



DuPree Financial Analysis Lab

800 West Peachtree St. NW

Atlanta, GA 30332-0520

404-894-9473

<http://www.dupree.gatech.edu/finlab>

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

Michael L. Ely, MBA
Financial Analyst
michael.ely@mgt.gatech.edu

Excess Cash Margin and 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 and 2002 and provides commentary on the results. Insights are provided into firms with a declining ECM, an increasing ECM and a stable ECM.

November, 2003

**DuPree Financial Analysis Lab
DuPree College of Management
Georgia Institute of Technology
Atlanta, GA 30332-0520**

DuPree Financial Analysis Lab

The DuPree 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.

Contact Information

Charles Mulford. Invesco Chair, Professor of Accounting and the Lab's Director.

Phone: (404) 894-4395

Email: charles.mulford@mgt.gatech.edu

Michael L. Ely. MBA, Financial Analyst.

Phone: (404) 894-9473

Email: michael.ely@mgt.gatech.edu

Kerianne Maloney. Graduate research assistant and MBA student.

Mario Martins. Graduate research assistant and MBA student.

Raul Quiroz. Graduate research assistant and MBA student.

Website: <http://www.dupree.gatech.edu/finlab>

©2003 by the DuPree College of Management, Georgia Institute of Technology, Atlanta, GA 30332-0520. **ALL RIGHTS RESERVED.** The information in this research report was based on sources believed to be reliable and accurate, consisting principally of required filings submitted by the companies represented to the Securities and Exchange Commission. However, no warranty can be made. No data or statement is or should be construed to be a recommendation for the purchase, retention, or sale of the securities mentioned.

Excess Cash Margin and the S&P 100

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

One way to measure whether earnings and operating cash flow are growing at consistent rates 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:

Excess cash margin = (Operating cash flow - Operating earnings) / Revenue, or

$$ECM = (OCF - OE) / REV.$$

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 $(\$100 \text{ minus } -\$160) / \$1,000$, 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 87 non-financial firms found in the S&P 100 for the years 2000, 2001 and 2002. 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 2003 report titled, *Calculating Sustainable Cash Flow: A Study of the S&P 100 Using 2002 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 three 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 2002 with its mean value across the three-year period, 2000 through 2002. We calculated the percent that the 2002 ECM was above or (below) the three-year mean. The firms were ranked based on this percent statistic.

Firms whose ECM was significantly above or below the three-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 three-year mean that is biased either high or low. Also, firms with particularly volatile earnings or cash flow will generate less meaningful three-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 and 2002, along with the three-year mean ECM and the percent that 2002 ECM was above or (below) the three-year mean. The data are ranked from most negative to most positive when ECM in 2002 was compared with the three-year mean ECM.

Table 2 provides adjusted operating cash flow, adjusted operating earnings and revenue data for the three years, 2000, 2001 and 2002. 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.

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, Sears, Roebuck and Co., The Walt Disney Co., PepsiCo, Inc., and United Technologies Corp.

Operating cash flow at Sears Roebuck and Co. declined by 111.8% between 2000 and 2002 and was negative in 2002. During that same period, operating earnings declined only 3.8% as revenue increased 1.3%. As a result, ECM declined rather dramatically over the sample period from 3.0 in 2000 to -4.2 in 2002. The main culprit for the company's lack of operating cash flow in 2002 was a significant increase in its credit card receivables, which the company has since addressed.

The Walt Disney Company saw operating cash flow decline 38.1% between 2000 and 2002 while operating earnings increased by 78.1% and revenue declined .4%. At the same time, ECM decreased steadily from 11.8 in 2000, to 8.4 in 2001, and to 4.2 in 2002. The lag in the company's cash flow growth was caused by increases in receivables, inventories and other assets, especially in 2002.

At PepsiCo, Inc., operating earnings increased 34.1% across the three-year sample period while operating cash flow declined by 4.3% and revenue declined 1.4%. As a result, ECM decreased from 7.6 in 2000 to 3.4 in 2002. While a modest increase in accounts and notes receivable hurt the company's operating cash flow in 2002, the primary reason for its drop off in operating cash flow generation was a sizable increase to \$820 million in its contribution to the company's pension plans in 2002. 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 United Technologies Corp. operating cash flow growth of 16.1% over the sample period also lagged growth in operating earnings of 35.2% on a 6.1% increase in revenue. ECM decreased from 2.6 in 2000 to 1.6 in 2002. Like PepsiCo, United Technologies cash flow problems in 2002 were due to an outsized contribution of \$500 million to the company's pension plans.

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.

Results: Rising ECM

Many firms also exhibited a rising ECM over the 2000 to 2002 sample period. Of note are The Dow Chemical Co., Hewlett-Packard Co., Toys "R" Us, Inc., and International Business Machines Corp.

A 6.5% decline in revenue accompanied by a significant drop in gross margin led to an 83.6% decline in income from continuing operations at The Dow Chemical Co. between 2000 and 2002. However, during that same time period, operating cash flow increased 23.5%. As a result, ECM increased from 1.3 in 2000 to 7.1 in 2002. Adding to operating cash flow were liquidations of inventories and increases in accounts payable. Also helping were dividends received from nonconsolidated affiliates that exceeded earnings of those companies.

At Hewlett-Packard, operating cash flow grew by 158.1% over the sample period and outpaced by a wide margin the 50.0% decrease in operating earnings on a 15.8% increase in revenue causing ECM to increase from -2.3 in 2000 to 7.5 in 2002. Adding to operating cash flow in

2002 were liquidations of accounts and financing receivables and inventory. Also, the non-cash expenses depreciation and amortization, which reduce earnings but not operating cash flow were 54.8% higher in 2002 than in 2001.

At Toys "R" Us, Inc., operating cash flow increased markedly from negative \$38 million to \$574 million over the 2000 through 2002 time period as operating earnings increased 12.4% on a .2% decline in revenue. At the same time, ECM increased from -2.1 in 2000 to 3.1 in 2002. The company added significantly to inventories and reduced accounts payable and accrued expenses payable in 2000, reducing operating cash flow that year and permitting it to grow more quickly in 2001 and 2002.

International Business Machines Corp. saw operating cash flow grow by 103.3% between 2000 and 2002 as operating earnings declined 12.6% on an 8.2% decline in revenue causing ECM to increase from -.4 in 2000, to 6.4 in 2001, and to 9.7 in 2002. Large declines in receivables and inventories and a significant increase in other liabilities boosted operating cash flow in 2002 relative to prior years. Some of this cash flow, though, was used to increase pension assets.

Loss Firms and ECM

Several firms reported notable losses from continuing operations in 2002, including The AES Corp., AOL Time Warner, Inc., Lucent Technologies, Inc. and Schlumberger, N.V. These firms also reported positive operating cash flow in 2002. As a result, in 2002 ECM was positive and well above the three-year mean. Clearly, operating cash flow at these firms cannot be maintained at existing levels if operating losses are not converted into operating earnings.

Results: Stable ECM

As noted, a stable relationship between operating cash flow and 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 Wal-Mart Stores, Inc.

At all three companies, operating cash flow grew at a rate that was very similar to the rate of growth in 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., operating cash flow increased 20.4% between 2000 and 2002 while operating earnings increased 24.6% on a 7.9% increase in revenue. Operating cash flow increased 24.5% between 2000 and 2002 at The Coca-Cola Company while operating earnings increased 26.5% on a 12.7% increase in revenue. At Wal-Mart, operating cash flow increased 31.2% over the sample period while operating earnings increased 27.7%, in line with a 27.7% 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.

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 and 2002. 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 - 2002

Company Name	2000 ECM In Percent	2001 ECM In Percent	2002 ECM In Percent	Three-Year Mean ECM 2000 - 2002	% 2002 Above (Below) Mean
Sears, Roebuck and Co.	3.0	2.4	-4.2	0.4	-1188.59%
Pharmacia Corporation	1.6	3.1	-3.2	0.5	-729.82%
Bristol-Myers Squibb Company	2.1	15.3	-9.5	2.6	-467.39%
E.I. du Pont De Nemours and Company	7.2	15.9	-2.1	7.0	-129.65%
General Dynamics Corporation	1.3	1.1	-0.1	0.8	-108.91%
Viacom Inc.	8.5	14.6	3.3	8.8	-62.91%
Pfizer Inc.	9.0	4.1	2.2	5.1	-56.58%
Johnson & Johnson	6.5	9.3	3.2	6.3	-48.80%
The Walt Disney Company	11.8	8.4	4.2	8.1	-48.47%
The Williams Companies, Inc.	-25.7	7.9	-17.2	-11.7	-47.49%
Pepsico Inc.	7.6	6.0	3.4	5.7	-39.74%
The Limited, Inc.	4.5	8.0	3.2	5.2	-38.42%
Clear Channel Communications, Inc.	23.0	22.5	12.2	19.2	-36.77%
United Technologies Corporation	2.6	2.7	1.6	2.3	-30.56%
Colgate-Palmolive Company	6.0	4.8	3.5	4.8	-27.42%
Harrah's Entertainment, Inc.	12.4	14.5	9.3	12.1	-23.23%
Boise Cascade Corp	4.8	5.5	3.7	4.6	-20.31%
International Paper Company	9.1	8.1	6.3	7.8	-19.52%
Avon Products, Inc.	-3.0	3.8	0.3	0.4	-11.81%
Ford Motor Company	14.3	14.2	12.2	13.6	-9.84%
The Boeing Company	7.4	1.0	3.6	4.0	-9.63%
General Motors Corporation	9.9	6.4	7.0	7.8	-9.55%
Delta Air Lines, Inc.	13.0	4.0	7.4	8.1	-9.05%
Computer Sciences	4.6	9.1	6.3	6.7	-5.72%
Norfolk Southern Corporation	15.1	6.9	10.4	10.8	-3.76%
Nextel Communications, Inc.	23.4	32.1	26.7	27.4	-2.59%
General Electric Company	10.6	12.9	11.5	11.7	-1.62%
Entergy Corporation	8.6	16.4	12.4	12.5	-0.50%
Oracle Corporation	31.5	-14.1	8.8	8.7	0.30%
Home Depot Inc.	0.4	3.3	1.9	1.8	2.55%
The Gillette Company	4.3	12.5	8.8	8.5	2.77%
Burlington Northern Santa Fe Corporation	14.1	15.3	15.6	15.0	4.05%
Anheuser-Busch Companies, Inc.	4.7	4.3	4.8	4.6	4.36%
Minnesota Mining and Manufacturing Company	3.3	8.9	6.6	6.3	5.36%
Wal-Mart Stores, Inc.	1.6	1.6	1.8	1.7	6.05%
The Southern Company	13.5	12.1	14.0	13.2	6.10%
Baxter International Inc.	0.3	1.0	0.7	0.7	6.75%
Rockwell International Corporation	7.0	4.4	6.3	5.9	6.85%
Alcoa Inc.	5.8	5.2	6.2	5.7	7.29%
The Coca-Cola Company	3.4	2.5	3.4	3.1	9.55%
Verizon Communications Inc.	12.0	22.5	19.9	18.1	9.95%
Exelon Corporation	6.0	12.8	10.9	9.9	10.13%
Campbell Soup Company	6.9	6.7	8.1	7.2	11.50%
Texas Instruments Incorporated	7.4	23.4	18.3	16.4	11.64%

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 – 2002

Company Name	2000 ECM In Percent	2001 ECM In Percent	2002 ECM In Percent	Three-Year Mean ECM 2000 - 2002	% 2002 Above (Below) Mean
RadioShack Corporation	-5.2	10.9	3.4	3.0	11.92%
American Express Company	15.0	13.4	17.4	15.3	14.20%
Altria Group	3.8	0.3	2.5	2.2	14.39%
SBC Communications Inc.	16.3	14.9	19.4	16.9	14.82%
FedEx Corporation	5.1	7.0	7.5	6.5	15.01%
Intel Corp.	12.9	21.4	21.5	18.6	15.72%
HCA Inc.	5.3	5.7	7.1	6.0	17.29%
The May Department Stores Company	3.3	6.5	6.4	5.4	18.61%
Baker Hughes Incorporated	7.9	3.9	7.8	6.5	19.72%
Xerox Corporation	0.8	12.9	9.7	7.8	24.59%
The Black & Decker Corporation	1.5	5.1	4.7	3.8	24.75%
Exxon Mobil Corporation	3.3	3.4	4.8	3.8	25.07%
McDonald's Corporation	5.8	6.6	9.5	7.3	29.56%
AT&T Corp.	3.3	21.7	19.8	14.9	32.62%
Weyerhaeuser Company	3.1	4.9	6.5	4.8	34.18%
MedImmune, Inc.	5.2	15.5	16.8	12.5	34.39%
Sara Lee Corporation	1.3	3.1	3.6	2.7	35.71%
Tyco International Ltd.	8.2	6.7	12.7	9.2	38.28%
The Dow Chemical Co.	1.3	6.8	7.1	5.1	39.84%
Medtronic, Inc.	-2.0	13.6	10.2	7.3	40.49%
National Semiconductor Corporation	3.1	11.2	12.9	9.1	41.99%
Honeywell International Inc.	0.9	4.1	4.8	3.3	47.67%
Merck & Co., Inc.	0.8	3.7	4.5	3.0	48.69%
Cisco Systems, Inc.	4.8	18.6	23.2	15.5	49.39%
Raytheon Company	3.7	1.2	4.8	3.2	49.79%
The Procter and Gamble Co.	2.0	5.0	8.2	5.1	61.49%
EMC Corporation	0.5	19.8	24.9	15.1	65.24%
Eastman Kodak Company	-2.3	11.6	11.7	7.0	67.06%
Schlumberger N.V.	8.2	3.4	17.0	9.6	78.03%
Unisys Corporation	-1.8	3.1	2.0	1.1	82.01%
International Business Machines Corporation	-0.4	6.4	9.7	5.2	84.96%
El Paso Corporation	-5.6	9.1	6.5	3.3	97.02%
American Electric Power	-6.0	9.5	7.0	3.5	99.76%
Toys "R" Us, Inc.	-2.1	3.5	3.1	1.5	104.99%
The AES Corporation	-5.2	13.6	22.7	10.4	119.26%
Halliburton Company	-1.5	3.6	6.1	2.8	123.24%
AOL Time Warner Inc.	-2.1	16.2	49.4	21.1	133.53%
Lucent Technologies, Inc.	-7.5	31.0	87.7	37.1	136.56%
Allegheny Technologies Inc.	0.2	2.9	11.7	4.9	137.34%
Microsoft Corp.	-7.8	10.6	12.4	5.0	145.02%
Hewlett-Packard Company	-2.3	4.0	7.5	3.0	147.15%
Amgen Inc.	2.3	1.8	22.3	8.8	153.56%
H.J. Heinz Company	-0.8	-2.3	0.5	-0.9	161.66%

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 - 2002

Excess Cash Margin Source Data (\$ Millions)									
Company Name	2000 Adjusted Operating C/F	2000 Adjusted Operating Earnings	2000 Total Revenues	2001 Adjusted Operating C/F	2001 Adjusted Operating Earnings	2001 Total Revenues	2002 Adjusted Operating C/F	2002 Adjusted Operating Earnings	2002 Total Revenues
The AES Corporation	356	751	7,534	1,514	474	7,645	985	(976)	8,632
Alcoa Inc.	2,877	1,537	22,936	2,400	1,204	22,859	1,970	720	20,263
Allegheny Technologies Inc.	151	146	2,460	123	61	2,128	209	(15)	1,908
Altria Group	11,147	8,339	73,503	9,218	8,970	80,879	11,784	9,739	80,408
American Electric Power	(339)	328	11,113	2,199	983	12,767	1,789	769	14,555
American Express Company	6,288	2,745	23,675	5,405	2,376	22,582	6,863	2,711	23,807
Amgen Inc.	1,176	1,092	3,629	1,350	1,279	4,016	1,910	676	5,523
Anheuser-Busch Companies, Inc.	2,229	1,552	14,534	2,336	1,694	14,973	2,682	1,934	15,687
AOL Time Warner Inc.	329	1,090	36,213	3,865	(2,311)	38,234	6,816	(13,405)	40,961
AT&T Corp.	11,080	9,550	46,850	10,617	1,475	42,197	10,832	3,360	37,827
Avon Products, Inc.	318	491	5,723	727	496	6,000	569	548	6,228
Baker Hughes Incorporated	538	124	5,234	612	402	5,382	586	193	5,020
Baxter International Inc.	995	974	6,896	1,033	960	7,663	1,222	1,166	8,110
The Black & Decker Corporation	364	294	4,561	395	173	4,333	472	263	4,394
The Boeing Company	5,904	2,107	51,321	3,976	3,401	58,198	4,342	2,387	54,069
Boise Cascade Corp	489	118	7,807	430	23	7,422	316	42	7,412
Bristol-Myers Squibb Company	4,337	3,975	17,538	6,752	4,007	17,987	1,048	2,776	18,119
Burlington Northern Santa Fe Corporation	2,286	988	9,207	2,201	790	9,208	2,164	761	8,979
Campbell Soup Company	1,161	714	6,466	1,104	655	6,664	1,021	526	6,133
Cisco Systems, Inc.	3,522	2,610	18,928	5,172	1,036	22,293	6,659	2,273	18,915
Clear Channel Communications, Inc.	1,075	(157)	5,345	672	(1,119)	7,970	1,750	726	8,421
The Coca-Cola Company	3,808	3,218	17,354	4,296	3,849	17,545	4,741	4,072	19,564
Colgate-Palmolive Company	1,588	1,023	9,358	1,601	1,146	9,428	1,608	1,285	9,294
Computer Sciences	863	379	10,524	1,382	344	11,426	1,155	443	11,347
Delta Air Lines, Inc.	2,986	809	16,741	(308)	(858)	13,879	160	(822)	13,305
The Dow Chemical Co.	1,763	1,379	29,534	2,250	359	27,805	2,178	226	27,609
E.I. du Pont De Nemours and Company	4,474	2,380	29,202	5,072	1,040	25,370	1,505	2,013	24,522
Eastman Kodak Company	989	1,308	13,994	2,067	534	13,234	2,380	880	12,835
El Paso Corporation	91	1,179	19,271	3,086	1,850	13,649	551	(244)	12,194
EMC Corporation	1,838	1,794	8,873	1,410	5	7,091	1,376	22	5,438
Entergy Corporation	1,573	710	10,022	2,252	670	9,621	1,875	842	8,305
Exelon Corporation	1,100	652	7,499	3,424	1,511	14,918	3,135	1,504	14,955
Exxon Mobil Corporation	23,242	15,581	232,748	22,624	15,462	213,488	20,993	11,276	204,506
FedEx Corporation	1,600	674	18,257	2,027	647	19,629	2,211	661	20,607
Ford Motor Company	26,677	2,319	170,579	21,001	(1,862)	161,519	24,956	4,992	163,420
General Dynamics Corporation	1,036	901	10,356	1,082	943	12,163	1,126	1,136	13,829
General Electric Company	24,123	10,376	129,853	29,403	13,121	125,913	29,778	14,666	131,698
General Motors Corporation	22,069	3,725	184,632	12,874	1,578	177,260	17,195	4,048	186,763
The Gillette Company	1,584	1,186	9,225	2,175	1,056	8,961	1,924	1,184	8,453
H.J. Heinz Company	771	846	8,939	552	755	8,821	896	846	9,432
Halliburton Company	(19)	155	11,944	1,016	551	13,046	1,450	677	12,572
Harrah's Entertainment, Inc.	528	115	3,330	739	199	3,709	713	329	4,136
HCA Inc.	1,628	736	16,670	2,001	977	17,953	2,703	1,304	19,729
Hewlett-Packard Company	2,322	3,470	48,870	2,967	1,178	45,226	5,994	1,736	56,588
Home Depot Inc.	2,751	2,581	45,738	4,801	3,053	53,553	4,764	3,664	58,247

Excess Cash Margin and the S&P 100, November 2003

(c) 2003 by the DuPree College of Management, Georgia Institute of Technology, Atlanta, GA 30332-0520

Table 2 (cont'd)
Adjusted Operating Cash Flow, Adjusted Operating Earnings, and Total Revenues
for the S&P 100 Non-Financials, 2000 - 2002

Excess Cash Margin Source Data (\$ Millions)									
Company Name	2000 Adjusted Operating C/F	2000 Adjusted Operating Earnings	2000 Total Revenues	2001 Adjusted Operating C/F	2001 Adjusted Operating Earnings	2001 Total Revenues	2002 Adjusted Operating C/F	2002 Adjusted Operating Earnings	2002 Total Revenues
Honeywell International Inc.	2,324	2,104	25,023	2,377	1,405	23,652	2,843	1,766	22,274
Intel Corp.	12,517	8,181	33,726	7,453	1,766	26,539	9,585	3,822	26,764
International Business Machines Corporation	7,038	7,393	88,396	13,513	8,188	83,067	14,306	6,463	81,186
International Paper Company	2,823	254	28,180	1,949	(174)	26,363	2,343	771	24,976
Johnson & Johnson	6,883	4,995	29,172	8,870	5,867	32,317	8,113	6,936	36,298
The Limited, Inc.	822	413	9,080	1,075	403	8,423	795	523	8,445
Lucent Technologies, Inc.	(964)	1,206	28,904	(2,580)	(9,189)	21,294	791	(10,019)	12,321
The May Department Stores Company	1,336	858	14,511	1,631	706	14,175	1,481	616	13,491
McDonald's Corporation	2,748	1,922	14,243	2,706	1,717	14,870	2,913	1,456	15,406
MedImmune, Inc.	173	145	540	245	149	619	247	104	848
Medtronic, Inc.	993	1,093	5,016	1,998	1,241	5,552	1,793	1,137	6,411
Merck & Co., Inc.	7,127	6,800	40,363	9,054	7,279	47,716	9,450	7,144	51,790
Microsoft Corp.	6,497	8,295	22,956	11,848	9,165	25,296	12,913	9,405	28,365
Minnesota Mining and Manufacturing Company	2,342	1,796	16,724	3,165	1,735	16,079	3,179	2,103	16,332
National Semiconductor Corporation	501	434	2,140	502	265	2,113	89	(105)	1,495
Nextel Communications, Inc.	503	(834)	5,714	1,071	(1,395)	7,689	2,486	160	8,721
Norfolk Southern Corporation	1,004	73	6,159	755	326	6,170	1,085	431	6,270
Oracle Corporation	5,233	2,011	10,231	1,036	2,578	10,961	3,240	2,393	9,673
Pepsico Inc.	4,507	2,577	25,479	4,431	2,807	26,935	4,315	3,456	25,112
Pfizer Inc.	7,841	5,504	26,045	9,258	8,080	29,024	10,309	9,595	32,373
Pharmacia Corporation	1,576	1,374	12,651	2,185	1,751	13,835	1,593	2,041	13,993
The Procter and Gamble Co.	4,880	4,063	39,951	6,024	4,069	39,244	8,240	4,944	40,238
RadioShack Corporation	117	368	4,795	780	258	4,776	407	251	4,577
Raytheon Company	983	398	15,817	682	495	16,017	2,112	1,300	16,760
Rockwell International Corporation	650	318	4,722	369	177	4,323	476	228	3,909
Sara Lee Corporation	1,385	1,158	17,511	1,872	1,320	17,747	1,767	1,124	17,628
SBC Communications Inc.	15,121	6,742	51,374	14,999	8,149	45,908	15,471	7,117	43,138
Schlumberger N.V.	1,531	721	9,831	1,084	600	14,058	1,917	(378)	13,473
Sears, Roebuck and Co.	2,703	1,490	40,848	2,393	1,397	40,990	(319)	1,433	41,366
The Southern Company	2,349	994	10,066	2,349	1,119	10,155	2,794	1,318	10,549
Texas Instruments Incorporated	2,826	1,950	11,875	2,071	149	8,201	2,023	492	8,383
Toys "R" Us, Inc.	(38)	204	11,332	575	185	11,019	574	229	11,305
Tyco International Ltd.	5,734	3,364	28,928	6,425	4,152	34,002	5,564	1,036	35,590
Unisys Corporation	206	327	6,885	300	116	6,018	356	243	5,607
United Technologies Corporation	2,491	1,808	26,583	2,920	2,164	27,897	2,893	2,445	28,212
Verizon Communications Inc.	17,934	10,192	64,707	19,741	4,624	67,190	22,132	8,649	67,625
Viacom Inc.	1,775	66	20,044	3,150	(240)	23,223	3,030	2,227	24,606
Wal-Mart Stores, Inc.	9,428	6,295	193,116	10,164	6,671	219,672	12,369	8,039	246,525
The Walt Disney Company	3,675	682	25,418	3,074	943	25,269	2,276	1,215	25,329
Weyerhaeuser Company	1,468	976	15,980	1,143	430	14,545	1,541	344	18,521
The Williams Companies, Inc.	(880)	807	6,559	1,625	1,066	7,066	(828)	138	5,608
Xerox Corporation	39	(115)	18,751	2,046	(141)	17,008	2,219	679	15,849