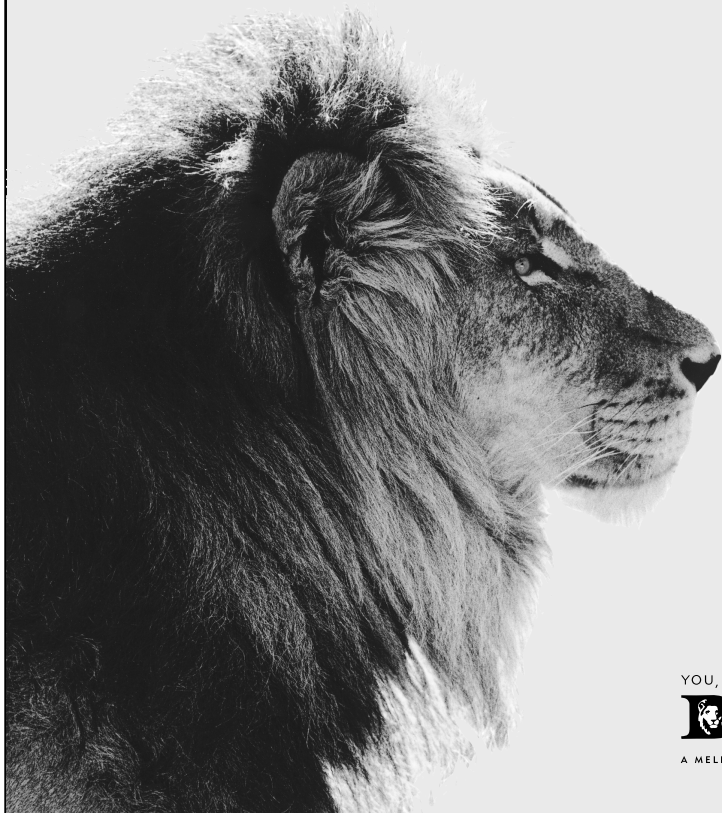


Dreyfus GNMA Fund, Inc.

SEMIANNUAL REPORT October 31, 2004



YOU, YOUR ADVISOR AND

Dreyfus

A MELLON FINANCIAL COMPANY™

The views expressed in this report reflect those of the portfolio manager only through the end of the period covered and do not necessarily represent the views of Dreyfus or any other person in the Dreyfus organization. Any such views are subject to change at any time based upon market or other conditions and Dreyfus disclaims any responsibility to update such views. These views may not be relied on as investment advice and, because investment decisions for a Dreyfus fund are based on numerous factors, may not be relied on as an indication of trading intent on behalf of any Dreyfus fund.

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LETTER FROM THE CHAIRMAN

Dear Shareholder:

We are pleased to present this semiannual report for Dreyfus GNMA Fund, Inc., covering the six-month period from May 1, 2004, through October 31, 2004. Inside, you'll find valuable information about how the fund was managed during the reporting period, including a discussion with Gerald E. Thunelius, portfolio manager and Director of the Dreyfus Taxable Fixed Income Team that manages the fund.

The Federal Reserve Board has raised short-term interest rates three times since the beginning of the summer, and higher commodity prices suggest that inflationary pressures may be rising over the near term. On the other hand, lackluster job growth, low capacity utilization and greater worker productivity should help to keep a lid on inflation over the longer term. The probable result of these conflicting market forces, in our judgment, is a U.S. bond market that trades primarily within a relatively well-defined range and favors higher-quality bonds, but that may occasionally overshoot in both directions.

In uncertain markets such as these, the fixed-income investments that are right for you depend on your current needs, future goals, tolerance for risk and the composition of your current portfolio. As always, your financial advisor may be in the best position to recommend the specific market sectors that will satisfy your income and capital preservation needs most effectively.

Thank you for your continued confidence and support.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen E. Canter", written in a fluid, cursive style.

Stephen E. Canter
Chairman and Chief Executive Officer
The Dreyfus Corporation
November 15, 2004



DISCUSSION OF FUND PERFORMANCE

Gerald E. Thunelius, Director and Senior Portfolio Manager
Dreyfus Taxable Fixed Income Team

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

For the six-month period ended October 31, 2004, the fund achieved a total return of 2.99% and distributed aggregate income dividends totaling \$0.3220 per share.¹ The Lehman Brothers GNMA Index (the “Index”), the fund’s benchmark, achieved a total return of 3.93% for the same period.² In addition, the average total return of all funds reported in the Lipper GNMA Funds category was 3.26%.³

Mortgage-backed securities produced relatively attractive returns over the reporting period as mortgage rates began to rise and refinancing activity abated from previous record levels. The fund produced a lower return than its benchmark and Lipper category average, primarily due to weakness in one holding that was subject to credit-related concerns.

What is the fund’s investment approach?

The fund invests at least 80% of its assets in Government National Mortgage Association (“GNMA” or “Ginnie Mae”) securities. The remainder may be allocated to other mortgage-related securities, including U.S. government agency securities and privately issued mortgage-backed securities, as well as to asset-backed securities, U.S. Treasuries and repurchase agreements. The fund seeks to maximize total return, consisting of capital appreciation and current income.

We use a four-step investment approach:

- *Prepayment trend analysis.* We carefully review the extent to which homeowners are likely to prepay their mortgages because of home sales or refinancing, since a sharp increase or decrease in this trend would adversely affect returns provided by the fund’s mortgage-backed holdings.
- *Option-adjusted spread analysis.* This analytical tool compares the early redemption or extension characteristics of different mortgage-

backed securities with other securities, such as U.S. Treasuries. This analysis helps us measure the relative risk that different types of mortgage-backed securities may have versus their expected total return.

- *Cash flow structure analysis.* This helps us determine the predictability and security of cash flows provided by different bond structures. We analyze the benefits of 15- and 30-year fixed-rate securities along with adjustable-rate mortgage securities (“ARMs”). Also, within the GNMA market, we analyze project loans that offer cash flow protection from loan prepayments.
- *Total-rate-of-return scenarios.* We calculate expected rates of return for each security relative to U.S. Treasury securities under different interest-rate scenarios over a six-month time frame. This helps us estimate which securities are likely to provide above-average returns in any given interest-rate environment.

What other factors influenced the fund’s performance?

Ginnie Mae securities generally fared well over the reporting period in a market environment characterized by a recovering economy, low inflation and rising short-term interest rates. As the economy gained momentum, mortgage rates rose from their previous low levels, and the number of homeowners seeking to refinance their existing mortgages declined, moving closer to historical norms. A lower rate of prepayments helped support prices of mortgage-backed securities, enabling them to rank among the better-performing sectors of the bond market. In addition, banks and other institutional investors increasingly turned to mortgage-backed securities as higher-yielding alternatives to U.S. Treasury securities, supporting their prices.

While portions of the broader mortgage-backed securities market were hurt during the reporting period by allegations of accounting irregularities at Fannie Mae, one of the nation’s largest purchasers of mortgages for securitization, securities issued by Ginnie Mae proved to be relatively unaffected by these concerns.

In this environment, the fund benefited from its focus on Ginnie Mae securities that, in our judgment, would be relatively insensitive to prepayment risk. For example, we focused on pools of low-balance mort-

gages in the belief that homeowners with relatively little indebtedness were less likely to assume the expenses of mortgage refinancing. By the same token, we also emphasized pools of mortgages issued in states, such as New York, where relatively high taxes and fees represent a greater impediment to refinancing. Finally, the fund's holdings of higher-coupon mortgages fared better than lower-coupon mortgages in a rising interest-rate environment.

On the other hand, one of the fund's commercial mortgage-backed securities issues, which was downgraded from a BBB to a B, had a measurable impact on the fund's overall performance. The downgrade was the result of one of the issues underlying loans failing to mature, due to adverse economic conditions in the surrounding area. However, the area is currently undergoing a revitalization, and we believe the appraisal value of the property should assure a full payoff.

What is the fund's current strategy?

As of the end of the reporting period, we have reduced the fund's holdings of commercial mortgage-backed securities, locking in gains and redeploying assets to Ginnie Mae pass-through securities.

Less than two weeks after the close of the reporting period, the Federal Reserve Board increased short-term interest rates for the fourth time since June 2004. Historically, moderately rising interest rates have helped keep prepayment rates low, providing a measure of support for prices of mortgage-backed securities.

November 15, 2004

¹ Total return includes reinvestment of dividends and any capital gains paid. Past performance is no guarantee of future results. Share price, yield and investment return fluctuate such that upon redemption, fund shares may be worth more or less than their original cost.

² SOURCE: LIPPER INC. — Reflects reinvestment of dividends and, where applicable, capital gain distributions. The Lehman Brothers GNMA Index is an unmanaged, total return performance benchmark for the GNMA market consisting of 15- and 30-year fixed-rate securities backed by mortgage pools of the Government National Mortgage Association.

³ Source: Lipper Inc.

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 GNMA Fund, Inc. from May 1, 2004 to October 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 October 31, 2004	
Expenses paid per \$1,000 [†]	\$ 4.45
Ending value (after expenses)	\$1,029.90

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 October 31, 2004	
Expenses paid per \$1,000 [†]	\$ 4.43
Ending value (after expenses)	\$1,020.82

[†] Expenses are equal to the fund's annualized expense ratio of .87%, multiplied by the average account value over the period, multiplied by 184/365 (to reflect the one-half year period).

STATEMENT OF INVESTMENTS

October 31, 2004 (Unaudited)

	Principal Amount (\$)	Value (\$)
Bonds and Notes—120.1%		
U.S. Government Agencies/Mortgage-Backed—99.8%		
Government National Mortgage Association I:		
5%	110,375,000 ^a	110,719,370
5%, 7/15/2033-7/15/2034	4,369,910	4,395,978
5.5%, 2/15/2033-4/15/2034	182,347,932	187,093,420
5.5%, Ser. 2004-39, Cl. C, 12/20/2029	4,260,000	4,474,331
6%	11,691,000 ^a	12,154,899
6%, 8/15/2026-9/15/2034	188,147,178	195,966,482
6.5%, 9/15/2008-6/15/2032	16,249,638	17,272,249
7%, 11/15/2022-12/15/2022	38,244	41,076
7.5%, 12/15/2006-5/15/2026	14,735,645	15,983,721
8%, 4/15/2008-12/15/2022	7,104,379	7,726,422
8.5%, 2/15/2006-12/15/2022	5,271,132	5,817,669
9%, 1/15/2019-12/15/2022	3,781,510	4,269,116
9.5%, 3/15/2018-11/15/2024	1,042,631	1,183,771
Construction Loans,		
6.75%, 3/15/2040	8,167,526	9,197,422
Project Loans:		
6.375%, 10/15/2033	2,726,295	2,897,614
6.5%, 12/15/2023	1,848,621	1,933,112
6.55%, 7/15/2033	7,596,930	7,694,231
6.6%, 9/15/2019-9/15/2030	8,410,637	8,894,535
6.625%, 6/15/2028-5/15/2033	10,336,451	10,805,862
6.75%, 10/15/2033-12/15/2033	6,736,720	7,204,683
		615,725,963
Government National Mortgage Association II:		
3%, 7/20/2030-9/20/2030	2,155,112 ^b	2,164,145
3.375%, 2/20/2027-6/20/2032	12,646,387 ^b	12,725,070
3.5%, 8/20/2032	16,600,322 ^b	16,640,495
4%, 7/20/2032	3,663,318 ^b	3,713,065
4.5%, 1/20/2034	1,679,374 ^b	1,697,266
4.75%, 9/20/2027	22,121 ^b	22,360
5.5%	146,088,000 ^a	149,249,436
6%, 12/20/2028-1/20/2031	3,902,911	4,071,963
6.5%, 5/20/2031-6/20/2031	2,719,790	2,873,622
7%, 4/20/2024-4/20/2032	29,537,092	31,445,603
7.5%, 9/20/2030	455,275	488,136
9.5%, 6/20/2016-2/20/2025	244,955	276,563
Stripped Securities, Interest Only Class,		
Ser. 2002-88, Cl. GI, 5.5%, 6/20/2031	14,327,044 ^c	1,839,204
		227,206,928

Bonds and Notes (continued)	Principal Amount (\$)	Value (\$)
U.S. Government Agencies/ Mortgage-Backed (continued)		
Federal Home Loan Mortgage Corp.:		
Multiclass Mortgage Participation Ctf., REMIC,		
Ser. 2539, Cl. TL, 4.5%, 6/15/2017	2,074,378	2,075,598
Stripped Securities, Interest Only Class:		
Ser. 1583, Cl. ID, 7%, 2/15/2023	223,783 ¢	4,156
Ser. 1882, Cl. PK, 7%, 8/15/2026	585,632 ¢	80,589
Ser. 2048, Cl. PJ, 7%, 4/15/2028	602,836 ¢	95,278
Ser. 2520, Cl. PI, 5.5%, 1/15/2020	4,433,784 ¢	158,882
Ser. 2574, Cl. IB, 5.5%, 5/15/2026	17,641,684 ¢	1,571,698
Ser. 2590, Cl. YD, 5.5%, 4/15/2032	4,545,454 ¢	1,570,877
Ser. 2615, Cl. IE, 5.5%, 9/15/2029	24,000,000 ¢	3,252,000
Ser. 2617, Cl. ID, 5%, 10/15/2030	2,500,000 ¢	738,858
Ser. 2621, Cl. IO, 5%, 1/15/2026	20,587,847 ¢	2,240,837
Ser. 2627, Cl. UI, 5%, 7/15/2023	15,774,296 ¢	1,364,357
Ser. 2630, Cl. IE, 5%, 12/15/2025	2,989,900 ¢	544,849
Ser. 2632, Cl. IB, 5%, 6/15/2026	12,000,000 ¢	2,274,811
Ser. 2638, Cl. IC, 5%, 5/15/2022	7,300,000 ¢	1,000,082
Ser. 2645, Cl. ID, 5%, 12/15/2031	1,000,000 ¢	325,057
Ser. 2645, Cl. IW, 5%, 7/15/2026	32,381,684 ¢	3,760,899
Ser. 2659, Cl. IA, 5%, 12/15/2021	11,109,177 ¢	925,694
Ser. 2676, Cl. IB, 5%, 4/15/2017	4,281,600 ¢	283,101
Ser. 2676, Cl. ID, 5%, 1/15/2023	2,000,000 ¢	292,966
Ser. 2707, Cl. IE, 5%, 5/15/2016	11,458,900 ¢	1,100,638
Ser. 2750, Cl. IG, 5%, 12/15/2022	20,000,000 ¢	2,100,286
Ser. 2764, Cl. IQ, 5%, 1/15/2022	6,000,000 ¢	604,471
		26,365,984
Federal National Mortgage Association:		
6%, 8/1/2034-9/1/2034	11,311,544	11,749,261
6.406%, 1/1/2011	17,674,270	19,497,376
6.82%, 1/1/2028	3,324,874	3,757,410
Ser. 2003-49, Cl. JE, 3%, 4/25/2033	3,145,039	3,054,604
Ser. 2004-58, Cl. LJ, 5%, 7/25/2034	5,871,152	6,084,921
Stripped Securities, Interest Only Class:		
Ser. 1997-40, Cl. PI, 7%, 2/18/2027	2,756,337 ¢	161,108
Ser. 2002-76, Cl. PI, 5.5%, 12/25/2025	6,314,165 ¢	227,533
Ser. 2003-8, Cl. PI, 5.5%, 10/25/2021	5,183,730 ¢	317,469
Ser. 2003-70, Cl. IC, 5%, 8/25/2015	10,166,300 ¢	523,728
Whole Loan,		
Ser. 2001-W1, Cl. AF6, 6.402%, 7/25/2031	5,210,477	5,271,750
		50,645,160
Total U.S. Government Agencies/Mortgage-Backed		919,944,035

Bonds and Notes (continued)	Principal Amount (\$)	Value (\$)
Asset-Backed Ctf s./Home Equity–6.3%		
Ameritrust Mortgage Securities:		
Ser. 2003-11, Cl. AF4, 5.07%, 2034	10,749,000	11,071,659
Ser. 2003-1A1, Cl. A4, 4.965%, 2033	5,700,000	5,798,823
Argent Securities,		
Ser. 2004-W5, Cl. AF3, 2.85%, 2034	11,200,000	10,948,668
Conseco Finance,		
Ser. 2001-D, Cl. A4, 5.53%, 2032	874,939	898,143
Equity One ABS,		
Ser. 2004-3, Cl. AF3, 4.265%, 2034	6,461,000	6,512,409
Equivantage Home Equity Loan Trust,		
Ser. 1997-1, Cl. A4, 7.775%, 2028	2,308,096	2,307,207
GE Capital Mortgage Services,		
Ser. 1999-HE1, Cl. A7, 6.265%, 2029	7,558,266	7,681,541
Residential Funding Mortgage Securities I,		
Ser. 2004-HS2, Cl. A13, 4.4%, 2019	3,578,000	3,629,096
Saxon Asset Securities Trust,		
Ser. 2004-2, Cl. AF2, 4.15%, 2035	9,329,000	9,400,469
Total Asset-Backed Ctf s./Home Equity		58,248,015
Asset-Backed Ctf s./Trade Receivables–.3%		
ACLIC Business Loan Receivables Trust,		
Ser. 1998-1, Cl. A1, 6.435%, 2019	3,697,049 ^d	3,142,492
Commercial Mortgage Pass-Through Ctf s.–1.5%		
Banc of America Large Loan,		
Ser. 2002-FL2A, Cl. H, 3.19%, 2014	2,000,000 ^{b,d}	2,006,250
COMM:		
Ser. 2001-FL5A, Cl. G, 2.733%, 2013	5,335,000 ^{b,d}	4,271,334
Ser. 2002-FL7, Cl. G, 3.72%, 2014	1,303,000 ^{b,d}	1,303,627
CS First Boston Mortgage Securities,		
Ser. 1998-C1, Cl. A1A, 6.26%, 2040	6,136,114	6,248,122
Total Commercial Mortgage Pass-Through Ctf s.		13,829,333
Residential Mortgage Pass-Through Ctf s.–4.1%		
Countrywide Alternative Loan Trust,		
Ser. 2004-7T1, Cl. A1, 5.75%, 2034	19,998,846	20,554,113
Countrywide Home Loans,		
Ser. 2002-35, Cl. 1A5, 5%, 2018	1,960,684	2,003,640
Nomura Asset Acceptance,		
Ser. 2004-AP3, Cl. A3, 4.423%, 2034	9,356,000	9,347,229
Ocwen Residential MBS,		
Ser. 1998-R1, Cl. B1, 7%, 2040	5,248,849 ^d	5,578,484

STATEMENT OF INVESTMENTS (Unaudited) (continued)

	Principal Amount (\$)	Value (\$)
Bonds and Notes (continued)		
Residential Mortgage Pass-Through Ctfs. (continued)		
Residential Asset Securitization Trust, Ser. 2003-A12, Cl. B2, 5%, 2018	239,967	238,960
Structured Asset Securities, Ser. 2000-3, Cl. 2A6, 8%, 2030	135,000	134,828
Total Residential Mortgage Pass-Through Ctfs.		37,857,254
U.S. Government—8.1%		
U.S. Treasury Notes:		
1.625%, 1/31/2005	1,692,000 ^e	1,691,208
3.375%, 9/15/2009	26,259,000	26,375,958
3.5%, 8/15/2009	16,872,000	17,051,855
4%, 6/15/2009	7,728,000	7,982,483
4.25%, 8/15/2014	21,068,000	21,446,381
		74,547,885
Total Bonds and Notes (cost \$1,111,479,356)		1,107,569,014
Other Investments—3.3%		
	Shares	Value (\$)
Registered Investment Company,		
Dreyfus Institutional Preferred Plus Money Market Fund (cost \$30,466,000)	30,466,000 ^f	30,466,000
Total Investments (cost \$1,141,945,356)	123.4%	1,138,035,014
Liabilities, Less Cash and Receivables	(23.4%)	(216,015,376)
Net Assets	100.0%	922,019,638

^a Purchased on a forward commitment basis.

^b Variable rate security—interest rate subject to periodic change.

^c Notional face amount shown.

^d Securities exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers. These securities have been deemed liquid by the Board of Directors. At October 31, 2004, these securities amounted to \$ 16,302,187 or 1.8% of net assets.

^e Partially held by a broker as collateral for open financial futures positions.

^f Investment in affiliated money market mutual fund.

Portfolio Summary (Unaudited)[†]

	Value (%)		Value (%)
U.S. Government Agency/ Mortgage Backed Securities	99.8	U.S. Government Short-Term/Money Market Investments	8.1 3.3
Mortgage/Asset Backed Securities	12.2		123.4

[†] Based on net assets.

See notes to financial statements.

STATEMENT OF FINANCIAL FUTURES

October 31, 2004 (Unaudited)

	Contracts	Market Value Covered by Contracts (\$)	Expiration	Unrealized Appreciation/ (Depreciation) at 10/31/2004 (\$)
Financial Futures Long				
U.S. Treasury 2 Year Notes	8	1,694,125	December 2004	875
U.S. Treasury 5 Year Notes	288	32,076,000	December 2004	67,500
U.S. Treasury 30 Year Bonds	440	50,091,250	December 2004	971,063
Financial Futures Short				
U.S. Treasury 10 Year Notes	423	48,036,937	December 2004	(502,313)
				537,125

STATEMENT OF ASSETS AND LIABILITIES

October 31, 2004 (Unaudited)

	Cost	Value
Assets (\$):		
Investments in securities—See Statement of Investments:		
Unaffiliated issuers	1,111,479,356	1,107,569,014
Affiliated issuers	30,466,000	30,466,000
Cash		2,174,556
Receivable for investment securities sold		93,540,503
Dividends and interest receivable		5,912,466
Receivable for futures variation margin—Note 4		207,875
Receivable for shares of Common Stock subscribed		53,684
Prepaid expenses		17,847
		1,239,941,945
Liabilities (\$):		
Due to The Dreyfus Corporation and affiliates—Note 3(b)		692,995
Payable for investment securities purchased		316,497,155
Payable for shares of Common Stock redeemed		462,043
Accrued expenses		270,114
		317,922,307
Net Assets (\$)		922,019,638
Composition of Net Assets (\$):		
Paid-in capital		955,502,451
Accumulated undistributed investment income—net		22,577
Accumulated net realized gain (loss) on investments		(30,132,173)
Accumulated net unrealized appreciation (depreciation) on investments (including \$537,125 net unrealized appreciation on financial futures)		(3,373,217)
Net Assets (\$)		922,019,638
Shares Outstanding		
(1.1 billion shares of \$.001 par value Common Stock authorized)		62,418,463
Net Asset Value , offering and redemption price per share (\$)		14.77

See notes to financial statements.

STATEMENT OF OPERATIONS

Six Months Ended October 31, 2004 (Unaudited)

Investment Income (\$):

Income:

Interest	20,621,744
Dividends;	
Affiliated issuers	359,981
Income on securities lending	90

Total Income **20,981,815**

Expenses:

Management fee—Note 3(a)	2,803,531
Service plan and prospectus fees—Note 3(b)	666,011
Shareholder servicing costs—Note 3(b)	295,429
Custodian fees—Note 3(b)	119,517
Directors' fees and expenses—Note 3(c)	31,646
Professional fees	30,685
Shareholders' reports	18,713
Registration fees	14,376
Miscellaneous	82,107

Total Expenses **4,062,015**

Investment Income—Net **16,919,800**

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

Net realized gain (loss) on investments	6,086,120
Net realized gain (loss) on options transactions	(58,042)
Net realized gain (loss) on financial futures	(7,437,205)

Net Realized Gain (Loss) **(1,409,127)**

Net unrealized appreciation (depreciation) on investments (including \$654,359 net unrealized appreciation on financial futures)	11,682,034
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Net Realized and Unrealized Gain (Loss) on Investments **10,272,907**

Net Increase in Net Assets Resulting from Operations **27,192,707**

See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS

	Six Months Ended October 31, 2004 (Unaudited)	Year Ended April 30, 2004
Operations (\$):		
Investment income—net	16,919,800	35,823,994
Net realized gain (loss) on investments	(1,409,127)	4,851,176
Net unrealized appreciation (depreciation) on investments	11,682,034	(29,319,669)
Net Increase (Decrease) in Net Assets Resulting from Operations	27,192,707	11,355,501
Dividends to Shareholders from (\$):		
Investment income—net	(20,439,118)	(44,205,895)
Capital Stock Transactions (\$):		
Net proceeds from shares sold	34,815,827	75,894,401
Dividends reinvested	16,566,811	35,739,239
Cost of shares redeemed	(85,563,462)	(194,943,486)
Increase (Decrease) in Net Assets from Capital Stock Transactions	(34,180,824)	(83,309,846)
Total Increase (Decrease) in Net Assets	(27,427,235)	(116,160,240)
Net Assets (\$):		
Beginning of Period	949,446,873	1,065,607,113
End of Period	922,019,638	949,446,873
Undistributed investment income—net	22,577	3,541,895
Capital Share Transactions (Shares):		
Shares sold	2,374,287	5,080,929
Shares issued for dividends reinvested	1,133,924	2,401,260
Shares redeemed	(5,853,775)	(13,086,624)
Net Increase (Decrease) in Shares Outstanding	(2,345,564)	(5,604,435)

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 October 31, 2004 (Unaudited)	Year Ended April 30,				
		2004	2003	2002 ^a	2001	2000
Per Share Data (\$):						
Net asset value, beginning of period	14.66	15.14	14.85	14.49	13.89	14.54
Investment Operations:						
Investment income—net	.27 ^b	.53 ^b	.60 ^b	.81 ^b	.90	.90
Net realized and unrealized gain (loss) on investments	.16	(.35)	.36	.37	.60	(.65)
Total from Investment Operations	.43	.18	.96	1.18	1.50	.25
Distributions:						
Dividends from investment income—net	(.32)	(.66)	(.67)	(.82)	(.90)	(.90)
Net asset value, end of period	14.77	14.66	15.14	14.85	14.49	13.89
Total Return (%)	2.99 ^c	1.20	6.60	8.42	11.22	1.75
Ratios/Supplemental Data (%):						
Ratio of total expenses to average net assets	.87 ^d	.90	.85	.85	.92	.92
Ratio of net investment income to average net assets	3.62 ^d	3.58	3.96	5.53	6.30	6.40
Portfolio Turnover Rate	235.16 ^{c,e}	466.25 ^e	456.90	452.76	458.09	420.18
Net Assets, end of period (\$ x 1,000)	922,020	949,447	1,065,607	997,188	921,098	910,969

^a As required, effective May 1, 2001, the fund has adopted the provisions of the AICPA Audit and Accounting Guide for Investment Companies and began accreting discount or amortizing premium on fixed income securities on a scientific basis and including paydown gains and losses in interest income. The effect of this change for the period ended April 30, 2002 was to decrease net investment income per share by \$.03 and increase net realized and unrealized gain (loss) on investments per share by \$.03 and decrease the ratio of net investment income to average net assets from 5.68% to 5.53%. Per share data and ratios/supplemental data for periods prior to May 1, 2001 have not been restated to reflect this change in presentation.

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

^c Not annualized.

^d Annualized.

^e The portfolio turnover rate excluding mortgage dollar roll transactions for the six month period ended October 31, 2004 and the year ended April 30, 2004 were 65.66% and 207.20%, respectively.

See notes to financial statements.

NOTE 1—Significant Accounting Policies:

Dreyfus GNMA Fund, Inc. (the “fund”) is registered under the Investment Company Act of 1940, as amended (the “Act”), as a diversified open-end management investment company. The fund’s investment objective is to seek to maximize total return consisting of capital appreciation and current income. The Dreyfus Corporation (the “Manager” or “Dreyfus”) serves as the fund’s investment adviser. The Manager is a wholly-owned 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.

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 (excluding short-term investments, other than U.S. Treasury Bills, financial futures and option transactions) are valued each business day by an independent pricing service (the “Service”) approved by the Board of Directors. Investments for which quoted bid prices are readily available and are representative of the bid side of the market in the judgment of the Service are valued at the mean between the quoted bid prices (as obtained by the Service from dealers in such securities) and asked prices (as calculated by the Service based upon its evaluation of the market for such securities). Other investments (which constitute a majority of the portfolio securities) are valued as determined by the Service, based on methods which include consideration of: yields or prices of securities of comparable quality, coupon, maturity and type; indications as to values from dealers; and general market conditions. Securities for which there are no such

valuations are valued at fair value as determined in good faith under the direction of the Board of Directors. Restricted securities, as well as securities or other assets for which recent market quotations are not readily available, that are not valued by a pricing service approved by the fund's Board of Directors, or are determined by the fund not to reflect accurately fair value (such as when an event occurs after the close of the exchange on which the security is principally traded and that is determined by the fund to have changed the value of the security), are valued at fair value as determined in good faith under the direction of the Board of Directors. The factors that may be considered when fair valuing a security include fundamental analytical data, the nature and duration of restrictions on dispositions, 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. Short-term investments, excluding U.S. Treasury Bills, are carried at amortized cost, which approximates value. Financial futures and options are valued at the last sales price on the securities exchange on which such securities are primarily traded or at the last sales price on the national securities market on each business day.

(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. 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 origination, 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 the Manager. 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.

(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 are declared and paid monthly. 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 income tax regulations, which may differ from U.S. generally accepted accounting principles.

On October 29, 2004, the Board of Directors declared a cash dividend of \$.05 per share from undistributed investment income-net, payable on November 1, 2004 (ex-dividend date) to shareholders of record as of the close of business on October 29, 2004.

(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 fund has an unused capital loss carryover of \$28,740,255 available for federal income tax purposes to be applied against future net secu-

rities profits, if any, realized subsequent to April 30, 2004. If not applied, \$5,710,751 of the carryover expires in fiscal 2005, \$6,916,020 expires in fiscal 2007, \$8,326,405 expires in fiscal 2008, \$1,913,534 expires in fiscal 2009 and \$5,873,545 expires in fiscal 2012.

The tax character of distributions paid to shareholders during the fiscal years ended April 30, 2004 was as follows: ordinary income \$44,205,895. The tax character of current year distributions will be determined at the end of the current fiscal year.

NOTE 2—Bank Lines of Credit:

The fund may borrow up to \$20 million for leveraging purposes under a short-term unsecured line of credit and participates with other Dreyfus-managed funds in a \$100 million unsecured line of credit primarily to be utilized for temporary or emergency purposes, including the financing of redemptions. Interest is charged to the fund based on prevailing market rates in effect at the time of borrowings. During the period ended October 31, 2004, the fund did not borrow under either line of credit.

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 .60 of 1% of the value of the fund’s average daily net assets and is payable monthly. The Agreement provides that if in any full year the aggregate expenses of the fund, exclusive of taxes, brokerage fees, interest on borrowings and extraordinary expenses, exceed 1½% of the value of the fund’s average daily net assets, the fund may deduct from payments to be made to the Manager, or the Manager will bear the amount of such excess. No expense reimbursement was required for the period ended October 31, 2004, pursuant to the Agreement.

(b) Under the Service Plan (the “Plan”) adopted pursuant to Rule 12b-1 under the Act, the fund pays the Distributor for distributing the fund’s shares, for servicing shareholder accounts and for advertising and

marketing relating to the fund. The Plan provides for payments to be made at an aggregate annual rate not to exceed .20 of 1% of the value of the fund's average daily net assets. The Distributor determines the amounts, if any, to be paid to Service Agents to which it will make payments and the basis on which such payments are made. The Plan also separately provides for the fund to bear the costs of preparing, printing and distributing certain of the fund's prospectuses and statements of additional information and costs associated with implementing and operating the Plan, not to exceed the greater of \$100,000 or .005 of 1% of the value of the fund's average daily net assets for any full fiscal year. During the period ended October 31, 2004, the fund was charged \$666,011 pursuant to the Plan.

The fund compensates Dreyfus Transfer, Inc., a wholly-owned subsidiary of the Manager, under a transfer agency agreement for providing personnel and facilities to perform transfer agency services for the fund. During the period ended October 31, 2004, the fund was charged \$242,018 pursuant to the transfer agency agreement.

The fund compensates Mellon Bank, N.A., an affiliate of the Manager, under a custody agreement for providing custodial services for the fund. During the period ended October 31, 2004, the fund was charged \$119,517 pursuant to the custody agreement.

The components of Due to The Dreyfus Corporation and affiliates in the Statement of Assets and Liabilities consist of: management fees \$469,565, Rule 12b-1 distribution fees \$101,739, custodian fees \$40,730 and transfer agency per account fees \$80,961.

(c) 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.

(d) Pursuant to an exemptive order from the Securities and Exchange Commission, the fund may invest its available cash balances in affiliated money market mutual funds. Management fees of the underlying money market mutual funds have been waived by the Manager.

NOTE 4—Securities Transactions:

The aggregate amount of purchases and sales (including paydowns) of investment securities, excluding short-term securities, financial futures and option transactions, during the period ended October 31, 2004, amounted to \$2,682,520,252 and \$2,757,378,258, respectively, of which \$1,933,545,599 in purchases and \$1,940,483,800 in sales were from dollar roll transactions.

A mortgage dollar roll transaction involves a sale by the fund of mortgage related securities that it holds with an agreement by the fund to repurchase similar securities at an agreed upon price and date. The securities purchased will bear the same interest rate as those sold, but generally will be collateralized by pools of mortgages with different prepayment histories than those securities sold.

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 contracts 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 October 31, 2004, are set forth in the Statement of Financial Futures.

At October 31, 2004, accumulated net unrealized depreciation on investments was \$3,910,342, consisting of \$17,596,306 gross unrealized appreciation and \$21,506,648 gross unrealized depreciation.

At October 31, 2004, the cost of investments for federal income tax purposes was substantially the same as the cost for financial reporting purposes (see the Statement of Investments).

NOTE 5—Reverse Repurchase Agreements:

The fund may enter into reverse repurchase agreements with banks, brokers or dealers. This form of borrowing involves the transfer by the fund of an underlying debt instrument in return for cash proceeds based on a percentage of the value of the security. The fund retains the right to receive interest and principal payments on the security. At an agreed upon future date, the fund repurchases the security at principal plus accrued interest. Reverse repurchase agreements may subject the fund to interest rate risk and counter party credit risk. During the period ended October 31, 2004, the fund did not enter into reverse repurchase agreements.

NOTE 6—Legal Matters:

Two class actions have been filed against Mellon Financial, Mellon Bank, N.A., Dreyfus, Founders Asset Management LLC and the directors of all or substantially all of the Dreyfus funds, on behalf of a purported class and derivatively on behalf of said funds, alleging violations of the Investment Company Act of 1940, the Investment Advisers Act of 1940, and the common law. The complaints alleged, among other things, (i) that 12b-1 fees and directed brokerage were improperly used to pay brokers to recommend Dreyfus funds over other funds, (ii) that such payments were not disclosed to investors, (iii) that economies of scale and soft-dollar benefits were not passed on to investors and (iv) that 12b-1 fees charged to certain funds that were closed to new investors were also improper. The complaints sought 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. On April 22, 2004, the actions were consolidated under the caption In re Dreyfus Mutual Funds Fee Litigation, and a consolidated amended complaint was filed on September 13, 2004. While adding new parties and claims under state and federal law, the allegations in the consolidated amended complaint essentially track the allegations in the prior complaints pertaining to 12b-1 fees, directed brokerage, soft dollars and revenue sharing. Dreyfus and the funds believe the allegations to be totally without merit and intend to defend the action vigorously.

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 Dreyfus funds believe that any of the pending actions will have a material adverse effect on the Dreyfus funds or Dreyfus' ability to perform its contracts with the Dreyfus funds.

For More Information

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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 1-800-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.

