

Empirical Research and Financial Statement Analysis

**Chapter 5
How does financial information affect capital markets ?**

1

Classical Approach

Choose accounting and reporting methods based on:
- How close does reported information come close to "true" picture

Believes in:
Investors accept statements at face value
Interrelationships between investors' motivation and reaction not measured.

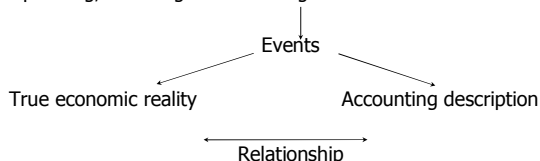
More importantly

Interrelationships between management's motivation and Investor reaction not measured.

2

Classical Theory

Operating, investing and financing and decisions



Can Derive "correct statements" from concepts and principles

3

Market based research

From 1960's
How do users react to financial information?
Do alternate accounting methods affect users' reaction

Two advances in financial theory:

4

Efficient Market theory

Security prices fully reflect information in:

Weak form

past security prices

Semi strong form

publicly available information

Strong form

all information

5

SanDisk Shares Drop on Intel-Micron Deal

Monday November 21, 12:09 pm ET
SanDisk Shares Drop 15.7 Percent After Intel, Micron Technology Announce Joint Venture

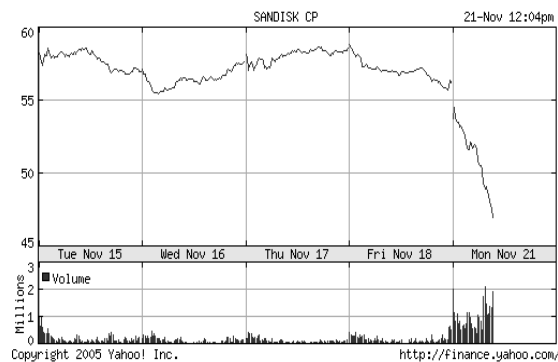
NEW YORK (AP) -- Shares of SanDisk Corp. ??? after chipmakers Intel Corp. and Micron Technology Inc. announced a NAND flash memory joint venture, which could put the squeeze on the company.

Shares of the Sunnyvale, Calif.-based flash memory card maker dropped by \$8.82, or 15.7 percent, to \$47.38 in midday trading on the Nasdaq.

05 SanDisk Shares Intel-Micron Deal.htm

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SanDisk Shares Drop



7

Target 07

TODAY'S MARKETS
 By JOANNA OSSINGER
 Stocks Fall on Subprime, Bernanke
 July 10, 2007 8:24 p.m.
 The markets fumbled while trying to climb a wall of worry Tuesday,

On the earnings front, Sears Holdings shares fell 10% after the retailer said its domestic same-store sales had dropped and forecast second-quarter earnings below analysts' expectations. It also announced an additional \$1 billion stock buyback. Other retailers were also lower ahead of sector data later this week, as investors see signs of trouble ahead. Macy's fell 3.7% and Target lost 2.9%.

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Target 07

Reuters
 Stocks surge on retail sales and Alcoa talk
 Thursday July 12, 3:17 pm ET By Caroline Valetkevitch

Retailers Target Corp (NYSE:TGT - News) and J.C. Penney Co. Inc. (NYSE:JCP - News) also released positive sales reports. Shares of Target rose 5.2 percent to \$68.99 and hit a new lifetime high of \$70.37 after the No. 2 U.S. discounter forecast July same-store sales up 5 percent to 7 percent.

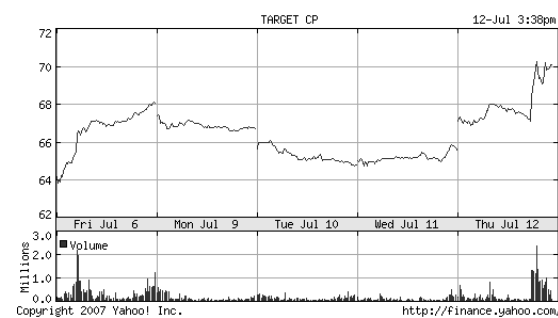
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Target 07

UPDATE 1-Target soars after report of Ackman stake
 Thu Jul 12, 2007 3:56PM EDT
 LOS ANGELES, July 12 (Reuters) - Target Corp (TGT.N: Quote, Profile, Research) shares rose as much as 7 percent Thursday afternoon after Bloomberg reported that activist investor William Ackman has taken a more than 5 percent stake in the discount retailer.

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Target 07 2



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Tests of EMH with respect to financial disclosures

- Change accelerated to straight-line depreciation method?
 Earnings increase or decrease
 Value of assets increase or decrease
 Cash flow increase or decrease
 Economic value increase or decrease
 Stock price increase or decrease

What will happen to stock prices ?
 Under Classical (Mechanistic) hypothesis it will go $\uparrow \leftrightarrow \downarrow$
 Under Efficient market hypothesis it will go $\uparrow \leftrightarrow \downarrow$
 Under Positive approach hypothesis it will go $\uparrow \leftrightarrow \downarrow$

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Portfolio theory

$$\text{Exp}(R_{it}) = R_f + \text{beta}_i [\text{Exp}(R_{mt}) - R_f]$$

R_{it} Rate of return on stock i in period t
 R_f Risk free return
 beta_i Covariance of (stock i and market m)
 $\text{Exp}(R_{mt})$ Expected market return

Actual return $R_{it} = \text{Exp}(R_{it}) + \text{error in return is } e_t$

Can accounting numbers predict beta_i , e_t ?

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Citi - Market reaction

Last Trade: 29.76 Change: 1.94 (6.12%) Prev Close: 31.70
 Open: 31.60 1y Target Est: 43.03 52wk Range: 30.50 - 57.00
 Volume: 110,432,771 Avg Vol (3m): 62,118,000 Market Cap: 148.24B



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Citi - Market reaction

Top Stories: Credit Fears Drag Down Stocks; Dow Sinks - AP
 Wall Street sold off sharply Monday as concerns about a weakening credit market The Dow Jones industrial average fell nearly 240 points. Citi Aims to Cut Costs; Layoffs

Dow 12,743.44 -237.44 -1.83% Nasdaq 2,540.99 -55.61 -2.14%
 S&P 500 1,407.22 -33.48 -2.32% 30-yr Bond 4.2800% -0.1580
 NYSE Volume 3,682,758,000 Nasdaq Volume 1,970,405,750



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Ball and Brown Study

B&B partition firms into "good news" and "bad news" groupings; Based on the actual realization of a firm's earnings, a firm is classified as having reported good (bad) news

if the actual earnings realization was above (below) than predicted by a time series forecasting model

Compute abnormal returns:

$$R_{it} - (R_f + \text{beta}_i [R_{mt} - R_f]) \text{ for portfolios}$$

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Ball and Brown Study

Good (bad) news had positive (negative) abnormal returns. Page 170

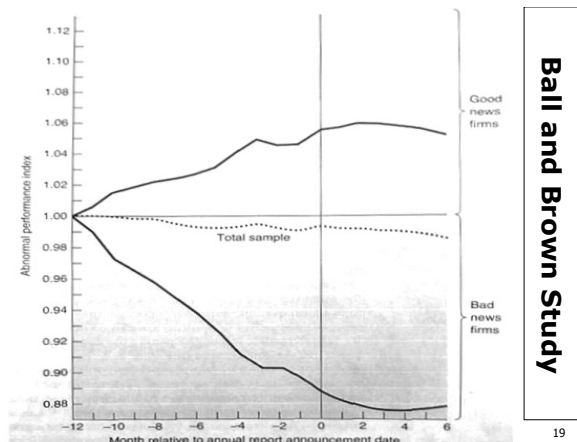
+ Good (bad) news had positive (negative) abnormal returns. *Comovement in earnings and stock prices;*

- Statistical significance but low R² (5%);

+ - Anticipation (why) and timeliness;

- Evidence of a post-announcement drift

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Information content of earnings

Which is the most desirable accounting figure ?
- one that triggers the most market reaction.

Accounting variables:
Operating earnings
Earnings from continuing operations
Cash flows
Component of earnings.

Expectations of unexpected earnings

Time series models: (random walk)
A firm reports net income for year 2000 of \$10m. Assuming that the firm's net income follows a random walk without drift:

(a) best estimate of the net income in 2001, 2002

Answer: \$10m

(b) net income in the financial year 2001 turns out to be \$18m, best estimate of the net income in the 2002 and 2003?

Answer: \$18m

EMH and FSA

EMH under fire:

If all information is reflected in prices, then there is no incentive for financial analysis.

If no one does analysis, then stock prices will not reflect all analysis

There are liquidity traders and informed traders.

Is there any role for financial statement analysis ?

Earnings Expectations

Are financial analysts – better ?

<http://finance.yahoo.com/>

Do analysts matter?

IBM-Shares-Fall-As-Accounting-Is-Scrutinised---ZDNet.htm

Market returns: Beta explains very little
Size adjusted, or beta = 1 models better.

Short window – event studies: better or worse?

Earnings Response Coefficients (ERC): like a E/P ratio

Abnormal stock return = ERC x Abnormal Earnings

Analysts - information

Monday, November 18, 2002

Wal-Mart, AT&T Hurt Blue Chips; Rally Stalls

By ERIN SCHULTE THE WALL STREET JOURNAL ONLINE

Dow component AT&T lost 4.4% after Lehman Brothers cut its rating on the company's stock to "underweight" from "equal weight." Competitor Qwest fell as well, dropping by 4.2%.

Lehman Brothers analyst Blake Bath also cut the 2003 revenue estimate for AT&T's consumer-services division to \$8.1 billion from an earlier forecast of \$9 billion, pointing to expected loss of share to the Baby Bells as they begin to offer long-distance service ... as well as continued increases in use of wireless AT&T may have to sell or shut down its consumer division by the end of next year, Mr. Bath wrote in a research note.

Abbott Labs' Q1 EPS a penny ahead

April 8, 2004 NEW YORK (CBS.MW) -- Abbott (ABT: news, chart, profile) said first-quarter net income was \$823 million, or 57 cents per share, up from \$801 million, or 51 cents per share, earned in the same period last year, on a 13.9 percent increase in sales.

The Abbott Park, Ill.-based manufacturer of pharmaceuticals and medical products saw its quarterly profit beat the average forecast of 56 cents per share in a survey of analysts by Thomson First Call.

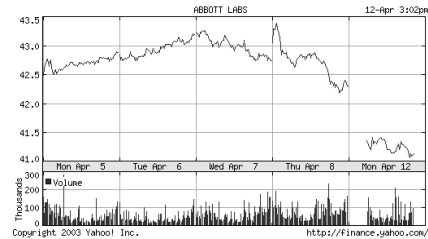
The company also reiterated its 2004 projected profit range of \$2.40 to \$2.48 per share. For the second quarter, Abbott's earnings target is 57 to 59 cents per share, analysts in the First Call survey are looking for 59 cents.

Abbott's shares fell 44 cents to end at \$42.75 on Wednesday.

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Abbott shares fall after downgrade

April 12, 2004: SAN FRANCISCO (CBS.MW) - Shares of the Abbott Park, Ill.-based firm fell \$1.07, or 3 percent, to \$41.25 in midday trading. J.P. Morgan analyst Michael Weinstein cut Abbott (ABT: news, chart, profile) to "underweight" from "neutral," citing the competition Abbott's Biaxin drug will face from generics beginning in May 2005



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Anomalies

Accounting information based excess returns with:

- Low P/E firms
- Low P/B firms
- Smaller firms

Super analysts: Briloff, Schilit
Post announcement drift

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Recent developments

R-squared between earnings and stock returns low. Why? (page 176)

- 1 Poor specification of the empirical model; (Empirical researchers are in error)
- 2 Firms may be faithfully applying GAAP but the resulting earnings are anticipated by the market with access to superior information; (Poor results follow from the historical nature of GAAP)
- 3 Reported earnings may be unreliable indicators of firm performance because of deliberate misapplication of GAAP; (Preparers of accounts are in error)
4. Firms may be faithfully applying GAAP but the market fails to respond rationally to the information;

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Positive Accounting Theory

Accounting numbers are used in numerous contracts.

Why ? For contracts these are only "audited" numbers around.

Economic consequences of accounting or Contracting theory Will explain reported numbers.

Asymmetric information and incentives of managers play large roles in choice of accounting methods and in the reporting numbers

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Bonus plan hypothesis

Management "hired" by stockholders

Incentive contracts use either:

Stock returns or Accounting numbers

Management "manages" earnings to receive higher compensation.

- when reaching limits in contracts.

They may not always go for higher earnings or book values.

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5 Empirical research

Debt covenants

Lenders put restrictions on
 - dividends, stock repurchases, senior debt.
 Certain ratios have to be maintained.
 Common ratios:
 Equity / debt
 Times interest earned
 Book value of total assets.

Always go for higher earnings or book values

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Political cost hypothesis

Accounting numbers invite regulation or government scrutiny
 - obscene profits (oil & drug companies)
 - cable TV companies
 - tax authorities
 - utilities

Go for lower earnings or book values (higher?)

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Accounting Methods

Choice of "liberal" accounting methods depend on factors like bonus plans, debt ratios, size, industry concentration and capital intensity.

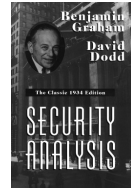
Inventory:	FIFO
Depreciation:	Straight-line
Pension:	Higher rate for assets

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Back to the future

Fundamental analysis on the upswing
 (Graham and Dodd, Warren Buffet)

Modern research and fund management tools use many accounting and other variables to find "mispriced" firms.



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Earnings Take Spotlight, Apr 9, 04

Dow components due to post earnings next week are Intel Corp. (NasdaqNM:INTC - News), Johnson & Johnson Inc. (NYSE:JNJ - News), McDonald's Corp. (NYSE:MCD - News), International Business Machines Corp. (NYSE:IBM - News) and Citigroup Inc. (NYSE:C - News).

Other heavyweights reporting results include Merrill Lynch & Co. Inc. (NYSE:MER - News), Texas Instruments Inc. (NYSE:TXN - News), and PepsiCo Inc. (NYSE:PEP - News).

For the first quarter, analysts have pegged earnings growth over last year of 17 percent, according to market research firm Thomson First Call (News - Websites). Though that is slightly below the previous quarter's sizzling 28 percent growth rate, it's still relatively strong.

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'Alamo' Bomb Pressures Disney

Apr 12, 04: The Alamo lasted 13 days before Mexican troops overwhelmed it, but a dismal three-day debut was enough for many observers to label Walt Disney Co.'s \$100 million "The Alamo" film a bomb

The movie about the men behind the battle of Texas independence from Mexico took in an estimated \$9.2 million in its opening weekend, easily and embarrassingly topped by ...

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Disney – 4/12/04



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GE First-Quarter Earnings Rise 8%

Thursday April 8, 2004 HARTFORD, Conn. (AP) -- General Electric Co.'s earnings rose 8 percent in the first quarter, matching analysts' expectations as nine of its 11 businesses reported double-digit profit gains.

The huge industrial, media and financial services conglomerate said Thursday it earned \$3.2 billion, or 32 cents a share, for the January-March period, up from \$3 billion, or 30 cents per share, a year ago. Analysts surveyed by Thomson First Call expected a profit of 32 cents a share.

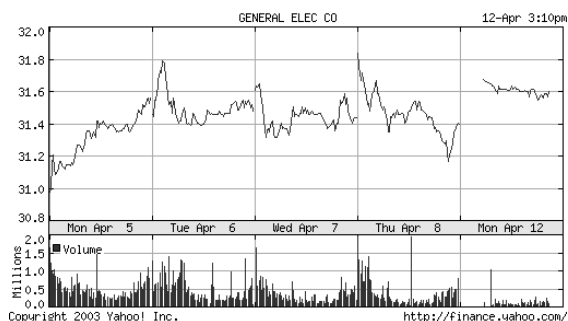
The Fairfield-based company said an accounting change had depressed its earnings a year ago, and its latest profit was up 1 percent from 2003 results before the change.

Immett also cited the decision announced Tuesday by Boeing that GE and Rolls Royce PLC will supply the engines for its planned new 7E7 Dreamliner airplane. The deal could be worth as much as \$40 billion over 25 years.

In trading on the New York Stock Exchange, GE shares were up 1 cent to close at \$31.41.

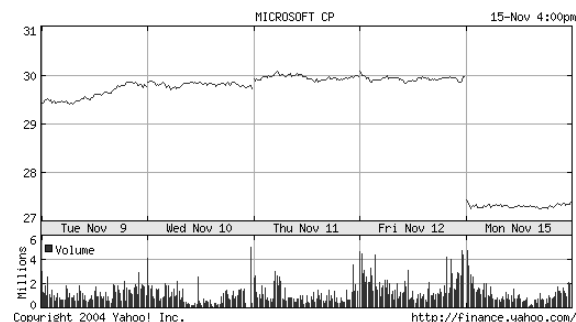
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GE



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Microsoft – 14415 - Dividend



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Microsoft – 14415 - Dividend

Last Trade: **27.39** Trade
 Time: 4:00PM ET Change: **0.50 (1.86%)**
 Prev Close: 29.97 Open: 27.35 Bid: 27.34 x 1100 Ask: 27.35 x 11001y
 Target Est: 33.06
 Day's Range: 27.20 - 27.50 52wk Range: 24.01 - 30.20
 Volume: 104,733,712 Avg Vol (3m): 61,540,136
 Market Cap: 297.77
 BP/E (ttm): 36.86
 EPS (ttm): 0.743
 Div & Yield: 0.32 (1.19%)

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Merck Vioxx Withdrawal Shakes Up Sector

Thursday September 30, 4:41 pm ET
 NEW YORK (AP) -- Merck & Co.'s announcement Thursday it was pulling arthritis drug Vioxx off the market worldwide for safety reasons dragged the company's stock down and most drug maker stocks with it.

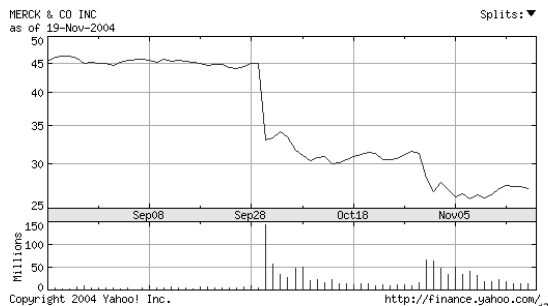
Shares of Merck closed down \$12.07, or nearly 27 percent, to \$33 on the New York Stock Exchange. Merck's only direct competitor, drug giant Pfizer Inc., was one of the few drug companies up on the news. Shares of Pfizer closed up 42 cents, or 1.4 percent, to \$30.60 on the NYSE.

Last Trade: **27.13** 52wk Range: 25.60 - 49.33
 Avg Vol (3m): 19,250,727 Market Cap: 60.16
 P/E (ttm): 9.91 EPS (ttm): 2.737
 Div & Yield: 1.52 (5.60%)

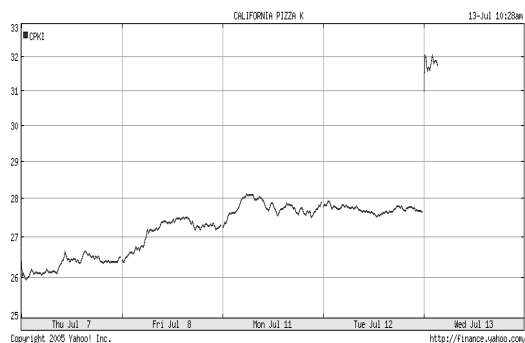
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Merck Sept 29, 2004

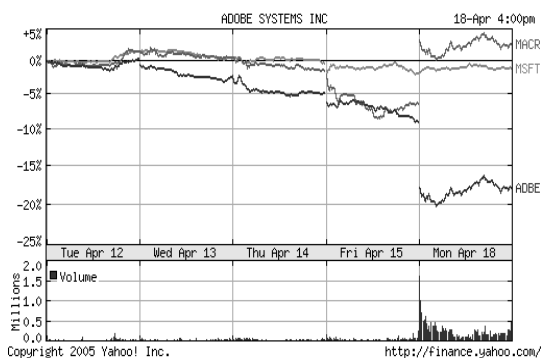
Nov 22, 2004: Last Trade: **27.13**
52wk Range:25.60 - 49.33 Market Cap:60.16



California Pizza Kitchen - Chart



Adobe to Buy Macromedia for \$3.4 Bn



California Pizza Kitchen Raises 2Q View 7/12/2005 5:44 PM EDT

Shares of California Pizza Kitchen (CPKI:Nasdaq) were stronger in extended trading Tuesday after the company raised its second-quarter earnings forecast and said same-store sales were better than expected.

The pizza chain owner said revenue increased 16.5% to \$119.4 million for the second quarter ended July 3, compared with \$102.5 million in the year-ago period. Comparable-store sales rose about 8.6%.

In April the company forecast a second-quarter comp sales increase of 5% to 6% and earnings of 26 cents to 28 cents a share. Now California Pizza expects earnings of 32 cents a share for the quarter. Shares were up \$1.88, or 7%, to \$29.55 in after-hours action.

On average, analysts polled by Thomson First Call were looking for a profit of 28 cents a share and sales of \$114.3 million for the quarter. California Pizza plans to release its second-quarter earnings on July 28.

Adobe to Buy Macromedia for \$3.4 Bn

Monday April 18, 5:01 pm ET

By Eric Auchard and Spencer Swartz

SAN FRANCISCO (Reuters) - Adobe Systems Inc. (NasdaqNM:ADBE - News), maker of Acrobat document-sharing software and Photoshop, on Monday said it agreed to buy digital animation and design software company Macromedia Inc. (NasdaqNM:MACR - News) for about \$3.4 billion in stock.

Under terms of the deal, Macromedia shareholders will receive 0.69 share of Adobe, worth \$41.86 at Adobe's closing price of \$60.66 on Friday on Nasdaq, for each Macromedia share. That is a 25 percent premium to Macromedia's closing price of \$33.45 on Friday, also on Nasdaq

IBM Results Fall Short of Targets

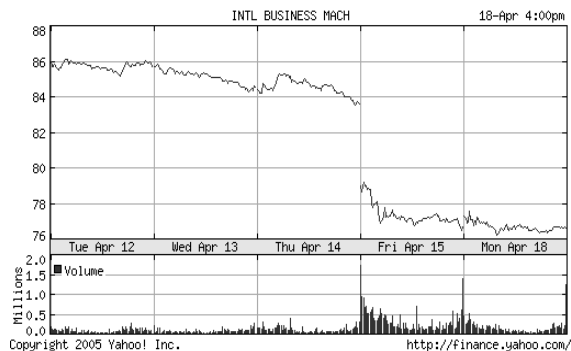
THE WALL STREET JOURNAL April 15, 2005;

Last night, IBM shares dropped 3.8% in after-hours trading on the Big Board, down \$3.14 to \$80.50; earlier, in 4 p.m. trading, they had fallen 93 cents to \$83.64.

In all, IBM, based in Armonk, N.Y., said its revenue for the quarter was \$22.9 billion, up 3.3% from the same period a year ago, but an increase of just 1% after factoring out the beneficial effects of the weak dollar overseas. Net income was \$1.40 billion, or 84 cents a share, compared with \$1.36 billion, or 79 cents a share, a year ago.

Though earnings increased, the mean estimate of analysts surveyed by Thomson First Call had been 90 cents a share.

IBM Results Fall Short of Targets



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Apple

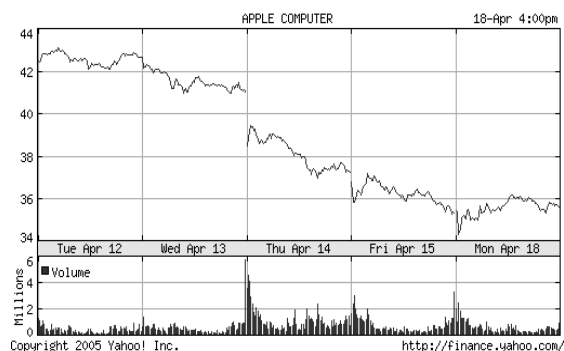
For its fiscal second quarter, Apple reported net income of \$290 million, or 34 cents a share, up from \$46 million, or a split-adjusted 6 cents a share, in the year ago second quarter. Revenue came in at \$3.24 billion, up 70% from a year ago. Apple said it shipped 5.31 million iPods and 1.07 million Mac computers. Analysts had expected

Apple to weigh in with earnings of 24 cents a share and revenue of \$3.21 billion.

For its fiscal third quarter, the Cupertino, Calif., computer company is forecasting revenue of \$3.25 billion and earnings of 28 cents a share, higher than the consensus which stands at earnings of 24 cents a share and revenue of \$3.24 billion.

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Apple



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5-8 Post retirement benefits

Three possible explanations for the results:

- (i) Firms were not aware of the magnitude of their postretirement health benefits until they were forced to calculate them by the new accounting rule.
- (ii) The mandated balance sheet recognition and disclosure of health care liabilities was directly responsible for their curtailment by firms.
- (iii) There is no direct cause and effect between balance sheet recognition and the curtailment of benefits. The events are only correlated with another. (association and correlation not causation)

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Campbell reports first quarter results: earnings per share of \$.73

	THREE MONTHS ENDED	
	October 30, 2005	October 31, 2004
Net sales	\$ 2,110	\$ 2,091
Costs and expenses		
Cost of products sold	1,228	1,245
Marketing and selling expenses	320	314
Administrative expenses	138	129
Research and development expenses	24	20
Other expenses / (income)	(1)	2
Total costs and expenses	1,709	1,710
Earnings before interest and taxes	401	381
Interest, net	26	44
Earnings before taxes	375	337
Taxes on earnings	73	107
Net earnings	\$ 302	\$ 230
Per share - basic		
Net earnings	\$.74	\$.56

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Campbell reports first quarter results:

Net earnings and earnings per share in the first quarter of fiscal 2006 were impacted by the following items: Full

The company recorded a non-cash tax benefit of \$47 million resulting from the favorable resolution of a U.S. tax contingency ... The aggregate non-cash impact of the settlement on net earnings was \$60 million, or \$.14 per share. The company finalized its plan to repatriate earnings from non-U.S. subsidiaries under the provisions of the American Jobs Creation Act, and as a result, recorded incremental tax expense of \$8 million, or \$.02 per share, associated with one-time incremental dividends of \$225 million.

The company changed the method of accounting for certain U.S. inventories from the LIFO method to the average cost method. The impact of the change to this preferable method of accounting resulted in a \$13 million pre-tax gain. The impact on net earnings was \$8 million, or \$.02 per share.

After adjusting for these items, net earnings would have been \$242 million in the first quarter of fiscal 2006 and \$224 million in the year-ago period, an increase of 8 percent. Earnings per share would have been \$.58 in the first quarter of fiscal 2006 and \$.54 in the year-ago period, an increase of 7 percent.

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Campbell Soup 1Q Profit Up on Tax Benefit

Monday November 21, 10:42 am ET Full

CAMDEN, N.J. (AP) -- Campbell Soup Co. said Monday its first-quarter profit climbed 31 percent, aided by lower expenses and a large tax benefit. The world's biggest soup maker also said its board of directors authorized it to spend up to \$600 million to buy back its own shares until the end of fiscal 2008.

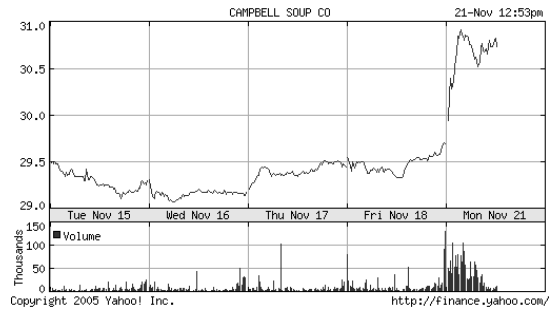
Campbell Soup reported net income of \$302 million, or 73 cents per share, for the quarter ended Oct. 30, compared with year-ago profit of \$230 million, or 56 cents per share.

Excluding items, adjusted earnings were \$242 million, or 58 cents per share, compared with \$224 million, or 54 cents per share, in the year-ago period. Sales edged up a percent to \$2.11 billion from \$2.09 billion last year.

<http://finance.yahoo.com/q/ae?s=CPB>

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Campbell Soup 1Q



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5-8

FASB passes 87 – requiring expensing of benefits and recognizing liabilities

Firms forced to calculate their postretirement health obligations by the new accounting rule.
» Shocked by the magnitude

Two thirds of corporations curtail retiree health plans

What does it show ?
Mechanistic Hypothesis
Efficient markets
Positive theory

Not Efficient Markets

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5-8 2

FASB passes 87 – requiring expensing of benefits and recognizing liabilities

Firms believe earnings and balance sheet will suffer and that stock prices will go down

Two thirds of corporations curtail retiree health plans

What does it show ?
Mechanistic Hypothesis
Efficient markets
Positive theory

Mechanistic Hypothesis
Positive theory

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5-8 alternate explanation

Health care costs shooting up

FASB passes 87 – requiring expensing of benefits and recognizing liabilities

NO

Firms » Shocked by the magnitude
Firms afraid of stock prices

NO

Two thirds of corporations curtail retiree health plans

What does it show ?
Mechanistic Hypothesis
Efficient markets
Positive theory

Not positive theory

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