservative in the assumptions employed for calculating pension expense. The need for incremental funding implies that a pension plan was underfunded. Such a development is likely caused by the failure of pension assets to grow in value at a rate that is commensurate with the growth in pension obligations. The accompanying likelihood is that a firm will also need to lower its assumed rate of return on pension assets for income reporting purposes and in the process, raise pension expense.

The Walt Disney Company saw adjusted operating cash flow decline 21.5% between 2000 and 2003 while adjusted operating earnings increased by 103.6% and revenue increased by 6.5%. At the same time, ECM decreased steadily from 11.8 in 2000, to 7.9 in 2001, and to 5.0 in 2002, and 5.5 in 2003. The lag in the company's cash flow growth was caused by increases in receivables, inventories and other assets, especially in 2002. An improvement in the rate at which the company generated cash flow relative to earnings in 2003 is a positive development but should be watched carefully.

Adjusted operating cash flow at International Paper Company declined by 32.5% between 2000 and 2003. During that same period, adjusted operating earnings increased 111.8% as revenue decreased -10.6%. As a result, ECM declined over the sample period from 9.2 in 2000 to 5.5 in 2003. The company's adjusted operating cash flow decreased partly as a result of declines in accounts payable and accrued liabilities. Future increases in accounts payable will supplement cash flow; however, additions to accrued liabilities will reduce earnings.

Results: Rising ECM

Many firms also exhibited a rising ECM over the 2000 to 2003 sample period. Of note are Toys "R" Us, Inc., Honeywell International Inc., Weyerhaeuser Company, and McDonald’s Corporation.

At Toys "R" Us, Inc., adjusted operating cash flow increased markedly from negative $38 million to $793 million over the 2000 through 2003 time period as adjusted operating earnings decreased -29.7% on a 2.1% increase in revenue. At the same time, ECM increased from –2.1

in 2000 to 5.6 in 2003. The company added significantly to inventories and reduced accounts payable and accrued expenses payable in 2000, reducing adjusted operating cash flow that year and, from that low base, permitted the firm to grow cash flow more quickly since then.

At Honeywell International Inc., adjusted operating cash flow grew by 35.7% over the sample period and outpaced by a wide margin the -25.0% decrease in adjusted operating earnings on a 7.7% decrease in revenue causing ECM to increase from 0.9 in 2000 to 6.8 in 2003. Adding to adjusted operating cash flow were liquidations of accounts, notes, and other receivables and inventory, while accounts payable and accrued liabilities increased.

Weyerhaeuser Company experienced a 70.7% decline in adjusted income from continuing operations between 2000 and 2003. However, during that same time period, adjusted operating cash flow increased 24.4% as revenue also grew 24.4%. As a result, ECM increased from 3.1 in 2000 to 7.8 in 2003. Adding to adjusted operating cash flow were the liquidation of inventories, real estate, and land and increases in accounts payable.

McDonald's Corporation saw adjusted operating cash flow grow by 23.9% between 2000 and 2003 as adjusted operating earnings declined 10.0% on a 20.3% increase in revenue causing ECM to increase from 5.8 in 2000, to 6.6 in 2001, to 9.5 in 2002, and to 9.8 in 2003. An increase in taxes and other accrued liabilities boosted adjusted operating cash flow relative to earnings over the years.

Results: Loss Firms and ECM

A few firms reported notable losses from continuing operations in 2003, including Allegheny Technologies Inc., Delta Air Lines, Inc., and Lucent Technologies, Inc. Allegheny Technologies, Inc. and Delta Air Lines, Inc. also reported positive adjusted operating cash flow in 2003. As a result, 2003 ECM was positive and above the four-year mean for Allegheny Technologies, Inc. and positive and at the four-year mean for Delta Air Lines, Inc. Clearly, operating cash flow at these firms cannot be maintained at existing levels if operating losses are not converted into operating earnings. Lucent Technologies, Inc. reported negative adjusted operating cash flow in 2003.

Results: Stable ECM

As noted, a stable relationship between adjusted operating cash flow and adjusted operating earnings is a useful indicator of the sustainability of the two measures. There were several companies that exhibited this desirable trait. Among them were Anheuser-Busch Companies, Inc., The Coca-Cola Co. and Exxon Mobil Corporation.

At all three companies, adjusted operating cash flow grew at a rate that was very similar to the rate of growth in adjusted operating earnings. In addition, there were no unusual and unsustainable changes in operating-related asset or liabilities that would jeopardize future cash flow.

At Anheuser-Busch Companies, Inc., adjusted operating cash flow increased 30.2% between 2000 and 2003 while adjusted operating earnings increased 33.8% on a 12.3% increase in revenue. Adjusted operating cash flow increased 47.0% between 2000 and 2003 at The Coca-

Cola Company while adjusted operating earnings increased 48.8% on a 21.3% increase in revenue. At Exxon Mobil Corporation, adjusted operating cash flow increased 15.0% over the sample period while adjusted operating earnings increased 10.9%, on a 6.0% increase in revenue. At all three companies ECM was little changed in the three years for which observations were taken indicating consistent growth through time in both earnings and cash flow.

Results: ECM for The Sample

As seen at the end of Table 1, we produced an Overall Total ECM for the 86 non-financial companies of the S&P 100. The trend is relatively stable, as the Overall Total ECM moves slightly from year to year. The Overall Total ECM was 5.1 in 2000, 8.7 in 2001, 8.3 in 2002, and 6.8 in 2003, with a four-year mean ECM of 7.2. With no discernable trend in the ECM, there is no obvious reason to be concerned about the growth rates exhibited for operating earnings or operating cash flow for the sample as a whole.

Total adjusted operating cash flow for the sample as a whole grew from $322,262 million in 2000, to $373,906 million in 2001, to $369,662 million in 2002, to $389,359 million in 2003, a jump of 20.8% from 2000 to 2003. Total adjusted operating income changed from $195,310 million in 2000, to $159,247 million in 2001, to $160,133 million in 2002, to $204,511 million in 2003, an increase of 4.7% over the sample years. Finally, Total Revenue was $2,502,681 million in 2000, $2,478,156 million in 2001, $2,517,293 million in 2002, and $2,704,164 million in 2003, a rise of 8.1% over the period. While adjusted operating cash flow grew at a slightly faster rate over the study period than adjusted operating income, Overall Total ECM stayed in a fairly tight range. As long as adjusted operating cash flow and adjusted operating income continue to trend in a similar direction through the years, cash flow and earnings for the S&P 100 non-financial firms as a whole should be sustainable.

Conclusions

ECM, or Excess Cash Margin, calculated by dividing by revenue the difference between adjusted operating cash flow and adjusted income from continuing operations, provides useful insight into the relationship between earnings and cash flow. When ECM declines in a consistent manner it indicates that earnings are growing faster or declining more slowly than cash flow. As a result, relative to the scale of operations, increasing levels of non-cash accounts are accumulating on the balance sheet. Earnings generated in this manner, that is, with declining cash flow confirmation, are not sustainable and are at risk for decline. When ECM increases consistently it indicates that operating cash flow is either growing faster or falling more slowly than earnings. As a result, relative to the scale of operations, the balance sheet is being liquidated. Operating cash flow generated in this manner, that is, without consistent earnings support, is not sustainable and is at risk for decline. The better, more sustainable relationship between operating cash flow and earnings is when the two measures grow at consistent rates, resulting in a constant ECM through time.

This study calculates ECM for the non-financial firms of the S&P 100 for the years 2000, 2001, 2002, and 2003. We saw evidence of firms exhibiting trends in ECM that were declining, increasing, and stable. The results of our findings are reported in Tables 1 and 2.

Table 1
Excess Cash Margin for the S&P 100 Non-Financials
2000 - 2003

Company Name	2000 ECM In Percent	2001 ECM In Percent	2002 ECM In Percent	2003 ECM In Percent	Four-Year Mean ECM	% 2003 Above (Below) Mean
Halliburton Company	-1.5	3.5	2.9	-7.0	-0.5	-1252.41%
United Technologies Corporation	2.4	2.3	0.8	-1.6	1.0	-259.79%
American Express Company	15.0	10.4	16.7	-1.1	10.3	-110.26%
Lucent Technologies, Inc.	-7.5	27.4	93.4	0.0	28.3	-100.14%
General Motors Corporation	8.3	12.6	3.3	0.5	6.2	-91.39%
The Boeing Company	7.4	0.9	2.9	1.3	3.1	-56.93%
Cisco Systems, Inc.	4.8	18.6	23.4	6.3	13.3	-52.64%
E.I. du Pont De Nemours and Company	7.0	16.4	2.5	3.7	7.4	-50.50%
PepsiCo Inc.	7.6	5.6	4.7	2.6	5.1	-49.46%
Time Warner Inc.	-3.1	4.8	46.2	7.5	13.9	-45.85%
Viacom Inc.	8.5	14.6	3.1	4.4	7.7	-42.30%
MedImmune, Inc.	5.2	15.5	63.5	15.8	25.0	-36.65%
Campbell Soup Company	6.9	5.5	8.0	4.0	6.1	-35.01%
Texas Instruments Incorporated	7.4	25.6	21.9	10.9	16.4	-33.54%
Nextel Communications, Inc.	22.5	34.1	23.0	15.9	23.9	-33.41%
Oracle Corporation	31.5	-14.1	8.7	5.4	7.9	-32.03%
The Walt Disney Company	11.8	7.9	5.0	5.5	7.6	-26.98%
Boise Cascade Corp	4.8	5.5	3.7	3.1	4.3	-26.97%
Ford Motor Company	10.2	21.0	8.8	9.0	12.2	-26.83%
Bristol-Myers Squibb Company	2.1	8.6	1.1	2.7	3.6	-25.54%
Medtronic, Inc.	-2.0	13.6	7.3	4.4	5.8	-25.24%
International Paper Company	9.2	8.0	6.5	5.5	7.3	-24.53%
Clear Channel Communications, Inc.	23.0	22.5	12.0	13.4	17.7	-24.22%
FedEx Corporation	5.1	7.0	7.2	4.6	6.0	-23.14%
Rockwell International Corporation	7.0	4.4	6.4	4.6	5.6	-18.75%
Colgate-Palmolive Company	6.0	3.5	2.9	3.2	3.9	-18.64%
Harrah's Entertainment, Inc.	12.4	15.2	9.2	9.4	11.5	-18.37%
Altria Group	3.8	0.3	2.5	1.8	2.1	-16.55%
Schlumberger N.V.	8.2	3.5	17.3	7.9	9.2	-14.20%
The AES Corporation	-5.2	17.7	31.2	12.1	13.9	-12.99%
Norfolk Southern Corporation	15.1	6.9	10.4	9.8	10.6	-7.07%
Johnson & Johnson	6.5	9.3	3.2	5.8	6.2	-6.76%
EMC Corporation	0.5	20.5	26.8	14.8	15.6	-5.65%
General Electric Company	10.5	13.3	10.9	11.2	11.5	-2.49%
Delta Air Lines, Inc.	13.0	4.9	8.6	8.8	8.9	-0.22%
Entergy Corporation	8.6	16.4	12.4	13.0	12.6	3.15%
Xerox Corporation	0.8	13.9	10.6	8.8	8.5	3.37%
Exxon Mobil Corporation	3.3	3.4	4.3	3.8	3.7	3.72%
HCA Inc.	5.3	5.7	6.8	6.3	6.1	4.61%
Exelon Corporation	6.0	12.6	10.1	10.2	9.7	4.88%
Baker Hughes Incorporated	7.9	4.2	7.1	6.8	6.5	5.04%
Burlington Northern Santa Fe Corporation	14.1	15.3	15.6	16.2	15.3	5.64%
The Dow Chemical Co.	1.4	5.6	6.8	5.0	4.7	5.88%
Alcoa Inc.	5.8	5.7	5.9	6.4	6.0	6.90%

Excess Cash Margin (ECM) = (Adjusted Cash Provided by Operating Activities – Adjusted Income from Continuing Operations) / Revenue, expressed in percent.

Table 1 (cont'd)
Excess Cash Margin for the S&P 100 Non-Financials
2000 - 2003

Company Name	2000 ECM In Percent	2001 ECM In Percent	2002 ECM In Percent	2003 ECM In Percent	Four-Year Mean ECM	% 2003 Above (Below) Mean
Anheuser-Busch Companies, Inc.	4.7	4.4	4.8	5.1	4.7	6.93%
The Limited, Inc.	4.5	8.7	3.1	6.0	5.6	7.69%
Tyco International Ltd.	8.2	6.6	12.8	10.2	9.4	7.91%
Intel Corp.	12.9	22.0	21.4	21.1	19.4	9.12%
Minnesota Mining and Manufacturing Co.	3.3	9.2	6.6	7.3	6.6	10.70%
The Southern Company	13.5	12.1	14.2	15.3	13.8	10.88%
Computer Sciences	4.6	9.1	6.3	7.8	7.0	12.76%
Eastman Kodak Company	-2.3	12.7	11.7	8.7	7.7	13.41%
Verizon Communications Inc.	12.0	22.3	22.5	22.8	19.9	14.63%
Sara Lee Corporation	1.3	3.1	3.6	3.3	2.8	15.25%
The Coca-Cola Company	3.4	2.5	3.5	3.9	3.3	16.14%
SBC Communications Inc.	16.3	14.9	19.4	21.1	17.9	17.67%
AT&T Corp.	3.3	21.7	22.1	20.1	16.8	19.83%
Amgen Inc.	2.3	1.8	22.3	11.6	9.5	22.20%
Hewlett-Packard Company	-2.3	3.9	9.7	4.9	4.0	22.37%
McDonald's Corporation	5.8	6.6	9.5	9.8	7.9	23.39%
The May Department Stores Company	3.3	6.7	6.4	7.8	6.0	28.99%
The Procter and Gamble Co.	2.0	5.0	8.2	7.5	5.7	32.24%
National Semiconductor Corporation	3.1	10.9	13.9	13.9	10.5	32.81%
Wal-Mart Stores, Inc.	1.6	1.9	2.2	2.8	2.1	32.95%
The Gillette Company	4.3	12.5	7.8	13.2	9.5	39.72%
The Black & Decker Corporation	1.5	5.3	4.6	6.2	4.4	40.94%
International Business Machines Corporation	-0.4	6.1	10.1	8.9	6.2	44.63%
Weyerhaeuser Company	3.1	4.3	6.1	7.8	5.3	46.06%
Home Depot Inc.	0.4	3.3	1.9	3.4	2.2	52.64%
Microsoft Corp.	-7.8	16.5	16.4	15.6	10.2	53.54%
Honeywell International Inc.	0.9	4.8	5.2	6.8	4.4	54.29%
Merck & Co., Inc.	0.8	2.7	9.3	8.1	5.2	54.40%
Allegheny Technologies Inc.	0.2	4.7	12.8	13.1	7.7	69.77%
American Electric Power	-6.0	9.8	4.8	6.5	3.8	73.38%
RadioShack Corporation	-5.2	10.9	3.4	7.3	4.1	78.37%
Baxter International Inc.	0.3	2.6	0.7	3.6	1.8	100.71%
Avon Products, Inc.	-3.0	3.9	0.4	1.5	0.7	120.46%
Toys "R" Us, Inc.	-2.1	3.5	3.1	5.6	2.5	122.79%
Unisys Corporation	-1.8	3.3	2.0	4.6	2.0	124.38%
General Dynamics Corporation	1.3	1.3	0.8	4.7	2.0	132.59%
The Williams Companies, Inc.	-25.7	7.5	-18.9	3.0	-8.5	135.23%
Pfizer Inc.	9.0	3.1	2.3	21.8	9.0	141.05%
Raytheon Company	4.2	-0.4	0.9	10.2	3.7	173.63%
El Paso Corporation	-5.8	6.5	14.7	35.0	12.6	177.87%
Sears, Roebuck and Co.	3.0	2.4	-4.2	3.0	1.0	189.84%
H.J. Heinz Company	-0.8	-7.4	0.4	3.5	-1.1	426.67%
Overall Total ECM for the Sample	5.1	8.7	8.3	6.8	7.2	-5.37%

Excess Cash Margin (ECM) = (Adjusted Cash Provided by Operating Activities – Adjusted Income from Continuing Operations) / Revenue, expressed in percent.

Table 2
Adjusted Operating Cash Flow, Adjusted Operating Earnings, and Total Revenues for the S&P 100 Non-Financials, 2000 - 2003

Excess Cash Margin Source Data ($ Millions)

Company Name	2000 Adjusted Operating C/F	2000 Adjusted Operating Income	2000 Total Revenues	2001 Adjusted Operating C/F	2001 Adjusted Operating Income	2001 Total Revenues	2002 Adjusted Operating C/F	2002 Adjusted Income	2002 Total Revenues	2003 Adjusted Operating C/F	2003 Adjusted Operating Income	2003 Total Revenues
The AES Corporation	356	751	7,534	1,537	420	6,299	1,587	(714)	7,380	1,422	400	8,415
Alcoa Inc.	2,877	1,537	22,936	2,425	1,200	21,504	1,967	756	20,351	2,486	1,046	22,576
Allegheny Technologies Inc.	151	146	2,460	123	23	2,128	209	(36)	1,908	90	(163)	1,937
Altria Group	11,151	8,339	73,503	9,212	8,970	80,879	11,778	9,739	80,408	10,840	9,403	81,832
American Electric Power	(339)	328	11,113	2,258	1,008	12,753	2,179	1,546	13,308	2,441	1,489	14,545
American Express Company	6,288	2,745	23,675	5,077	2,727	22,582	6,689	2,705	23,807	2,811	3,084	25,866
Amgen Inc.	1,176	1,092	3,629	1,350	1,279	4,016	1,910	676	5,523	3,269	2,298	8,356
Anheuser-Busch Companies, Inc.	2,229	1,552	14,534	2,355	1,694	14,973	2,687	1,934	15,687	2,902	2,076	16,320
Time Warner Inc.	329	1,437	36,213	2,554	708	38,234	5,546	(11,682)	37,314	5,715	2,745	39,565
AT&T Corp.	11,080	9,550	46,850	10,617	1,475	42,197	10,682	2,334	37,827	8,950	2,009	34,529
Avon Products, Inc.	318	491	5,723	727	496	6,000	572	548	6,228	785	681	6,876
Baker Hughes Incorporated	538	124	5,234	650	423	5,382	628	271	5,020	661	299	5,293
Baxter International Inc.	995	974	6,896	1,160	960	7,663	1,222	1,166	8,110	1,465	1,141	8,916
The Black & Decker Corporation	364	294	4,561	385	167	4,140	459	260	4,292	587	308	4,483
The Boeing Company	5,904	2,107	51,321	3,897	3,401	58,198	4,215	2,666	54,061	2,714	2,037	50,485
Boise Cascade Corp	489	118	7,807	430	20	7,422	316	40	7,412	291	33	8,245
Bristol-Myers Squibb Company	4,337	3,975	17,538	5,504	3,944	18,044	2,955	2,756	18,106	3,932	3,368	20,894
Burlington Northern Santa Fe Corp.	2,286	988	9,207	2,201	790	9,208	2,164	761	8,979	2,297	775	9,413
Campbell Soup Company	1,161	714	6,466	978	660	5,771	1,029	540	6,133	890	625	6,678
Cisco Systems, Inc.	3,522	2,610	18,928	5,172	1,036	22,293	6,698	2,273	18,915	5,092	3,907	18,878
Clear Channel Communications, Inc.	1,075	(157)	5,345	672	(1,119)	7,970	1,737	726	8,421	1,935	734	8,931
The Coca-Cola Company	3,808	3,218	17,354	4,296	3,849	17,545	4,817	4,134	19,564	5,600	4,787	21,044
Colgate-Palmolive Company	1,588	1,023	9,358	1,451	1,134	9,084	1,557	1,285	9,294	1,774	1,459	9,903
Computer Sciences	863	379	10,524	1,382	344	11,379	1,155	443	11,347	1,693	534	14,768
Delta Air Lines, Inc.	2,986	809	16,741	(308)	(993)	13,879	160	(990)	13,305	128	(1,047)	13,303
The Dow Chemical Co.	1,783	1,379	29,534	1,973	411	28,075	2,139	248	27,609	3,320	1,701	32,632
E.I. du Pont De Nemours and Company	4,418	2,380	29,202	5,289	1,130	25,370	2,815	2,208	24,522	3,173	2,160	27,730
Eastman Kodak Company	989	1,308	13,994	2,207	531	13,229	2,408	909	12,835	1,789	626	13,317
El Paso Corporation	91	1,200	19,271	2,976	2,094	13,649	910	(106)	6,917	2,814	464	6,711

Table 2 (cont'd.)
Adjusted Operating Cash Flow, Adjusted Operating Earnings, and Total Revenues for the S&P 100 Non-Financials, 2000 - 2003

Excess Cash Margin Source Data ($ Millions)

Company Name	2000 Adjusted Operating C/F	2000 Adjusted Operating Income	2000 Total Revenues	2001 Adjusted Operating C/F	2001 Adjusted Operating Income	2001 Total Revenues	2002 Adjusted Operating C/F	2002 Adjusted Income	2002 Total Revenues	2003 Adjusted Operating C/F	2003 Adjusted Operating Income	2003 Total Revenues
EMC Corporation	1,838	1,794	8,873	1,425	(31)	7,091	1,376	(80)	5,438	1,446	526	6,237
Entergy Corporation	1,573	710	10,022	2,252	670	9,621	1,875	842	8,305	2,006	808	9,195
Exelon Corporation	1,100	652	7,499	3,424	1,540	14,918	3,099	1,587	14,955	3,400	1,786	15,812
Exxon Mobil Corporation	23,242	15,581	232,748	22,632	15,462	213,488	20,046	11,276	204,506	26,727	17,278	246,738
FedEx Corporation	1,600	674	18,257	2,030	661	19,629	2,126	637	20,607	1,861	830	22,487
Ford Motor Company	19,672	2,319	170,579	31,822	(1,860)	160,504	18,926	4,611	162,256	15,854	1,157	164,196
General Dynamics Corporation	1,036	901	10,356	1,078	925	12,054	1,139	1,028	13,829	1,732	953	16,617
General Electric Company	24,067	10,376	129,853	29,862	13,121	125,913	30,346	15,882	132,210	30,392	15,347	134,187
General Motors Corporation	19,063	3,725	184,632	23,515	2,146	169,051	9,830	4,017	177,324	3,899	2,910	185,524
The Gillette Company	1,584	1,186	9,225	2,175	1,056	8,961	1,922	1,262	8,453	2,718	1,496	9,252
H.J. Heinz Company	771	846	8,939	305	824	6,988	719	687	7,614	997	707	8,237
Halliburton Company	(19)	155	11,944	1,016	558	13,046	1,450	1,090	12,572	(776)	361	16,271
Harrah's Entertainment, Inc.	528	115	3,330	750	197	3,648	706	327	4,099	720	312	4,323
HCA Inc.	1,628	736	16,670	2,001	977	17,953	2,686	1,339	19,729	2,720	1,339	21,808
Hewlett-Packard Company	2,322	3,470	48,870	3,025	1,273	45,226	6,159	692	56,588	6,933	3,331	73,061
Home Depot Inc.	2,751	2,581	45,738	4,801	3,053	53,553	4,764	3,664	58,247	6,514	4,304	64,816
Honeywell International Inc.	2,324	2,104	25,023	2,540	1,410	23,652	2,960	1,801	22,274	3,153	1,577	23,103
Intel Corp.	12,517	8,181	33,726	7,625	1,782	26,539	9,642	3,901	26,764	11,835	5,467	30,141
International Business Machines Corp.	7,038	7,393	88,396	13,235	8,188	83,067	14,662	6,466	81,186	15,447	7,486	89,131
International Paper Company	2,855	254	28,180	1,983	(128)	26,363	2,392	771	24,976	1,927	538	25,179
Johnson & Johnson	6,883	4,995	29,172	8,870	5,867	32,317	8,113	6,936	36,298	10,382	7,963	41,862
The Limited, Inc.	822	413	9,080	1,099	365	8,423	795	534	8,445	1,138	602	8,934
Lucent Technologies, Inc.	(964)	1,206	28,904	(2,580)	(8,422)	21,294	791	(10,711)	12,321	(653)	(650)	8,470
The May Department Stores Company	1,336	858	14,511	1,631	706	13,883	1,481	616	13,491	1,670	630	13,343
McDonald's Corporation	2,748	1,922	14,243	2,706	1,717	14,870	2,913	1,456	15,406	3,404	1,729	17,141
MedImmune, Inc.	173	145	540	245	149	621	256	(286)	853	347	180	1,054
Medtronic, Inc.	993	1,093	5,016	1,998	1,241	5,552	1,793	1,323	6,411	2,037	1,703	7,665
Merck & Co., Inc.	7,127	6,800	40,363	8,330	7,050	47,716	8,623	3,790	51,790	8,455	6,643	22,485
Microsoft Corp.	6,497	8,295	22,956	12,959	8,780	25,296	13,746	9,093	28,365	15,180	10,148	32,187
Minnesota Mining and Manufacturing Co.	2,342	1,796	16,724	3,174	1,689	16,079	3,181	2,100	16,332	3,797	2,463	18,232

Table 2 (cont'd.)
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Excess Cash Margin Source Data ($ Millions)

Company Name	2000 Adjusted Operating C/F	2000 Adjusted Operating Income	2000 Total Revenues	2001 Adjusted Operating C/F	2001 Adjusted Operating Income	2001 Total Revenues	2002 Adjusted Operating C/F	2002 Adjusted Income	2002 Total Revenues	2003 Adjusted Operating C/F	2003 Adjusted Operating Income	2003 Total Revenues
National Semiconductor Corporation	501	434	2,140	506	275	2,113	97	(111)	1,495	237	5	1,673
Nextel Communications, Inc.	503	(782)	5,714	1,071	(1,548)	7,689	2,486	480	8,721	3,277	1,558	10,820
Norfolk Southern Corporation	1,004	73	6,159	755	326	6,170	1,085	431	6,270	1,134	499	6,468
Oracle Corporation	5,233	2,011	10,231	1,036	2,578	10,961	3,236	2,393	9,673	2,939	2,432	9,475
PepsiCo Inc.	4,507	2,577	25,479	4,050	2,545	26,935	4,312	3,140	25,112	4,395	3,700	26,971
Pfizer Inc.	7,841	5,504	26,045	8,971	8,080	29,024	10,323	9,569	32,373	13,936	4,086	45,188
The Procter and Gamble Co.	4,880	4,063	39,951	6,024	4,069	39,244	8,238	4,944	40,238	8,933	5,674	43,377
RadioShack Corporation	117	368	4,795	780	258	4,776	406	251	4,577	630	290	4,649
Raytheon Company	1,060	398	15,817	422	479	16,017	1,461	1,313	16,760	2,587	741	18,109
Rockwell International Corporation	650	318	4,722	368	177	4,323	476	225	3,909	436	249	4,104
Sara Lee Corporation	1,385	1,158	17,511	1,872	1,320	17,747	1,767	1,124	17,628	1,810	1,214	18,291
SBC Communications Inc.	15,121	6,742	51,374	14,999	8,149	45,908	15,471	7,117	43,138	13,480	4,867	40,843
Schlumberger N.V.	1,531	721	9,831	1,083	589	13,998	1,909	(381)	13,257	2,017	903	14,059
Sears, Roebuck and Co.	2,703	1,490	40,848	2,379	1,397	40,990	(319)	1,433	41,366	2,524	1,299	41,124
The Southern Company	2,349	994	10,066	2,349	1,119	10,155	2,816	1,318	10,549	3,093	1,377	11,251
Texas Instruments Incorporated	2,826	1,950	11,875	2,071	(26)	8,201	2,020	185	8,383	2,238	1,164	9,834
Toys "R" Us, Inc.	(38)	204	11,332	575	185	11,019	574	229	11,305	793	143	11,566
Tyco International Ltd.	5,734	3,364	28,928	6,415	4,168	34,002	5,564	1,015	35,590	5,594	1,844	36,801
Unisys Corporation	206	327	6,885	300	99	6,018	356	243	5,607	530	259	5,911
United Technologies Corporation	2,451	1,808	26,583	2,797	2,164	27,897	2,706	2,466	28,212	1,979	2,470	31,034
Verizon Communications Inc.	17,934	10,192	64,707	19,497	4,611	66,713	22,100	6,986	67,304	22,949	7,509	67,752
Viacom Inc.	1,775	66	20,044	3,150	(240)	23,223	2,980	2,227	24,606	3,424	2,251	26,585
Wal-Mart Stores, Inc.	9,428	6,295	193,116	10,295	6,448	205,823	12,844	7,818	231,577	15,963	8,672	258,681
The Walt Disney Company	3,675	682	25,418	3,074	1,082	25,172	2,358	1,081	25,329	2,883	1,389	27,061
Weyerhaeuser Company	1,468	976	15,980	1,062	430	14,545	1,471	348	18,521	1,827	286	19,873
The Williams Companies, Inc.	(880)	807	6,559	1,311	914	5,303	(1,148)	(447)	3,717	574	69	16,834
Xerox Corporation	37	(115)	18,751	2,215	(149)	17,008	2,372	690	15,849	2,048	662	15,701
Totals	322,262	195,310	2,502,681	373,906	159,247	2,478,156	369,662	160,133	2,517,293	389,359	204,511	2,704,164