

Dreyfus Stock Index Fund, Inc.

ANNUAL REPORT December 31, 2004



YOU, YOUR ADVISOR AND

Dreyfus

A MELLON FINANCIAL COMPANY™

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LETTER FROM THE CHAIRMAN

Dear Shareholder:

We are pleased to present this annual report for Dreyfus Stock Index Fund, Inc., covering the 12-month period from January 1, 2004, through December 31, 2004. Inside, you'll find valuable information about how the fund was managed during the reporting period, including a discussion with the fund's portfolio manager, Thomas Durante, CFA.

2004 represented the second consecutive year of positive stock market performance. Unlike the 2003 rally, however, in which most stocks rose as general business conditions improved, 2004's market performance largely reflected the strengths and weaknesses of individual companies and industries. As a result, fundamental research and professional judgment became more important determinants of mutual fund performance in 2004.

What's ahead for stocks in 2005? No one knows for certain. Positive influences remain in place, including moderately expanding U.S. and global economies and low inflation. Nonetheless, a number of risks — such as rising short-term interest rates, currency fluctuations and generally slowing corporate earnings — could threaten the market environment.

As always, we urge our shareholders to view the stock market from a long-term perspective, measured in years rather than weeks or months. One of the best ways to ensure a long-term perspective is to establish an investment plan with the help of your financial advisor, and review it periodically to track your progress toward your financial goals.

Thank you for your continued confidence and support.

Sincerely,

Stephen E. Canter
Chairman and Chief Executive Officer
The Dreyfus Corporation
January 18, 2005



DISCUSSION OF FUND PERFORMANCE

Thomas Durante, CFA, Portfolio Manager

How did Dreyfus Stock Index Fund, Inc. perform relative to its benchmark?

For the 12-month period ended December 31, 2004, Dreyfus Stock Index Fund, Inc. produced total returns of 10.64% for its Initial shares and 10.35% for its Service shares.¹ In comparison, the fund's benchmark, the Standard & Poor's 500 Composite Stock Price Index ("S&P 500 Index"), produced a total return of 10.88% for the same period.^{2,3}

The U.S. stock market was sluggish during much of 2004, due in large part to investors' concerns regarding rising interest rates, surging energy prices, ongoing geopolitical instability and uncertainty surrounding the U.S. presidential election. In mid-October, however, investor sentiment began to improve, and the stock market rebounded over the remainder of the year. The difference between the fund's and S&P 500 Index's returns was primarily the result of transaction costs and other operating expenses that are not reflected in the performance of the S&P 500 Index.

What is the fund's investment approach?

The fund seeks to match the total return of the S&P 500 Index. To pursue this goal, the fund generally invests in all 500 stocks in proportion to their weightings in the S&P 500 Index. Often considered a barometer for the stock market in general, the S&P 500 Index is made up of 500 widely held common stocks across 10 sectors and is dominated by large-cap, blue-chip stocks which, when combined, cover nearly 75% of the total U.S. market capitalization.

However, it is important to note that the S&P 500 Index is not composed of the 500 largest companies; rather, it is designed to capture the returns of many different sectors of the U.S. economy. Each stock is weighted by its market capitalization. Overall, larger companies have greater representation in the S&P 500 Index than smaller ones. The fund may also use stock index futures as a substitute for the sale or purchase of stocks.

Dreyfus Stock Index Fund, Inc. uses a passive management approach; all investment decisions are made based on the fund's objective, which is to seek to match the performance of the S&P 500 Index. The fund does not attempt to manage market volatility.

What other factors influenced the fund's performance?

During much of the reporting period, stock prices rose only modestly, held back by investors' concerns regarding higher interest rates, potential inflationary pressures and the insurgency in Iraq. In the fall, however, oil prices began to moderate and the economy showed signs of emerging from its summertime "soft patch." In addition, the end of a contentious presidential election campaign lifted a degree of uncertainty, and the stock market rallied through year-end. As a result, all 10 of S&P 500 Index's economic sectors produced absolute positive returns for the year.

With the exception of the energy sector, which rose as a group as oil prices reached all-time highs, 2004 saw few sector-wide performance trends. Instead, individual stocks tended to respond to company-specific influences. For example, while safety-related issues affecting arthritis drugs drove down the stock prices of Merck & Co. and Pfizer, other large pharmaceutical companies, such as Johnson & Johnson, gained value. Similarly, in the financials sector, legal and regulatory challenges facing insurance and mutual fund provider Marsh & McLennan Cos. did not significantly affect the stocks of other financial services companies.

In fact, because the financials sector constitutes a larger percentage of the S&P 500 Index than any other industry group, financial stocks made the largest contribution to the fund's return during the reporting period. Winners included Bank of America, Wachovia, Franklin Resources and Lehman Brothers Holdings.

Energy stocks also contributed strongly to the fund's 2004 performance. Rising global demand from overseas markets, most notably China, helped drive energy prices higher, benefiting many of the energy companies in the S&P 500 Index. Integrated oil companies Exxon Mobil and ChevronTexaco, producer and distributor Duke Energy and refiners Valero Energy and ConocoPhillips led the sector's performance.

Utilities stocks also fared relatively well over the reporting period, with the largest gains posted by Edison International, TXU and Exelon.

On the other hand, the health care sector posted relatively meager returns overall as respectable performance among medical services and equipment companies was offset by the difficulties encountered by pharmaceutical giants Merck & Co. and Pfizer. The information technology group also lagged the S&P 500 Index's return overall when weakness in semiconductor companies weighed heavily on performance.

What is the fund's current strategy?

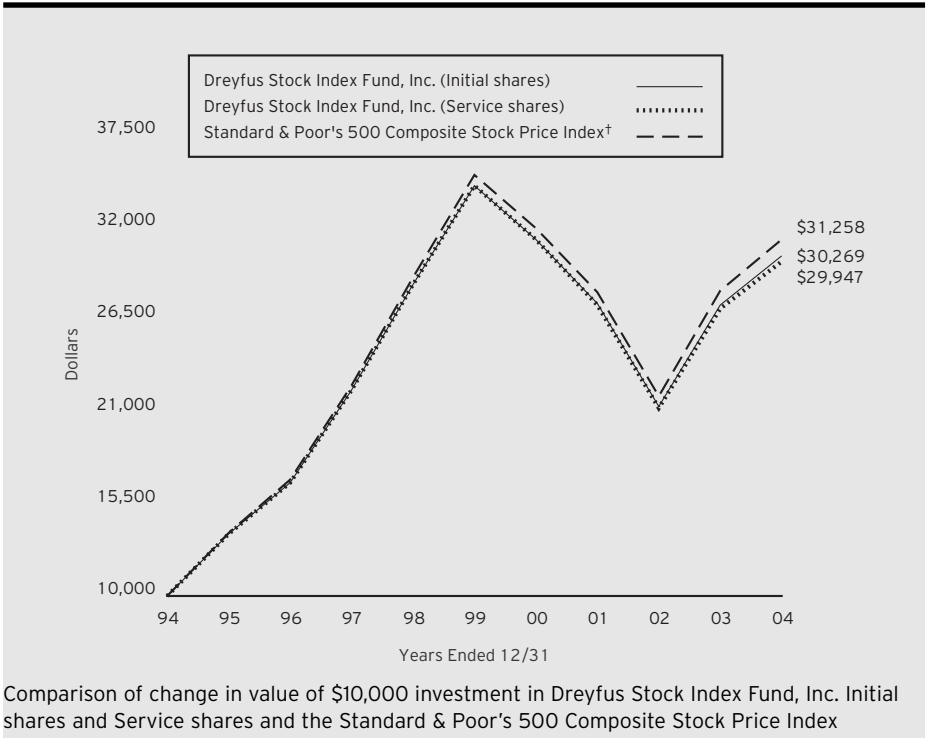
As an index fund, our strategy is to attempt to replicate the returns of the S&P 500 Index. Accordingly, as of December 31, 2004, the percentage of the fund's assets invested in each industry closely approximated its representation in the S&P 500 Index. In our view, one of the greatest benefits of broadly diversified index funds is that they can help investors manage risks by limiting the impact of unexpected losses in any single industry group or holding.

January 18, 2005

The fund is only available as a funding vehicle under variable life insurance policies or variable annuity contracts issued by insurance companies. Individuals may not purchase shares of the fund directly. A variable annuity is an insurance contract issued by an insurance company that enables investors to accumulate assets on a tax-deferred basis for retirement or other long-term goals. The investment objective and policies of Dreyfus Stock Index Fund, Inc. made available through insurance products may be similar to other funds/portfolios managed or advised by Dreyfus. However, the investment results of the fund may be higher or lower than, and may not be comparable to, those of any other Dreyfus fund/portfolio.

- ¹ Total return includes reinvestment of dividends and any capital gains paid. Past performance is no guarantee of future results. Share price and investment return fluctuate such that upon redemption, fund shares may be worth more or less than their original cost. The fund's performance does not reflect the deduction of additional charges and expenses imposed in connection with investing in variable insurance contracts, which will reduce returns. Return figures provided reflect the absorption of fund expenses by The Dreyfus Corporation pursuant to an agreement in which shareholders are given at least 180 days' notice, at which time it may be extended, terminated or modified. Had these expenses not been absorbed, the fund's returns would have been lower.
- ² SOURCE: LIPPER INC. — Reflects reinvestment of dividends daily and, where applicable, capital gain distributions. The Standard & Poor's 500 Composite Stock Price Index is a widely accepted, unmanaged index of U.S. stock market performance.
- ³ "Standard & Poor's," "S&P," "Standard & Poor's 500" and "S&P 500" are trademarks of The McGraw-Hill Companies, Inc., and have been licensed for use by the fund. The fund is not sponsored, endorsed, sold or promoted by Standard & Poor's and Standard & Poor's makes no representation regarding the advisability of investing in the fund.

FUND PERFORMANCE



Average Annual Total Returns as of 12/31/04

	1 Year	5 Years	10 Years
Initial shares	10.64%	(2.56)%	11.71%
Service shares	10.35%	(2.77)%	11.59%

The data for Service shares includes the results of Initial shares for the period prior to December 31, 2000 (inception date of Service shares). Actual Service shares' average annual total return and hypothetical growth results would have been lower. See notes below.

† Source: Lipper Inc.

Past performance is not predictive of future performance. The fund's performance shown in the graph and table does not reflect the deduction of taxes that a shareholder would pay on fund distributions or the redemption of fund shares.

The fund's performance does not reflect the deduction of additional charges and expenses imposed in connection with investing in variable insurance contracts which will reduce returns.

The above graph compares a \$10,000 investment made in Initial and Service shares of Dreyfus Stock Index Fund, Inc. on 12/31/94 to a \$10,000 investment made in the Standard & Poor's 500 Composite Stock Price Index (the "Index") on that date.

The fund's Initial shares are not subject to a Rule 12b-1 fee. The fund's Service shares are subject to a 0.25% annual Rule 12b-1 fee. The performance figures for Service shares reflect the performance of the fund's Initial shares from their inception date through December 30, 2000, and the performance of the fund's Service shares from December 31, 2000 (inception date of Service shares) to December 31, 2004 (blended performance figures). The performance figures for each share class reflect certain expense reimbursements, without which the performance of each share class would have been lower. In addition, the blended performance figures have not been adjusted to reflect the higher operating expenses of the Service shares. If these expenses had been reflected, the blended performance figures would have been lower. All dividends and capital gain distributions are reinvested.

The fund's performance shown in the line graph takes into account all applicable fund fees and expenses (after any expense reimbursements). The Index is a widely accepted, unmanaged index of U.S. stock market performance, and includes the reinvestment of dividends daily. The Index does not take into account charges, fees and other expenses. Further information relating to fund performance, including expense reimbursements, if applicable, is contained in the Financial Highlights section of the prospectus and elsewhere in this report.

UNDERSTANDING YOUR FUND'S EXPENSES (Unaudited)

As a mutual fund investor, you pay ongoing expenses, such as management fees and other expenses. Using the information below, you can estimate how these expenses affect your investment and compare them with the expenses of other funds. You also may pay one-time transaction expenses, including sales charges (loads) and redemption fees, which are not shown in this section and would have resulted in higher total expenses. For more information, see your fund's prospectus or talk to your financial adviser.

Review your fund's expenses

The table below shows the expenses you would have paid on a \$1,000 investment in Dreyfus Stock Index Fund, Inc. from July 1, 2004 to December 31, 2004. It also shows how much a \$1,000 investment would be worth at the close of the period, assuming actual returns and expenses.

Expenses and Value of a \$1,000 Investment

assuming actual returns for the six months ended December 31, 2004

	Investor Shares	Institutional Shares
Expenses paid per \$1,000†	\$ 1.35	\$ 2.65
Ending value (after expenses)	\$1,070.70	\$1,069.50

COMPARING YOUR FUND'S EXPENSES

WITH THOSE OF OTHER FUNDS (Unaudited)

Using the SEC's method to compare expenses

The Securities and Exchange Commission (SEC) has established guidelines to help investors assess fund expenses. Per these guidelines, the table below shows your fund's expenses based on a \$1,000 investment, assuming a hypothetical 5% annualized return. You can use this information to compare the ongoing expenses (but not transaction expenses or total cost) of investing in the fund with those of other funds. All mutual fund shareholder reports will provide this information to help you make this comparison. Please note that you cannot use this information to estimate your actual ending account balance and expenses paid during the period.

Expenses and Value of a \$1,000 Investment

assuming a hypothetical 5% annualized return for the six months ended December 31, 2004

	Investor Shares	Institutional Shares
Expenses paid per \$1,000†	\$ 1.32	\$ 2.59
Ending value (after expenses)	\$1,023.83	\$1,022.57

† Expenses are equal to the fund's annualized expense ratio of .26% for Initial shares and .51% for Service shares; multiplied by the average account value over the period, multiplied by 184/366 (to reflect the one-half year period).

STATEMENT OF INVESTMENTS

December 31, 2004

Common Stocks—99.8%	Shares	Value (\$)
Consumer Cyclical—9.6%		
Albertson's	141,242 ^a	3,372,859
AutoNation	101,600 ^b	1,951,736
AutoZone	30,600 ^b	2,794,086
Bed Bath & Beyond	115,500 ^b	4,600,365
Best Buy	124,550	7,400,761
Big Lots	43,300 ^b	525,229
Brunswick	36,900	1,826,550
CVS	153,590	6,922,301
Circuit City Stores—Circuit City Group	75,000	1,173,000
Coach	72,500 ^b	4,089,000
Cooper Tire & Rubber	28,800	620,640
Costco Wholesale	180,050	8,716,221
Dana	57,506	996,579
Darden Restaurants	60,400	1,675,496
Delphi	215,453	1,943,386
Delta Air Lines	49,800 ^{a,b}	372,504
Dillard's, Cl. A	31,500	846,405
Dollar General	125,762	2,612,077
Eastman Kodak	110,000	3,547,500
Eaton	58,300	4,218,588
Family Dollar Stores	64,350	2,009,651
Federated Department Stores	64,948	3,753,345
Ford Motor	702,353	10,282,447
Gap	336,589	7,108,760
General Motors	216,848 ^a	8,686,931
Genuine Parts	67,000	2,952,020
Harley-Davidson	112,800	6,852,600
Harrah's Entertainment	43,000	2,876,270
Hasbro	67,975	1,317,356
Hilton Hotels	148,150	3,368,931
Home Depot	842,994	36,029,563
International Game Technology	132,300	4,548,474
J. C. Penney	109,600	4,537,440
Johnson Controls	73,100	4,637,464
Jones Apparel Group	46,900	1,715,133
Kohl's	131,723 ^b	6,476,820
Kroger	283,748 ^b	4,976,940

Common Stocks (continued)	Shares	Value (\$)
Consumer Cyclical (continued)		
Limited Brands	156,000	3,591,120
Liz Claiborne	41,700	1,760,157
Lowe's Cos.	296,610	17,081,769
Marriott International, Cl. A	85,800	5,403,684
Mattel	159,250	3,103,783
May Department Stores	112,100	3,295,740
Maytag	30,500	643,550
McDonald's	482,655	15,473,919
NIKE, Cl. B	100,750	9,137,018
Navistar International	26,800 ^b	1,178,664
Nordstrom	53,800	2,514,074
Office Depot	119,900 ^b	2,081,464
OfficeMax	35,900	1,126,542
PACCAR	66,725	5,370,028
RadioShack	60,800	1,999,104
Reebok International	22,300	981,200
Safeway	171,769 ^b	3,390,720
Sears, Roebuck & Co.	79,400	4,051,782
Southwest Airlines	299,225	4,871,383
Staples	191,100	6,441,981
Starbucks	153,500 ^b	9,572,260
Starwood Hotels & Resorts Worldwide	79,600	4,648,640
TJX Cos.	184,950	4,647,794
Target	343,742	17,850,522
Tiffany & Co.	55,900	1,787,123
Toys R Us	82,600 ^{a,b}	1,690,822
V. F.	42,600	2,359,188
Visteon	49,859	487,122
Wal-Mart Stores	1,625,629	85,865,723
Walgreen	392,300	15,052,551
Wendy's International	43,800	1,719,588
Whirlpool	25,500 ^a	1,764,855
Yum! Brands	112,470	5,306,335
		418,585,633
Consumer Staples—7.7%		
Adolph Coors, Cl. B	14,350 ^a	1,085,865
Alberto-Culver, Cl. B	34,900	1,695,093

Common Stocks (continued)

	Shares	Value (\$)
Consumer Staples (continued)		
Altria Group	787,943	48,143,317
Anheuser-Busch Cos.	303,250	15,383,872
Archer-Daniels-Midland	251,218	5,604,674
Avon Products	181,600	7,027,920
Brown-Forman, Cl. B	46,800	2,278,224
Campbell Soup	157,949	4,721,096
Clorox	58,350	3,438,566
Coca-Cola	928,742	38,663,529
Coca-Cola Enterprises	180,100	3,755,085
Colgate-Palmolive	203,550	10,413,618
ConAgra Foods	197,450	5,814,903
Fortune Brands	55,350	4,271,913
General Mills	139,900	6,954,429
Gillette	381,066	17,064,135
H.J. Heinz	134,100	5,228,559
Hershey Foods	94,478	5,247,308
International Flavors & Fragrances	36,200	1,550,808
Kellogg	158,500	7,078,610
Kimberly-Clark	187,266	12,323,975
McCormick & Co.	52,500	2,026,500
Newell Rubbermaid	105,471	2,551,343
Pactiv	56,950 ^b	1,440,266
Pepsi Bottling Group	96,050	2,597,192
PepsiCo	646,631	33,754,138
Procter & Gamble	973,800	53,636,904
Reynolds American	56,600 ^a	4,448,760
SUPERVALU	51,500	1,777,780
Sara Lee	301,298	7,273,333
Sysco	245,650	9,376,461
UST	63,400	3,050,174
Wm. Wrigley Jr.	86,200	5,964,178
		335,642,528
Energy-7.2%		
Amerada Hess	35,200	2,899,776
Anadarko Petroleum	94,951	6,153,774
Apache	125,300 ^a	6,336,421
BJ Services	62,000	2,885,480

Common Stocks (continued)	Shares	Value (\$)
Energy (continued)		
Baker Hughes	128,770	5,494,616
Burlington Resources	150,280	6,537,180
ChevronTexaco	813,236	42,703,022
ConocoPhillips	264,959	23,006,390
Devon Energy	186,600	7,262,472
Dynegy, Cl. A	145,900 ^b	674,058
EOG Resources	45,500	3,246,880
El Paso	246,936	2,568,134
Exxon Mobil	2,476,494	126,945,083
Halliburton	169,651	6,657,105
Kerr-McGee	58,200	3,363,378
KeySpan	61,650	2,432,093
Kinder Morgan	47,600	3,480,988
Marathon Oil	133,050	5,004,011
Nabors Industries	57,400 ^b	2,944,046
Nicor	16,900	624,286
NiSource	103,753	2,363,493
Noble	52,000 ^b	2,586,480
Occidental Petroleum	151,550	8,844,458
Peoples Energy	14,400	632,880
Rowan Cos.	41,200 ^b	1,067,080
Schlumberger	226,000	15,130,700
Sempra Energy	89,641	3,288,032
Sunoco	28,100	2,296,051
Transocean	123,462 ^b	5,233,554
Unocal	101,000	4,367,240
Valero Energy	98,500	4,471,900
Williams Cos.	213,571	3,479,072
		314,980,133
Health Care—12.6%		
Abbott Laboratories	597,876	27,890,915
Aetna	56,649	7,066,963
Allergan	50,400	4,085,928
AmerisourceBergen	40,309 ^a	2,365,332
Amgen	487,556 ^b	31,276,717
Applera—Applied Biosystems Group	75,250	1,573,478
Bausch & Lomb	20,500	1,321,430

Common Stocks (continued)

	Shares	Value (\$)
Health Care (continued)		
Baxter International	236,650	8,173,891
Becton, Dickinson & Co.	97,200	5,520,960
Biogen Idec	128,092 ^b	8,532,208
Biomet	97,125	4,214,254
Boston Scientific	324,200 ^b	11,525,310
Bristol-Myers Squibb	746,828	19,133,733
C.R. Bard	40,200	2,571,996
Cardinal Health	165,825	9,642,724
Caremark Rx	174,500 ^b	6,880,535
Chiron	71,750 ^{a,b}	2,391,428
Eli Lilly & Co.	434,437	24,654,299
Express Scripts	29,200 ^b	2,232,048
Fisher Scientific International	45,000 ^b	2,807,100
Forest Laboratories	141,400 ^b	6,343,204
Genzyme	95,150 ^b	5,525,361
Gilead Sciences	166,200 ^b	5,815,338
Guidant	122,245	8,813,865
HCA	161,685	6,460,933
Health Management Associates, Cl. A	93,400	2,122,048
Hospira	59,957 ^b	2,008,560
Humana	61,200 ^b	1,817,028
Johnson & Johnson	1,139,218	72,249,205
King Pharmaceuticals	92,700 ^b	1,149,480
Laboratory Corporation of America Holdings	53,100 ^b	2,645,442
Manor Care	33,200	1,176,276
McKesson	112,846	3,550,135
Medco Health Solutions	104,633 ^b	4,352,733
MedImmune	95,500 ^b	2,589,005
Medtronic	463,973	23,045,538
Merck & Co.	851,266	27,359,689
Millipore	19,100 ^b	951,371
Mylan Laboratories	103,300 ^a	1,826,344
PerkinElmer	49,168	1,105,788
Pfizer	2,890,979	77,738,425
Quest Diagnostics	38,800	3,707,340
Schering-Plough	565,351	11,804,529
St. Jude Medical	137,300 ^b	5,756,989

Common Stocks (continued)	Shares	Value (\$)
Health Care (continued)		
Stryker	154,300	7,444,975
Tenet Healthcare	179,150 ^b	1,967,067
Thermo Electron	61,400 ^b	1,853,666
UnitedHealth Group	250,900	22,086,727
Waters	46,350 ^b	2,168,717
Watson Pharmaceuticals	42,000 ^b	1,378,020
WellPoint	113,350 ^b	13,035,250
Wyeth	512,120	21,811,191
Zimmer Holdings	94,122 ^b	7,541,055
		543,062,543
Interest Sensitive—24.1%		
ACE	109,050	4,661,888
AFLAC	194,192	7,736,609
Allstate	263,375	13,621,755
Ambac Financial Group	41,744	3,428,435
American Express	481,873	27,163,181
American International Group	999,789	65,656,143
AmSouth Bancorporation	136,300	3,530,170
Aon	121,525	2,899,587
Apartment Investment & Management, Cl. A	36,400	1,402,856
Archstone-Smith Trust	75,100	2,876,330
BB&T	212,000	8,914,600
Bank of America	1,550,504	72,858,182
Bank of New York	298,232	9,966,913
Bear Stearns Cos.	39,627	4,054,238
CIGNA	51,571 ^a	4,206,646
CIT Group	80,700	3,697,674
Capital One Financial	93,200	7,848,372
Charles Schwab	517,053	6,183,954
Chubb	73,500	5,652,150
Cincinnati Financial	64,552	2,857,072
Citigroup	1,992,218	95,985,063
Comerica	65,450	3,993,759
Compass Bancshares	47,100	2,292,357
Countrywide Financial	222,798	8,245,754
E*TRADE Financial	142,800 ^b	2,134,860
Equity Office Properties Trust	154,800	4,507,776

Common Stocks (continued)

	Shares	Value (\$)
Interest Sensitive (continued)		
Equity Residential	108,550	3,927,339
Fannie Mae	371,509	26,455,156
Federated Investors, Cl. B	41,200	1,252,480
Fifth Third Bancorp	215,434	10,185,720
First Horizon National	47,300	2,039,103
Franklin Resources	95,700	6,665,505
Freddie Mac	264,715	19,509,496
General Electric	4,058,383	148,130,979
Golden West Financial	117,586	7,222,132
Goldman Sachs Group	185,850	19,335,834
H&R Block	63,200	3,096,800
Hartford Financial Services Group	112,750	7,814,703
Huntington Bancshares	88,738	2,198,928
J.P. Morgan Chase & Co.	1,367,559	53,348,477
Janus Capital Group	90,700	1,524,667
Jefferson-Pilot	52,425	2,724,003
KeyCorp	156,050	5,290,095
Lehman Brothers Holdings	103,450	9,049,806
Lincoln National	67,000	3,127,560
Loews	71,250	5,008,875
M&T Bank	44,600	4,809,664
MBIA	54,050	3,420,284
MBNA	490,482	13,826,688
MGIC Investment	37,200	2,563,452
Marsh & McLennan Cos.	202,258	6,654,288
Marshall & Ilsley	85,800	3,792,360
Mellon Financial	162,557	5,057,148
Merrill Lynch	357,531	21,369,628
MetLife	285,700	11,573,707
Morgan Stanley	420,176	23,328,172
National City	260,099	9,766,717
North Fork Bancorporation	180,700	5,213,195
Northern Trust	84,190	4,089,950
PNC Financial Services Group	108,523	6,233,561
Plum Creek Timber	70,450	2,708,098
Principal Financial Group	117,850	4,824,779
Progressive	76,882	6,522,669

Common Stocks (continued)	Shares	Value (\$)
Interest Sensitive (continued)		
ProLogis	70,600	3,059,098
Providian Financial	112,543 ^{a,b}	1,853,583
Prudential Financial	196,950	10,824,372
Regions Financial	178,437	6,350,573
SLM	165,000	8,809,350
Safeco	48,650	2,541,476
St. Paul Travelers Cos.	256,943	9,524,877
Simon Property Group	84,900	5,490,483
Sovereign Bancorp	132,500	2,987,875
State Street	127,950	6,284,904
SunTrust Banks	142,350	10,516,818
Synovus Financial	118,900	3,398,162
T. Rowe Price Group	49,200	3,060,240
Torchmark	41,500	2,371,310
U.S. Bancorp	716,754	22,448,735
UnumProvident	113,844	2,042,361
Wachovia	615,559	32,378,403
Washington Mutual	335,137	14,169,592
Wells Fargo	649,497	40,366,239
XL Capital, Cl. A	53,200	4,130,980
Zions Bancorporation	34,400	2,340,232
		1,044,988,005
Producer Goods & Services—10.2%		
Air Products & Chemicals	87,250	5,057,883
Alcoa	334,188	10,500,187
Allegheny Technologies	36,766	796,719
American Power Conversion	73,400	1,570,760
American Standard Cos.	82,300 ^b	3,400,636
Ashland	27,300	1,593,774
Avery Dennison	42,450	2,545,727
Ball	43,200	1,899,936
Bemis	41,100	1,195,599
Black & Decker	31,000	2,738,230
Boeing	322,344	16,687,749
Burlington Northern Santa Fe	144,325	6,828,016
CSX	82,500	3,306,600

Common Stocks (continued)

	Shares	Value (\$)
Producer Goods & Services (continued)		
Caterpillar	131,015	12,775,273
Centex	47,700	2,841,966
Cooper Industries, Cl. A	35,200	2,389,728
Cummins	17,500	1,466,325
Deere & Co.	95,300	7,090,320
Dover	78,050	3,273,417
Dow Chemical	361,942	17,919,748
E. I. du Pont de Nemours	381,272	18,701,391
Eastman Chemical	29,900	1,726,127
Ecolab	98,900	3,474,357
Emerson Electric	161,090	11,292,409
Engelhard	46,900	1,438,423
FedEx	115,340	11,359,837
Fluor	32,200	1,755,222
Freeport-McMoRan Copper & Gold, Cl. B	68,500	2,618,755
General Dynamics	76,836	8,037,046
Georgia-Pacific	99,109	3,714,605
Goodrich	45,700	1,491,648
Goodyear Tire & Rubber	67,300 ^b	986,618
Great Lakes Chemical	19,600	558,404
Hercules	43,100 ^b	640,035
Honeywell International	330,237	11,693,692
ITT Industries	35,450	2,993,753
Illinois Tool Works	113,550	10,523,814
Ingersoll-Rand, Cl. A	66,100	5,307,830
International Paper	186,769 ^a	7,844,298
KB HOME	17,800	1,858,320
L-3 Communications Holdings	44,200	3,237,208
Leggett & Platt	73,300	2,083,919
Lockheed Martin	169,900	9,437,945
Louisiana-Pacific	42,200	1,128,428
Masco	172,000	6,283,160
MeadWestvaco	77,763	2,635,388
Molex	72,300 ^a	2,169,000
Monsanto	101,478	5,637,103
Newmont Mining	170,419	7,568,308

Common Stocks (continued)	Shares	Value (\$)
Producer Goods & Services (continued)		
Norfolk Southern	152,050	5,502,690
Nucor	61,100	3,197,974
PPG Industries	66,033	4,500,809
Pall	47,601	1,378,049
Parker-Hannifin	45,850	3,472,679
Phelps Dodge	36,633	3,623,736
Praxair	124,700	5,505,505
Pulte Homes	49,000	3,126,200
Raytheon	173,550	6,738,947
Rockwell Automation	70,700	3,503,185
Rockwell Collins	67,750	2,672,060
Rohm & Haas	86,356	3,819,526
Sealed Air	32,112 ^b	1,710,606
Sherwin-Williams	54,300	2,423,409
Sigma-Aldrich	26,500 ^a	1,602,190
Snap-On	22,050	757,638
Stanley Works	31,600	1,548,084
3M	298,898	24,530,558
Temple-Inland	21,500	1,470,600
Textron	52,800	3,896,640
Tyco International	772,206 ^a	27,598,642
Union Pacific	99,628	6,699,983
United Parcel Service, Cl. B	430,250	36,769,165
United States Steel	43,600 ^a	2,234,500
United Technologies	196,141	20,271,172
Vulcan Materials	39,300	2,146,173
W.W. Grainger	34,600	2,305,052
Weyerhaeuser	92,100	6,190,962
		443,272,370
Services—7.3%		
ALLTEL	116,600	6,851,416
Affiliated Computer Services, Cl. A	49,300 ^b	2,967,367
Allied Waste Industries	122,200 ^b	1,134,016
Apollo Group, Cl. A	71,150 ^b	5,742,517
Automatic Data Processing	223,578	9,915,684

Common Stocks (continued)

	Shares	Value (\$)
Services (continued)		
BellSouth	703,201	19,541,956
Carnival	243,124 ^a	14,011,236
Cendant	404,198	9,450,149
Cintas	65,900	2,890,374
Clear Channel Communications	220,147	7,372,723
Comcast, Cl. A	852,163 ^b	28,359,984
Computer Sciences	72,700 ^b	4,098,099
Convergys	54,502 ^b	816,985
Dow Jones & Co.	31,500	1,356,390
Electronic Data Systems	197,250	4,556,475
Equifax	51,850	1,456,985
First Data	318,582	13,552,478
Fiserv	75,082 ^b	3,017,546
Gannett	97,988	8,005,620
IMS Health	89,050	2,066,851
Interpublic Group of Companies	162,350 ^b	2,175,490
Knight-Ridder	29,594	1,981,022
McGraw-Hill Cos.	72,850	6,668,689
Meredith	19,200	1,040,640
Monster Worldwide	45,700 ^b	1,537,348
Moody's	56,750	4,928,738
NEXTEL Communications, Cl. A	426,550 ^b	12,796,500
New York Times, Cl. A	55,700 ^a	2,272,560
News, Cl. A	1,003,000	18,715,980
Omnicom Group	71,480	6,027,194
Paychex	145,175	4,947,564
R. R. Donnelley & Sons	84,250	2,973,183
Robert Half International	66,600	1,960,038
Ryder System	24,700	1,179,919
Sabre Holdings, Cl. A	52,010	1,152,542
SunGard Data Systems	110,900 ^b	3,141,797
Time Warner	1,758,268 ^b	34,180,729
Tribune	121,930	5,138,130
Unisys	129,000 ^b	1,313,220
Univision Communications, Cl. A	124,100 ^b	3,632,407

Common Stocks (continued)	Shares	Value (\$)
Services (continued)		
Viacom, Cl. B	654,553	23,819,183
Walt Disney	784,409	21,806,570
Waste Management	219,622	6,575,483
		317,129,777
Technology—16.0%		
ADC Telecommunications	310,500 ^b	832,140
Adobe Systems	91,650	5,750,121
Advanced Micro Devices	148,100 ^b	3,261,162
Agilent Technologies	186,362 ^b	4,491,324
Altera	142,900 ^b	2,958,030
Analog Devices	144,300	5,327,556
Andrew	61,750 ^b	841,653
Apple Computer	154,300 ^b	9,936,920
Applied Materials	651,900 ^b	11,147,490
Applied Micro Circuits	118,700 ^b	499,727
Autodesk	88,100	3,343,395
Avaya	175,764 ^b	3,023,141
BMC Software	85,200 ^b	1,584,720
Broadcom, Cl. A	126,358 ^b	4,078,836
CIENA	219,500 ^{a,b}	733,130
Cisco Systems	2,527,718 ^b	48,784,957
Citrix Systems	65,000 ^b	1,594,450
Computer Associates International	224,775	6,981,512
Compuware	148,600 ^b	961,442
Comverse Technology	75,900 ^b	1,855,755
Corning	538,298 ^b	6,335,767
Danaher	118,500	6,803,085
Dell	953,712 ^b	40,189,423
EMC	919,920 ^b	13,679,210
eBay	254,500 ^b	29,593,260
Electronic Arts	117,200 ^b	7,228,896
Freescale Semiconductor, Cl. B	149,606 ^b	2,746,766
Gateway	143,500 ^b	862,435
Hewlett-Packard	1,159,256	24,309,598
Intel	2,427,210	56,772,441
International Business Machines	639,068	62,999,323
Intuit	71,950 ^b	3,166,520

Common Stocks (continued)

	Shares	Value (\$)
Technology (continued)		
JDS Uniphase	554,300 ab	1,757,131
Jabil Circuit	77,400 ab	1,979,892
KLA-Tencor	75,000 b	3,493,500
LSI Logic	147,800 b	809,944
Lexmark International	49,550 b	4,211,750
Linear Technology	117,850	4,567,866
Lucent Technologies	1,696,985 b	6,380,664
Maxim Integrated Products	124,850	5,292,392
Mercury Interactive	32,436 ab	1,477,460
Micron Technology	235,050 b	2,902,868
Microsoft	4,173,296	111,468,736
Motorola	934,494	16,073,297
NCR	35,800 b	2,478,434
NVIDIA	63,800 b	1,503,128
National Semiconductor	137,500	2,468,125
Network Appliance	137,700 b	4,574,394
Northrop Grumman	141,326	7,682,481
Novell	144,300 b	974,025
Novellus Systems	53,700 b	1,497,693
Oracle	1,968,720 b	27,010,838
PMC-Sierra	68,400 b	769,500
Parametric Technology	103,300 b	608,437
Pitney Bowes	88,500	4,095,780
Power-One	32,300 b	288,116
QLogic	35,500 b	1,303,915
QUALCOMM	629,200	26,678,080
Sanmina-SCI	200,072 b	1,694,610
Scientific-Atlanta	58,900	1,944,289
Siebel Systems	195,051 b	2,048,036
Solectron	372,700 b	1,986,491
Sun Microsystems	1,290,984 b	6,945,494
Symantec	243,400 b	6,269,984
Symbol Technologies	92,350	1,597,655
Tektronix	34,600	1,045,266
Tellabs	177,300 b	1,523,007
Teradyne	74,500 b	1,271,715
Texas Instruments	663,348	16,331,628

Common Stocks (continued)	Shares	Value (\$)
Technology (continued)		
VERITAS Software	162,068 ^b	4,627,041
Xerox	366,066 ^b	6,226,783
Xilinx	133,700	3,964,205
Yahoo!	527,776 ^b	19,886,600
		692,385,435
Utilities—5.1%		
AES	249,100 ^b	3,405,197
AT&T	305,518	5,823,173
Allegheny Energy	52,700 ^{ab}	1,038,717
Ameren	74,800	3,750,472
American Electric Power	151,950	5,217,963
CMS Energy	75,000 ^b	783,750
Calpine	205,115 ^{ab}	808,153
CenterPoint Energy	118,139	1,334,971
CenturyTel	51,650	1,832,026
Cinergy	69,600	2,897,448
Citizens Communications	128,800	1,776,152
Consolidated Edison	92,900	4,064,375
Constellation Energy Group	67,550	2,952,611
DTE Energy	66,750	2,878,928
Dominion Resources	127,193	8,616,053
Duke Energy	367,276	9,303,101
Edison International	125,100	4,006,953
Entergy	85,850	5,802,602
Exelon	254,300	11,207,001
FPL Group	71,250 ^a	5,325,937
FirstEnergy	126,633	5,003,270
PG&E	154,750 ^b	5,150,080
PPL	72,550	3,865,464
Pinnacle West Capital	35,200	1,563,232
Progress Energy	94,885	4,292,597
Public Service Enterprise Group	91,250	4,724,013
Qwest Communications International	697,061 ^b	3,094,951
SBC Communications	1,272,695	32,797,350
Southern	283,910	9,516,663
Sprint (FON Group)	564,691	14,032,571
TECO Energy	76,600	1,175,044

Common Stocks (continued)	Shares	Value (\$)
Utilities (continued)		
TXU	92,230	5,954,369
Verizon Communications	1,062,887	43,057,552
XTO Energy	99,900	3,534,462
Xcel Energy	153,675	2,796,885
		223,384,086
Total Common Stocks (cost \$3,322,797,728)		4,333,430,510
	Principal Amount (\$)	Value (\$)
Short-Term Investments--0%		
U.S. Treasury Bills--0%		
1.65%, 1/6/2005 (cost \$1,999,540)	2,000,000 ^c	1,999,760
Investment of Cash Collateral for Securities Loaned--1.0%	Shares	Value (\$)
Registered Investment Company;		
Dreyfus Institutional Cash Advantage Plus Fund (cost \$43,388,860)	43,388,860 ^d	43,388,860
Total Investments (cost \$3,368,186,128)	100.8%	4,378,819,130
Liabilities, Less Cash and Receivables	(.8%)	(32,965,816)
Net Assets	100.0%	4,345,853,314

^a All or a portion of these securities are on loan. At December 31, 2004, the total market value of the fund's securities on loan is \$41,363,326 and the total market value of the collateral held by the fund is \$43,388,860.

^b Non-income producing.

^c Partially held by a broker in a segregated account as collateral for open financial futures positions.

^d Investment in affiliated money market mutual funds.

Portfolio Summary †

	Value (%)		Value (%)
Interest Sensitive	24.1	Services	7.3
Technology	16.0	Energy	7.2
Health Care	12.6	Utilities	5.1
Producer Goods & Services	10.2	Short-Term/ Money Market Investments	1.0
Consumer Cyclical	9.6		
Consumer Staples	7.7		100.8

† Based on net assets.

See notes to financial statements.

STATEMENT OF FINANCIAL FUTURES

December 31, 2004

	Contracts	Market Value Covered by Contracts (\$)	Expiration	Unrealized Appreciation at 12/31/2004 (\$)
Financial Futures Long				
Standard & Poor's 500	45	13,654,125	March 2005	90,565

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES

December 31, 2004

	Cost	Value
Assets (\$):		
Investments in securities—See Statement of Investments (including securities on loan, valued at \$41,363,326)—Note 1 (b):		
Unaffiliated issuers	3,324,797,268	4,335,430,270
Affiliated issuers	43,388,860	43,388,860
Cash		1,227,104
Receivable for investment securities sold		14,978,920
Dividends and interest receivable		5,655,398
Receivable for shares of Common Stock subscribed		501,608
Prepaid expenses		24,045
		4,401,206,205
Liabilities (\$):		
Due to The Dreyfus Corporation and affiliates—Note 3(c)		1,000,884
Liability for securities on loan—Note 1 (b)		43,388,860
Bank loan payable—Note 2		9,300,000
Payable for shares of Common Stock redeemed		1,507,560
Payable for futures variation margin—Note 4		14,730
Interest payable—Note 2		687
Accrued expenses		140,170
		55,352,891
Net Assets (\$)		4,345,853,314
Composition Net Assets (\$):		
Paid-in capital		3,770,817,647
Accumulated undistributed investment income—net		172,738
Accumulated net realized gain (loss) on investments		(435,860,638)
Accumulated net unrealized appreciation (depreciation) on investments (including \$90,565 net unrealized appreciation on financial futures)		1,010,723,567
Net Assets (\$)		4,345,853,314

Net Asset Value Per Share		
	Initial Shares	Service Shares
Net Assets (\$)	3,842,397,363	503,455,951
Shares Outstanding	124,382,970	16,293,016
Net Asset Value Per Share (\$)	30.89	30.90

See notes to financial statements.

STATEMENT OF OPERATIONS

Year Ended December 31, 2004

Investment Income (\$):

Income:

Cash dividends	83,079,256
Interest	433,464
Income on securities lending	71,038

Total Income **83,583,758**

Expenses:

Management fee—Note 3(a)	10,077,462
Distribution fees (Service Shares)—Note 3(b)	951,200
Prospectus and shareholders' reports	194,233
Professional fees	84,162
Directors' fees and expenses—Note 3(d)	74,427
Shareholder servicing costs (Initial Shares)—Note 3(c)	62,494
Loan commitment fees—Note 2	33,141
Interest expense—Note 2	6,327
Registration fees	2,760
Miscellaneous	132,910

Total Expenses **11,619,116**

Investment Income—Net **71,964,642**

Realized and Unrealized Gain (Loss) on Investments—Note 4 (\$):

Net realized gain (loss) on investments	(25,288,871)
Net realized gain (loss) on financial futures	4,857,264

Net Realized Gain (Loss) **(20,431,607)**

Net unrealized appreciation (depreciation) on investments [including (\$4,095,735) net unrealized (depreciation) on financial futures]	366,836,857
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Net Realized and Unrealized Gain (Loss) on Investments **346,405,250**

Net Increase in Net Assets Resulting from Operations **418,369,892**

See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS

	Year Ended December 31,	
	2004	2003
Operations (\$):		
Investment income—net	71,964,642	51,728,702
Net realized gain (loss) on investments	(20,431,607)	(45,864,286)
Net unrealized appreciation (depreciation) on investments	366,836,857	872,993,195
Net Increase (Decrease) in Net Assets Resulting from Operations	418,369,892	878,857,611
Dividends and Distributions to Shareholders (\$):		
Dividends from investment income—net:		
Initial shares	(66,135,348)	(49,118,186)
Service shares	(5,923,375)	(2,060,765)
Distributions of return of capital:		
Initial shares	(872,378)	—
Service shares	(113,991)	—
Total Dividends and Distributions	(73,045,092)	(51,178,951)
Capital Stock Transactions (\$):		
Net proceeds from shares sold:		
Initial shares	268,498,518	448,226,416
Service shares	271,373,054	187,041,841
Dividends reinvested:		
Initial shares	67,007,726	49,118,186
Service shares	6,037,366	2,060,765
Cost of shares redeemed:		
Initial shares	(573,864,693)	(603,645,534)
Service shares	(93,401,763)	(27,659,308)
Increase (Decrease) in Net Assets from Capital Stock Transactions	(54,349,792)	55,142,366
Total Increase (Decrease) in Net Assets	290,975,008	882,821,026
Net Assets (\$):		
Beginning of Period	4,054,878,306	3,172,057,280
End of Period	4,345,853,314	4,054,878,306
Undistributed investment income—net	172,738	747,863

STATEMENT OF CHANGES IN NET ASSETS (continued)

	Year Ended December 31,	
	2004	2003
Capital Share Transactions:		
Initial Shares		
Shares sold	9,283,294	18,189,464
Shares issued for dividends reinvested	2,257,246	1,960,120
Shares redeemed	(19,846,073)	(25,097,640)
Net Increase (Decrease) in Shares Outstanding	(8,305,533)	(4,948,056)
Service Shares		
Shares sold	9,376,754	7,450,896
Shares issued for dividends reinvested	202,987	81,007
Shares redeemed	(3,256,604)	(1,071,541)
Net Increase (Decrease) in Shares Outstanding	6,323,137	6,460,362

See notes to financial statements.

FINANCIAL HIGHLIGHTS

The following tables describe the performance for each share class for the fiscal periods indicated. All information (except portfolio turnover rate) reflects financial results for a single fund share. Total return shows how much your investment in the fund would have increased (or decreased) during each period, assuming you had reinvested all dividends and distributions. These figures have been derived from the fund's financial statements.

Initial Shares	Year Ended December 31,				
	2004	2003	2002	2001	2000
Per Share Data (\$):					
Net asset value, beginning of period	28.43	22.47	29.36	34.00	38.45
Investment Operations:					
Investment income—net ^a	.51	.37	.34	.34	.35
Net realized and unrealized gain (loss) on investments	2.48	5.96	(6.89)	(4.48)	(3.88)
Total from Investment Operations	2.99	6.33	(6.55)	(4.14)	(3.53)
Distributions:					
Dividends from investment income—net	(.53)	(.37)	(.34)	(.34)	(.35)
Dividends from net realized gain on investments	—	—	—	(.16)	(.57)
Dividends from return of capital	(.00) ^b	—	—	—	—
Total Distributions	(.53)	(.37)	(.34)	(.50)	(.92)
Net asset value, end of period	30.89	28.43	22.47	29.36	34.00
Total Return (%)	10.64	28.36	(22.36)	(12.18)	(9.28)
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	.26	.28	.27	.26	.26
Ratio of net investment income to average net assets	1.76	1.52	1.33	1.09	.95
Portfolio Turnover Rate	3.78	2.80	6.05	4.03	4.97
Net Assets, end of period (\$ x 1,000)	3,842,397	3,771,728	3,093,295	4,392,178	5,134,195

^a Based on average shares outstanding at each month end.

^b Amount represents less than \$.01 per share.

See notes to financial statements.

Service Shares	Year Ended December 31,				
	2004	2003	2002	2001	2000 ^a
Per Share Data (\$):					
Net asset value, beginning of period	28.40	22.44	29.33	34.00	34.00
Investment Operations:					
Investment income—net	.46 ^b	.32 ^b	.29 ^b	.24 ^b	—
Net realized and unrealized gain (loss) on investments	2.46	5.93	(6.89)	(4.48)	—
Total from Investment Operations	2.92	6.25	(6.60)	(4.24)	—
Distributions:					
Dividends from investment income—net	(.42)	(.29)	(.29)	(.27)	—
Dividends from net realized gain on investments	—	—	—	(.16)	—
Dividends from return of capital	(.00) ^c	—	—	—	—
Total Distributions	(.42)	(.29)	(.29)	(.43)	—
Net asset value, end of period	30.90	28.40	22.44	29.33	34.00
Total Return (%)	10.35	28.05	(22.55)	(12.46)	—
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	.51	.53	.51	.57	—
Ratio of net investment income to average net assets	1.59	1.27	1.19	.83	—
Portfolio Turnover Rate	3.78	2.80	6.05	4.03	4.97
Net Assets, end of period (\$ x 1,000)	503,456	283,150	78,762	26,461	1

^a The fund commenced offering Service shares on December 31, 2000.

^b Based on average shares outstanding at each month end.

^c Amount represents less than \$.01 per share.

See notes to financial statements.

NOTE 1—Significant Accounting Policies:

Dreyfus Stock Index Fund, Inc. (the “fund”) is registered under the Investment Company Act of 1940, as amended (the “Act”), as a non-diversified open-end management investment company, that is intended to be a funding vehicle for variable annuity contracts and variable life insurance policies to be offered by the separate accounts of life insurance companies. The fund’s investment objective is to match the total return of the Standard and Poor’s 500 Composite Stock Price Index. The Dreyfus Corporation (“Dreyfus”) serves as the fund’s manager and Mellon Equity Associates (“Mellon Equity”), an affiliate of Dreyfus, serves as the fund’s index manager. Dreyfus is a wholly-owned subsidiary of Mellon Financial Corporation (“Mellon Financial”).

Dreyfus Service Corporation (the “Distributor”), a wholly-owned subsidiary of Dreyfus, is the distributor of the fund’s shares, which are sold without a sales charge. The fund is authorized to issue 400 million shares of \$.001 par value Common Stock in each of the following classes of shares: Initial shares (250 million shares authorized) and Service shares (150 million shares authorized). Initial shares are subject to a shareholder services fee and Service shares are subject to a distribution fee. Each class of shares has identical rights and privileges, except with respect to the distribution plan and shareholder services plan and the expenses borne by each class and certain voting rights. Income, expenses (other than expenses attributable to a specific class), and realized and unrealized gains or losses on investments are allocated to each class of shares based on its relative net assets.

The fund’s financial statements are prepared in accordance with U.S. generally accepted accounting principles, which may require the use of management estimates and assumptions. Actual results could differ from those estimates.

The fund enters into contracts that contain a variety of indemnifications. The fund’s maximum exposure under these arrangements is unknown. The fund does not anticipate recognizing any loss related to these arrangements.

(a) Portfolio valuation: Investments in securities are valued at the last sales price on the securities exchange or national securities market on which such securities are primarily traded. Securities listed on the National Market System for which market quotations are available are valued at the official closing price or, if there is no official closing price that day, at the last sales price. Securities not listed on an exchange or the national securities market, or securities for which there were no transactions, are valued at the average of the most recent bid and asked prices, except for open short positions, where the asked price is used for valuation purposes. Bid price is used when no asked price is available. When market quotations or official closing prices are not readily available, or are determined not to reflect accurately fair value, such as when the value of a security has been significantly affected by events after the close of the exchange or market on which the security is principally traded (for example, a foreign exchange or market), but before the fund calculates its net asset value, the fund may value these investments at fair value as determined in accordance with the procedures approved by the Board of Directors. Fair valuing of securities may be determined with the assistance of a pricing service using calculations based on indices of domestic securities and other appropriate indicators, such as prices of relevant ADR's and futures contracts. For other securities that are fair valued by the Board of Directors, certain factors may be considered such as: fundamental analytical data, the nature and duration of restrictions on disposition, an evaluation of the forces that influence the market in which the securities are purchased and sold, and public trading in similar securities of the issuer or comparable issuers. Financial futures are valued at the last sales price.

(b) Securities transactions and investment income: Securities transactions are recorded on a trade date basis. Realized gain and loss from securities transactions are recorded on the identified cost basis. Dividend income is recognized on the ex-dividend date and interest income, including, where applicable, accretion of discount and amortization of premium on investments is recognized on the accrual basis.

The fund has an arrangement with the custodian bank whereby the fund receives earnings credits from the custodian when positive cash balances are maintained, which are used to offset custody fees. For financial reporting purposes, the fund includes net earnings credits, if any, as an expense offset in the Statement of Operations.

Pursuant to a securities lending agreement with Mellon Bank, N.A., an affiliate of Dreyfus, the fund may lend securities to qualified institutions. At originations, all loans are secured by collateral of at least 102% of the value of U.S. securities loaned and 105% of the value of foreign securities loaned. Collateral equivalent to at least 100% of the market value of securities on loan will be maintained at all times. Cash collateral is invested in certain money market mutual funds managed by Dreyfus. The fund will be entitled to receive all income on securities loaned, in addition to income earned as a result of the lending transaction. Although each security loaned is fully collateralized, the fund would bear the risk of delay in recovery of, or loss of rights in, the securities loaned should a borrower fail to return the securities in a timely manner.

The fund may engage in repurchase agreement transactions. Under the terms of a typical repurchase agreement, the fund, through its custodian and sub-custodian, takes possession of an underlying debt obligation subject to an obligation of the seller to repurchase, and the fund to resell, the obligation at an agreed-upon price and time, thereby determining the yield during the fund's holding period. This arrangement results in a fixed rate of return that is not subject to market fluctuations during the fund's holding period. The value of the collateral is at least equal, at all times, to the total amount of the repurchase obligation, including interest. In the event of a counter party default, the fund has the right to use the collateral to offset losses incurred. There is potential loss to the fund in the event the fund is delayed or prevented from exercising its rights to dispose of the collateral securities, including the risk of a possible decline in the value of the underlying securities during the period while

the fund seeks to assert its rights. Dreyfus, acting under the supervision of the Board of Directors, reviews the value of the collateral and the creditworthiness of those banks and dealers with which the fund enters into repurchase agreements to evaluate potential risks.

(c) Affiliated issuers: Investments in other investment companies advised by Dreyfus are defined as “affiliated” in the Act.

(d) Dividends to shareholders: Dividends are recorded on the ex-dividend date. Dividends from investment income-net are declared and paid on a quarterly basis. Dividends from net realized capital gain, if any, are normally declared and paid annually, but the fund may make distributions on a more frequent basis to comply with the distribution requirements of the Internal Revenue Code of 1986, as amended (the “Code”). To the extent that net realized capital gain can be offset by capital loss carryovers, it is the policy of the fund not to distribute such gain. Income and capital gain distributions are determined in accordance with incomes tax regulations, which may differ from U.S. generally accepted accounting principles.

(e) Federal income taxes: It is the policy of the fund to continue to qualify as a regulated investment company, if such qualification is in the best interests of its shareholders, by complying with the applicable provisions of the Code, and to make distributions of taxable income sufficient to relieve it from substantially all federal income and excise taxes.

At December 31, 2004, the components of accumulated earnings on a tax basis were as follows: accumulated, capital losses \$352,175,625 and unrealized appreciation \$934,109,141. In addition, the fund had \$6,897,849 of capital losses realized after October 31, 2004 which were deferred for tax purposes to the first day of the following fiscal year.

The accumulated capital loss carryover is available to be applied against future net securities profits, if any, realized subsequent to December 31, 2004. If not applied, \$309,578,875 of the carryover expires in fiscal 2010, \$27,409,843 expires in fiscal 2011 and \$15,186,907 expires in fiscal 2012.

The tax character of distributions paid to shareholders during the fiscal periods ended December 31, 2004 and December 31, 2003, were as follows: ordinary income \$72,058,723 and \$51,178,951 and return of capital \$986,369 and \$0, respectively.

During the period ended December 31, 2004, as a result of permanent book to tax differences primarily due to the tax treatment for real estate investment trusts, the fund decreased accumulated undistributed investment income-net by \$481,043, increased accumulated net realized gain (loss) on investments by \$476,155 and increased paid-in capital by \$4,888. Net assets were not affected by this reclassification.

NOTE 2—Bank Line of Credit:

The fund participates with other Dreyfus-managed funds in a \$350 million redemption credit facility (the “Facility”) to be utilized for temporary or emergency purposes, including the financing of redemptions. In connection therewith, the fund has agreed to pay commitment fees on its pro rata portion of the Facility. Interest is charged to the fund based on prevailing market rates in effect at the time of borrowings.

The average daily amount of borrowings outstanding under the Facility during the period ended December 31, 2004, was approximately \$305,500 with a related weighted average annualized interest rate of 2.07%.

NOTE 3—Management Fee, Index Management Fee and Other Transactions With Affiliates:

(a) Pursuant to a Management Agreement with Dreyfus, the management fee is computed at the annual rate of .245 of 1% of the value of the fund’s average daily net assets, and is payable monthly. Dreyfus has agreed to pay Mellon Equity a monthly index-management fee at the annual rate of .095 of 1% of the value of the fund’s average daily net assets. Dreyfus has undertaken from January 1, 2004 until such time as they give shareholders at least 180 days notice to the contrary that if

any full fiscal year the fund's aggregate expenses exclusive of brokerage commissions, Rule 12b-1 distribution plan fees, transaction fees and extraordinary expenses, exceed an annual rate of .40 of 1% of the fund's average daily net assets, the fund may deduct from the payments to be made to Dreyfus, or Dreyfus will bear, such excess expense. During the period ended December 31, 2004, there was no expense reimbursement pursuant to the undertaking.

(b) Under the Distribution Plan (the "Plan") adopted pursuant to Rule 12b-1 under the Act, Service shares pay the Distributor for distributing their shares, for servicing and/or maintaining Service shares shareholder accounts and for advertising and marketing for Service shares. The Plan provides payments to be made at an annual rate of .25 of 1% of the value of the Service shares average daily net assets. The Distributor may make payments to Participating Insurance Companies and brokers and dealers acting as principal underwriter for their variable insurance products. The fees payable under the Plan are payable without regard to actual expenses incurred. During the period ended December 31, 2004, Service shares were charged \$951,200 pursuant to the Plan.

(c) Under the Shareholder Services Plan, Initial shares reimburses the Distributor an amount not to exceed an annual rate of .25 of 1% of the value of the Initial shares' average daily net assets for certain allocated expenses with respect to servicing and/or maintaining Initial shares shareholder accounts. During the period ended December 31, 2004, Initial shares were charged \$14,807 pursuant to the Shareholder Services Plan.

The fund compensates Dreyfus Transfer, Inc., a wholly-owned subsidiary of Dreyfus, under a transfer agency agreement for providing personnel and facilities to perform transfer agency services for the fund. During the period ended December 31, 2004, the fund was charged \$1,089 pursuant to the transfer agency agreement.

The components of Due to The Dreyfus Corporation and affiliates in the Statement of Assets and Liabilities consist of: management fees \$896,060, Rule 12b-1 distribution plan fees \$103,634, shareholder services plan fees \$1,000 and transfer agency per account fees \$190.

(d) Each Board member also serves as a Board member of other funds within the Dreyfus complex. Annual retainer fees and attendance fees are allocated to each fund based on net assets.

NOTE 4—Securities Transactions:

The aggregate amount of purchases and sales of investment securities, excluding short-term securities and financial futures, during the period ended December 31, 2004, amounted to \$221,595,426 and \$153,834,661, respectively.

The fund may invest in financial futures contracts in order to gain exposure to or protect against changes in the market. The fund is exposed to market risk as a result of changes in the value of the underlying financial instruments. Investments in financial futures require the fund to “mark to market” on a daily basis, which reflects the change in the market value of the contract at the close of each day’s trading. Typically, variation margin payments are received or made to reflect daily unrealized gains or losses. When the contracts are closed, the fund recognizes a realized gain or loss. These investments require initial margin deposits with a broker, which consist of cash or cash equivalents. The amount of these deposits is determined by the exchange or Board of Trade on which the contract is traded and is subject to change. Contracts open at December 31, 2004 are set forth in the Statement of Financial Futures.

At December 31, 2004, the cost of investments for federal income tax purposes was \$3,444,709,989; accordingly, accumulated net unrealized appreciation on investments was \$934,109,141, consisting of \$1,418,817,265 gross unrealized appreciation and \$484,708,124 gross unrealized depreciation. The difference between book basis and tax-basis unrealized appreciation is attributable primarily to the tax deferral of losses on wash sales.

NOTE 5—Legal Matters:

In early 2004, two purported class and derivative actions were filed against Mellon Financial, Mellon Bank, N.A., Dreyfus, Founders Asset Management LLC, and certain directors of the Dreyfus Funds and the

Dreyfus Founders Funds (together, the “Funds”). In September 2004, plaintiffs served a Consolidated Amended Complaint (the “Amended Complaint”) on behalf of a purported class of all persons who acquired interests in any of the Funds between January 30, 1999 and November 17, 2003, and derivatively on behalf of the Funds. The Amended Complaint in the newly styled In re Dreyfus Mutual Funds Fee Litigation also named the Distributor, Premier Mutual Fund Services, Inc. and two additional Fund directors as defendants and alleges violations of the Investment Company Act of 1940, the Investment Advisers Act of 1940, the Pennsylvania Unfair Trade Practices and Consumer Protection Law and common-law claims. Plaintiffs seek to recover allegedly improper and excessive Rule 12b-1 and advisory fees allegedly charged to the Funds for marketing and distribution services. More specifically, plaintiffs claim, among other things, that 12b-1 fees and directed brokerage were improperly used to pay brokers to recommend the Funds over other funds, and that such payments were not disclosed to investors. In addition, plaintiffs assert that economies of scale and soft-dollar benefits were not passed on to the Funds. Plaintiffs further allege that 12b-1 fees were improperly charged to certain of the Funds that were closed to new investors. The Amended Complaint seeks compensatory and punitive damages, rescission of the advisory contracts, and an accounting and restitution of any unlawful fees, as well as an award of attorneys’ fees and litigation expenses. As noted, some of the claims in this litigation are asserted derivatively on behalf of the Funds that have been named as nominal defendants. With respect to such derivative claims, no relief is sought against the Funds. Dreyfus believes the allegations to be totally without merit and intends to defend the action vigorously. Defendants filed motions to dismiss the Amended Complaint on November 12, 2004, and those motions are pending.

Additional lawsuits arising out of these circumstances and presenting similar allegations and requests for relief may be filed against the defendants in the future. Neither Dreyfus nor the Funds believe that any of the pending actions will have a material adverse effect on the Funds or Dreyfus’ ability to perform its contract with the Funds.

REPORT OF INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM

**To the Board of Directors and Shareholders of
Dreyfus Stock Index Fund, Inc.**

In our opinion, the accompanying statement of assets and liabilities, including the statements of investments and financial futures, and the related statements of operations and of changes in net assets and the financial highlights present fairly, in all material respects, the financial position of Dreyfus Stock Index Fund, Inc. (the "Fund") at December 31, 2004, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period then ended and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as "financial statements") are the responsibility of the Fund's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of securities owned at December 31, 2004 by correspondence with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

New York, New York
February 1, 2005

IMPORTANT TAX INFORMATION (Unaudited)

For federal tax purposes, the portfolio hereby designates 100% of the ordinary dividends paid during the fiscal year ended December 31, 2004 as qualifying for the corporate dividends received deduction. Shareholders will receive notification in January 2005 of the percentage applicable to the preparation of their 2004 income tax returns.

BOARD MEMBERS INFORMATION (Unaudited)

Joseph S. DiMartino (61) **Chairman of the Board (1995)**

Principal Occupation During Past 5 Years:

- Corporate Director and Trustee

Other Board Memberships and Affiliations:

- The Muscular Dystrophy Association, Director
- Levcor International, Inc., an apparel fabric processor, Director
- Century Business Services, Inc., a provider of outsourcing functions for small and medium size companies, Director
- The Newark Group, a provider of a national market of paper recovery facilities, paperboard mills and paperboard converting plants, Director
- Azimuth Trust, an institutional asset management firm, Member of Board of Managers and Advisory Board

No. of Portfolios for which Board Member Serves: 186

David P. Feldman (65) **Board Member (1989)**

Principal Occupation During Past 5 Years:

- Corporate Director & Trustee

Other Board Memberships and Affiliations:

- BBH Mutual Funds Group (11 funds), Director
- The Jeffrey Company, a private investment company, Director
- QMED, a medical device company, Director

No. of Portfolios for which Board Member Serves: 51

Ehud Houminer (64) **Board Member (1996)**

Principal Occupation During Past 5 Years:

- Executive-in-Residence at the Columbia Business School, Columbia University
- Principal of Lear, Yavitz and Associates, a management consulting firm (1996 to 2001)

Other Board Memberships and Affiliations:

- Avnet Inc., an electronics distributor, Director
- International Advisory Board to the MBA Program School of Management, Ben Gurion University, Chairman
- Explore Charter School, Brooklyn, NY, Chairman

No. of Portfolios for which Board Member Serves: 30

Gloria Messinger (75)
Board Member (1996)

Principal Occupation During Past 5 Years:

- Arbitrator for American Arbitration Association and National Association of Securities Dealers, Inc.
- Consultant in Intellectual Property

Other Board Memberships and Affiliations:

- Yale Law School Fund, Director
- Theater for a New Audience, Inc., Director
- Brooklyn Philharmonic, Director
- New York Women's Agenda Music Performance Trust Fund, Director

No. of Portfolios for which Board Member Serves: 19

T. John Szarkowski (79)
Board Member (1991)

Principal Occupation During Past 5 Years:

- Consultant in Photography

Other Board Memberships and Affiliations:

- Photography Department at The Museum of Modern Art, Director Emeritus

No. of Portfolios for which Board Member Serves: 19

Anne Wexler (74)
Board Member (1991)

Principal Occupation During Past 5 Years:

- Chairman of the Wexler & Walker Public Policy Associates, consultants specializing in government relations and public affairs

Other Board Memberships and Affiliations:

- Wilshire Mutual Funds (5 funds), Director
- Methanex Corporation, a methanol producing company, Director
- Member of the Council of Foreign Relations
- Member of the National Park Foundation

No. of Portfolios for which Board Member Serves: 29

Once elected all Board Members serve for an indefinite term. The address of the Board Members and Officers is in c/o The Dreyfus Corporation, 200 Park Avenue, New York, New York 10166. Additional information about the Board Members is available in the fund's Statement of Additional Information which can be obtained from Dreyfus free of charge by calling this toll free number: 1-800-554-4611.

John M. Fraser, Jr., Emeritus Board Member

OFFICERS OF THE FUND (Unaudited)

STEPHEN E. CANTER, President since March 2000.

Chairman of the Board, Chief Executive Officer and Chief Operating Officer of the Manager, and an officer of 92 investment companies (comprised of 185 portfolios) managed by Dreyfus. Mr. Canter also is a Board member and, where applicable, an Executive Committee Member of the other investment management subsidiaries of Mellon Financial Corporation, each of which is an affiliate of Dreyfus. He is 59 years old and has been an employee of Dreyfus since May 1995.

STEPHEN R. BYERS, Executive Vice President since November 2002.

Chief Investment Officer, Vice Chairman and a director of Dreyfus, and an officer of 92 investment companies (comprised of 185 portfolios) managed by Dreyfus. Mr. Byers also is an officer, director or an Executive Committee Member of certain other investment management subsidiaries of Mellon Financial Corporation, each of which is an affiliate of the Dreyfus. He is 51 years old and has been an employee of Dreyfus since January 2000. Prior to joining Dreyfus, he served as an Executive Vice President-Capital Markets, Chief Financial Officer and Treasurer at Gruntal & Co., L.L.C.

MARK N. JACOBS, Vice President since March 2000.

Executive Vice President, Secretary and General Counsel of Dreyfus, and an officer of 93 investment companies (comprised of 201 portfolios) managed by Dreyfus. He is 58 years old and has been an employee of Dreyfus since June 1977.

MICHAEL A. ROSENBERG, Secretary since March 2000.

Associate General Counsel of Dreyfus, and an officer of 90 investment companies (comprised of 194 portfolios) managed by Dreyfus. He is 44 years old and has been an employee of Dreyfus since October 1991.

STEVEN F. NEWMAN, Assistant Secretary since March 2000.

Associate General Counsel and Assistant Secretary of the Manager, and an officer of 93 investment companies (comprised of 201 portfolios) managed by Dreyfus. He is 55 years old and has been an employee of Dreyfus since July 1980.

JAMES WINDELS, Treasurer since November 2001.

Director - Mutual Fund Accounting of Dreyfus, and an officer of 93 investment companies (comprised of 201 portfolios) managed by Dreyfus. He is 46 years old and has been an employee of Dreyfus since April 1985.

RICHARD CASSARO, Assistant Treasurer since August 2003.

Senior Accounting Manager - Equity Funds of Dreyfus, and an officer of 26 investment companies (comprised of 102 portfolios) managed by Dreyfus. He is 44 years old and has been an employee of Dreyfus since September 1982.

KENNETH J. SANDGREN, Assistant Treasurer since November 2001.

Mutual Funds Tax Director of Dreyfus, and an officer of 93 investment companies (comprised of 201 portfolios) managed by Dreyfus. He is 50 years old and has been an employee of Dreyfus since June 1993.

ROBERT SVAGNA, Assistant Treasurer since December 2002.

Senior Accounting Manager - Equity Funds of Dreyfus, and an officer of 27 investment companies (comprised of 107 portfolios) managed by Dreyfus. He is 37 years old and has been an employee of Dreyfus since November 1990.

JOSEPH W. CONNOLLY, Chief Compliance Officer since October 2004.

Chief Compliance Officer of Dreyfus and The Dreyfus Family of Funds (93 investment companies, comprising 201 portfolios). From November 2001 through March 2004, Mr. Connolly was first Vice-President, Mutual Fund Servicing for Mellon Global Securities Services. In that capacity, Mr. Connolly was responsible for managing Mellon's Custody, Fund Accounting and Fund Administration services to third-party mutual fund clients. He is 47 years old and has served in various capacities with Dreyfus since 1980, including manager of the firm's Fund Accounting Department from 1997 through October 2001.

WILLIAM GERMENIS, Anti-Money Laundering Compliance Officer since October 2002.

Vice President and Anti-Money Laundering Compliance Officer of the Distributor, and the Anti-Money Laundering Compliance Officer of 88 investment companies (comprised of 196 portfolios) managed by Dreyfus. He is 34 years old and has been an employee of the Distributor since October 1998.

For More Information

Dreyfus Stock Index Fund, Inc.

200 Park Avenue
New York, NY 10166

Manager

The Dreyfus Corporation
200 Park Avenue
New York, NY 10166

Index Fund Manager

Mellon Equity Associates
500 Grant Street
Pittsburgh, PA 15258

Custodian

Boston Safe Deposit and Trust
Company
One Boston Place
Boston, MA 02109

**Transfer Agent &
Dividend Disbursing Agent**

Dreyfus Transfer, Inc.
200 Park Avenue
New York, NY 10166

Distributor

Dreyfus Service Corporation
200 Park Avenue
New York, NY 10166

Telephone Call your financial representative or 1-800-554-4611

Mail The Dreyfus Family of Funds, 144 Glenn Curtiss Boulevard, Uniondale, NY 11556-0144
Attn: Institutional Servicing

The fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission ("SEC") for the first and third quarters of each fiscal year on Form N-Q. The fund's Forms N-Q are available on the SEC's website at <http://www.sec.gov> and may be reviewed and copied at the SEC's Public Reference Room in Washington, DC. Information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

A description of the policies and procedures that the fund uses to determine how to vote proxies relating to portfolio securities, and information regarding how the fund voted these proxies for the 12-month period ended June 30, 2004, is available through the fund's website at <http://www.dreyfus.com> and on the SEC's website at <http://www.sec.gov>. The description of the policies and procedures is also available without charge, upon request, by calling 1-800-645-6561.

