

Dreyfus Midcap Index Fund, Inc.

SEMIANNUAL REPORT April 30, 2007



Dreyfus

A Mellon Financial CompanySM

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A LETTER FROM THE CEO

Dear Shareholder:

We are pleased to present this semiannual report for Dreyfus Midcap Index Fund, Inc., covering the six-month period from November 1, 2006, through April 30, 2007.

The U.S. economy moderated throughout the reporting period as a cooling housing market took its toll on consumer and business spending, and key measures of inflation stayed stubbornly above the Federal Reserve's stated "comfort zone." Yet, labor markets remained relatively strong and the general markets continued toward record price levels. Dreyfus' chief economist believes that these seemingly conflicting signals may be the result of a lag between the current downturn in housing activity and its likely dampening effect on housing-related employment. In his view, inflationary pressures may moderate over the coming months in an environment of modestly rising unemployment rates and sub-par economic growth.

The likely implications of this economic outlook include a long pause in Fed policy before an eventual easing of short-term interest rates, a modest drop in 10-year Treasury bond yields, decelerating corporate earnings, continued high pace of mergers-and-acquisitions activity and a probable continuation of the ongoing shift in investor sentiment toward higher quality stocks. We expect these developments to produce both challenges and opportunities in the financial markets, and your financial advisor can help determine the appropriate investments for you and position your investment portfolio for these trends.

For information about how the fund performed during the reporting period, as well as market perspectives, we have provided a Discussion of Fund Performance given by the fund's Portfolio Manager.

Thank you for your continued confidence and support.

Sincerely,

Thomas F. Eggers
Chief Executive Officer
The Dreyfus Corporation
May 15, 2007



DISCUSSION OF FUND PERFORMANCE

Tom Durante, CFA, Portfolio Manager

How did Dreyfus Midcap Index Fund perform relative to its benchmark?

For the six-month period ended April 30, 2007, Dreyfus Midcap Index Fund produced a total return of 11.68%.¹ The Standard & Poor's MidCap 400 Index ("S&P 400 Index"), the fund's benchmark, produced a total return of 11.98% for the same period.^{2,3}

Despite occasional bouts of volatility during the reporting period, midcap stocks advanced in an environment of robust corporate earnings, subdued inflation and stable interest rates. As they have for some time, midsize companies continue to post greater gains than most large- and small-cap companies during the reporting period. Results were particularly attractive in the industrials, information technology and consumer discretionary sectors. The difference in returns between the fund and the S&P 400 Index was primarily the result of transaction costs and operating expenses that are not reflected by the S&P 400 Index.

What is the fund's investment approach?

The fund seeks to match the total return of the S&P 400 Index by generally investing in all 400 stocks in the S&P 400 Index, in proportion to their respective weightings. The fund may also use stock index futures whose performance is tied to the S&P 400 Index as a substitute for the sale or purchase of stocks. The S&P 400 Index is composed of 400 stocks of midsize domestic companies across 10 economic sectors. Each stock is weighted by its market capitalization; that is, larger companies have greater representation in the S&P 400 Index than smaller ones.

What other factors influenced the fund's performance?

During the reporting period, U.S. economic growth slowed gradually, led by weakness in the housing market. In contrast to the United States, many international economies flourished during the reporting period,

most notably China, Europe, Australia and New Zealand. These trends suggest that the United States may have passed the baton in driving the growth of the global economy, at least temporarily, to other countries.

In this environment, U.S. stocks posted generally favorable returns over the first few months of the reporting period, fueled by increased mergers-and-acquisitions activity, strong corporate earnings, low unemployment, stable interest rates and subdued inflation. Turmoil in Chinese equity markets and the U.S. sub-prime mortgage market in late February produced heightened volatility in the U.S. financial markets, but the decline proved to be short-lived. The stock market rallied strongly in late March and April, more than offsetting previous weakness.

Some of the midcap market's stronger gains for the reporting period were produced by companies in the industrials sector, where machinery producers posted especially attractive returns. Agriculture equipment companies flourished due to larger crops of corn and sugar to be used in ethanol production as an alternative energy source. Mining equipment stocks also gained value in a robust commodities market. Other positive contributors within the industrials area included parts suppliers to the aerospace industry and engineering firms that help build manufacturing facilities, refineries, power plants, major road projects and other infrastructure projects around the world.

In the information technology sector, midcap semiconductor manufacturers posted attractive results, largely due to rising demand for specialty microchips and wafers used in the production of solar power. Electronic component makers also prospered during the reporting period on sales of parts used in the next wave of electronic products and computers.

Specialty retailers within the consumer discretionary area also contributed positively to the S&P 400 Index's performance. Top performers included apparel stores located in regional malls that cater to younger consumers. For-profit education companies also rebounded during the reporting period, as the industry put previous problems behind it and demand remained strong from individuals seeking to improve their skills and knowledge in a tight labor market.

On the other hand, no sector posted a negative absolute return, and relatively few industry groups detracted from the S&P 400 Index's overall return. However, airline stocks generally languished during the reporting period due to flight scheduling issues and concerns associated with their cost structures. Declines in the biotechnology industry can be traced to one company's difficulties in bringing new drugs to market. Finally, while the S&P 400 Index's financial stocks fared well overall, consumer finance companies and thrifts were hurt by their exposure to the troubled housing market.

What is the fund's current strategy?

As an index fund, our strategy is to attempt to replicate the returns of the S&P 400 Index by maintaining an asset allocation that closely approximates that of the S&P 400 Index. In our view, an investment in a broadly diversified midcap index fund, such as Dreyfus Midcap Index Fund, may help investors in their efforts to manage the risks associated with midcap investing by limiting the impact on the overall portfolio of unexpected losses in any single industry group or holding.

May 15, 2007

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. Return figure provided reflects the absorption of certain fund expenses by The Dreyfus Corporation pursuant to an agreement in effect that may be extended, terminated or modified. Had these expenses not been absorbed, the fund's return would have been lower.*

² *SOURCE: LIPPER INC. — Reflects reinvestment of dividends and, where applicable, capital gain distributions. The Standard & Poor's MidCap 400 Index is a widely accepted, unmanaged total return index measuring the performance of the midsize company segment of the U.S. market.*

³ *"Standard & Poor's®," "S&P®" and "Standard & Poor's MidCap 400 Index" 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.*

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 Midcap Index Fund, Inc. from November 1, 2006 to April 30, 2007. 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 April 30, 2007	
Expenses paid per \$1,000†	\$ 2.62
Ending value (after expenses)	\$1,116.80

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 April 30, 2007	
Expenses paid per \$1,000†	\$ 2.51
Ending value (after expenses)	\$1,022.32

† Expenses are equal to the fund's annualized expense ratio of .50%, multiplied by the average account value over the period, multiplied by 181/365 (to reflect the one-half year period).

STATEMENT OF INVESTMENTS

April 30, 2007 (Unaudited)

Common Stocks—97.7%	Shares	Value (\$)
Consumer Cyclical—10.3%		
99 Cents Only Stores	94,495 ^a	1,351,279
Advance Auto Parts	213,750	8,806,500
Aeropostale	106,385 ^a	4,377,743
AirTran Holdings	184,750 ^a	2,034,098
Alaska Air Group	81,537 ^a	2,413,495
American Eagle Outfitters	405,950	11,963,347
American Greetings, Cl. A	114,995	2,926,623
AnnTaylor Stores	145,240 ^a	5,588,835
Applebee's International	150,350	4,086,513
Barnes & Noble	103,490	4,090,960
BJ's Wholesale Club	130,154 ^a	4,494,218
Bob Evans Farms	72,394	2,656,860
Borders Group	120,145	2,536,261
Boyd Gaming	86,450	3,933,475
Brinker International	247,449	7,695,664
CarMax	434,730 ^a	10,833,472
CBRL Group	50,925	2,270,237
CDW	122,600	8,828,426
Charming Shoppes	249,400 ^a	3,117,500
Cheesecake Factory	158,325 ^a	4,369,770
Chico's FAS	355,510 ^a	9,371,244
Claire's Stores	188,264	6,131,758
Coldwater Creek	122,400 ^a	2,533,680
Dick's Sporting Goods	76,100 ^a	4,268,449
Dollar Tree Stores	207,550 ^a	8,160,866
Fastenal	253,900	10,440,368
Foot Locker	314,790	7,488,854
GameStop, Cl. A	306,800 ^a	10,176,556
Hanesbrands	194,900 ^a	5,182,391
JetBlue Airways	360,425 ^{a,b}	3,571,812
MSC Industrial Direct, Cl. A	108,200	5,273,668
NetFlix	122,300 ^{a,b}	2,711,391
O'Reilly Automotive	229,400 ^a	8,166,640
OSI Restaurant Partners	151,995	6,050,921
Pacific Sunwear of California	140,500 ^a	2,940,665

Common Stocks (continued)	Shares	Value (\$)
Consumer Cyclical (continued)		
Payless ShoeSource	133,490 ^a	4,258,331
PetSmart	274,500	9,110,655
Phillips-Van Heusen	112,300	6,277,570
Rent-A-Center	142,200 ^a	3,958,848
Ross Stores	282,700	9,371,505
Ruby Tuesday	109,895	2,940,790
Saks	280,870	5,881,418
Sotheby's, Cl. A	115,727	5,973,828
Timberland, Cl. A	101,650 ^a	2,623,587
Urban Outfitters	226,500 ^a	5,834,640
Williams-Sonoma	226,825	7,988,777
		255,064,488
Consumer Hard Goods—2.8%		
ArvinMeritor	144,238	2,978,515
Bandag	23,250	1,172,730
BorgWarner	117,285	9,137,674
Callaway Golf	125,795	2,259,278
Federal Signal	96,363	1,521,572
Furniture Brands International	97,785	1,572,383
Gentex	289,100	5,145,980
Herman Miller	130,450	4,488,785
HNI	96,952	4,046,776
International Speedway, Cl. A	72,350	3,574,090
Lear	154,545 ^a	5,674,892
Modine Manufacturing	66,570	1,539,764
Mohawk Industries	108,640 ^{a,b}	9,794,982
Oshkosh Truck	149,500	8,363,030
Scientific Games, Cl. A	135,700 ^{a,b}	4,517,453
Thor Industries	70,985	2,827,333
		68,615,237
Consumer Staples—2.1%		
Alberto-Culver	164,700	4,000,563
Blyth	50,950	1,329,795
Church & Dwight	132,714	6,732,581
Hansen Natural	123,100 ^{a,b}	4,702,420
Hormel Foods	147,835	5,631,035
J.M. Smucker	114,488	6,390,720

Common Stocks (continued)		
	Shares	Value (\$)
Consumer Staples (continued)		
Lancaster Colony	47,349	1,999,548
PepsiAmericas	122,435	2,955,581
Ruddick	72,680	2,182,580
Sensient Technologies	94,578	2,476,052
Smithfield Foods	201,820 ^a	6,169,637
Tootsie Roll Industries	54,844 ^b	1,589,928
Tupperware Brands	123,440	3,471,133
Universal/Richmond, VA	52,566	3,294,837
		52,926,410
Financial—16.2%		
A.G. Edwards	152,224	11,028,629
AMB Property	200,050	12,185,045
American Financial Group/OH	141,681	4,997,089
AmeriCredit	237,545 ^a	5,993,260
Arthur J. Gallagher & Co.	198,955	5,562,782
Associated Banc-Corp	263,893	8,544,855
Astoria Financial	170,775	4,535,784
Bank of Hawaii	100,555	5,319,359
BISYS Group	244,825 ^a	2,832,625
Broadridge Financial Solutions	275,000 ^a	5,511,000
Brown & Brown	232,980	5,999,235
Cathay General Bancorp	104,700	3,433,113
City National/Beverly Hills, CA	80,987	5,929,868
Colonial BancGroup	309,075	7,436,344
Commerce Group	97,100	3,166,431
Cousins Properties	88,500	2,970,945
Cullen/Frost Bankers	121,130	6,198,222
Eaton Vance	255,690	9,772,472
Everest Re Group	129,485	13,031,370
Fidelity National Financial, Cl. A	448,170	11,423,853
First American	195,205	10,053,057
First Niagara Financial Group	221,100	3,006,960
FirstMerit	162,050	3,383,604
Greater Bay Bancorp	103,200	2,661,528
Hanover Insurance Group	103,685	4,765,363
HCC Insurance Holdings	226,310	6,938,665
Highwoods Properties	113,730	4,637,909

Common Stocks (continued)	Shares	Value (\$)
Financial (continued)		
Horace Mann Educators	87,200	1,834,688
Hospitality Properties Trust	189,840	8,643,415
IndyMac Bancorp	146,290 ^b	4,423,810
Investors Financial Services	133,500	8,260,980
Jefferies Group	212,760	6,744,492
Liberty Property Trust	184,850	8,944,891
Macerich	145,500	13,839,960
Mack-Cali Realty	137,085	6,713,052
Mercury General	71,900	3,893,385
MoneyGram International	169,655	4,823,292
New York Community Bancorp	554,519	9,681,902
Nuveen Investments, Cl. A	160,600	8,559,980
Ohio Casualty	121,135	3,832,711
Old Republic International	467,612	9,946,107
PMI Group	175,760	8,519,087
Potlatch	78,683	3,414,055
Protective Life	141,645	6,643,150
Radian Group	161,705	9,396,678
Raymond James Financial	187,192	5,743,051
Rayonier	156,273	6,777,560
Regency Centers	140,000	11,536,000
SEI Investments	128,200	7,824,046
StanCorp Financial Group	108,400	5,159,840
SVB Financial Group	69,825 ^a	3,576,436
TCF Financial	226,890	6,144,181
UDR	274,220	8,237,569
Unitrin	81,290	3,832,823
W.R. Berkley	343,250	11,152,192
Waddell & Reed Financial, Cl. A	169,650	4,108,923
Washington Federal	176,918	4,194,726
Webster Financial	114,230	5,077,523
Weingarten Realty Investors	152,800	7,313,008
Westamerica Bancorporation	61,300	2,870,679
Wilmington Trust	138,540	5,605,328
		398,588,887

Common Stocks (continued)

	Shares	Value (\$)
Health Care—10.5%		
Advanced Medical Optics	120,776 ^a	4,882,974
Affymetrix	138,000 ^a	3,625,260
Apria Healthcare Group	87,600 ^a	2,780,424
Beckman Coulter	124,764	7,836,427
Cephalon	132,900 ^a	10,580,169
Charles River Laboratories International	135,400 ^a	6,412,544
Community Health Systems	190,315 ^a	7,003,592
Covance	129,390 ^a	7,828,095
Cytoc	232,150 ^a	8,178,644
Dentsply International	307,700	10,280,257
Edwards Lifesciences	117,085 ^a	5,737,165
Gen-Probe	105,800 ^a	5,407,438
Health Management Associates, Cl. A	489,800	5,235,962
Health Net	226,340 ^a	12,235,940
Henry Schein	177,900 ^a	9,273,927
Hillenbrand Industries	124,490	7,612,564
Intuitive Surgical	75,100 ^a	9,737,466
Invitrogen	95,200 ^a	6,232,744
LifePoint Hospitals	116,000 ^a	4,235,160
Lincare Holdings	177,050 ^a	6,982,852
Martek Biosciences	65,200 ^a	1,407,668
Medicis Pharmaceutical, Cl. A	112,500	3,420,000
Millennium Pharmaceuticals	642,762 ^a	7,121,803
Mine Safety Appliances	60,500	2,550,075
Omnicare	245,665	8,148,708
Par Pharmaceutical Cos.	72,700 ^a	1,957,811
PDL BioPharma	233,150 ^{a,b}	5,889,369
Perrigo	153,600	2,918,400
Pharmaceutical Product Development	209,900	7,571,093
Psychiatric Solutions	108,600 ^a	3,808,602
Resmed	155,400 ^a	6,567,204
Sepracor	222,900 ^a	11,965,272
STERIS	131,245	3,354,622
Techne	79,700 ^a	4,699,909
Triad Hospitals	178,747 ^a	9,498,616

Common Stocks (continued)	Shares	Value (\$)
Health Care (continued)		
Universal Health Services, Cl. B	108,935	6,614,533
Valeant Pharmaceuticals International	190,950	3,440,919
Varian	61,800 ^a	3,581,928
VCA Antech	169,200 ^a	6,671,556
Ventana Medical Systems	66,800 ^a	3,245,812
Vertex Pharmaceuticals	256,150 ^a	7,874,051
WellCare Health Plans	67,100 ^a	5,407,589
		259,815,144
Industrial-15.8%		
AGCO	184,705 ^a	7,707,740
Alexander & Baldwin	86,737	4,636,093
Alliant Techsystems	66,700 ^a	6,211,771
Avis Budget Group	204,810 ^a	5,761,305
Beazer Homes USA	79,200	2,643,696
Brink's	98,135	6,231,572
Career Education	191,900 ^a	5,668,726
Con-way	94,185	5,145,326
Copart	144,000 ^a	4,173,120
Corinthian Colleges	174,800 ^a	2,417,484
Crane	103,000	4,378,530
DeVry	120,595	3,978,429
Donaldson	139,366	5,006,027
DRS Technologies	82,000	4,125,420
Dycom Industries	82,200 ^a	2,129,802
Energizer Holdings	113,550 ^a	11,034,789
Expeditors International Washington	433,000	18,099,400
Florida Rock Industries	99,800	6,898,176
Flowserve	114,650	6,994,796
GATX	107,296	5,258,577
Graco	134,845	5,326,377
Granite Construction	68,487	4,125,657
Hanover Compressor	211,542 ^a	4,575,653
Hovnanian Enterprises, Cl. A	73,940 ^a	1,773,821
Hubbell, Cl. B	121,265	6,268,188
ITT Educational Services	64,800 ^a	6,299,208
J.B. Hunt Transport Services	208,100	5,631,186

Common Stocks (continued)

	Shares	Value (\$)
Industrial (continued)		
Jacobs Engineering Group	239,254 ^a	12,065,579
Joy Global	221,300	11,204,419
KBR	339,100 ^a	7,005,806
Kelly Services, Cl. A	43,585	1,250,889
Kennametal	78,150	5,514,264
Korn/Ferry International	86,500 ^a	2,038,805
Laureate Education	104,000 ^a	6,141,200
Lincoln Electric Holdings	86,600	5,519,018
M.D.C. Holdings	70,500	3,613,830
Manpower	172,255	13,823,464
Martin Marietta Materials	91,180	13,295,868
MDU Resources Group	366,462	11,103,799
Nordson	68,086	3,120,381
NVR	9,800 ^a	8,075,200
Overseas Shipholding Group	59,745	4,229,946
Pentair	202,040	6,493,566
Precision Castparts	277,372	28,877,199
Quanta Services	239,380 ^a	6,580,556
Regis	90,900	3,475,107
Republic Services	340,867	9,520,415
Rollins	60,723	1,400,880
Ryland Group	86,100	3,814,230
Sequa, Cl. A	13,986 ^a	1,639,159
SPX	120,795	8,561,950
Stericycle	89,600 ^a	7,807,744
Strayer Education	28,900	3,593,426
Swift Transportation	109,450 ^a	3,423,596
Teleflex	79,175	5,687,140
Thomas & Betts	103,940 ^a	5,662,651
Timken	190,500	6,282,690
Toll Brothers	256,490 ^a	7,638,272
Trinity Industries	161,751	7,505,246
United Rentals	134,795 ^a	4,515,632
Werner Enterprises	100,550	1,901,400
YRC Worldwide	115,700 ^a	4,603,703
		389,487,899

Common Stocks (continued)	Shares	Value (\$)
Information—5.7%		
Acxiom	139,500	3,152,700
Alliance Data Systems	133,650 ^a	8,508,159
Belo, Cl. A	178,039	3,430,812
Catalina Marketing	73,385	2,326,305
Ceridian	285,640 ^a	9,643,206
Cerner	132,400 ^a	7,048,976
CheckFree	176,800 ^a	5,951,088
ChoicePoint	154,871 ^a	5,880,452
Corporate Executive Board	77,300	4,919,372
CSG Systems International	91,750 ^a	2,457,065
Deluxe	104,400	3,951,540
DST Systems	111,950 ^a	8,737,698
Dun & Bradstreet	121,340	10,957,002
Entercom Communications	56,785	1,575,216
Fair Isaac	115,495	4,124,326
Gartner	105,230 ^a	2,654,953
Global Payments	138,500	5,260,230
Harte-Hanks	95,480	2,492,028
Imation	70,900	2,616,919
Integrated Device Technology	397,560 ^a	5,955,449
Jack Henry & Associates	156,250	3,710,938
John Wiley & Sons, Cl. A	89,400	3,348,030
Lee Enterprises	93,150	2,438,667
Media General, Cl. A	48,800	1,792,912
MPS Group	207,315 ^a	2,838,142
Navigant Consulting	109,800 ^a	2,105,964
NeuStar, Cl. A	131,000 ^a	3,767,560
Scholastic	52,450 ^a	1,619,132
Valassis Communications	96,830 ^a	1,855,263
ValueClick	201,300 ^a	5,757,180
Washington Post, Cl. B	11,429	8,503,176
Westwood One	141,810	965,726
		140,346,186
Materials—6.3%		
Airgas	158,895	7,078,772
Albemarle	159,800	6,783,510
Arch Coal	288,000	10,388,160

Common Stocks (continued)

Shares

Value (\$)

Materials (continued)

Bowater	113,695 ^b	2,488,784
Cabot	130,140	5,895,342
Carlisle Cos.	123,364	5,080,130
Chemtura	487,703	5,379,364
Commercial Metals	239,100	8,017,023
Cytec Industries	85,100	4,671,990
Ferro	87,249	1,815,652
Glatfelter	90,550	1,353,723
Harsco	169,992	8,669,592
Leucadia National	328,184 ^b	9,891,466
Louisiana-Pacific	211,100	4,160,781
Lubrizol	139,888	8,384,887
Lyondell Chemical	433,498	13,490,458
Minerals Technologies	38,450	2,446,189
Olin	148,685	2,548,461
Packaging Corp. of America	165,515	4,098,151
Reliance Steel & Aluminum	130,400	7,745,760
RPM International	241,983	5,146,978
Scotts Miracle-Gro, Cl. A	88,300	3,970,851
Sonoco Products	201,283	8,582,707
Steel Dynamics	176,500	7,820,715
Valspar	206,660	5,588,086
Worthington Industries	141,400	3,146,150

154,643,682**Oil & Gas Producers—7.7%**

Cameron International	227,670 ^a	14,700,652
Cimarex Energy	168,400	6,634,960
Denbury Resources	243,700 ^a	8,064,033
Encore Acquisition	107,400 ^a	2,868,654
FMC	77,500	5,962,075
Forest Oil	110,935 ^a	3,909,349
Frontier Oil	220,900	7,804,397
Grant Prideco	258,848 ^a	13,341,026
Helmerich & Payne	208,770	6,741,183
Newfield Exploration	262,970 ^a	11,504,938
Noble Energy	344,724	20,273,218
ONEOK	224,215	10,854,248

Common Stocks (continued)	Shares	Value (\$)
Oil & Gas Producers (continued)		
Patterson-UTI Energy	316,700	7,724,313
Pioneer Natural Resources	249,825	12,541,215
Plains Exploration & Production	146,495 ^a	6,883,800
Pogo Producing	118,340 ^b	5,711,088
Pride International	334,535 ^a	10,976,093
Quicksilver Resources	112,100 ^a	4,692,506
Southwestern Energy	341,800 ^a	14,355,600
Superior Energy Services	163,100 ^a	5,925,423
Tidewater	116,290	7,350,691
		188,819,462
Technology—12.8%		
3Com	803,700 ^a	3,238,911
Activision	504,754 ^a	10,095,080
ADTRAN	124,800	3,176,160
Advent Software	40,350 ^a	1,354,146
AMETEK	214,776	7,792,073
Amphenol, Cl. A	360,200	12,646,622
Andrew	316,800 ^a	3,459,456
Arrow Electronics	248,582 ^a	9,823,961
Atmel	866,500 ^a	4,609,780
Avnet	260,083 ^a	10,637,395
Avocent	102,750 ^a	2,878,028
Cadence Design Systems	565,990 ^a	12,564,978
CommScope	121,190 ^a	5,653,514
Cree	170,300 ^{a,b}	3,474,120
Cypress Semiconductor	374,243 ^a	8,540,225
Diebold	132,896	6,335,152
F5 Networks	83,500 ^a	6,411,130
Fairchild Semiconductor International	249,875 ^a	4,397,800
FMC Technologies	136,651 ^a	9,685,823
Harris	271,280	13,930,228
Ingram Micro, Cl. A	288,400 ^a	5,658,408
International Rectifier	146,690 ^a	5,175,223
Intersil, Cl. A	274,300	8,171,397
Kemet	169,350 ^a	1,436,088
Lam Research	286,750 ^a	15,421,415
Lattice Semiconductor	232,100 ^a	1,267,266

Common Stocks (continued)

	Shares	Value (\$)
Technology (continued)		
Macrovision	105,500 ^a	2,560,485
McAfee	322,705 ^a	10,484,685
MEMC Electronic Materials	340,200 ^a	18,670,176
Mentor Graphics	171,859 ^a	2,780,679
Micrel	114,650	1,438,858
Microchip Technology	437,150	17,634,631
National Instruments	115,400	3,215,044
Palm	206,500 ^a	3,485,720
Parametric Technology	230,700 ^a	4,099,539
Plantronics	96,850	2,431,904
Polycom	183,800 ^a	6,120,540
Powerwave Technologies	263,350 ^a	1,640,671
RF Micro Devices	390,300 ^a	2,439,375
Roper Industries	177,800	9,967,468
Semtech	147,300 ^a	2,124,066
Silicon Laboratories	110,900 ^a	3,638,629
SRA International, Cl. A	83,500 ^a	2,039,905
Sybase	185,960 ^a	4,498,372
Synopsys	293,600 ^a	8,120,976
Tech Data	110,200 ^a	3,916,508
Transaction Systems Architects	75,850 ^a	2,406,721
Triquint Semiconductor	277,638 ^a	1,435,388
UTStarcom	215,100 ^a	1,535,814
Vishay Intertechnology	373,149 ^a	6,212,931
Western Digital	445,000 ^a	7,867,600
Wind River Systems	152,750 ^a	1,501,533
Zebra Technologies, Cl. A	139,495 ^a	5,550,506
		315,653,103
Telecommunication Services--6%		
Cincinnati Bell	500,550 ^a	2,537,789
Telephone & Data Systems	210,535	11,989,968
		14,527,757
Utilities--6.9%		
AGL Resources	157,302	6,848,929
Alliant Energy	235,149	10,299,526
Aqua America	267,723 ^b	5,919,356
Aquila	757,820 ^a	3,129,797

STATEMENT OF INVESTMENTS (Unaudited) (continued)

Common Stocks (continued)	Shares	Value (\$)
Utilities (continued)		
Black Hills	67,592	2,690,838
DPL	228,830	7,173,821
Duquesne Light Holdings	177,545	3,540,247
Energy East	317,266	7,684,183
Equitable Resources	245,980	12,793,420
Great Plains Energy	173,775	5,672,016
Hawaiian Electric Industries	164,753	4,336,299
IDACORP	88,233	3,039,627
National Fuel Gas	167,424	7,870,602
Northeast Utilities	312,040	10,038,327
NSTAR	216,070	7,756,913
OGE Energy	184,751	7,101,828
Pepco Holdings	389,313	11,492,520
PNM Resources	153,531	4,997,434
Puget Energy	236,100	6,096,102
SCANA	235,979	10,272,166
Sierra Pacific Resources	447,536 ^a	8,172,007
Vectren	154,275	4,484,774
Westar Energy	177,005	4,818,076
WGL Holdings	99,440	3,365,050
Wisconsin Energy	236,612	11,544,299
		171,138,157
Total Common Stocks (cost \$1,714,201,268)		2,409,626,412
Short-Term Investments--.1%	Principal Amount (\$)	Value (\$)
U.S. Treasury Bills:		
4.78%, 7/26/07	250,000 ^c	247,178
4.85%, 7/5/07	2,100,000 ^c	2,081,982
Total Short-Term Investments (cost \$2,328,756)		2,329,160
Other Investment--2.2%	Shares	Value (\$)
Registered Investment Company;		
Dreyfus Institutional Preferred Plus Money Market Fund (cost \$55,124,000)	55,124,000 ^d	55,124,000

Investment of Cash Collateral for Securities Loaned—1.0%		
	Shares	Value (\$)
Registered Investment Company;		
Dreyfus Institutional Cash Advantage Plus Fund (cost \$23,998,083)	23,998,083 ^d	23,998,083
Total Investments (cost \$1,795,652,107)	101.0%	2,491,077,655
Liabilities, Less Cash and Receivables	(1.0%)	(24,527,410)
Net Assets	100.0%	2,466,550,245

^a Non-income producing security.

^b All or a portion of these securities are on loan. At April 30, 2007, the total market value of the fund's securities on loan is \$26,213,742 and the total market value of the collateral held by the fund is \$27,898,341, consisting of cash collateral of \$23,998,083 and U.S. Government and agency securities valued at \$3,900,258.

^c All or partially held by a broker as collateral for open financial futures positions.

^d Investment in affiliated money market mutual fund.

Portfolio Summary (Unaudited)[†]			
	Value (%)		Value (%)
Financial	16.2	Information	5.7
Industrial	15.8	Short-Term/ Money Market Investments	3.3
Technology	12.8	Consumer Hard Goods	2.8
Health Care	10.5	Consumer Staples	2.1
Consumer Cyclical	10.3	Telecommunication Services	.6
Oil & Gas Producers	7.7		
Utilities	6.9		
Materials	6.3		101.0

[†] Based on net assets.

See notes to financial statements.

STATEMENT OF FINANCIAL FUTURES

April 30, 2007 (Unaudited)

	Contracts	Market Value Covered by Contracts (\$)	Expiration	Unrealized Appreciation at 4/30/2007 (\$)
Financial Futures Long				
Standard & Poor's Midcap 400 E-mini	690	60,595,800	June 2007	1,925,350

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES

April 30, 2007 (Unaudited)

	Cost	Value
Assets (\$):		
Investments in securities—See Statement of Investments (including securities on loan, valued at \$26,213,742)—Note 1(b):		
Unaffiliated issuers	1,716,530,024	2,411,955,572
Affiliated issuers	79,122,083	79,122,083
Cash		2,664,488
Receivable for shares of Common Stock subscribed		3,777,083
Dividends and interest receivable		1,379,477
		2,498,898,703
Liabilities (\$):		
Due to The Dreyfus Corporation and affiliates—Note 3(b)		1,010,656
Liability for securities on loan—Note 1(b)		23,998,083
Payable for shares of Common Stock redeemed		6,442,719
Payable for futures variation margin—Note 4		897,000
		32,348,458
Net Assets (\$)		2,466,550,245
Composition of Net Assets (\$):		
Paid-in capital		1,727,808,702
Accumulated undistributed investment—net		12,180,950
Accumulated net realized gain (loss) on investments		29,209,695
Accumulated net unrealized appreciation (depreciation) on investments (including \$1,925,350 net unrealized appreciation on financial futures)		697,350,898
Net Assets (\$)		2,466,550,245
Shares Outstanding		
(200 million shares of \$.001 par value Common Stock authorized)		77,482,631
Net Asset Value , offering and redemption price per share—Note 3(c) (\$)		31.83

See notes to financial statements.

STATEMENT OF OPERATIONS

Six Months Ended April 30, 2007 (Unaudited)

Investment Income (\$):	
Income:	
Cash dividends:	
Unaffiliated issuers	21,576,584
Affiliated issuers	969,844
Income from securities lending	140,435
Interest	77,461
Total Income	22,764,324
Expenses:	
Management fee–Note 3(a)	2,917,228
Shareholder servicing costs–Note 3(b)	2,917,228
Loan commitment fees–Note 2	25,859
Total Expenses	5,860,315
Investment Income–Net	16,904,009
Realized and Unrealized Gain (Loss) on Investments–Note 4 (\$):	
Net realized gain (loss) on investments	74,618,119
Net realized gain (loss) on financial futures	1,986,590
Net Realized Gain (Loss)	76,604,709
Net unrealized appreciation (depreciation) on investments (including \$1,650,260 net unrealized appreciation on financial futures)	166,885,661
Net Realized and Unrealized Gain (Loss) on Investments	243,490,370
Net Increase in Net Assets Resulting from Operations	260,394,379

See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS

	Six Months Ended April 30, 2007 (Unaudited)	Year Ended October 31, 2006
Operations (\$):		
Investment income—net	16,904,009	21,470,557
Net realized gain (loss) on investments	76,604,709	79,491,207
Net unrealized appreciation (depreciation) on investments	166,885,661	162,415,969
Net Increase (Decrease) in Net Assets Resulting from Operations	260,394,379	263,377,733
Dividends to Shareholders from (\$):		
Investment income—net	(20,998,329)	(19,493,377)
Net realized gain on investments	(88,327,490)	(86,704,318)
Total Dividends	(109,325,819)	(106,197,695)
Capital Stock Transactions (\$):		
Net proceeds from shares sold	321,935,103	734,836,127
Dividends reinvested	103,680,432	99,747,297
Cost of shares redeemed	(381,102,961)	(780,016,408)
Increase (Decrease) in Net Assets from Capital Stock Transactions	44,512,574	54,567,016
Total Increase (Decrease) in Net Assets	195,581,134	211,747,054
Net Assets (\$):		
Beginning of Period	2,270,969,111	2,059,222,057
End of Period	2,466,550,245	2,270,969,111
Undistributed investment income—net	12,180,950	16,275,271
Capital Share Transactions (Shares):		
Shares sold	10,551,394	25,223,648
Shares issued for dividends reinvested	3,504,973	3,549,776
Shares redeemed	(12,504,343)	(26,884,773)
Net Increase (Decrease) in Shares Outstanding	1,552,024	1,888,651

See notes to financial statements.

FINANCIAL HIGHLIGHTS

The following table describes the performance for the fiscal periods indicated. 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.

	Six Months Ended April 30, 2007 (Unaudited)	Year Ended October 31,				
		2006	2005	2004	2003	2002
Per Share Data (\$):						
Net asset value, beginning of period	29.91	27.81	24.55	22.42	17.66	19.31
Investment Operations:						
Investment income—net ^a	.22	.28	.28	.16	.13	.12
Net realized and unrealized gain (loss) on investments	3.16	3.23	3.87	2.18	5.07	(1.04)
Total from Investment Operations	3.38	3.51	4.15	2.34	5.20	(.92)
Distributions:						
Dividends from investment income—net	(.28)	(.26)	(.16)	(.12)	(.12)	(.15)
Dividends from net realized gain on investments	(1.18)	(1.15)	(.73)	(.09)	(.32)	(.58)
Total Distributions	(1.46)	(1.41)	(.89)	(.21)	(.44)	(.73)
Net asset value, end of period	31.83	29.91	27.81	24.55	22.42	17.66
Total Return (%)	11.68 ^b	12.95	17.14	10.50	30.05	(5.30)
Ratios/Supplemental Data (%):						
Ratio of total expenses to average net assets	.25 ^b	.50	.50	.50	.51	.50
Ratio of net investment income to average net assets	.72 ^b	.95	1.04	.68	.69	.61
Portfolio Turnover Rate	10.76 ^b	16.05	19.54	14.13	12.12	19.09
Net Assets, end of period (\$ x 1,000)	2,466,550	2,270,969	2,059,222	1,526,260	1,119,730	703,536

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

^b Not annualized.

See notes to financial statements.

NOTE 1—Significant Accounting Policies:

Dreyfus Midcap 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. The fund’s investment objective is to match the performance of the Standard & Poor’s Midcap 400 Index. The Dreyfus Corporation (the “Manager” or “Dreyfus”) serves as the fund’s investment adviser. The Manager is a wholly-owned subsidiary of subsidiary of Mellon Financial Corporation (“Mellon Financial”). Dreyfus Service Corporation (the “Distributor”), a wholly-owned subsidiary of the Manager, is the Distributor of the fund’s shares, which are sold to the public without a sales charge.

On May 24, 2007, the shareholders of Mellon Financial and The Bank of New York Company, Inc. approved the proposed merger of the two companies. The new company will be called The Bank of New York Mellon Corporation. As part of this transaction, Dreyfus would become a wholly-owned subsidiary of The Bank of New York Mellon Corporation. The transaction is subject to certain regulatory approvals, as well as other customary conditions to closing. Subject to such approvals and the satisfaction of the other conditions, Mellon Financial and The Bank of New York Company, Inc. expect the transaction to be completed in the third quarter of 2007.

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 sale 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. Registered open-end investment companies that are not traded on an exchange are valued at their net asset value. 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.

The Financial Accounting Standards Board (FASB) released Statement of Financial Accounting Standards No. 157 "Fair Value Measurements" ("FAS 157"). FAS 157 establishes an authoritative definition of fair value, sets out a framework for measuring fair value, and requires additional disclosures about fair-value measurements. The application of FAS 157 is required for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. Management does not believe that the application of this standard will have a material impact on the financial statements of the fund.

(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.

Pursuant to a securities lending agreement with Mellon Bank, N.A., an affiliate of the Manager, the fund may lend securities to qualified institutions. It is the fund's policy, that 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 is maintained at all times. Cash collateral is invested in certain money market mutual funds managed by the Manager. The fund is 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 bears 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.

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

(d) Dividends to shareholders: Dividends are recorded on the ex-dividend date. Dividends from investment income-net and dividends from net realized capital gain, 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, if any, it is the policy of the fund not to distribute such gain. Income and capital gain distributions are determined in accordance with income 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.

The FASB released FASB Interpretation No. 48 “Accounting for Uncertainty in Income Taxes” (FIN 48). FIN 48 provides guidance for how uncertain tax positions should be recognized, measured, presented and disclosed in the financial statements. FIN 48 requires the evaluation of tax positions taken or expected to be taken in the course of preparing the fund’s tax returns to determine whether the tax positions are “more-likely-than-not” of being sustained by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax benefit or expense in the current year. Adoption of FIN 48 is required for fiscal years beginning after December 15, 2006 and is to be applied to all open tax years as of the effective date. Management does not believe that the application of this standard will have a material impact on the financial statements of the fund.

The tax character of distributions paid to shareholders during the fiscal year ended October 31, 2006 were as follows: ordinary income \$28,111,105 and long-term capital gains \$78,086,590. The tax character of current year distributions will be determined at the end of the current fiscal year.

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. During the period ended April 30, 2007, the fund did not borrow under the Facility.

NOTE 3—Management Fee and Other Transactions With Affiliates:

(a) Pursuant to a management agreement (“Agreement”) with the Manager, the management fee is computed at the annual rate of .25% of the value of the fund’s average daily net assets, and is payable monthly. Under the terms of the Agreement, the Manager has agreed to pay all of the fund’s expenses, except management fees, brokerage commissions, taxes, commitment fees, interest fees and expenses of non-interested Board members (including counsel fees), Shareholder Services Plan fees and extraordinary expenses. In addition, the Manager is required to reduce its fee in an amount equal to the fees and expenses of the non-interested Board members (including counsel fees). Each Board member also serves as a Board member of other funds within the Dreyfus complex (collectively, the “Fund Group”). Currently, the Fund and 13 other funds (comprised of 41 portfolios) in the Dreyfus Family of Funds pay each Board member their respective allocated portion of an annual retainer of \$85,000, and an attendance fee of \$10,000 for each regularly scheduled Board meeting, an attendance fee of \$2,000 for each separate in-person committee meeting that is not held in conjunction with a regularly scheduled Board meeting, and an attendance fee of \$1,000 for each Board meeting and separate committee meetings that are conducted by telephone. The Chairman of the Board receives an additional 25% of such compensation and the Audit Committee Chairman receives an additional \$15,000 per annum. The Fund also reimburses each Board member for travel and out of pocket expenses in connection with attending Board or committee meetings. Subject to the fund’s Emeritus Program Guidelines, Emeritus Board members, if any, receive 50% of the fund’s annual retainer fee and per meeting fee paid at the time the Board member achieves emeritus status.

(b) Under the Shareholder Services Plan, the fund pays the Distributor for the provision of certain services at the annual rate of .25% of the value of the fund's average daily net assets. The services provided may include personal services relating to shareholder accounts, such as answering shareholder inquiries regarding the fund and providing reports and other information, and services related to the maintenance of shareholder accounts. The Distributor may make payments to Service Agents (a securities dealer, financial institution or other industry professional) in respect of these services. The Distributor determines the amounts to be paid to Service Agents. During the period ended April 30, 2007, the fund was charged \$2,917,228 pursuant to the Shareholder Services Plan.

The components of Due to The Dreyfus Corporation and affiliates in the Statement of Assets and Liabilities consist of: management fees \$505,328 and shareholders services fee of \$505,328.

(c) A 2% redemption fee is charged and retained by the fund on certain shares redeemed within 60 days of purchase subject to exceptions described in the fund's current prospectus.

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 April 30, 2007, amounted to \$247,903,949 and \$343,060,298, 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. Accordingly, 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 April 30, 2007, are set forth in the Statement of Financial Futures.

At April 30, 2007, accumulated net unrealized appreciation on investments was \$695,425,548, consisting of \$762,888,896 gross unrealized appreciation and \$67,463,348 gross unrealized depreciation.

At April 30, 2007, the cost of investments for federal income tax purposes was substantially the same as the cost for financial reporting purposes (see Statement of Investment).

INFORMATION ABOUT THE REVIEW AND APPROVAL OF THE FUND'S INVESTMENT MANAGEMENT AGREEMENT (Unaudited)

At a meeting of the fund's Board held on March 7 and 8, 2007, the Board unanimously approved the continuation of the fund's Management Agreement with Dreyfus for a one-year term ending March 30, 2008. The Board members, none of whom are "interested persons" (as defined in the Investment Company Act of 1940, as amended) of the fund were assisted in their review by independent legal counsel and met with counsel in executive session separate from representatives of Dreyfus. In approving the continuance of the Management Agreement, the Board considered all factors that they believed to be relevant, including, among other things, the factors discussed below.

Analysis of Nature, Extent and Quality of Services Provided to the Fund. The Board members received a presentation from representatives of Dreyfus regarding services provided to the fund and other funds in the Dreyfus fund complex, and discussed the nature, extent and quality of the services provided to the fund pursuant to its Management Agreement. Dreyfus's representatives reviewed the fund's distribution of accounts and the relationships Dreyfus has with various intermediaries and the different needs of each. Dreyfus's representatives noted the various distribution channels for the fund as well as the diverse methods of distribution among other funds in the Dreyfus fund complex, and Dreyfus's corresponding need for broad, deep, and diverse resources to be able to provide ongoing shareholder services to each distribution channel, including those of the fund. Dreyfus also provided the number of accounts investing in the fund, as well as the fund's asset size.

The Board members also considered Dreyfus's research and portfolio management capabilities and Dreyfus's oversight of day-to-day fund operations, including fund accounting and administration and assistance in meeting legal and regulatory requirements. The Board members also considered Dreyfus's extensive administrative, accounting and compliance infrastructure.

Comparative Analysis of the Fund's Performance and Management Fee and Expense Ratio. The Board members reviewed the fund's performance, management fee and expense ratio, placing significant

emphasis on comparative data supplied by Lipper, Inc., an independent provider of mutual fund data, including contractual and actual (net of fee waivers and expense reimbursements) management fees, operating expense components and total return performance. The fund's performance was compared to that of a Performance Universe, consisting of all funds with the same Lipper classification/objective, and a Performance Group, consisting of comparable funds chosen by Lipper based on guidelines previously approved by the Board. Similarly, the fund's contractual and actual management fee and operating expenses were compared to those of an Expense Universe, consisting of funds with the same or similar Lipper classification/objective, and an Expense Group, consisting of comparable funds chosen by Lipper based on guidelines previously approved by the Board. As part of its review of expenses, the Board also considered other fund expenses, such as transfer agent fees, custody fees, 12b-1 or non-12b-1 service fees (if any), and other non-management fees, as well as any waivers or reimbursements of fees and expenses.

In its review of performance, the Board noted that the fund's average annual total return ranked in the first quintile of its Performance Group for the one-, two-, three, and four-year periods ended December 31, 2006.

In its review of the fund's management fee and operating expenses, the Board examined the range of management fees and expense ratios of the funds in the Expense Group and Expense Universe, noting, among other things, that under the fund's management contract, Dreyfus has agreed to pay all of the fund's expenses, except management fees, shareholder services fees, brokerage commissions, taxes, interest fees and expenses of the non-interested directors and of independent counsel to the fund, and extraordinary expenses. The Board noted that the fund's total expense ratio was in the second quintile of the Expense Group and the third quintile of the Expense Universe (the first quintile represents the funds with the lowest fees).

Representatives of Dreyfus reviewed with the Board members the fees paid to Dreyfus or its affiliates by mutual funds and/or separate accounts managed by Dreyfus with similar investment objectives, policies and strategies as the fund (the "Similar Accounts"), and explained the nature of the Similar Accounts and the differences, from Dreyfus's perspective, as applicable, in providing services to the Similar Accounts as compared to the fund. Dreyfus's representatives also reviewed the costs associated with distribution through intermediaries. The Board analyzed differences in fees paid to Dreyfus and discussed the relationship of the advisory fees paid in light of Dreyfus's performance, and the services provided. The Board members considered the relevance of the fee information provided for the Similar Accounts managed by Dreyfus, to evaluate the appropriateness and reasonableness of the fund's management fees. The Board acknowledged that differences in fees paid by the Similar Accounts seemed to be consistent with the services provided.

Analysis of Profitability and Economies of Scale. Dreyfus's representatives reviewed the dollar amount of expenses allocated and profit received by Dreyfus and the method used to determine such expenses and profit. The Board members evaluated the profitability analysis in light of the relevant circumstances for the fund and the extent to which economies of scale would be realized if the fund grows and whether fee levels reflect these economies of scale for the benefit of fund investors. The Board members also considered potential benefits to Dreyfus from acting as investment adviser and noted that there were no soft dollar arrangements with respect to trading the fund's investments.

It was noted that the Board members should consider Dreyfus's profitability with respect to the fund as part of their evaluation of whether the fees under the Management Agreement bear a reasonable relationship to the mix of services provided by Dreyfus, including the nature, extent and quality of such services and that a discussion of economies of scale is predicated on assets increasing significantly. It also was noted that the profitability percentage for managing the fund was within ranges determined by appropriate court cases to be reasonable given

the services rendered and generally superior service levels provided. The Board also noted the fee waiver and expense reimbursement arrangements in place for the fund and its effect on Dreyfus's profitability.

At the conclusion of these discussions, the Board agreed that it had been furnished with sufficient information to make an informed business decision with respect to continuation of the fund's Management Agreement. Based on the discussions and considerations as described above, the Board made the following conclusions and determinations.

- The Board concluded that the nature, extent and quality of the services provided by Dreyfus are adequate and appropriate.
- The Board generally was satisfied with the fund's total return.
- The Board concluded that the fee paid by the fund to Dreyfus was reasonable in light of the services provided, comparative performance, expense and advisory fee information, costs of the services provided and profits to be realized and benefits derived or to be derived by Dreyfus from its relationship with the fund.
- The Board determined that the economies of scale which may accrue to Dreyfus and its affiliates in connection with the management of the fund had been adequately considered by Dreyfus in connection with the management fee rate charged to the fund and that, to the extent in the future it were determined that material economies of scale had not been shared with the fund, the Board would seek to have those economies of scale shared with the fund.

The Board members considered these conclusions and determinations, along with information received on a routine and regular basis throughout the year, and, without any one factor being dispositive, the Board determined that continuation of the fund's Management Agreement was in the best interests of the fund and its shareholders.

For More Information

Dreyfus
Midcap Index Fund, Inc.
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New York, NY 10166

Manager

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New York, NY 10166

Custodian

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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

Ticker Symbol: PESPX

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

E-mail Send your request to info@dreyfus.com

Internet Information can be viewed online or downloaded at: <http://www.dreyfus.com>

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 1-202-551-8090.

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, 2006, is available 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.

