

TECHNOLOGY STOCKS AND THE MARKET

TECH EXPLOSION

Which stock index best represents the market now?

By GREG IP
Staff Reporter of The Wall Street Journal

IS IT THE STOCK MARKET that is too exuberant? Or are conventional views on the economy not exuberant enough? On Friday, Aug. 27, Federal Reserve Chairman Alan Greenspan again worried aloud about the market's stratospheric level and indicated that he would pay closer attention to the impact of rising stock-market wealth on U.S. economic growth.

Investors, who saw this as a sign that the Fed's Aug. 24 interest-rate increase might not be the last this year, sent the Dow Jones Industrial Average down 108.28 points, or 1%, to 11090.17 after hitting a

record two days before Mr. Greenspan's remarks.

But there is a school of thought that it is the stock market that has it right, not the skeptics.

The explosive rise of young, technology-intensive companies such as Microsoft Corp., Cisco Systems Inc. and America Online Inc. into the ranks of the world's most valuable stocks may be a sign of economic prosperity still to come and not of an overvalued market.

The question of whether such companies really have changed the nature of the market also figures into whether the Dow Jones Industrial Average is still a good representation of that market, since it contains none of the six biggest technology companies except International Business Machines Inc.

Under Review

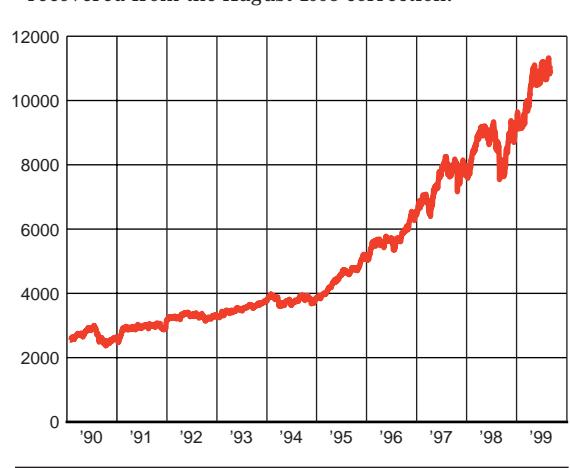
The 30-stock average's composition is under review by the editors of The Wall Street Journal as a result of Dow Chemical Co.'s pending takeover of component Union Carbide Corp., and component Hewlett-Packard Co.'s coming spin-off of its testing and instrument division, Agilent Technologies. (Editors of the Journal, published by Dow Jones & Co., oversee the industrial average.)

"If the stock market provides a forecast of future events, then the recent dramatic upswing represents a rosy estimate about growth in future profits for the economy," wrote Jeremy Greenwood and Boyan Jovanovic, economics professors at the University of Rochester and New York University, respectively. "This translates into a forecast of higher output and productivity growth."

The view meets with widespread skepticism, not least by Mr. Greenspan, who called the rise in U.S. stocks over the past five years "extraordinary." He has in the past questioned the assumptions of enduring, robust profit growth now underpinning stock prices.

Steady Climb

The Dow Jones Industrial Average (daily closes) has recovered from the August 1998 correction.



combination of chemicals will do without having to put it in test tube and quickly get to a much better drug."

However, the industrial average, which contains no Nasdaq companies, has lagged the Nasdaq composite in the past few years: As of late August, the Nasdaq was up 162% since the end of 1995; the Dow industrials were up 117%.

Meanwhile, the value of all other firms — those that traded over the counter in 1968 or went public later — rose to 86% from 34% of GDP.

The authors see this as evidence that the pace of technological change now amounts to another industrial revolution as sweeping as that which saw the rise of electricity, the internal-combustion engine and chemicals between 70 and 110 years ago. Such revolutions, they

Dow Jones Industrial Average

This chart and the two others on this page trace the daily closings of several important stock-market indices from June 30, 1998, to Sept. 3, 1999.

Only one of the original companies, General Electric, remains in the average. Among other current components are General Motors, McDonald's, Coca Cola, Sears, Disney, DuPont, International Business Machines and AT&T.

The Dow Jones Industrial Average was unveiled on May 26, 1896, by Charles H. Dow, a founder of Dow Jones & Co.

This 12-stock average was a successor to Mr. Dow's first market measure: an 11-stock average introduced in 1884 that mainly represented railroad companies — the first great national corporations.

Change doesn't happen often. The average is designed to provide consistent measurement, not to track "hot" stocks.

In 1916 the industrial aver-

age, benefit young companies unencumbered by the ignorance, outdated capital and vested interests of their older brethren.

Only one of the companies in the Dow industrials went public in the past 30 years: Wal-Mart Stores Inc., in 1970.

Yet the average has kept pace in this period with the broader Standard & Poor's 500-stock index, which does contain more young companies. This may be because technology has helped even non-technological companies such as Wal-Mart and General Electric Co. to boost productivity and profits.

Transforming Innovation

"The process of routine innovation that the big companies do has been transformed," Prof. Jovanovic says. For example, a pharmaceutical company with a computer can "simulate what a

Dow companies by market value, and three of the country's five largest stocks, are Nasdaq companies: Microsoft, Cisco Systems, Intel Corp., MCI WorldCom Inc. and Dell Computer Corp.

The 10 largest non-Dow companies averaged a market value of \$201 billion each as of Aug. 26, actually larger than the average of the 10 largest Dow companies, at \$193 billion each. But they are a lot younger: on average 28 years since incorporation, compared with 84 years for the Dow companies (a few of which are far older than their incorporation dates imply).

While size alone has never been the criterion for additions to the average, the absence of so many of the largest companies now does seem striking. This raises the question of whether the average, one of whose attributes has been its consistency, should change more often.

There have been only seven changes to its 30 components since 1988 (there have been 27 changes to the S&P 500 in the same period).

Jeff Lindsey, lead manager of Putnam Investments' Growth Opportunities fund, says when he wants to hear how the stock market has done, "like most people, I listen to the number of points on the Dow, just because I have a sense for what it means."

But when he wants to know how stocks that are important to him have done, he looks to percentage changes in the Nasdaq or S&P 500. Although not certain of what is now in the industrial average, he says he would like to see more technology.

But David Dreman, the veteran chairman and chief investment officer of Dreman Value Management LLC, notes that "a lot of people think we're in a technology bubble and if that's the case, and if we're right at the tail, that will hurt the average pretty significantly" if these technology stocks are added now.

Mr. Dreman remembers that in 1972 many hot companies commanded enormous market values — "Avon Products had a bigger market value than the whole U.S. steel industry." But by August of 1974, with the average down more than 40%, "these stocks were down double that." ♦ 8/30/1999

Nasdaq-100 Index

The minimum of two years.

As of early September 1999,

Microsoft represented almost 15% of the index, Intel accounted for 9%, Cisco System represented 7%, MCI WorldCom was almost 5% and Dell Computer was about 4%.

The index represents the 100 largest and most active nonfinancial stocks of the almost 5,000 stocks in the Nasdaq Composite Index.

The largest stocks are determined by market capitalization: the number of shares of a company's stock outstanding multiplied by the stock's current trading price.

To be eligible for the index, a stock must have minimum average daily trading volume of 100,000 shares. Generally, the stock must also have been listed on Nasdaq or on another major stock exchange for a

Dow Jones Internet Index

Dow Jones introduced the Dow Jones Internet Index on Feb. 17, 1999. (The index history dates back to June 30, 1997.)

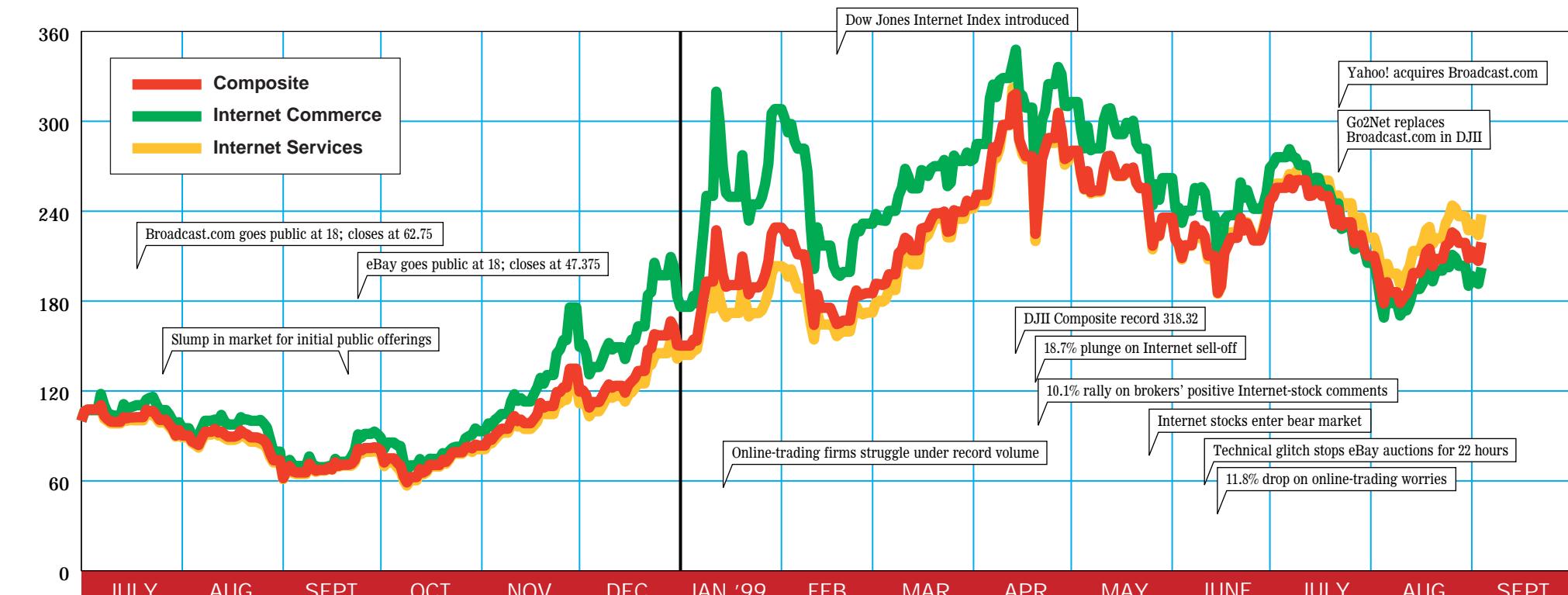
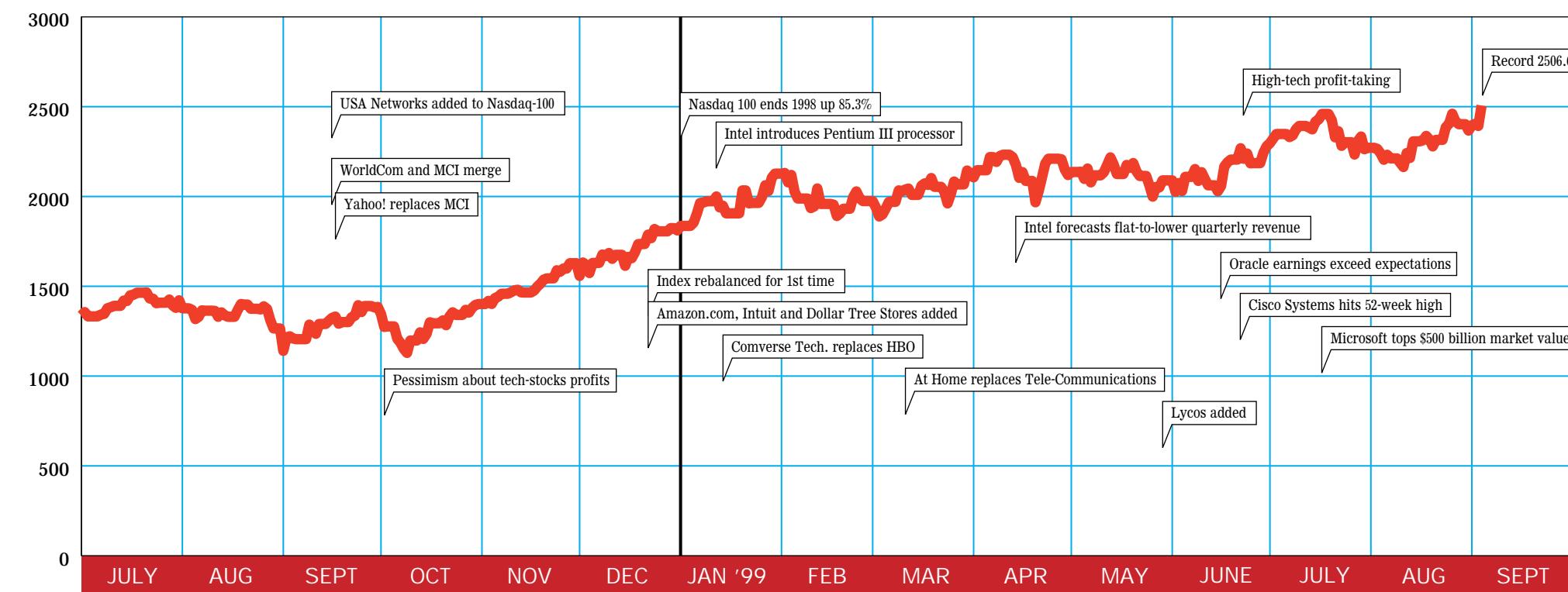
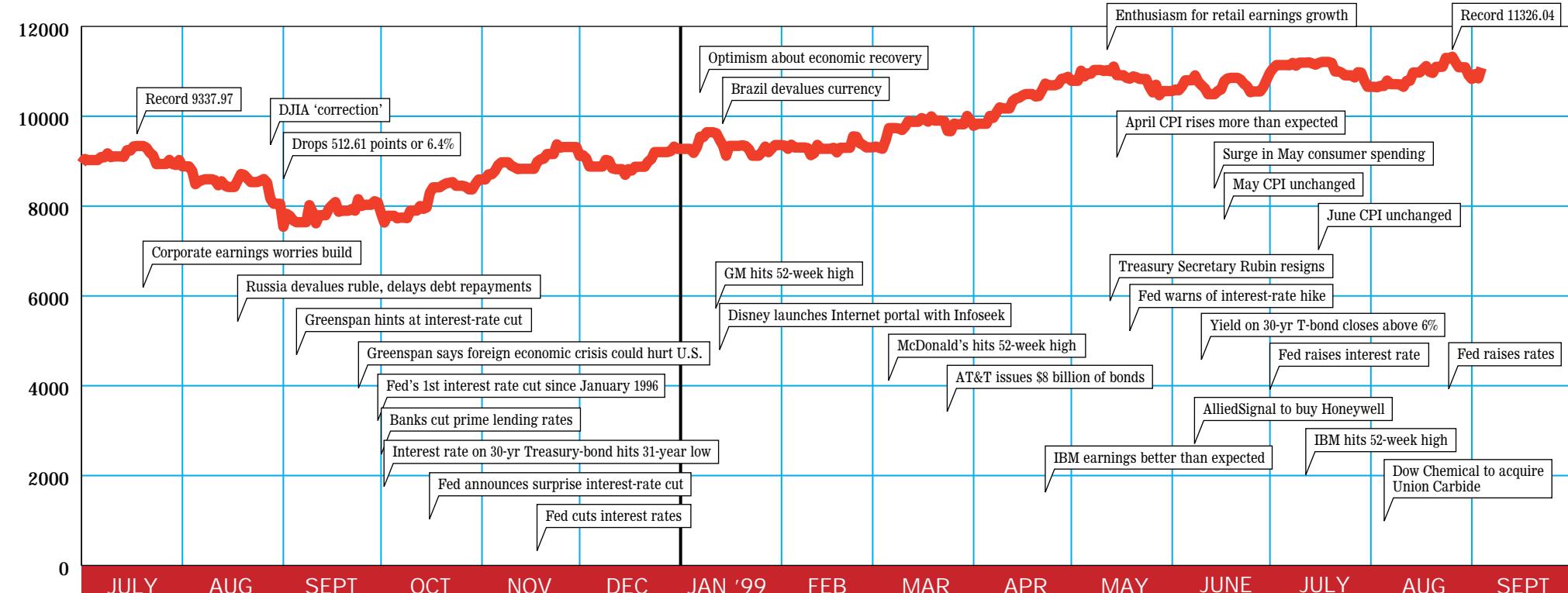
The 40-stock composite

index (the red line on the chart) measures the performance of U.S. Internet stocks by representing 80% of the stocks' market capitalizations.

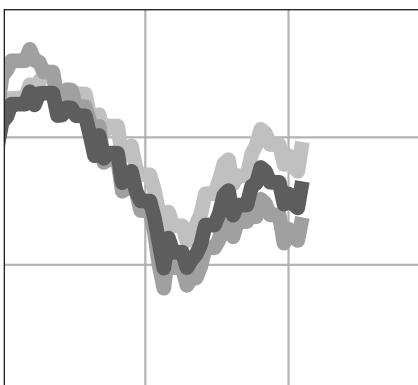
The Index includes only companies that generate a minimum of 50% of their revenue from the Internet. It is comprised of two subindexes: Internet Commerce and Internet Services.

The Internet Commerce Index (green) consists of 15 stocks representing companies that provide goods or services over an open network such as

TECHNOLOGY STOCKS AND THE MARKET



CHARTS



THIS MONTH'S Centerspread charts trace the daily closings of three stock-market indices from June 30, 1998, to Sept. 3, 1999. "Tech Explosion" asks which stock index best represents the market now.

TECH EXPLOSION, PP. 12-13

Vocabulary

Brethren	Robust
Clamoring	Skepticism
Component	Stratospheric
Exuberant	Tallied
Market capitalization	Technology bubble
Pending	Unencumbered

Related Articles

ONLINE TURF BATTLES, P. 1

ALONG FOR THE RIDE, P. 21

Objectives: Compare the performance of three stock-market indices. • Understand why the U.S. stock market is an indicator of the economy's health.

INTERPRETATION

1 Use the text boxes and the stock-market-index charts to answer the following questions:

A What do the vertical scales measure? Explain this measure. How are the scales different?

The Dow Industrials Meet Technology

For a related activity, see p. 14 of this guide. Answers are on p. 16.

B For each index, estimate the close on Jan. 1, 1999.

C How many companies are in each index? What types of companies are represented in each index?

D Selection of the stocks that make up the Nasdaq-100 Index is determined by *market capitalization*. What is market capitalization?

E Which company represents the largest percentage of the Nasdaq-100? On July 17, 1999, what was significant about this stock's market value?

F Why did railroads represent the majority of companies in Charles Dow's first market measure?

G Identify the two subindexes that make up the Dow Jones Internet Index. What do you observe about the performance of these subindexes between July 1998 and September 1999? What do you think could account for this?

H Find each index's record close and compare it with the rest of the index's performance. What do you notice about the record closes of the Dow Jones Industrial Average and the Nasdaq-100 Index? How are they different from the record close for the Dow Jones Internet Index?

2 Use the numbers below to find the percentage increase for each index (subtract the June close from the September close and divide by the June close). If you were an investor, what would be significant about these percentages? In which index would you want to invest your money? What are the risks in your decision?

	June 30, 1998	Sept. 3, 1999
DJIA	8952.02	11078.45
Nasdaq-100	1337.34	2506.69
DJII Composite	100.00	219.26

3 How do interest rates affect the stock market? Examine the impact on each index of the following interest-

rate actions by the Federal Reserve:

- Oct. 15, 1998 - Surprise rate cut
- Aug. 24, 1999 - Rates are raised

4 When a market index falls 10%, this is considered a *correction*. When did the Dow industrials experience a correction? Estimate the minimum number of points it dropped.

5 A 20% drop in a market index is considered a *bear market*. Which index experienced a 20% drop? When?

6 Use the chart on p. 12 to estimate the percentage increase in the Dow industrials from 1990 to 1999. What has been the trend in this average?

CRITICAL THINKING

7 "A lot of people think we're in a technology bubble," David Dreman says. What is a *technology bubble*? Do you agree we are in one? Use "Tech Explosion" and the Internet indexes to explain your answer.

8 Some people question whether the Dow industrials is still a good representation of the market. Why? Which index do you think presents the best picture of the health of the economy? Why? Use the Centerspread data, "Tech Explosion," "Online Turf Battles" and "Along for the Ride" to explain your answer.

① For a list of all the companies in the indices on the Centerspread and the data used to create these charts, visit the Archive of the Student Center on our Web site at <http://info.wsj.com/classroom>

Related Video

MARKET MANIAS

(V) This historical segment looks at bubbles that went bust. How are most market manias alike? Is the market experiencing one now? Why?

Data as of Sep. 21, 99 Mkt Close.

The Dow Jones Industrial Average

AlliedSignal Inc.
Aluminum Co. of America
American Express Co.
AT & T Corp.
Boeing Co.
Caterpillar Inc.
Chevron Corp.
Citigroup Inc.
Coca-Cola Co.
DuPont Co.
Eastman Kodak Co.
Exxon Corp.
General Electric Co.
General Motors Corp.
Goodyear Tire & Rubber Co.
Hewlett-Packard Co.
International Business Machines Corp.
International Paper Co.
J.P. Morgan & Co.
Johnson & Johnson
McDonald's Corp.
Merck & Co.
Minnesota Mining & Manufacturing Co.
Philip Morris Cos.
Procter & Gamble Co.
Sears, Roebuck & Co.
Union Carbide Corp.
United Technologies Corp.
Wal-Mart Stores Inc.
Walt Disney Co.

Data as of Sep. 21, 99 Mkt Close.

The Nasdaq 100

3Com Corporation
Adaptec, Inc.
ADC Telecommunications, Inc.
Adobe Systems Incorporated
Altera Corporation
Amazon.com, Inc.
American Power Conversion Corporation
Amgen Inc.
Andrew Corporation
Apollo Group, Inc.
Apple Computer, Inc.
Applied Materials, Inc.
At Home Corporation
Atmel Corporation
Autodesk, Inc.
Bed Bath & Beyond Inc.
Biogen, Inc.
Biomet, Inc.
BMC Software, Inc.
Cambridge Technology Partners, Inc.
CBRL Group Inc.
Centocor, Inc.
Chiron Corporation
CIENA Corporation
Cintas Corporation
Cisco Systems, Inc.
Citrix Systems, Inc.
CMGI, Inc.
CNET, Inc.
Comair Holdings, Inc.
Comcast Corporation
Compuware Corporation
Converse Technology, Inc.
Concord EFS, Inc.
Conexant Systems, Inc.
Corporate Express, Inc.
Costco Wholesale Corporation
Dell Computer Corporation
Dollar Tree Stores, Inc.
Electronic Arts Inc.
Electronics for Imaging, Inc.
Fastenal Company
First Health Group Corp.
Fiserv, Inc.
Genzyme General
Global Crossing Ltd
Herman Miller, Inc.
Immunex Corporation
Intel Corporation
Intuit Inc.
JDS Uniphase Corporation
KLA-Tencor Corporation
Level 3 Communications, Inc.
Lincare Holdings Inc.
Linear Technology Corporation
LM Ericsson Telephone Company
Lycos, Inc.
Maxim Integrated Products, Inc.
MCI WORLDCOM, Inc.
McLeodUSA Incorporated
Microchip Technology Incorporated
Micron Electronics, Inc.
Microsoft Corporation
Molex Incorporated
Network Associates, Inc.
Nextel Communications, Inc.
Northwest Airlines Corporation
Novell, Inc.
NTL Incorporated
Oracle Corporation
PACCAR Inc
Pacificare Health Systems, Inc.
PanAmSat Corporation
Parametric Technology Corporation
Paychex, Inc.
PeopleSoft, Inc.
QUALCOMM Incorporated
Quintiles Transnational Corp.
Qwest Communications International Inc.
Reuters Group PLC
Rexall Sundown, Inc.
Ross Stores, Inc.
Sanmina Corporation
Siebel Systems, Inc.
Sigma-Aldrich Corporation
Smurfit-Stone Container Corporation
Staples, Inc.
Starbucks Corporation
Stewart Enterprises, Inc.
Sun Microsystems, Inc.
Synopsys, Inc.
Tech Data Corporation
Tellabs, Inc.
USA Networks, Inc.
VERITAS Software Corporation
VISX, Incorporated
Vitesse Semiconductor Corporation
Worthington Industries, Inc.
Xilinx, Inc.
Yahoo! Inc.

Dow Jones Composite Internet Index

Commerce Index
Lycos Inc.
Yahoo!
Infoseek Corp.
E*trade Group Inc.
Amazon.com Inc.
Net.B@nk Inc.
Beyond.com Corp.
Go2Net Inc.
Ebay Inc.
Ticketmaster Online Citysearch Inc.
Healtheon Corp.
Ameritrade Holding Corp.
CNET Inc.*
Priceline*
Etoys Inc.*

Internet Service Index

CMGI Inc.
PSINet Inc.
CheckFree Holding Corp.
Cybercash
Realnetworks
Sterling Commerce Inc.
Mindspring Enterprise Inc.
IDT Corp.
AXENT Technologies Inc.
Open Market Inc.
Broadvision Inc.
Check Point Software Technologies Ltd.
America Online Inc.
Earthlink Network Inc.
Excite@Home Corp.
Network Solutions Inc.
Usweb Corp.
Verisign Inc
DoubleClick Inc.
Exodus Communications Inc.
Verio Inc.
Inktomi Corp.
Infospace.com Inc.
Covad Communications Group
HighSpeed Access Corp.*

* Added as of September 20, 1999

Effective September 20, 1999
Egghead.com Inc., Cyberian Outpost Inc., Onsale
will be deleted from the Internet Commerce Index.

CNET Inc. will be deleted from the Internet Service Index
and added to the Internet Commerce Index.

	DJIA Close	NASDAQ 100 Close		Dow Jones Internet Index: Composite	Dow Jones Internet Index: E*Commerce	Dow Jones Internet Index: Services
Tuesday	6/30/98 8952.02	6/30/98 1337.34		6/30/98 100.00	100.00	100.00
Wednesday	7/1/98 9048.67	7/1/98 1356.14		7/1/98 106.52	106.57	106.51
Thursday	7/2/98 9025.26	7/2/98 1332.53		7/2/98 107.65	107.21	107.76
Friday	7/3/98 9025.26	7/3/98 1332.53		7/3/98 107.65	107.21	107.76
Saturday	7/4/98 9025.26	7/4/98 1332.53		7/4/98 107.65	107.21	107.76
Sunday	7/5/98 9025.26	7/5/98 1332.53		7/5/98 107.65	107.21	107.76
Monday	7/6/98 9091.77	7/6/98 1342.58		7/6/98 110.59	118.06	108.63
Tuesday	7/7/98 9085.04	7/7/98 1346.32		7/7/98 103.48	110.75	101.57
Wednesday	7/8/98 9174.97	7/8/98 1377.84		7/8/98 101.21	105.69	100.03
Thursday	7/9/98 9089.78	7/9/98 1383.22		7/9/98 99.59	104.21	98.38
Friday	7/10/98 9105.74	7/10/98 1391.11		7/10/98 99.41	103.55	98.33
Saturday	7/11/98 9105.74	7/11/98 1391.11		7/11/98 99.41	103.55	98.33
Sunday	7/12/98 9105.74	7/12/98 1391.11		7/12/98 99.41	103.55	98.33
Monday	7/13/98 9096.21	7/13/98 1420.58		7/13/98 102.56	111.23	100.29
Tuesday	7/14/98 9245.54	7/14/98 1418.13		7/14/98 101.80	108.44	100.06
Wednesday	7/15/98 9234.47	7/15/98 1449.58		7/15/98 102.42	108.92	100.72
Thursday	7/16/98 9328.19	7/16/98 1452.62		7/16/98 102.38	109.76	100.44
Friday	7/17/98 9337.97	7/17/98 1463.97		7/17/98 102.52	110.55	100.42
Saturday	7/18/98 9337.97	7/18/98 1463.97		7/18/98 102.52	110.55	100.42
Sunday	7/19/98 9337.97	7/19/98 1463.97		7/19/98 102.52	110.55	100.42
Monday	7/20/98 9295.75	7/20/98 1465.89		7/20/98 107.57	114.32	105.80
Tuesday	7/21/98 9190.19	7/21/98 1431.89		7/21/98 106.38	115.41	104.02
Wednesday	7/22/98 9128.91	7/22/98 1430.58		7/22/98 106.70	116.09	104.24
Thursday	7/23/98 8932.98	7/23/98 1405.80		7/23/98 103.85	111.31	101.89
Friday	7/24/98 8937.36	7/24/98 1408.60		7/24/98 100.72	107.26	99.00
Saturday	7/25/98 8937.36	7/25/98 1408.60		7/25/98 100.72	107.26	99.00
Sunday	7/26/98 8937.36	7/26/98 1408.60		7/26/98 100.72	107.26	99.00
Monday	7/27/98 9028.24	7/27/98 1426.37		7/27/98 97.83	104.38	96.12
Tuesday	7/28/98 8934.78	7/28/98 1393.28		7/28/98 95.07	100.47	93.66
Wednesday	7/29/98 8914.96	7/29/98 1380.08		7/29/98 90.26	93.28	89.46
Thursday	7/30/98 9026.95	7/30/98 1422.05		7/30/98 94.05	99.18	92.71
Friday	7/31/98 8883.29	7/31/98 1377.26		7/31/98 90.31	95.14	89.05
Saturday	8/1/98 8883.29	8/1/98 1377.26		8/1/98 90.31	95.14	89.05
Sunday	8/2/98 8883.29	8/2/98 1377.26		8/2/98 90.31	95.14	89.05
Monday	8/3/98 8786.74	8/3/98 1368.44		8/3/98 86.35	90.38	85.29
Tuesday	8/4/98 8487.31	8/4/98 1317.24		8/4/98 85.15	89.81	83.93
Wednesday	8/5/98 8546.78	8/5/98 1329.90		8/5/98 83.92	90.37	82.23
Thursday	8/6/98 8577.68	8/6/98 1365.87		8/6/98 88.66	95.16	86.96
Friday	8/7/98 8598.00	8/7/98 1364.07		8/7/98 92.84	100.12	90.93
Saturday	8/8/98 8598.00	8/8/98 1364.07		8/8/98 92.84	100.12	90.93
Sunday	8/9/98 8598.00	8/9/98 1364.07		8/9/98 92.84	100.12	90.93
Monday	8/10/98 8574.85	8/10/98 1362.88		8/10/98 94.66	100.94	93.01
Tuesday	8/11/98 8462.85	8/11/98 1330.13		8/11/98 92.27	99.55	90.36
Wednesday	8/12/98 8552.96	8/12/98 1354.66		8/12/98 93.02	104.07	90.13
Thursday	8/13/98 8459.50	8/13/98 1338.39		8/13/98 90.94	99.61	88.67
Friday	8/14/98 8425.00	8/14/98 1330.04		8/14/98 89.51	97.63	87.38
Saturday	8/15/98 8425.00	8/15/98 1330.04		8/15/98 89.51	97.63	87.38
Sunday	8/16/98 8425.00	8/16/98 1330.04		8/16/98 89.51	97.63	87.38
Monday	8/17/98 8574.85	8/17/98 1367.79		8/17/98 90.32	98.20	88.26
Tuesday	8/18/98 8714.65	8/18/98 1401.24		8/18/98 93.56	102.53	91.22
Wednesday	8/19/98 8693.28	8/19/98 1398.26		8/19/98 91.83	100.96	89.44
Thursday	8/20/98 8611.41	8/20/98 1398.20		8/20/98 90.88	101.01	88.22
Friday	8/21/98 8533.65	8/21/98 1374.77		8/21/98 89.02	100.10	86.12
Saturday	8/22/98 8533.65	8/22/98 1374.77		8/22/98 89.02	100.10	86.12
Sunday	8/23/98 8533.65	8/23/98 1374.77		8/23/98 89.02	100.10	86.12
Monday	8/24/98 8566.61	8/24/98 1370.92		8/24/98 88.19	100.69	84.92
Tuesday	8/25/98 8602.65	8/25/98 1388.35		8/25/98 87.25	98.45	84.32
Wednesday	8/26/98 8523.35	8/26/98 1374.05		8/26/98 84.35	95.57	81.41
Thursday	8/27/98 8165.99	8/27/98 1311.53		8/27/98 78.24	87.58	75.79
Friday	8/28/98 8051.68	8/28/98 1265.04		8/28/98 73.78	79.56	72.26
Saturday	8/29/98 8051.68	8/29/98 1265.04		8/29/98 73.78	79.56	72.26
Sunday	8/30/98 8051.68	8/30/98 1265.04		8/30/98 73.78	79.56	72.26
Monday	8/31/98 7539.07	8/31/98 1140.34		8/31/98 61.79	64.22	61.16
Tuesday	9/1/98 7827.43	9/1/98 1215.06		9/1/98 66.78	70.02	65.94
Wednesday	9/2/98 7782.37	9/2/98 1221.44		9/2/98 69.94	74.00	68.88
Thursday	9/3/98 7682.22	9/3/98 1208.96		9/3/98 66.34	70.66	65.22
Friday	9/4/98 7640.30	9/4/98 1205.41		9/4/98 65.65	69.95	64.52
Saturday	9/5/98 7640.30	9/5/98 1205.41		9/5/98 65.65	69.95	64.52
Sunday	9/6/98 7640.30	9/6/98 1205.41		9/6/98 65.65	69.95	64.52
Monday	9/7/98 7640.30	9/7/98 1205.41		9/7/98 65.65	69.95	64.52
Tuesday	9/8/98 8020.78	9/8/98 1286.47		9/8/98 71.56	76.32	70.31
Wednesday	9/9/98 7865.02	9/9/98 1261.77		9/9/98 68.47	71.05	67.79
Thursday	9/10/98 7615.54	9/10/98 1235.37		9/10/98 66.80	69.80	66.01
Friday	9/11/98 7795.50	9/11/98 1290.20		9/11/98 67.38	69.17	66.91
Saturday	9/12/98 7795.50	9/12/98 1290.20		9/12/98 67.38	69.17	66.91
Sunday	9/13/98 7795.50	9/13/98 1290.20		9/13/98 67.38	69.17	66.91
Monday	9/14/98 7945.35	9/14/98 1308.23		9/14/98 68.96	69.85	68.72
Tuesday	9/15/98 8024.39	9/15/98 1324.19		9/15/98 67.67	68.77	67.38
Wednesday	9/16/98 8089.78	9/16/98 1331.45		9/16/98 72.47	74.71	71.88
Thursday	9/17/98 7873.77	9/17/98 1291.79		9/17/98 70.03	72.29	69.44
Friday	9/18/98 7895.70	9/18/				

Wednesday	10/14/98	7968.78	10/14/98	1235.67	10/14/98	66.99	71.89	65.70
Thursday	10/15/98	8299.36	10/15/98	1299.66	10/15/98	70.77	74.81	69.71
Friday	10/16/98	8416.76	10/16/98	1293.91	10/16/98	70.60	74.66	69.54
Saturday	10/17/98	8416.76	10/17/98	1293.91	10/17/98	70.60	74.66	69.54
Sunday	10/18/98	8416.76	10/18/98	1293.91	10/18/98	70.60	74.66	69.54
Monday	10/19/98	8466.45	10/19/98	1310.17	10/19/98	74.12	78.52	72.96
Tuesday	10/20/98	8505.85	10/20/98	1283.23	10/20/98	72.71	77.35	71.49
Wednesday	10/21/98	8519.23	10/21/98	1332.05	10/21/98	75.42	79.86	74.25
Thursday	10/22/98	8533.14	10/22/98	1355.19	10/22/98	78.97	82.02	78.17
Friday	10/23/98	8452.30	10/23/98	1340.60	10/23/98	79.13	82.77	78.18
Saturday	10/24/98	8452.30	10/24/98	1340.60	10/24/98	79.13	82.77	78.18
Sunday	10/25/98	8452.30	10/25/98	1340.60	10/25/98	79.13	82.77	78.18
Monday	10/26/98	8432.20	10/26/98	1368.93	10/26/98	82.25	88.50	80.61
Tuesday	10/27/98	8372.74	10/27/98	1353.34	10/27/98	82.86	89.84	81.03
Wednesday	10/28/98	8371.97	10/28/98	1379.96	10/28/98	81.69	90.79	79.29
Thursday	10/29/98	8495.03	10/29/98	1396.30	10/29/98	84.24	95.02	81.40
Friday	10/30/98	8592.10	10/30/98	1401.15	10/30/98	83.62	93.13	81.12
Saturday	10/31/98	8592.10	10/31/98	1401.15	10/31/98	83.62	93.13	81.12
Sunday	11/1/98	8592.10	11/1/98	1401.15	11/1/98	83.62	93.13	81.12
Monday	11/2/98	8706.15	11/2/98	1418.79	11/2/98	88.01	98.36	85.29
Tuesday	11/3/98	8706.15	11/3/98	1401.73	11/3/98	87.41	96.40	85.05
Wednesday	11/4/98	8783.14	11/4/98	1434.00	11/4/98	90.36	100.71	87.63
Thursday	11/5/98	8915.47	11/5/98	1442.04	11/5/98	92.62	102.32	90.07
Friday	11/6/98	8975.46	11/6/98	1458.34	11/6/98	94.78	104.65	92.19
Saturday	11/7/98	8975.46	11/7/98	1458.34	11/7/98	94.78	104.65	92.19
Sunday	11/8/98	8975.46	11/8/98	1458.34	11/8/98	94.78	104.65	92.19
Monday	11/9/98	8897.96	11/9/98	1467.63	11/9/98	99.99	113.12	96.53
Tuesday	11/10/98	8863.98	11/10/98	1477.48	11/10/98	103.23	117.89	99.37
Wednesday	11/11/98	8823.82	11/11/98	1480.71	11/11/98	99.84	113.42	96.26
Thursday	11/12/98	8829.74	11/12/98	1466.54	11/12/98	100.92	115.16	97.17
Friday	11/13/98	8829.74	11/13/98	1465.22	11/13/98	98.51	113.00	94.69
Saturday	11/14/98	8829.74	11/14/98	1465.22	11/14/98	98.51	113.00	94.69
Sunday	11/15/98	8829.74	11/15/98	1465.22	11/15/98	98.51	113.00	94.69
Monday	11/16/98	8829.74	11/16/98	1475.60	11/16/98	101.35	118.04	96.95
Tuesday	11/17/98	8986.28	11/17/98	1498.55	11/17/98	104.28	122.26	99.55
Wednesday	11/18/98	9041.11	11/18/98	1514.89	11/18/98	111.98	128.76	107.56
Thursday	11/19/98	9056.05	11/19/98	1537.45	11/19/98	108.90	124.82	104.71
Friday	11/20/98	9159.55	11/20/98	1544.22	11/20/98	109.99	130.66	104.55
Saturday	11/21/98	9159.55	11/21/98	1544.22	11/21/98	109.99	130.66	104.55
Sunday	11/22/98	9159.55	11/22/98	1544.22	11/22/98	109.99	130.66	104.55
Monday	11/23/98	9374.27	11/23/98	1589.06	11/23/98	119.29	145.05	112.50
Tuesday	11/24/98	9301.15	11/24/98	1580.83	11/24/98	119.30	147.73	111.81
Wednesday	11/25/98	9314.28	11/25/98	1598.48	11/25/98	122.39	153.95	114.08
Thursday	11/26/98	9314.28	11/26/98	1598.48	11/26/98	122.39	153.95	114.08
Friday	11/27/98	9314.28	11/27/98	1628.35	11/27/98	134.90	175.77	124.12
Saturday	11/28/98	9314.28	11/28/98	1628.35	11/28/98	134.90	175.77	124.12
Sunday	11/29/98	9314.28	11/29/98	1628.35	11/29/98	134.90	175.77	124.12
Monday	11/30/98	9116.55	11/30/98	1557.96	11/30/98	119.56	149.48	111.67
Tuesday	12/1/98	9133.54	12/1/98	1632.53	12/1/98	120.46	151.34	112.32
Wednesday	12/2/98	9064.54	12/2/98	1619.09	12/2/98	117.60	145.21	110.32
Thursday	12/3/98	8879.68	12/3/98	1573.78	12/3/98	108.92	131.04	103.09
Friday	12/4/98	8879.68	12/4/98	1630.01	12/4/98	112.64	135.99	106.49
Saturday	12/5/98	8879.68	12/5/98	1630.01	12/5/98	112.64	135.99	106.49
Sunday	12/6/98	8879.68	12/6/98	1630.01	12/6/98	112.64	135.99	106.49
Monday	12/7/98	8879.68	12/7/98	1676.89	12/7/98	116.51	141.20	110.00
Tuesday	12/8/98	9027.98	12/8/98	1668.16	12/8/98	120.95	147.37	113.99
Wednesday	12/9/98	9009.19	12/9/98	1685.38	12/9/98	124.39	152.02	117.10
Thursday	12/10/98	8841.58	12/10/98	1652.76	12/10/98	122.20	147.66	115.49
Friday	12/11/98	8821.76	12/11/98	1675.01	12/11/98	123.49	149.16	116.72
Saturday	12/12/98	8821.76	12/12/98	1675.01	12/12/98	123.49	149.16	116.72
Sunday	12/13/98	8821.76	12/13/98	1675.01	12/13/98	123.49	149.16	116.72
Monday	12/14/98	8695.60	12/14/98	1614.09	12/14/98	118.85	141.29	112.93
Tuesday	12/15/98	8823.30	12/15/98	1663.78	12/15/98	124.08	148.92	117.54
Wednesday	12/16/98	8790.60	12/16/98	1656.28	12/16/98	126.40	154.22	119.06
Thursday	12/17/98	8875.82	12/17/98	1689.63	12/17/98	128.66	154.11	121.96
Friday	12/18/98	8875.82	12/18/98	1735.00	12/18/98	133.37	163.12	125.03
Saturday	12/19/98	8875.82	12/19/98	1735.00	12/19/98	133.37	163.12	125.03
Sunday	12/20/98	8875.82	12/20/98	1735.00	12/20/98	133.37	163.12	125.03
Monday	12/21/98	8988.95	12/21/98	1787.30	12/21/98	147.39	184.12	136.60
Tuesday	12/22/98	9044.46	12/22/98	1767.82	12/22/98	148.46	185.86	137.41
Wednesday	12/23/98	9202.03	12/23/98	1818.96	12/23/98	157.94	205.55	142.98
Thursday	12/24/98	9202.03	12/24/98	18				

Tuesday	2/2/99	9274.12	2/2/99	2078.69	2/2/99	219.73	292.57	196.25
Wednesday	2/3/99	9366.81	2/3/99	2119.94	2/3/99	224.76	298.22	201.17
Thursday	2/4/99	9304.50	2/4/99	2027.66	2/4/99	216.94	286.87	194.57
Friday	2/5/99	9304.50	2/5/99	1988.55	2/5/99	211.16	281.70	188.37
Saturday	2/6/99	9304.50	2/6/99	1988.55	2/6/99	211.16	281.70	188.37
Sunday	2/7/99	9304.50	2/7/99	1988.55	2/7/99	211.16	281.70	188.37
Monday	2/8/99	9291.11	2/8/99	1988.55	2/8/99	200.30	266.06	179.16
Tuesday	2/9/99	9133.03	2/9/99	1935.33	2/9/99	179.71	229.81	164.69
Wednesday	2/10/99	9177.31	2/10/99	1944.18	2/10/99	164.09	201.41	154.37
Thursday	2/11/99	9363.46	2/11/99	2044.68	2/11/99	184.46	229.25	172.19
Friday	2/12/99	9274.89	2/12/99	1958.60	2/12/99	175.53	217.06	164.38
Saturday	2/13/99	9274.89	2/13/99	1958.60	2/13/99	175.53	217.06	164.38
Sunday	2/14/99	9274.89	2/14/99	1958.60	2/14/99	175.53	217.06	164.38
Monday	2/15/99	9274.89	2/15/99	1958.60	2/15/99	175.53	217.06	164.38
Tuesday	2/16/99	9297.03	2/16/99	1954.49	2/16/99	170.20	203.50	162.67
Wednesday	2/17/99	9195.47	2/17/99	1891.37	2/17/99	164.66	198.55	156.59
Thursday	2/18/99	9298.63	2/18/99	1906.09	2/18/99	165.45	196.88	158.57
Friday	2/19/99	9298.63	2/19/99	1931.59	2/19/99	166.99	199.45	159.71
Saturday	2/20/99	9298.63	2/20/99	1931.59	2/20/99	166.99	199.45	159.71
Sunday	2/21/99	9298.63	2/21/99	1931.59	2/21/99	166.99	199.45	159.71
Monday	2/22/99	9552.68	2/22/99	1996.02	2/22/99	180.19	220.36	169.90
Tuesday	2/23/99	9544.42	2/23/99	2028.23	2/23/99	187.12	228.65	176.52
Wednesday	2/24/99	9399.67	2/24/99	1989.14	2/24/99	183.69	226.53	172.31
Thursday	2/25/99	9366.34	2/25/99	1974.39	2/25/99	184.52	231.70	171.12
Friday	2/26/99	9306.58	2/26/99	1974.39	2/26/99	185.30	231.68	172.32
Saturday	2/27/99	9306.58	2/27/99	1974.39	2/27/99	185.30	231.68	172.32
Sunday	2/28/99	9306.58	2/28/99	1974.39	2/28/99	185.30	231.68	172.32
Monday	3/1/99	9324.78	3/1/99	1937.70	3/1/99	191.60	238.08	178.87
Tuesday	3/2/99	9297.61	3/2/99	1888.66	3/2/99	191.32	234.12	180.28
Wednesday	3/3/99	9275.88	3/3/99	1899.81	3/3/99	190.74	233.89	179.50
Thursday	3/4/99	9467.40	3/4/99	1933.03	3/4/99	191.65	233.52	181.05
Friday	3/5/99	9736.08	3/5/99	1969.87	3/5/99	197.90	240.19	187.39
Saturday	3/6/99	9736.08	3/6/99	1969.87	3/6/99	197.90	240.19	187.39
Sunday	3/7/99	9736.08	3/7/99	1969.87	3/7/99	197.90	240.19	187.39
Monday	3/8/99	9727.61	3/8/99	2034.05	3/8/99	212.09	250.41	204.04
Tuesday	3/9/99	9693.76	3/9/99	2028.57	3/9/99	214.21	255.80	204.76
Wednesday	3/10/99	9772.84	3/10/99	2038.51	3/10/99	222.25	268.28	211.11
Thursday	3/11/99	9897.44	3/11/99	2043.76	3/11/99	220.53	262.91	210.99
Friday	3/12/99	9876.35	3/12/99	2008.96	3/12/99	213.88	255.25	204.51
Saturday	3/13/99	9876.35	3/13/99	2008.96	3/13/99	213.88	255.25	204.51
Sunday	3/14/99	9876.35	3/14/99	2008.96	3/14/99	213.88	255.25	204.51
Monday	3/15/99	9958.77	3/15/99	2060.34	3/15/99	228.35	267.46	220.66
Tuesday	3/16/99	9930.47	3/16/99	2073.14	3/16/99	229.03	266.40	222.17
Wednesday	3/17/99	9879.41	3/17/99	2064.50	3/17/99	229.41	263.51	224.07
Thursday	3/18/99	9997.62	3/18/99	2102.77	3/18/99	234.41	268.58	229.30
Friday	3/19/99	9903.55	3/19/99	2053.69	3/19/99	238.56	270.08	234.99
Saturday	3/20/99	9903.55	3/20/99	2053.69	3/20/99	238.56	270.08	234.99
Sunday	3/21/99	9903.55	3/21/99	2053.69	3/21/99	238.56	270.08	234.99
Monday	3/22/99	9890.51	3/22/99	2027.14	3/22/99	239.75	274.21	234.77
Tuesday	3/23/99	9671.83	3/23/99	1961.31	3/23/99	226.21	256.71	222.52
Wednesday	3/24/99	9666.84	3/24/99	2013.55	3/24/99	226.93	258.99	222.50
Thursday	3/25/99	9836.39	3/25/99	2083.35	3/25/99	240.66	277.16	234.69
Friday	3/26/99	9822.24	3/26/99	2067.30	3/26/99	239.61	273.49	234.91
Saturday	3/27/99	9822.24	3/27/99	2067.30	3/27/99	239.61	273.49	234.91
Sunday	3/28/99	9822.24	3/28/99	2067.30	3/28/99	239.61	273.49	234.91
Monday	3/29/99	10006.78	3/29/99	2144.66	3/29/99	246.98	279.12	243.54
Tuesday	3/30/99	9913.26	3/30/99	2125.69	3/30/99	243.82	273.34	241.53
Wednesday	3/31/99	9786.16	3/31/99	2106.39	3/31/99	244.47	274.68	241.87
Thursday	4/1/99	9832.51	4/1/99	2146.13	4/1/99	250.95	284.87	246.82
Friday	4/2/99	9832.51	4/2/99	2146.13	4/2/99	250.95	284.87	246.82
Saturday	4/3/99	9832.51	4/3/99	2146.13	4/3/99	250.95	284.87	246.82
Sunday	4/4/99	9832.51	4/4/99	2146.13	4/4/99	250.95	284.87	246.82
Monday	4/5/99	10007.33	4/5/99	2219.64	4/5/99	267.04	315.25	256.50
Tuesday	4/6/99	9963.49	4/6/99	2218.83	4/6/99	282.65	324.53	276.13
Wednesday	4/7/99	10085.31	4/7/99	2192.29	4/7/99	279.40	316.15	275.30
Thursday	4/8/99	10197.70	4/8/99	2224.75	4/8/99	287.20	327.29	281.83
Friday	4/9/99	10173.84	4/9/99	2232.47	4/9/99	297.61	328.86	297.24
Saturday	4/10/99	10173.84	4/10/99	2232.47	4/10/99	297.61	328.86	297.24
Sunday	4/11/99	10173.84	4/11/99	2232.47	4/11/99	297.61	328.86	297.24
Monday	4/12/99	10339.51	4/12/99	2219.21	4/12/99	316.75	338.28	322.31
Tuesday	4/13/99	10395.01	4/13/99	2175.18	4/13/99	318.32	347.80	319.92
Wednesday	4/14/99	10411.66	4/14/99	2103.63	4/14/99	287.93	318.73	287.29
Thursday	4/15/99	10462.72	4/15/99	2135.81	4/15/99	281.54	317.17</td	

Monday	5/24/99	10654.67	5/24/99	2060.59	5/24/99	235.09	260.73	234.32
Tuesday	5/25/99	10531.09	5/25/99	1999.04	5/25/99	216.94	243.93	214.54
Wednesday	5/26/99	10702.16	5/26/99	2053.04	5/26/99	229.12	258.00	226.39
Thursday	5/27/99	10466.93	5/27/99	2050.09	5/27/99	223.67	247.56	223.19
Friday	5/28/99	10559.74	5/28/99	2089.70	5/28/99	235.72	262.11	234.60
Saturday	5/29/99	10559.74	5/29/99	2089.70	5/29/99	235.72	262.11	234.60
Sunday	5/30/99	10559.74	5/30/99	2089.70	5/30/99	235.72	262.11	234.60
Monday	5/31/99	10559.74	5/31/99	2089.70	5/31/99	235.72	262.11	234.60
Tuesday	6/1/99	10596.26	6/1/99	2025.79	6/1/99	220.93	242.02	221.66
Wednesday	6/2/99	10577.89	6/2/99	2074.54	6/2/99	218.05	242.29	217.11
Thursday	6/3/99	10663.69	6/3/99	2030.40	6/3/99	208.79	232.24	207.76
Friday	6/4/99	10799.84	6/4/99	2109.41	6/4/99	217.29	240.30	216.91
Saturday	6/5/99	10799.84	6/5/99	2109.41	6/5/99	217.29	240.30	216.91
Sunday	6/6/99	10799.84	6/6/99	2109.41	6/6/99	217.29	240.30	216.91
Monday	6/7/99	10909.38	6/7/99	2152.69	6/7/99	230.33	255.49	229.54
Tuesday	6/8/99	10765.64	6/8/99	2086.75	6/8/99	224.95	254.00	221.99
Wednesday	6/9/99	10690.29	6/9/99	2135.48	6/9/99	227.24	256.06	224.51
Thursday	6/10/99	10621.27	6/10/99	2097.79	6/10/99	223.11	252.66	219.82
Friday	6/11/99	10490.51	6/11/99	2062.29	6/11/99	210.31	236.63	207.96
Saturday	6/12/99	10490.51	6/12/99	2062.29	6/12/99	210.31	236.63	207.96
Sunday	6/13/99	10490.51	6/13/99	2062.29	6/13/99	210.31	236.63	207.96
Monday	6/14/99	10563.33	6/14/99	2028.92	6/14/99	185.47	205.74	184.84
Tuesday	6/15/99	10594.99	6/15/99	2058.17	6/15/99	190.09	211.17	189.28
Wednesday	6/16/99	10784.95	6/16/99	2167.49	6/16/99	212.14	234.04	212.04
Thursday	6/17/99	10841.63	6/17/99	2190.83	6/17/99	216.82	236.92	217.83
Friday	6/18/99	10855.56	6/18/99	2205.46	6/18/99	222.21	237.38	225.89
Saturday	6/19/99	10855.56	6/19/99	2205.46	6/19/99	222.21	237.38	225.89
Sunday	6/20/99	10855.56	6/20/99	2205.46	6/20/99	222.21	237.38	225.89
Monday	6/21/99	10815.98	6/21/99	2268.66	6/21/99	235.47	259.20	235.72
Tuesday	6/22/99	10721.63	6/22/99	2209.89	6/22/99	227.07	248.95	227.79
Wednesday	6/23/99	10666.86	6/23/99	2239.33	6/23/99	231.84	254.08	232.63
Thursday	6/24/99	10534.83	6/24/99	2184.87	6/24/99	226.54	247.11	227.86
Friday	6/25/99	10552.56	6/25/99	2185.76	6/25/99	220.43	241.59	221.17
Saturday	6/26/99	10552.56	6/26/99	2185.76	6/26/99	220.43	241.59	221.17
Sunday	6/27/99	10552.56	6/27/99	2185.76	6/27/99	220.43	241.59	221.17
Monday	6/28/99	10655.15	6/28/99	2243.94	6/28/99	226.53	244.17	229.24
Tuesday	6/29/99	10815.35	6/29/99	2280.06	6/29/99	235.53	252.54	239.00
Wednesday	6/30/99	10970.80	6/30/99	2296.77	6/30/99	247.29	269.02	249.07
Thursday	7/1/99	11066.42	7/1/99	2322.32	7/1/99	249.59	271.62	251.35
Friday	7/2/99	11139.24	7/2/99	2347.88	7/2/99	255.60	276.02	258.42
Saturday	7/3/99	11139.24	7/3/99	2347.88	7/3/99	255.60	276.02	258.42
Sunday	7/4/99	11139.24	7/4/99	2347.88	7/4/99	255.60	276.02	258.42
Monday	7/5/99	11139.24	7/5/99	2347.88	7/5/99	255.60	276.02	258.42
Tuesday	7/6/99	11135.12	7/6/99	2330.73	7/6/99	261.46	281.43	264.78
Wednesday	7/7/99	11187.36	7/7/99	2340.67	7/7/99	255.25	276.24	257.78
Thursday	7/8/99	11126.89	7/8/99	2374.58	7/8/99	260.60	275.51	266.30
Friday	7/9/99	11193.70	7/9/99	2393.02	7/9/99	260.79	270.71	268.89
Saturday	7/10/99	11193.70	7/10/99	2393.02	7/10/99	260.79	270.71	268.89
Sunday	7/11/99	11193.70	7/11/99	2393.02	7/11/99	260.79	270.71	268.89
Monday	7/12/99	11200.98	7/12/99	2384.24	7/12/99	250.20	257.87	258.84
Tuesday	7/13/99	11175.02	7/13/99	2373.66	7/13/99	250.52	259.05	258.77
Wednesday	7/14/99	11148.10	7/14/99	2417.05	7/14/99	253.95	262.32	262.44
Thursday	7/15/99	11186.41	7/15/99	2429.27	7/15/99	253.74	262.15	262.22
Friday	7/16/99	11209.84	7/16/99	2459.48	7/16/99	250.14	254.38	260.42
Saturday	7/17/99	11209.84	7/17/99	2459.48	7/17/99	250.14	254.38	260.42
Sunday	7/18/99	11209.84	7/18/99	2459.48	7/18/99	250.14	254.38	260.42
Monday	7/19/99	11187.68	7/19/99	2424.62	7/19/99	241.25	247.53	250.12
Tuesday	7/20/99	10996.13	7/20/99	2329.32	7/20/99	231.30	237.32	239.81
Wednesday	7/21/99	11002.78	7/21/99	2363.63	7/21/99	240.90	245.24	250.66
Thursday	7/22/99	10969.22	7/22/99	2281.92	7/22/99	230.06	228.17	242.17
Friday	7/23/99	10910.96	7/23/99	2302.02	7/23/99	232.55	229.49	245.32
Saturday	7/24/99	10910.96	7/24/99	2302.02	7/24/99	232.55	229.49	245.32
Sunday	7/25/99	10910.96	7/25/99	2302.02	7/25/99	232.55	229.49	245.32
Monday	7/26/99	10863.16	7/26/99	2233.51	7/26/99	218.66	214.60	231.22
Tuesday	7/27/99	10979.04	7/27/99	2308.78	7/27/99	220.04	216.07	232.62
Wednesday	7/28/99	10972.07	7/28/99	2333.78	7/28/99	224.03	221.86	235.98
Thursday	7/29/99	10791.29	7/29/99	2263.06	7/29/99	214.54	214.48	225.05
Friday	7/30/99	10655.15	7/30/99	2270.93	7/30/99	210.04	205.55	222.38
Saturday	7/31/99	10655.15	7/31/99	2270.93	7/31/99	210.04	205.55	222.38
Sunday	8/1/99	10655.15	8/1/99	2270.93	8/1/99	210.04	205.55	222.38
Monday	8/2/99	10645.96	8/2/99	2264.81	8/2/99	201.86	194.77	215.00
Tuesday	8/3/99	10677.31	8/3/99	2239.18	8/3/99	189.93	179.53	204.02
Wednesday								