

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**Form 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

Commission File No.: 0-50231

**Federal National Mortgage Association**

*(Exact name of registrant as specified in its charter)*

**Fannie Mae**

**Federally chartered corporation**  
*(State or other jurisdiction of  
incorporation or organization)*

**52-0883107**  
*(I.R.S. Employer  
Identification No.)*

**3900 Wisconsin Avenue, NW**  
**Washington, DC**  
*(Address of principal executive offices)*

**20016**  
*(Zip Code)*

**Registrant's telephone number, including area code:**  
**(202) 752-7000**

**Securities registered pursuant to Section 12(b) of the Act:**  
**None**

**Securities registered pursuant to Section 12(g) of the Act:**  
**Common Stock, without par value**  
**(Title of class)**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes  No

As of the close of business on February 28, 2003, there were 986,925,508 shares of common stock outstanding. As of June 28, 2002 (the last business day of Registrant's most recent second fiscal quarter), the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$73,217 million. As of February 28, 2003, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$63,262 million.

**DOCUMENTS INCORPORATED BY REFERENCE**

Material contained in the registration statement of Fannie Mae on Form 10 filed with the Securities and Exchange Commission on March 31, 2003 is incorporated by reference in Part II, Item 5, and Part III of this Form 10-K.

# TABLE OF CONTENTS

## PART I

### Item 1. Business

#### Overview

#### The Residential Mortgage Market

#### Fannie Mae Business Standards

#### Mortgage Committing and Servicing Arrangements

#### Business Segments

#### Housing Goals

#### Competition

#### Employees

#### Government Regulation and Charter Act

### Item 2. Properties

### Item 3. Legal Proceedings

### Item 4. Submission of Matters to a Vote of Security Holders

## PART II

### Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

### Item 6. Selected Financial Data

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

#### Forward-Looking Information

## ORGANIZATION OF INFORMATION

### 2002 OVERVIEW

### ABOUT FANNIE MAE

### RESULTS OF OPERATIONS

### CORE BUSINESS EARNINGS AND BUSINESS SEGMENT RESULTS

### OFF-BALANCE SHEET TRANSACTIONS

### APPLICATION OF CRITICAL ACCOUNTING POLICIES

### RISK MANAGEMENT

### LIQUIDITY AND CAPITAL RESOURCES

### PERFORMANCE OUTLOOK

### NEW ACCOUNTING STANDARDS

### Item 7A. Quantitative and Qualitative Disclosures About Market Risk

### Item 8. Financial Statements and Supplementary Data

### Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

## PART III

### Item 10. Directors and Executive Officers of the Registrant

### Section 16(a) Beneficial Ownership Reporting Compliance

### Item 11. Executive Compensation

### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

### Item 13. Certain Relationships and Related Transactions

### Item 14. Controls and Procedures

## PART IV

### Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

## SIGNATURES

## CERTIFICATIONS

### Ex-99.1 Certification by Chief Executive Officer

### Ex-99.2 Certification by Chief Financial Officer

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## TABLE OF CONTENTS

	<b>Page</b>
<b>PART I</b>	<b>1</b>
Item 1. Business	1
Overview	1
Introduction	1
Business Segments	1
Additional Information	2
The Residential Mortgage Market	3
Residential Mortgage Debt Outstanding	3
Our Role in the Secondary Mortgage Market	4
Fannie Mae Business Standards	4
Principal Balance Limits	4
Loan-to-Value Ratios	5
Underwriting Guidelines	5
The Mortgage Seller or Servicer	6
Mortgage Committing and Servicing Arrangements	6
Single-Family Mortgage Commitments	6
Servicing Arrangements	6
Business Segments	7
Portfolio Investment Business	7
Credit Guaranty Business	10
Fee-Based Services	13
Housing Goals	14
Competition	14
Employees	16
Government Regulation and Charter Act	16
Charter Act	16
Regulatory Approval and Oversight	17
Capital Requirements	18
Dividend Restrictions	18
Item 2. Properties	19
Item 3. Legal Proceedings	19
Item 4. Submission of Matters to a Vote of Security Holders	19
<b>PART II</b>	<b>19</b>
Item 5. Market for Registrant's Common Equity and Related Stockholder Matters	19
Item 6. Selected Financial Data	20
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Forward-Looking Information	22
Organization of Information	23
2002 Overview	23
About Fannie Mae	25
Results of Operations	26
Net Interest Income	27
Guaranty Fee Income	29
Fee and Other Income (Expense)	30
Credit-Related Expenses	30
Administrative Expenses	31
Special Contribution	32
Purchased Options Expense	32
Debt Extinguishments	32

	<b>Page</b>
Income Taxes	33
Cumulative Effect of Change in Accounting Principle	33
Core Business Earnings and Business Segment Results	33
Core Business Earnings	33
Taxable-Equivalent Revenues	37
Core Net Interest Income	38
Business Segment Results	40
Off-Balance Sheet Transactions	53
Guaranteed MBS and Other Mortgage-Related Securities	53
Commitments	54
Application of Critical Accounting Policies	55
Allowance for Loan Losses and Guaranty Liability for MBS	55
Deferred Price Adjustments	57
Time Value of Purchased Options	59
Risk Management	61
Interest Rate Risk Management	61
Credit Risk Management	75
Operations Risk Management	94
Liquidity and Capital Resources	96
Liquidity	96
Capital Resources	97
Performance Outlook	100
New Accounting Standards	100
Accounting for Stock Compensation	100
Guarantor's Accounting and Disclosure Requirements for Guarantees	101
Special Purpose Entities ("SPEs")	101
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	102
Item 8. Financial Statements and Supplementary Data	103
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	151
<b>PART III</b>	151
Item 10. Directors and Executive Officers of the Registrant	151
Section 16(a) Beneficial Ownership Reporting Compliance	151
Item 11. Executive Compensation	151
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	151
Item 13. Certain Relationships and Related Transactions	151
Item 14. Controls and Procedures	151
<b>PART IV</b>	152
Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K	152
<b>SIGNATURES</b>	153
<b>CERTIFICATIONS</b>	155

## PART I

### Item 1. *Business*

#### Overview

##### *Introduction*

At Fannie Mae (formally, the Federal National Mortgage Association), our purpose is to facilitate the flow of low-cost mortgage capital in order to increase the availability and affordability of homeownership for low-, moderate-, and middle-income Americans. We operate under a federal charter and our primary regulator is the Office of Federal Housing Enterprise Oversight (“OFHEO”). However, we are a private, shareholder-owned company. The U.S. government does not guarantee, directly or indirectly, Fannie Mae’s debt securities or other obligations.

Fannie Mae is the nation’s largest source of funds for mortgage lenders and investors, providing resources for our customers to make additional mortgage loans or investments in mortgage-related securities. We provide liquidity to the mortgage market for the benefit of borrowers; however, we do not lend money directly to consumers. We operate exclusively in the secondary mortgage market by purchasing mortgages and mortgage-related securities, including Fannie Mae mortgage-related securities, from primary market institutions, such as commercial banks, savings and loan associations, mortgage companies, securities dealers and other investors. We provide additional liquidity in the secondary mortgage market by issuing and guaranteeing mortgage-related securities.

We also offer fee-based services to our customers that facilitate our purpose and mission. These services include issuing and administering a variety of mortgage-related securities, providing credit enhancements and offering technology products to aid in originating and underwriting mortgage loans.

Fannie Mae expands equal housing access and opportunity in America by helping our lender customers reach the nation’s underserved families and communities. In 1994, we launched our Trillion Dollar Commitment to provide \$1 trillion in home financing for 10 million families traditionally underserved by mainstream mortgage finance. After achieving that goal ahead of plan, in 2000 Fannie Mae announced a new, redoubled affordable housing plan, our \$2 trillion American Dream Commitment®, to serve 18 million underserved families by 2010.

Under the American Dream Commitment, Fannie Mae has pledged to promote mortgage consumer rights, including broader, more equal access to lowest-cost mortgage credit; fight mortgage discrimination and lead the housing market in serving minority families, including a pledge to provide \$700 billion in financing for 4.6 million minority households; address the unique housing needs of women-headed households, young families, new immigrants, seniors, and urban and rural dwellers; strengthen inner-city communities and older suburban areas; provide new technologies to mortgage lenders and consumers in order to lower mortgage financing costs; and increase the supply of affordable rental housing.

Fannie Mae was established in 1938 as a United States government-owned entity to provide supplemental liquidity to the secondary market for residential mortgages and to promote access to mortgage credit throughout the nation. We became a stockholder-owned and privately-managed corporation by legislation enacted in 1968, which we refer to as the “Charter Act” (the Federal National Mortgage Association Charter Act, 12 U.S.C. §1716 et seq.). Our common stock is traded primarily on the New York Stock Exchange under the symbol “FNM.”

##### *Business Segments*

We provide liquidity in the secondary mortgage market through our two primary business segments: the portfolio investment business and the credit guaranty business.

In the portfolio investment business, we purchase loans and mortgage-related securities from mortgage lenders, which replenishes those lenders’ funds for making additional mortgage loans. We also purchase loans, mortgage-related securities and other investments from securities dealers, investors and other market

participants. In addition, our liquid investment portfolio invests in high quality, short-term, non-mortgage assets that can provide us with liquidity as the need arises. We acquire the funds to purchase these loans, mortgage-related securities and other investments from our equity capital and by selling debt securities to domestic and international capital markets investors. By doing so, we expand the total amount of funds available to finance housing in the United States. Income from our portfolio investment business comes primarily from the difference, or spread, between the yield on mortgage loans and other investments in our portfolio and our borrowing costs.

In the credit guaranty business, we receive fees for our guaranty of timely payment of scheduled principal and interest on mortgage-related securities guaranteed by Fannie Mae and held by investors other than Fannie Mae. For segment reporting purposes, we also allocate a fee comparable to an MBS guaranty fee from the portfolio investment business to the credit guaranty business for management of the credit risk on mortgage portfolio investments. The guaranty fees we charge are based on the credit risk we assume, the costs of administering the mortgage-related securities and market and competitive factors. In a typical mortgage-related securities transaction, a lender will deliver mortgage loans to us that it has originated or purchased. We place these loans in a trust and issue certificates evidencing beneficial interests in the trust, then deliver the certificates with our guaranty to the lender or its designee. The lender may then hold the mortgage-related securities as an investment or sell the securities in the market to replenish its funds for additional lending. This activity provides liquidity to the lender because mortgage-related securities, with Fannie Mae's guaranty, are more readily marketable than mortgage loans without this guaranty.

We have described our business segments in more detail under "Business — Overview — Business Segments."

### ***Additional Information***

In this document, we refer to both whole loans and participation interests in loans as "loans," "mortgage loans" and "mortgages." The term "mortgage" also is used to refer to the deed of trust or other security instrument securing a loan. The terms "loans" and "mortgage loans" may include loans secured by manufactured housing. Mortgage loans secured by four or fewer dwelling units are referred to as "single-family" mortgage loans and mortgage loans secured by more than four dwelling units are referred to as "multifamily" mortgage loans. We use the term "mortgage-related securities" generally to refer to mortgage pass-through trust certificates representing beneficial interests in pools of mortgage loans or other mortgage-related securities. The term "MBS" (mortgage-backed securities) specifically refers to mortgage-related securities we issue and on which we guarantee timely payment of scheduled principal and interest.

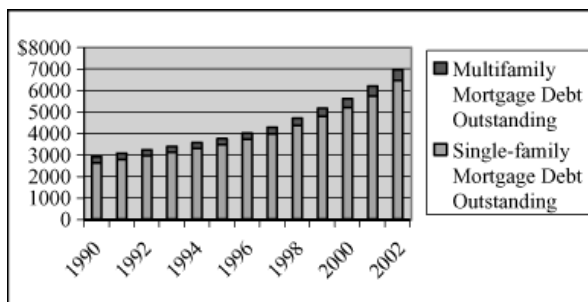
Debt, equity and mortgage-related securities we issue are exempt from registration under the Securities Act of 1933 and are "exempted securities" under the Securities Exchange Act of 1934. In July 2002, we announced a voluntary initiative to register our common stock, without par value, with the Securities and Exchange Commission under Section 12(g) of the Securities Exchange Act of 1934. The registration of our common stock became effective on March 31, 2003. Registration of our common stock does not impact the exempt status of debt, equity and mortgage-related securities we issue.

We file reports, proxy statements and other information with the Securities and Exchange Commission, beginning in 2003. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site (<http://www.sec.gov>) that contains reports, proxy statements, and other information that we file with the SEC. You may also inspect our SEC reports and other information at the New York Stock Exchange, Inc., 20 Broad Street, New York, NY 10005 or obtain them, free of charge, from our website at <http://www.fanniemae.com>. We are providing the addresses of the SEC's and our Internet sites solely for the information of investors. We do not intend the Internet addresses to be active links.

**The Residential Mortgage Market**

*Residential Mortgage Debt Outstanding*

The housing market in which we operate consists of the supply, or “stock,” of total outstanding residential mortgages. In its Flow of Funds Accounts, the Board of Governors of the Federal Reserve System estimates and publishes figures each quarter on the stock of residential mortgages. The total residential mortgage debt outstanding figures published by the Federal Reserve include loans secured by single-family properties and multifamily properties. As of December 31, 2002, the latest date for which information is available, the Federal Reserve’s estimate for total residential mortgage debt outstanding was \$7 trillion. (See “Business — Fannie Mae Business Standards — Principal Balance Limits” for a discussion of the limits on mortgages we purchase.) The following table shows the Federal Reserve’s estimate for residential mortgage debt outstanding for the last 12 years.



We expect growth in residential mortgage debt outstanding over the next ten years to be driven by the following factors:

- **Household Formation.** Household formation represents the number of new households that will need homes. Household formation is a principal driver of demand for homes. Growth in household formation is driven by growth in the population and “headship rates,” the rate at which the population forms into households.
- **Homeownership Rates.** Homeownership rates reflect the percentage of the population that owns a home. As reported by the Census Bureau, Department of Commerce, the national homeownership rate grew at approximately one-half a percent a year during the decade of the 1990s, rising from 64 percent to over 67 percent. The growth in homeownership rates was driven by increased affordability of homes, improved technology (e.g., automated underwriting), and low downpayment lending. We expect future growth in homeownership rates to be driven by economic growth, increases in minority homeownership rates, and demographic trends as baby-boomers move into age groups that traditionally experience higher homeownership rates. We anticipate that minority homeownership rates will benefit from a shortage in rental housing, the expansion of more flexible, low downpayment lending, and tax incentives.
- **Home Price Appreciation.** Home price appreciation reflects the combined effect of two components: the underlying rate of inflation and the amount that home prices appreciate net of inflation. Home price appreciation allows current homeowners to borrow against the additional equity in their homes and causes new homebuyers to borrow more to finance the purchase of a home. Home prices have typically appreciated faster than inflation. While inflation and home price appreciation over inflation were relatively low for most of the 1990s, home price appreciation over inflation returned to more historical levels in the latter part of the decade. Home price appreciation in the current decade will depend upon the demand and supply for housing. We expect the supply of housing to be somewhat constrained relative to demand due to limited availability of land and the increase of land use controls.

- *Debt-to-Value Ratios.* The debt-to-value ratio represents the percentage of total housing value that is financed with mortgage debt. Over the past 50 years, homeowners have steadily increased the percentage of their home value that is financed with debt, from around 20 percent to 44.4 percent at the end of 2002. This increase reflects the rising prices of homes, the increased popularity of cash-out refinancing as a means to tap equity wealth, availability of home equity lines of credit, and increased lower downpayment lending. Growth in the mortgage debt-to-value ratio over the coming decade will be driven by continued expansion of lower downpayment lending, and increased use by homeowners of the equity, or value, in their homes for other purposes.

As of December 31, 2002, Fannie Mae held 11 percent of total residential mortgage debt outstanding in our mortgage portfolio, which includes mortgage-related securities. MBS issued by Fannie Mae and held by investors other than Fannie Mae represented an additional 15 percent of total residential mortgage debt outstanding.

### *Our Role in the Secondary Mortgage Market*

Our lender customers are part of the primary mortgage market, where mortgages are originated and funds are loaned to borrowers. Primary market lenders include mortgage companies, savings and loan associations, commercial banks, credit unions, and state and local housing finance agencies.

Lenders sell mortgages into the “secondary market,” where mortgages are bought and sold by various investors. Secondary market investors include Fannie Mae, the Federal Home Loan Mortgage Corporation (“Freddie Mac”), the Federal Home Loan Banks, pension funds, insurance companies, securities dealers, and other financial institutions. Lenders may sell their mortgages into the secondary market in the form of whole loans or in the form of mortgage-related securities. For lenders that want to hold or sell mortgages in the form of mortgage-related securities, we may create those securities for them.

As the secondary market leader, Fannie Mae’s central role in providing a steady stream of mortgage funds to lenders across the country is supported by technologies that help us manage our risks and make the process of buying a home quicker, easier, and less expensive. We have developed an automated underwriting system for single-family mortgage loans that our lender customers are using nationwide, and allows consumers to obtain loan approval more quickly and consistently, and with lower closing costs than ever before.

We purchase mortgage loans for our portfolio and exchange mortgage-related securities for mortgage loans from over two thousand primary market lenders that have a selling and servicing contract with us. Five of those customers accounted for approximately 50 percent of the single-family mortgage loans that we purchased or guaranteed in 2002. Ten lender customers accounted for approximately 63 percent of the single-family mortgage loans that we purchased or guaranteed in 2002. In addition, we purchase mortgage loans and mortgage-related securities from securities dealers, investors and other participants in the secondary market.

### **Fannie Mae Business Standards**

The mortgage loans we purchase or guarantee must meet standards required by the Charter Act, including maximum principal balance limits and credit enhancement requirements. The Charter Act also requires that, so far as practicable and in our judgment, the mortgage loans be of a quality, type, and class that meet, generally, the purchase standards imposed by private institutional mortgage investors. Consistent with those requirements, and with the purposes for which we were chartered, we establish additional eligibility criteria and policies for the mortgage loans we purchase or guaranty, and for the sellers and servicers of those mortgage loans. Servicers are the entities that collect loan payments and perform other administrative functions with respect to the mortgage loans we purchase or guarantee.

#### *Principal Balance Limits*

Our purchase and guaranty of single-family “conventional” mortgage loans (loans not federally insured or guaranteed) are subject to certain maximum original principal balance limits, often referred to as the “conforming loan limit.” For 2002, the limit for a one-family residence was \$300,700 (except for loans secured



by properties in Alaska, Hawaii, Guam, and the Virgin Islands). Higher principal balance limits apply to loans secured by properties in those areas or secured by two- to four-family residences. We can adjust the maximum principal balance limits applicable to conventional single-family mortgage loans annually based on the year-to-year change in the national average price of a one-family house as surveyed by the Federal Housing Finance Board each October. In November 2002, the limit for loans acquired in 2003, secured by a one-family residence, was increased to \$322,700. There are no statutory limits on the maximum principal balance of multifamily mortgage loans that we purchase or guarantee. Mortgage loans insured by the Federal Housing Administration (“FHA”) are subject to separate statutory maximum amount limitations. There are no statutory limits on the principal balance of loans guaranteed by the Department of Veterans Affairs (“VA”) or by the Rural Housing Service (“RHS”).

#### ***Loan-to-Value Ratios***

The loan-to-value ratio requirements for loans we purchase or guaranty may vary depending upon a variety of factors such as the loan purpose, the number of dwelling units in the property securing the loan, the repayment terms, borrower credit history, and FHA or VA loan-to-value limits. Depending upon these factors, the loan-to-value ratio for loans we purchase or guarantee can be in excess of 100 percent.

The Charter Act requires credit enhancement on any conventional single-family mortgage loan that we purchase or guarantee if it has a loan-to-value ratio over 80 percent at the time of purchase or guaranty. Credit enhancement may take several forms, including insurance or a guaranty issued by a qualified insurer, repurchase arrangements with the seller of the mortgage loans, and seller-retained participation interests. We may require credit enhancement in excess of the minimum required to satisfy this provision of the Charter Act.

#### ***Underwriting Guidelines***

We have established underwriting guidelines for the purchase or guaranty of mortgage loans to effectively manage the risk of loss from borrower defaults. Lenders determine whether to make mortgage loans and frequently have several investors to whom they sell loans. When originating loans to be purchased or guaranteed by Fannie Mae, lenders look to our underwriting guidelines. We designed these guidelines to assess the creditworthiness of the borrower, as well as the value of the mortgaged property relative to the amount of the mortgage loan. At our discretion, we may grant waivers from these underwriting guidelines. We also review and change these guidelines from time to time. As part of our affordable housing initiatives, we continue to introduce new underwriting criteria in an attempt to make the mortgage finance system more accessible to minorities, low- and moderate-income families, underserved and rural residents, and people with special housing needs. In addition, we continue to look for more effective methods of assessing the creditworthiness of potential borrowers and property values.

We generally rely on lender representations and warranties that the mortgage loans we purchase or guaranty conform to our applicable guidelines. We also perform quality control reviews of selected loans to monitor compliance with the guidelines. In the event that a lender is found to have breached its representations with respect to a loan’s compliance with the guidelines, we can require that the lender repurchase the loan, indemnify us against any loss or, in some cases, share a greater percentage of any loss.

Over the last several years, we have enhanced Desktop Underwriter®, our automated underwriting system, to assist lenders in applying Fannie Mae underwriting standards for single-family loans. Desktop Underwriter is designed to help lenders process mortgage applications in a more efficient and accurate manner and to apply our underwriting criteria consistently, objectively, and in a more customized manner to all prospective borrowers. If Desktop Underwriter provides an “approve/ eligible” or “expanded approval/ eligible” recommendation to a lender regarding a loan application, we waive certain representations by the lender as long as the information that was submitted by the lender through Desktop Underwriter is accurate and the lender complies with other specified requirements.

### *The Mortgage Seller or Servicer*

Before we approve a lender or other customer to become a seller or servicer, we require that it meet certain standards which include demonstrating, to our satisfaction, that it:

- has a proven ability to originate or service the type of mortgages for which our approval is being requested;
- employs a staff with adequate experience;
- has as one of its principal business purposes the origination or servicing of residential mortgages;
- is properly licensed, or otherwise authorized, to originate, sell, or service residential mortgages in each of the jurisdictions in which it does business;
- meets financial criteria and standards;
- has quality control and management systems to evaluate and monitor the overall quality of its loan production and servicing activities; and
- is adequately covered by a fidelity bond and errors and omissions insurance.

We enter into a written mortgage selling and servicing contract with each approved customer. In this contract, the customer agrees to a number of obligations, including ongoing compliance with the foregoing provisions to our satisfaction.

### **Mortgage Committing and Servicing Arrangements**

#### *Single-Family Mortgage Commitments*

We enter into master agreements with lenders to facilitate ongoing transactions. Mortgage loans delivered to us for pooling into MBS generally require a master agreement, while mortgage loans purchased in cash transactions may or may not be under a master agreement. Pursuant to a master agreement, a lender agrees to deliver a specified volume of mortgage loans over a specified period of time, usually 12 months.

The master agreement usually requires mandatory delivery by the lender of an agreed upon volume, but may also contain an amount that is optional for the lender to deliver after it has met the required mandatory delivery commitment. If a lender does not deliver the mandatory portion of the specified volume, we may assess a buyout fee based on the undelivered amount. The optional portion of the volume does not obligate the lender to sell loans to us.

Whether or not there is a master agreement, we purchase mortgage loans for our portfolio pursuant to “mandatory delivery commitments,” which can be for either standard or negotiated loan products. Under these commitments, lenders are obligated to sell to us the mortgage loans described in the commitment at an agreed-upon price and within an agreed-upon time period (generally from one to ninety days for fixed-rate mortgages and from one to sixty days for adjustable-rate mortgages). If a lender is unable to deliver some or all of the mortgage loans required under a mandatory delivery commitment during the term of the commitment, the lender may repurchase the remaining balance of the commitment for a “pair-off” fee. We may assess the pair-off fee based on the amount of the commitment being paired off and the difference between the commitment price and the current price.

#### *Servicing Arrangements*

Mortgage loans held in our mortgage portfolio or in a trust for holders of our MBS may be serviced only by an approved servicer. We do not service mortgage loans directly. Typically, lenders who sell single-family mortgage loans and conventional multifamily loans to Fannie Mae initially service the mortgage loans they sell to us. There is an active market in which lenders sell servicing rights to other servicers. In addition, we may at times engage a servicing entity to service loans on our behalf due to termination of a servicer or for other reasons.

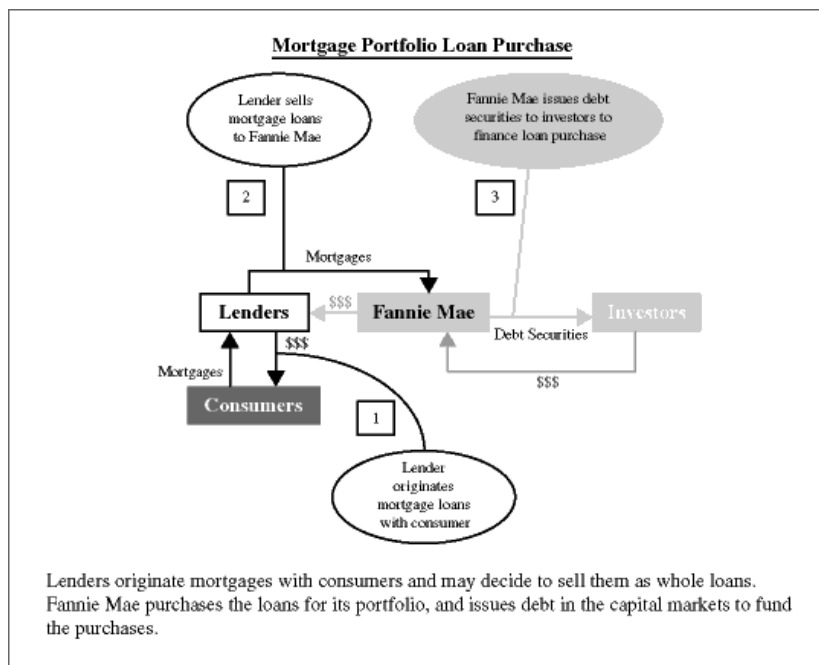
Mortgage servicers collect and remit principal and interest payments, administer escrow accounts, evaluate transfers of ownership interests, respond to requests for partial releases of security, and handle proceeds from casualty and condemnation losses. For problem loans, servicing includes negotiating workouts and, if necessary, inspecting and preserving properties and processing foreclosures and bankruptcies. In the case of multifamily loans, servicing also may include performing routine property inspections, evaluating the financial condition of owners, and administering various types of agreements (including agreements regarding replacement reserves, completion or repair, and operations and maintenance). We compensate servicers primarily by permitting them to retain a specified portion of each interest payment on a serviced mortgage loan, called a “servicing fee.” The weighted average servicing fee for conventional single-family loans owned or guaranteed by Fannie Mae in 2002 was .389 percent. We have the right to remove servicing responsibilities from any lender under criteria established in our contractual arrangements with lenders.

## **Business Segments**

### ***Portfolio Investment Business***

*Overview.* Our portfolio investment business has two principal components: a mortgage portfolio and a liquid investment portfolio. The mortgage portfolio purchases mortgage loans, mortgage-related securities, and other investments from lenders, securities dealers, investors, and other market participants. The liquid investment portfolio primarily purchases readily marketable, high credit quality, non-mortgage securities from securities dealers. The securities have short term maturities or can be sold as a source of funds to meet our cash flow needs. We fund the purchase of assets for our mortgage and liquid investment portfolios primarily by borrowing money in the domestic and international capital markets through the sale of debt securities. We derive income from the difference, or “spread,” between the yield we earn on our portfolio investments and the interest we pay on our borrowings.

The following diagram illustrates the basic structure of how we purchase a loan and fund that mortgage portfolio investment.



Most of the single-family mortgage loans in our mortgage portfolio or backing mortgage-related securities in our portfolio may be prepaid by the borrower at any time without penalty. We, therefore, bear the risk that if our mortgage assets are paid off as interest rates decline, or as a result of other factors, we may not be able to prepay the outstanding indebtedness used to finance those assets or to reinvest the prepayment proceeds at a rate at or above our borrowing costs. If interest rates rise, our debt costs could rise faster than the yield on our mortgage assets and thereby reduce our interest spread. In contrast, most multifamily loans contain a prepayment premium that compensates us for the loss of yield in the event of a prepayment, or provide some other mechanism to protect us from prepayment risk. We actively manage our mortgage portfolio to mitigate prepayment risks. Our approach to managing interest rate risk includes three central elements. First, we attempt to fund purchases of mortgage assets with liabilities that have similar cash flow patterns through time and in different interest rate environments. We use a combination of debt securities and interest rate derivatives to achieve the appropriate funding mix. Second, we regularly assess the mortgage portfolio's exposure to changes in interest rates using a diverse set of analyses and measures. Third, we establish appropriate parameters for taking rebalancing actions that meet our objectives, and undertake rebalancing actions as necessary.

Our mortgage portfolio is also exposed to the credit risk that borrowers may fail to repay mortgage loans held in our portfolio or backing mortgage-related securities held in our portfolio. Our credit guaranty business is responsible for managing mortgage credit risk on loans and mortgage-related securities held in our portfolio and mortgage-related securities guaranteed by us that are held by other investors. Accordingly, for segment reporting purposes, we allocate a fee comparable to an MBS guaranty fee from the portfolio investment business to the credit guaranty business for management of the credit risk on the mortgage loans and mortgage-related securities held in the portfolio. Likewise, all mortgage-related credit expenses are allocated to the credit guaranty business. We establish a loss reserve for credit risk allocated to the credit guaranty

business. This intersegment allocation of a credit risk management fee and mortgage-related credit expenses has no impact on Fannie Mae's reported net income.

### *Mortgage Portfolio*

*Assets Purchased.* Fannie Mae purchases primarily single-family, conventional, fixed- or adjustable-rate, first lien mortgage loans, or mortgage-related securities backed by such loans. In addition, we purchase loans insured by the FHA, loans guaranteed by the VA or RHS, manufactured housing loans, multifamily mortgage loans, subordinate mortgage loans (*e.g.*, loans secured by second liens) and other mortgage-related securities. See "Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Business Segment Results — Portfolio Investment Business — Mortgage Portfolio — Table 8" for information on the composition of our mortgage portfolio.

*Maturities.* Fannie Mae purchases conventional, single-family fixed-rate mortgages with original maturities of up to 30 years and conventional, single-family adjustable-rate mortgages ("ARMs") with maturities of up to 40 years. Only a small portion of ARMs we purchase have maturities of more than 30 years. The multifamily mortgage loans we purchase generally are fixed-rate loans with maturities of up to 30 years.

*Payment Structure; Balloon Payments.* The majority of fixed-rate mortgage loans we purchase provide for equal or "level" monthly installments of principal and interest. Some of these loans have larger or "balloon" payments due 5, 7, or 10 years after origination, but with monthly payments based on longer (*e.g.*, 30-year) amortization schedules. Most of the 7-year balloon single-family mortgage loans permit the borrower to refinance the balloon payment at maturity with a 23-year fixed-rate mortgage loan if certain requirements are satisfied. Many of the multifamily mortgage loans have balloon payments due 5, 7, 10, or 15 years after origination, but with payments based on 25- or 30-year amortization schedules.

*Adjustable-Rate Mortgage Loans.* The interest rates on ARMs are determined by formulas providing for automatic adjustment, up or down, at specified intervals in accordance with changes in specified indices. Fixed-period ARMs have an interest rate that is fixed for the first 2 to 10 years, and is adjusted at specified intervals after the initial period. The payments of interest, or principal and interest, on substantially all ARMs adjust (up or down) after the interest rate on the loan is adjusted because of changes in the applicable index. We currently purchase single-family ARMs only if the ARMs limit the amount the interest rate may change over the life of the loan. We purchase a small amount of ARMs that may permit negative amortization. We generally require that those loans be reamortized at least annually to limit the amount of negative amortization that may accrue.

We also purchase certain ARMs, called reverse mortgages, that provide for periodic installments of principal to be paid to the borrower. Over the life of these loans, interest and certain other fees accrue on the balance of the payments made to the borrower. Generally, the loan is due when the borrower no longer occupies the property. We currently purchase reverse mortgages only if the reverse mortgages are subject to a limit on the amount the interest rate may change over the life of the loan. Most of the reverse mortgages we purchase are guaranteed by the Federal government.

### *Liquid Investment Portfolio*

The liquid investment portfolio serves principally as a source of liquidity and an investment vehicle for our surplus capital. If our access to the debt capital markets is ever impeded, we first will utilize assets in our liquid investment portfolio to generate cash to meet our liquidity needs. We may use funds received at maturity of the short-term investments in the portfolio or sell assets from the portfolio to generate those funds. The liquid investment portfolio primarily invests in high quality securities that are readily marketable or have short-term maturities. The liquid investment portfolio does not invest in mortgage loans or mortgage-related securities.

We have set a goal to maintain liquid assets equal to at least 5 percent of total on balance-sheet assets. Our ratio of liquid assets to total assets at December 31, 2002 and 2001 was 6.9 percent and 9.5 percent,

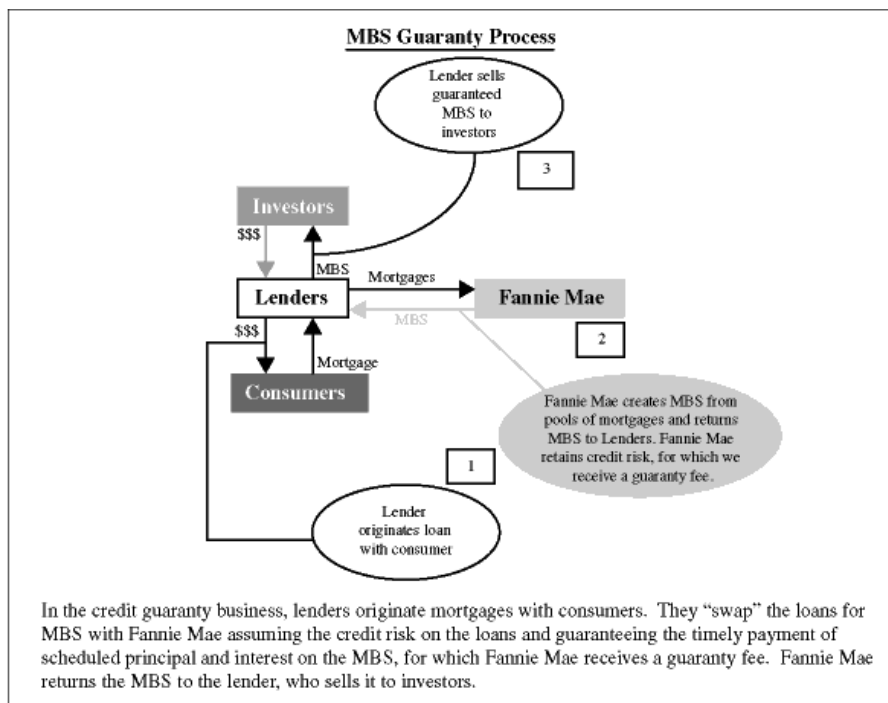
respectively. Because our liquid assets are maintained for liquidity purposes and not principally as an investment business, the income generated from these investments is considerably lower than the income generated by mortgage portfolio investments. See “Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Business Segment Results — Portfolio Investment Business — Nonmortgage Investments — Tables 11 and 12” for information on our liquid investment portfolio.

### *Credit Guaranty Business*

*Overview.* Our credit guaranty business has primary responsibility for managing our mortgage credit risk. Credit risk is the risk of nonpayment by borrowers and counterparties. The primary source of income for the credit guaranty business is fees we receive for our guaranty of the timely payment of scheduled principal and interest on MBS that are held by other investors, less the cost of providing this service. In addition, the portfolio investment business compensates the credit guaranty business, for segment reporting purposes, through a fee comparable to an MBS guaranty fee. Consequently, we generally allocate mortgage credit expenses, including credit losses, to the credit guaranty business for business segment reporting purposes. The credit guaranty business also provides investment capital to the portfolio investment business for which it is allocated income, and earns interest income on the temporary investment of principal and interest payments on mortgage loans underlying MBS prior to remittance to investors.

Our credit guaranty business manages Fannie Mae’s mortgage credit risk through sound asset acquisition practices, use of credit enhancements, active management of the credit book of business, and aggressive problem loan management. We share mortgage credit risk with third parties as an integral part of our risk management strategy. In our credit enhancement arrangements, we bear institutional counterparty risk that the parties assuming credit enhancement obligations may be unable to meet their contractual obligations. Mortgage credit enhancements are primarily mortgage insurance, lender recourse, and other risk sharing contracts. We routinely monitor the risks associated with credit enhancement and other risk sharing arrangements. We have provided a detailed description of how we manage the mortgage-related credit risk associated with the credit guaranty business, as well as other types of credit risk, in “Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Risk Management — Credit Risk Management.”

The following diagram illustrates the basic structure of how we create a typical MBS in the case where a lender chooses to sell the MBS to a third party.



**MBS.** We create both single-class and multi-class MBS. The MBS represent beneficial interests in pools of mortgage loans or in other mortgage-related securities. The MBS, and the mortgage loans and mortgage-related securities backing MBS, are not assets of Fannie Mae, except when we acquire them for mortgage portfolio investment purposes.

We create MBS backed by mortgage loans bearing interest at either fixed or adjustable rates, and secured by first or subordinate liens on either single-family or multifamily residential properties. Mortgage loans can be either conventional mortgage loans or government guaranteed or insured mortgage loans. Conventional single-family and multifamily loans are subject to the underwriting guidelines applicable to our loan purchases. The majority of our outstanding MBS represent beneficial interests in conventional fixed-rate first mortgage loans secured by single-family dwellings.

We are the trustee for each trust and hold the underlying mortgage loans or mortgage-related securities separate and apart from our assets, for the benefit of the certificateholders.

**Single-Class MBS.** Single-class MBS are MBS that are typically created through single-lender transactions in which a lender delivers mortgage loans in exchange for MBS representing beneficial interests in those mortgage loans and our guaranty. Another form of single-class MBS, referred to as “Fannie Majors®”, allows multiple lenders to pool mortgage loans that are delivered to us and, in exchange, receive MBS representing each lender’s proportionate share of the larger pool. We also create single-class MBS referred to as “Fannie Megs®” or “Megs.” Megs are pass-through certificates backed by pooled multiple single-class MBS with similar characteristics and/or other pooled Megs with similar characteristics. Megs are issued in transactions in which a lender or investment banker exchanges pooled single-class MBS and/or other pooled Megs for newly issued Mega certificates.

Principal and interest from the mortgage loans underlying the single-class MBS are passed through to the certificateholders less a fee for servicing the mortgage loans and a fee for our guaranty. We guarantee the timely payment of scheduled principal due on the underlying mortgage loans and interest at the MBS pass-through rate to the certificateholders, even if we have not received the payments on the underlying mortgage loans. In other words, through our guaranty to certificateholders, we assume the credit risk of borrower defaults on the underlying mortgage loans, as well as any risk arising from a default or bankruptcy of the seller and servicer of the loans.

We have a responsibility to certificateholders for the servicing of the mortgage loans underlying the MBS and certain other mortgage-related securities, although we do not directly service the mortgage loans. See “Item 1 — Business — Fannie Mae Business Standards — Servicing Arrangements.” We are also responsible for certain administrative functions, such as the collection and receipt of payments from the contract servicer, maintaining accounting records for each trust, and for the distribution of payments and reports due to certificateholders.

*The MBS TBA Market.* Single-class MBS outstanding constituted approximately 75 percent of Fannie Mae’s total MBS outstanding as of December 31, 2002. The vast majority of these MBS are sold by lenders into the “TBA” (“to be announced”) securities market. A TBA trade represents a contract for the purchase or sale of single-family mortgage-related securities to be delivered at a future agreed-upon date. The specific pool numbers that will be delivered to fulfill the trade obligation or terms of the contract are unknown at the time of the trade. Parties to a TBA trade agree upon the issuer and product type to be delivered (denoted by a pool prefix), the coupon or interest rate of the security to be delivered, the settlement date of the trade, the amount of securities to be delivered, and the price of those securities. The single-class MBS that ultimately will be delivered, and the loans backing that MBS, frequently have not been created or originated at the time of the TBA trade, even though a price for the securities is agreed to at that time. A TBA trade may be entered into as much as several months before actual settlement of that trade. TBA sales enable the originating lender to hedge its interest rate risk and “lock-in” interest rates for mortgage loan applicants throughout the loan origination process. A lender may satisfy its delivery requirement under a TBA trade by delivering any mortgage-related security meeting the agreed-upon terms.

*Multi-Class MBS.* We also create and guarantee multi-class MBS, such as real estate mortgage investment conduits, commonly referred to as “REMICs”, certain grantor trust certificates, and stripped mortgage-backed certificates, commonly referred to as “SMBS”. REMICs are a vehicle by which an issuer can restructure interest and principal payments on mortgage assets into separately tradeable interests. By redirecting the cash flows from the underlying mortgage assets, we can create a security having several classes, also called “tranches,” which, among other things, may have different coupon rates, average lives, repayment sensitivities and final maturities. SMBS operate in a manner similar to REMICs, though we typically use SMBS to create tranches that pay only principal or only interest. We generally receive one-time fees for swapping mortgage loans, MBS and other mortgage-related securities for our multi-class MBS. If the multi-class MBS are backed by whole loans or securities we have not already guaranteed, we may receive a guaranty fee in addition to a transaction fee. We otherwise receive no separate guaranty fees for these transactions because we have already assumed the credit risk on the underlying securities and receive guaranty fees for that assumption on the underlying securities.

Multi-class MBS provide a variety of cash flow options for investors. In multi-class MBS, each class is entitled to different cash flows. For example, these cash flows may consist of (1) principal only payments from the underlying mortgage loans, (2) interest only payments from the underlying mortgage loans, or (3) different percentages of principal and interest payments. In addition, the timing of payments may vary among the classes of REMIC certificates. For example, a REMIC class may receive payments for only a limited period during the life of the trust. Our multi-class MBS may be backed directly by mortgage loans or by other mortgage-related securities, including single-class MBS, REMIC certificates, grantor trust certificates, or mortgage-related securities of an issuer other than Fannie Mae. In general, our guaranty for multi-class mortgage-related securities covers timely payment of scheduled principal and interest due on these certificates and ultimate payment of principal by the date specified for each class of certificates. We have created a limited number of subordinated REMIC classes that are not guaranteed by Fannie Mae. Most Fannie Mae



multi-class mortgage-related securities are created in transactions in which an investment banker, or less frequently a lender or a mortgage banker, exchanges mortgage loans or mortgage-related securities, or a combination of both, for the newly-issued Fannie Mae multi-class MBS.

**Guaranty Fees.** We receive guaranty fees for our guaranty of timely payment of scheduled principal and interest on MBS. When we create an MBS, we establish a guaranty fee for the MBS, taking into consideration the credit risk associated with the loans backing the MBS. We either (1) determine a weighted average guaranty fee based on the characteristics of the loans in the trust and assign that fee to each loan in the trust or (2) assign each loan in the trust a guaranty fee based on its risk characteristics. In the latter instance, our weighted average guaranty fee for the MBS may increase or decrease over time depending upon prepayment activity. Guaranty fees generally are paid to us on a monthly basis from a portion of the interest payments received on the underlying mortgage loans, as long as the loans are in the MBS. Guaranty fees are typically calculated for MBS at the loan level as a percent of the unpaid principal balance remaining on a loan. The monthly guaranty fee may be adjusted up or down through a cash payment to or from the lender at the time the MBS is issued.

The aggregate amount of guaranty fees we receive in any financial statement period depends primarily upon the amount of Fannie Mae MBS outstanding during that financial statement period and on the applicable guaranty fee rates. The amount of MBS outstanding is influenced by factors including the rates at which the underlying mortgage loans are repaid, the rate of defaults on loans or breaches of lender representations resulting in repurchases from the pool, and the rate at which we issue new MBS and purchase or sell MBS in our mortgage portfolio business. In general, when prevailing interest rates decline below the interest rates on loans underlying outstanding MBS, both the rate of mortgage loan prepayments and the issuance of new MBS are likely to increase. Conversely, when interest rates rise above the interest rates on mortgage loans underlying our outstanding MBS, the rate of mortgage loan prepayments and new MBS issuance is likely to slow. The rate of principal prepayments also is influenced by a variety of economic, demographic, and other factors.

**Delinquencies and REO.** We manage loans in partnership with our servicers to minimize the frequency of foreclosure and the severity of loss in the event of foreclosure. When a loan is in default, generally the servicer takes appropriate loss mitigation steps or, if necessary, pursues foreclosure on behalf of Fannie Mae. If a mortgage is liquidated through foreclosure or deed in lieu of foreclosure we would acquire the underlying property (as real estate owned, or "REO") and attempt to sell the REO. If the defaulted loan backs an MBS, we may repurchase the loan out of the MBS trust and pay the principal balance on the loan to the MBS certificateholders when the loan is delinquent by four or more consecutive monthly payments (or eight biweekly installments.) This is generally our current practice given the level of interest rates, because it is often less expensive for us to fund the purchase of the loan at our lower borrowing cost than to continue to pass through to the investor the coupon rate of the MBS. We have a policy to repurchase the loan if it is delinquent by twenty-four consecutive months or at the time of foreclosure, if it is still in the MBS trust at that time. As long as the loan or REO remains in the MBS trust, we continue to pay scheduled principal and interest to the certificateholders and defer payment of the remaining principal balance until the earlier of the repurchase of the loan from the MBS trust, the sale of the REO or the third year following foreclosure.

The level of delinquencies and number of REO are affected by economic conditions, loss mitigation efforts (which include contacting delinquent borrowers to offer a repayment plan, loan modification, preforeclosure sale, or other options), contractual provisions in credit enhancements, and a variety of other factors. We manage the risk of delinquencies and REO, including the risk on loans and mortgage-related securities held in our mortgage portfolio, as described in "Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management — Credit Risk Management."

#### ***Fee-Based Services***

We offer services to lenders and other customers in return for fees. These include transaction fees for issuing and administering REMICs, SMBS, Fannie Megas and certain grantor trust securities, and facilitating securities transactions.

We also receive fee income in return for providing technology-related services, such as Desktop Underwriter, Desktop Originator®, and other on-line services. These services provide lenders the ability to underwrite mortgage loans electronically, communicate with third-party originators, access our loan pricing schedules, and enter into sale commitments with us on a real-time basis.

We also facilitate securities transactions for customers. For this service, we may earn a spread on the purchase and sale of MBS and certain other mortgage-related securities, such as Ginnie Mae certificates, or may receive a fee from the customer. In addition, we receive fee income through other activities, such as providing credit enhancements and other investment alternatives for customers.

**Housing Goals**

The Federal Housing Enterprises Financial Safety and Soundness Act (the “1992 Act”) requires the Secretary of the U.S. Department of Housing and Urban Development (“HUD”) to establish a low- and moderate-income, an underserved areas, and a special affordable housing goal for loans purchased or guaranteed by Fannie Mae. We are required to submit an annual report to the House Committee on Financial Services, the Senate Committee on Banking, Housing and Urban Affairs, and the Secretary of HUD regarding our performance in meeting the housing goals. By regulation, HUD has established the low- and moderate-income housing goal at 50 percent of the total number of dwelling units financed by eligible mortgage purchases annually, the underserved areas housing goal at 31 percent, and the special affordable housing goal, a more targeted measure, at 20 percent. “Eligible mortgage purchases” include MBS guarantees but exclude several activities, including the purchase or guaranty of non-conventional mortgages and mortgages on second homes, commitments to purchase or guarantee mortgages at a later date, and equity investments in low-income housing tax credits. For the year ended December 31, 2002, “eligible mortgage purchases” represented approximately 97% of our business volume. In addition, HUD has established Fannie Mae’s targeted multifamily subgoal at \$2.85 billion.

Each of these goals applies annually during 2001 through 2003. If HUD does not establish different goals for 2004 and after, the goals will continue at the current levels. The goals also include certain provisions that reduce penalties for missing data and provide incentive points for serving small multifamily and owner-occupied rental housing. A loan may be counted in more than one category of goals. If HUD determines that Fannie Mae has failed to meet its housing goals and that achievement of the goals was feasible, taking into account market and economic conditions and Fannie Mae’s financial condition, Fannie Mae must submit a housing plan to HUD describing the actions it will take to meet the goal in the next calendar year. If HUD determines that Fannie Mae has failed to submit a housing plan or failed to make a good faith effort to comply with the plan, HUD may take certain administrative actions. The following table shows Fannie Mae’s housing goals and results for the past three years.

Housing Goals	2002		2001		2000	
	Goal <sup>(1)</sup>	Result	Goal <sup>(1)</sup>	Result	Goal <sup>(1)</sup>	Result
	(Dollars in billions)					
Low- and moderate-income housing	50.0%	51.8%	50.0%	51.6%	42.0%	49.5%
Underserved areas	31.0	32.8	31.0	32.5	24.0	31.0
Special affordable housing	20.0	21.4	20.0	21.6	14.0	22.3
Multifamily minimum in special affordable housing	\$2.85	\$7.22	\$2.85	\$7.40	\$1.30	\$3.78

(1) Goals are expressed as a percentage of the total number of dwelling units financed through eligible mortgage purchases during the period, except for the targeted multifamily goal.

**Competition**

In the case of single-family mortgage loans, Fannie Mae competes, within the limits prescribed by the Charter Act, for the purchase of mortgage loans for our own portfolio, for the guaranty of mortgage credit risk, and for the issuance in the secondary mortgage market of mortgage-related securities. For single-family products, we compete with Freddie Mac (another government-sponsored enterprise with a mission, authority, and regulatory oversight that are virtually identical to our own), commercial banks, savings and loan

associations, savings banks, pension funds, insurance companies, securities dealers, and other financial entities that purchase single-family mortgage loans or mortgage-related securities for their own portfolio or pool single-family mortgage loans for sale to investors as whole loans or mortgage-related securities. We compete with the Federal Home Loan Banks, which also finance single-family mortgage loans through a variety of programs that were initiated in 1997. We compete with mortgage insurers, bond insurers, and other financial guarantors that provide mortgage credit guaranty services on loans and pools of loans.

Commercial banks and thrifts are the largest participants in the U.S. mortgage industry. Banks and thrifts originate mortgages (which we are not empowered to do under the Charter Act), have access to low cost, FDIC-insured deposits and can borrow advances from Federal Home Loan Banks. There has been significant consolidation among commercial banks and thrifts, increasing the size of individual organizations and resulting in concentration in the banking industry. This has created larger institutions with the scale necessary to permit them to securitize their own mortgages and manage large and complex portfolios. As institutions become larger, they have increasing bargaining power in their negotiations with Fannie Mae, and are able to offer us volume in return for lower guaranty fees and customization of services.

We compete with the FHA insurance program, a program of HUD, for the business of guaranteeing the credit performance of mortgage loans and, because of the eligibility of such FHA-insured loans for securitization by the Government National Mortgage Association (“Ginnie Mae”), an entity within HUD, with Ginnie Mae as well. The base maximum principal balance for loans eligible for the FHA insurance program is 48 percent of our loan limit. The loan limit for FHA-insured loans in high-cost areas is as much as 87 percent of our limit. These higher FHA limits may result in increased competition for our credit guaranty business.

We compete primarily on the basis of price, products, structures, and services offered. Competition based on advances in technology-related and other fee-based services continues to increase, as do the types and nature of the products offered by us and other market participants. Our market share of loans purchased for cash or swapped for mortgage-related securities is affected by the volume of mortgage loans offered for sale in the secondary market by loan originators and other market participants and the amount purchased by our competitors.

In the case of multifamily mortgage loans, we generally compete with government housing programs, Freddie Mac, insurance companies, and the same kinds of entities we compete with in the single-family market. In addition, there is competition for multifamily mortgage loans from certain entities typically sponsored by investment banks and commercial banks that purchase such loans and pool them for sale to investors in the commercial mortgage-related securities market. Such entities are referred to as “conduits,” and their role in the multifamily mortgage market has increased significantly over the last five years. Conduits continue to be a strong source of competition.

Competition is particularly intense for multifamily mortgage loans eligible for government subsidies, which have low-income rent and occupancy restrictions. Commercial banks contemplating merger or expansion plans seek to fund such loans to secure favorable review under the Community Reinvestment Act and may either hold such loans as an investment or sell them to a secondary market investor. We compete for these investments in the secondary market to meet our housing goals.

Under the 1992 Act, the Secretary of HUD must approve any new Fannie Mae or Freddie Mac conventional mortgage program that is significantly different from those approved or engaged in prior to that Act’s enactment. Our ability to compete could be affected by this requirement. See “Government Regulation and Charter Act.”

Competition also is a consideration in connection with the issuance of Fannie Mae’s debt securities. We compete with Freddie Mac, the Federal Home Loan Bank system, and other government-sponsored entities for funds raised through the issuance of unsecured debt in the “agency” debt market. Increases in the issuance of unsecured debt by other government-sponsored entities generally, and in the issuance of callable debt in particular, may have an adverse effect on the issuance of our unsecured debt or result in the issuance of such debt at higher interest rates than would otherwise be the case. In addition, the availability and cost of funds

raised through the issuance of certain types of unsecured debt may be adversely affected by regulatory initiatives that may reduce investments by depository institutions in unsecured debt with greater than normal volatility or interest-rate sensitivity.

## **Employees**

As of February 28, 2003, Fannie Mae employed approximately 4,800 permanent personnel.

## **Government Regulation and Charter Act**

### *Charter Act*

We were established in 1938 under Title III of the National Housing Act as a government owned entity. In 1954, under the Federal National Mortgage Association Charter Act, the entity became a mixed-ownership corporate instrumentality of the United States. Under the Housing and Urban Development Act of 1968, the entity was divided into two separate institutions, the present Fannie Mae and Ginnie Mae. Fannie Mae became an entirely stockholder-owned corporation, organized and existing under the Charter Act. The Charter Act provides that the corporation will continue until dissolved by an act of Congress. The Charter Act was further amended by the 1992 Act.

Under the Charter Act, our purpose is:

“to (1) provide stability in the secondary market for residential mortgages, (2) respond appropriately to the private capital market, (3) provide ongoing assistance to the secondary market for residential mortgages (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing, [and] (4) promote access to mortgage credit throughout the nation (including central cities, rural areas and underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.”

The Charter Act authorizes us to “deal in” conventional mortgage loans, and “purchase,” “sell,” “service,” and “lend on the security of” such mortgages, subject to limitations on the quality of mortgages purchased and credit enhancement requirements. Fannie Mae can act as a depository, custodian, or fiscal agent “for its own account or as fiduciary, and for the account of others.” The Charter Act expressly enables Fannie Mae “to lease, purchase, or acquire any property, real, personal, or mixed, or any interest therein, to hold, rent, maintain, modernize, renovate, improve, use, and operate such property, and to sell, for cash or credit, lease, or otherwise dispose of the same, at such time and in such manner as and to the extent that it may deem necessary or appropriate.” The Charter Act also permits Fannie Mae to “purchase,” “service,” “sell,” “lend on the security of” and otherwise deal in loans or advances of credit for the purchase and installation of home improvements (so long as the loans are secured by a lien against the property to be improved).

Under the Charter Act, we may not originate mortgage loans or advance funds on an interim basis pending the sale of a mortgage in the secondary market. We may not purchase loans in excess of the amount of the current loan limits. (See “Business—Fannie Mae Business Standards—Principal Balance Limits.”) We may conduct business only in the United States, its territories and possessions, the District of Columbia and the Commonwealth of Puerto Rico. Our activities must relate to housing, mortgages and related financial products.

Thirteen members of our eighteen-member Board of Directors are elected by the holders of our common stock. The President of the United States appoints the remaining five members. The appointed directors must include one person from the home building industry, one person from the mortgage lending industry, one person from the real estate industry, and one person from a consumer or community interest organization or who has demonstrated a career commitment to providing low-income housing. Any member of the Board of Directors that is appointed by the President of the United States may be removed by the President for good cause. All members of the Board of Directors are elected or appointed annually.

In general, HUD and OFHEO oversee the activities of Fannie Mae. HUD has “general regulatory power” over Fannie Mae. The 1992 Act established OFHEO to ensure that Fannie Mae is adequately capitalized and is operating safely.

The Secretary of the Treasury has the authority to approve Fannie Mae’s issuance of debt obligations and mortgage-related securities. At the discretion of the Secretary of the Treasury of the United States, the U.S. Treasury may purchase obligations of Fannie Mae up to a maximum of \$2.25 billion outstanding at any one time. This facility has not been used since our transition from government ownership in 1968. Neither the United States nor any agency thereof is obligated to finance our operations or to assist us in any other manner. The Federal Reserve Banks are authorized to act as depositories, custodians, and fiscal agents for Fannie Mae, for the Bank’s own account, or as fiduciary.

Securities we issue are “exempt securities” under laws administered by the SEC to the same extent as securities that are obligations of, or guaranteed as to principal and interest by, the United States. Registration statements with respect to offerings of our securities are not filed with the SEC. In July 2002, we announced our voluntary initiative to register our common stock with the SEC under Section 12(g) of the Securities Exchange Act of 1934. The registration of our common stock became effective on March 31, 2003. As a result, we will file periodic reports with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, together with any required exhibits. These filings will be available on the SEC’s Electronic Data Gathering, Analysis, and Retrieval (“EDGAR”) system at [www.sec.gov](http://www.sec.gov). Registration of our common stock with the SEC will not impact the status of our securities (including equity, debt and MBS) as exempt securities within the meaning of the laws administered by the SEC.

We are exempt from taxation by states, counties, municipalities, or local taxing authorities, except for taxation by those authorities on our real property. We are not exempt from payment of federal corporate income taxes. We also may conduct our business without regard to any qualification or similar statute in any state of the United States, including the District of Columbia, the Commonwealth of Puerto Rico, and the territories and possessions of the United States.

### ***Regulatory Approval and Oversight***

As a federally chartered corporation, Fannie Mae is subject to Congressional legislation and oversight and is regulated for various purposes by HUD, OFHEO and the U.S. Department of the Treasury, to the extent authorized by statute. In addition, the financial institutions with whom we do business are subject to extensive federal and state law and regulation. Changes to legislation, regulations or policy that impact us or our business partners could adversely or favorably affect the performance, development, or results of our business.

OFHEO, an independent office within HUD, is responsible for ensuring that we are adequately capitalized and operating safely in accordance with the 1992 Act. OFHEO conducts on-site examinations of Fannie Mae for purposes of ensuring our financial safety and soundness. We are required to submit annual and quarterly reports of our financial condition and operations to OFHEO. OFHEO is authorized to levy annual assessments on Fannie Mae and Freddie Mac, pursuant to annual Congressional appropriations, to cover OFHEO’s reasonable expenses. OFHEO’s formal enforcement powers include the power to impose temporary and final cease-and-desist orders and civil monetary penalties on us and on our directors and executive officers, provided certain conditions are met. OFHEO may use other informal supervisory tools of the type that are generally used by agencies with authority to regulate other financial institutions. In accordance with OFHEO regulation, Fannie Mae has elected to follow the applicable corporate governance practices and procedures of the Delaware General Corporation Law, as it may be amended from time to time. On January 21, 2003, OFHEO proposed regulations that would require Fannie Mae to file with the SEC all reports, statements and forms relating to our common stock that are required to be filed under Sections 14(a) and (c) of the Exchange Act and the rules and regulations under those sections and require Fannie Mae’s directors and officers to file all reports and forms relating to our common stock that are required to be filed under Section 16 of the Exchange Act and the rules and regulations under that section.

The Secretary of the Treasury has the authority to approve Fannie Mae’s issuance of debt obligations and mortgage-related securities. The General Accounting Office is authorized to audit the programs, activities,

receipts, expenditures, and financial transactions of Fannie Mae. The Secretary of HUD has general regulatory authority to promulgate rules and regulations to carry out the purposes of the Charter Act, excluding authority over matters granted exclusively to OFHEO. The Secretary of HUD has authority to approve any new conventional mortgage program that is significantly different from those approved or engaged in prior to the 1992 Act. The Secretary must approve any new program unless it is not authorized by the Charter Act or the Secretary finds that it is not in the public interest. The Secretary has adopted regulations related to the program approval requirement. We are also required to meet certain goals established by the Secretary of HUD to promote affordable housing and to serve the housing needs of those in underserved areas. See “Business — Housing Goals.”

### ***Capital Requirements***

The 1992 Act established minimum capital, risk-based capital, and critical capital requirements for Fannie Mae. See also “Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Capital Resources — Regulatory Environment.” OFHEO issued a final rule in 1996 that sets forth the minimum capital requirements for Fannie Mae and Freddie Mac, which are to be calculated, reported, and classified on a quarterly basis. We were in compliance with the minimum capital rule as of December 31, 2002, and have been in compliance for every reporting period since the rule became effective. OFHEO issued regulations in September 2001, as subsequently amended, to establish a risk-based capital test to be used to determine the amount of total capital Fannie Mae must hold to meet the risk-based capital standard. Fannie Mae and Freddie Mac are required to hold enough capital to withstand a severe 10-year stress period, characterized by extreme interest-rate movements and credit losses occurring simultaneously, plus 30 percent of that amount for management and operations risk. The risk-based capital test evaluates combined interest-rate and credit stress for both rising and declining interest-rate scenarios. The more stringent of these two scenarios determines the required risk-based capital. The test assumes that (1) interest rates increase or decrease by up to 600 basis points over the first year, and remain constant at this new level for the remaining 9 years of the test; (2) severe credit conditions apply nationwide; and (3) we acquire no new business during this period except to meet outstanding mortgage commitments. The regulations specify that “benchmark loss experience” will be combined with other assumptions and applied each quarter to our book of business to establish expected credit losses based on the stress assumptions under the risk-based capital standard. The regulations also specify the housing price index that OFHEO will use in connection with the standard and how the test will be used to determine Fannie Mae’s risk-based capital requirements. On March 31, 2003, OFHEO announced that Fannie Mae complied with the risk-based capital rule as of December 31, 2002. See “Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Capital Resources — Regulatory Environment.”

If we fail to meet the capital standards, OFHEO is permitted or required to take remedial measures, depending on the standards we fail to meet. Compliance with the capital standards could limit operations that require intensive use of capital and restrict our ability to repay debt or pay dividends on our common stock. We are required to submit a capital restoration plan if we fail to meet any of the capital standards. If OFHEO determines that we are engaging in conduct not approved by the Director that could result in a rapid depletion of core capital or that the value of the property subject to mortgages we hold or have securitized has decreased significantly, or if OFHEO does not approve the capital restoration plan or determines that we have failed to make reasonable efforts to comply with the plan, OFHEO may take remedial measures as if we were not meeting the capital standards we otherwise meet. The 1992 Act gives OFHEO authority, after following prescribed procedures, to appoint a conservator if we do not meet the critical capital level.

### ***Dividend Restrictions***

The Charter Act as amended by the 1992 Act restricts the ability of our Board of Directors to make capital distributions, including any dividends, in the following circumstances:

- Fannie Mae may not pay any dividend, without the approval of OFHEO, if the dividend payment would decrease our total capital below the risk-based capital level or our core capital below the minimum capital level.

- If we do not meet the risk-based capital standard but do meet the minimum capital standard, we may not make any dividend payment that would cause us to fail to meet the minimum capital standard.
- If we meet neither the risk-based capital standard nor the minimum capital standard but do meet the critical capital standard established under the 1992 Act, we may make a dividend payment only if we would not fail to meet the critical capital standard as a result of the payment and the Director of OFHEO approves the payment after finding that the payment satisfies certain statutory conditions.

The Director has the authority to require us to submit a report to the Director regarding any capital distribution we declare before we make the distribution.

**Item 2. *Properties***

We own our principal office, which is located at 3900 Wisconsin Avenue, NW, Washington, DC, offices at 3939 Wisconsin Avenue, NW, and 4250 Connecticut Avenue, NW, in Washington, DC, and two facilities in Herndon, Virginia. These owned facilities total approximately 829,000 square feet of space. In addition, we lease 375,000 square feet of office space at 4000 Wisconsin Avenue, NW, which is adjacent to Fannie Mae's principal office. The present lease for 4000 Wisconsin Avenue expires in 2008, and we have options to extend the lease for up to 10 additional years, in 5-year increments. We also lease an additional 377,000 square feet of office space in four locations in Washington, D.C. and suburban Virginia.

We maintain offices in leased premises in Pasadena, California; Atlanta, Georgia; Chicago, Illinois; Philadelphia, Pennsylvania; and Dallas, Texas. In addition, we have 54 "Fannie Mae Partnership Offices" in leased premises around the United States which work with cities, rural areas, and underserved communities.

**Item 3. *Legal Proceedings***

In the ordinary course of business, we are involved in legal proceedings that arise in connection with properties acquired either through foreclosure on properties securing delinquent mortgage loans we own or by receiving deeds to those properties in lieu of foreclosure. For example, claims related to possible tort liability arise from time to time, primarily in the case of single-family REO.

We are a party to legal proceedings from time to time arising from our relationships with our seller/ servicers. Disputes with lenders concerning their loan origination or servicing obligations to us, or disputes concerning termination by us (for any of a variety of reasons) of a lender's authority to do business with us as a seller and/or servicer, can result in litigation. Also, loan servicing and financing issues have resulted from time to time in claims against us brought as putative class actions for borrowers. We also are a party to legal proceedings from time to time arising from other aspects of our business and administrative policies.

Claims and proceedings of all types are subject to many uncertain factors that generally cannot be predicted with assurance. However, in the case of the legal proceedings and claims that are currently pending against us, management believes that their outcome will not have a material adverse effect on our financial condition, results of operations or cashflows.

**Item 4. *Submission of Matters to a Vote of Security Holders***

None.

**PART II**

**Item 5. *Market for Registrant's Common Equity and Related Stockholder Matters***

Information on the market for our common stock and related stockholder matters is set forth under Item 9 of the Form 10 we filed on March 31, 2003 (the "Form 10") and incorporated by reference herein.

**Item 6. Selected Financial Data**

The following selected financial data have been summarized or derived from our audited financial statements. This financial information should be read in conjunction with “Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Item 1 — Business,” and our financial statements and related notes, included elsewhere in this report.

Income Statement Data:	Year Ended December 31,				
	2002	2001	2000	1999	1998
	(Dollars and shares in millions, except per common share amounts)				
Interest income	\$ 50,853	\$ 49,170	\$ 42,781	\$ 35,495	\$ 29,995
Interest expense	(40,287)	(41,080)	(37,107)	(30,601)	(25,885)
Net interest income	10,566	8,090	5,674	4,894	4,110
Guaranty fee income	1,816	1,482	1,351	1,282	1,229
Fee and other income (expense), net	232	151	(44)	191	275
Provision for losses	(128)	(94)	(122)	(151)	(245)
Foreclosed property income (expense)	36	16	28	24	(16)
Administrative expense	(1,219)	(1,017)	(905)	(800)	(708)
Special contribution	—	(300)	—	—	—
Purchased options expense <sup>(1)</sup>	(4,545)	(37)	—	—	—
Debt extinguishments, net	(710)	(524)	49	(14)	(40)
Income before federal income taxes and cumulative effect of change in accounting principle	6,048	7,767	6,031	5,426	4,605
Provision for federal income taxes	(1,429)	(2,041)	(1,583)	(1,514)	(1,187)
Income before cumulative effect of change in accounting principle	4,619	5,726	4,448	3,912	3,418
Cumulative effect of change in accounting principle, net of tax effect <sup>(2)</sup>	—	168	—	—	—
Net income	\$ 4,619	\$ 5,894	\$ 4,448	\$ 3,912	\$ 3,418
Preferred stock dividends	(99)	(138)	(121)	(78)	(66)
Net income available to common stockholders	\$ 4,520	\$ 5,756	\$ 4,327	\$ 3,834	\$ 3,352
Basic earnings per common share:					
Earnings before cumulative effect of change in accounting principle	\$ 4.56	\$ 5.58	\$ 4.31	\$ 3.75	\$ 3.26
Cumulative effect of change in accounting principle	—	.17	—	—	—
Net earnings	\$ 4.56	\$ 5.75	\$ 4.31	\$ 3.75	\$ 3.26
Diluted earnings per common share:					
Earnings before cumulative effect of change in accounting principle	\$ 4.53	\$ 5.55	\$ 4.29	\$ 3.72	\$ 3.23
Cumulative effect of change in accounting principle	—	.17	—	—	—
Net earnings	\$ 4.53	\$ 5.72	\$ 4.29	\$ 3.72	\$ 3.23
Cash dividends per common share	\$ 1.32	\$ 1.20	\$ 1.12	\$ 1.08	\$ .96

Balance Sheet Data:	December 31,				
	2002	2001	2000	1999	1998
Mortgage portfolio, net	\$797,693	\$705,324	\$607,551	\$522,921	\$415,355
Liquid assets	61,554	76,072	55,585	41,850	59,258
Total assets	887,515	799,948	675,224	575,308	485,146
Borrowings:					
Due within one year	382,412	343,492	280,322	226,582	205,413
Due after one year	468,570	419,975	362,360	321,037	254,878
Total liabilities	871,227	781,830	654,386	557,679	469,693
Preferred stock	2,678	2,303	2,278	1,300	1,150
Stockholders’ equity	16,288	18,118	20,838	17,629	15,453



## Year ended December 31,

Core Business Earnings Data <sup>(3)</sup> :	Year ended December 31,				
	2002	2001	2000	1999	1998
	(Dollars and Shares in millions, except per common share amounts)				
Core business earnings <sup>(4)</sup>	\$ 6,394	\$ 5,367	\$4,448	\$3,912	\$3,418
Total taxable-equivalent revenues <sup>(5)</sup>	11,896	10,187	7,825	6,975	6,272
Net interest margin	1.15%	1.11%	1.01%	1.01%	1.03%
Return on average assets <sup>(6)</sup>	.76	.71	.71	.73	.78
Return on average realized common equity <sup>(7)</sup>	26.1	25.4	25.2	25.0	25.2
	December 31,				
Other Data:	2002	2001	2000	1999	1998
Average effective guaranty fee rate	.191%	.190%	.195%	.193%	.202%
Credit loss ratio <sup>(8)</sup>	.005	.006	.007	.011	.027
Administrative expense ratio <sup>(9)</sup>	.072	.071	.072	.071	.074
Efficiency ratio <sup>(10)</sup>	10.2	10.0	11.6	11.5	11.3
Dividend payout ratio	29.0	20.9	26.0	28.8	29.5
Ratio of earnings to combined fixed charges and preferred stock dividends <sup>(11)</sup>	1.15:1	1.19:1	1.16:1	1.17:1	1.17:1
Mortgage purchases	\$ 370,641	\$270,584	\$154,231	\$195,210	\$188,448
MBS issues acquired by others <sup>(12)</sup>	478,260	344,739	105,407	174,850	220,723
Outstanding MBS <sup>(13)</sup>	1,029,456	858,867	706,684	679,169	637,143
Weighted-average diluted common shares outstanding	997	1,006	1,009	1,031	1,037
Return on average assets	.55%	.78%	.71%	.73%	.78%
Average equity to average assets	2.1	2.3	3.1	3.1	3.3
Return on common equity	30.2	39.8	25.6	25.2	25.2
Core capital <sup>(14)</sup>	\$ 28,079	\$ 25,182	\$ 20,827	\$ 17,876	\$ 15,465
Total capital <sup>(15)</sup>	28,871	25,976	21,634	18,677	16,257

- (1) Represents the change in the fair value of the time value of purchased options under FAS 133, "Accounting for Derivative Instruments and Hedging Activities" (FAS 133).
- (2) Represents the after-tax effect on income of the adoption of FAS 133 on January 1, 2001.
- (3) Core business earnings data are non-GAAP (generally accepted accounting principles) measures management uses to track and analyze our financial performance. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Core Business Earnings and Business Segment Results" for additional discussion of these measures.
- (4) Core business earnings is a non-GAAP measure developed by management, in conjunction with the adoption of FAS 133, to evaluate and assess the quality of Fannie Mae's earnings from its principal business activities on a consistent basis. Core business earnings is presented on a net of tax basis and excludes the transition adjustment from the adoption of FAS 133 and unrealized gains and losses on purchased options recorded under FAS 133, and includes purchased options premiums amortized on a straight-line basis over the original estimated life of the option.
- (5) Includes revenues net of operating losses on low-income housing tax credit limited partnerships (accounted for using the equity method of accounting) and amortization expense of purchased options premiums, plus taxable-equivalent adjustments for tax-exempt income and investment tax credits using the applicable federal income tax rate. This is a non-GAAP measure.
- (6) Core business earnings less preferred stock dividends divided by average assets. This is a non-GAAP measure.
- (7) Core business earnings less preferred stock dividends divided by average realized common stockholders' equity (common stockholders' equity excluding accumulated other comprehensive income). This is a non-GAAP measure.
- (8) Charge-offs, net of recoveries, and foreclosed property income (expense) as a percentage of average mortgage portfolio (on an amortized cost basis) and average outstanding MBS.
- (9) Administrative expenses as a percentage of average net mortgage portfolio and average outstanding MBS.
- (10) Administrative expenses as a percentage of taxable-equivalent revenues.
- (11) "Earnings" consists of (a) income before federal income taxes and cumulative effect of accounting changes and (b) fixed charges. Fixed charges represent interest expense.
- (12) Includes MBS and other mortgage-related securities guaranteed by Fannie Mae.
- (13) Includes MBS and other mortgage-related securities guaranteed by Fannie Mae and held by investors other than Fannie Mae.
- (14) The sum of (a) the stated value of common stock, (b) the stated value of outstanding noncumulative perpetual preferred stock, (c) paid-in capital, and (d) retained earnings, less treasury stock. Core capital represents a regulatory measure of capital. Refer to Note 11 of the financial statements, "Dividend Restrictions and Regulatory Capital Ratios," for a discussion of core capital.
- (15) The sum of (a) core capital and (b) the total allowance for loan losses and guaranty liability for MBS, less (c) the specific loss allowance. Total capital represents a regulatory measure of capital. Specific loss allowances totaled \$19 million, \$13 million, \$2 million, \$3 million, and \$10 million for the years ended December 31, 2002, 2001, 2000, 1999, and 1998, respectively. Refer to Note 11 of the financial statements, "Dividend Restrictions and Regulatory Capital Ratios," for a discussion of total capital.

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations****Forward-Looking Information**

From time to time, we make forward-looking statements relating to matters such as our anticipated financial performance, business prospects, future business plans, financial condition, or other matters. This report includes forward-looking statements that are not historical facts or explanations of historical data. The words "believes," "anticipates," "expects," "should" and similar expressions generally identify forward-looking statements.

Forward-looking statements reflect our management's expectations based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. As such, forward-looking statements are subject to risks and uncertainties, and our actual results may differ (possibly significantly) from those indicated in such statements. Among the factors that may affect the performance, development, or results of our business, and thereby cause actual results to differ from management's expressed expectations, are the following:

- significant changes in borrower preferences for fixed- or adjustable-rate mortgages, originator preferences for selling mortgages in the secondary market, investor preferences for our securities versus other investments, the availability of funding at attractive spreads in the financial markets (in particular from callable debt), and other factors affecting the overall mix of mortgage loans available for purchase, our funding opportunities, or our net interest margins;
- significant changes in housing price valuations, employment rates, or other factors affecting delinquency or foreclosure levels and credit losses;
- significant changes in our policies or strategies, such as our underwriting requirements or our interest rate risk management, credit loss mitigation, or investment strategies;
- regulatory or legislative changes affecting us, our competitors, or the markets in which we are active, including changes in tax law or capital requirements applicable to us or our activities, or loss of certain exemptions or the Treasury's ability to purchase our obligations (see "Item 1 — Business — Government Regulation and Charter Act");
- competitive developments in the markets for mortgage purchases and for the sale of mortgage-related and debt securities, or significant changes in the rate of growth in conforming residential mortgage debt;
- significant changes in the amount and rate of growth of our expenses, and the costs (and effects) of legal or administrative proceedings (see "Item 3 — Legal Proceedings") or changes in accounting policies or practices;
- significant changes in general economic conditions or the monetary or fiscal policy of the United States;
- unanticipated, substantial changes in interest rates. It is possible that sudden, severe swings in interest rates could have at least a short-term significant effect on our results; and
- political events in the United States and internationally.

**We do not undertake to update any forward-looking statement in this document or that we may make from time to time.**

## ORGANIZATION OF INFORMATION

Management's Discussion and Analysis ("MD&A") provides a narrative on Fannie Mae's financial performance and condition that should be read in conjunction with the accompanying financial statements. It includes the following sections:

- 2002 Overview
- About Fannie Mae
- Results of Operations
- Core Business Earnings and Business Segment Results
- Off-Balance Sheet Transactions
- Application of Critical Accounting Policies
- Risk Management
- Liquidity and Capital Resources
- Performance Outlook
- New Accounting Standards

## 2002 OVERVIEW

2002 was a year of notable achievements for Fannie Mae. We produced strong financial results and made continued progress on our key strategic initiatives in an uncertain economic environment marked by significant interest rate volatility and more intense competition for mortgages in the secondary market. We reported net income of \$4.619 billion and diluted earnings per share ("diluted EPS") of \$4.53 in 2002, compared with \$5.894 billion and \$5.72 in 2001, and \$4.448 billion and \$4.29 in 2000. Our reported results are based on generally accepted accounting principles ("GAAP"), which include the effects of our January 1, 2001 adoption of Financial Accounting Standard No. 133 ("FAS 133"), *Accounting for Derivative Instruments and Hedging Activities*. FAS 133 generates significant volatility in our reported net income because it requires that we record in our income changes in the time value portion of purchased options that we use to manage interest rate risk, but it does not allow us to record in earnings changes in the intrinsic value portion of some of those options or similar changes in the fair value of options in all of our callable debt or mortgage assets. We expect purchased options expense to vary, often substantially, from period to period with changes in interest rates, expected interest rate volatility, and derivative activity.

The 22 percent decrease in our 2002 net income resulted primarily from a \$4.508 billion increase in purchased options expense, which occurred due to an increase in the notional amount of purchased options outstanding and the declining interest rate environment. We recorded \$4.545 billion in purchased options expense in 2002, compared with \$37 million in 2001. Excluding the impact of purchased options expense, we experienced solid growth in our business operations. Taxable-equivalent net interest income increased 29 percent over 2001 because of strong growth in our average net mortgage portfolio and actions taken during 2002 and 2001 to lower our debt costs. Guaranty fee income increased 23 percent, primarily due to an increase in the volume of outstanding MBS. These increases were partially offset by a modest rise in credit-related expenses and higher administrative expenses and losses on debt extinguishments.

Management also tracks and analyzes Fannie Mae's financial results based on a supplemental non-GAAP measure called "core business earnings" (previously referred to by us as "operating net income"). While core business earnings is not a substitute for GAAP net income, we rely on core business earnings in operating our business because we believe core business earnings provides our management and investors with a better measure of our financial results and better reflects our risk management strategies than our GAAP net income. We developed core business earnings in conjunction with our January 1, 2001 adoption of FAS 133 to adjust for accounting differences between alternative transactions we use to hedge interest rate risk that produce similar economic results but require different accounting treatment under FAS 133. For example, our

core business earnings measure allows management and investors to evaluate the quality of earnings from Fannie Mae's principal business activities in a way that accounts for comparable hedging transactions in a similar manner. We discuss our core business earnings results in "MD&A—Core Business Earnings and Business Segment Results."

While the overall U.S. economy was weak during 2002, the U.S. housing market remained strong, with both home sales and mortgage originations reaching record levels. The decline in mortgage interest rates during the third quarter of 2002 to the lowest levels since the 1960s sparked a refinance boom and fueled record refinance as well as purchase originations. Single-family mortgage originations in 2002 totaled \$2.6 trillion, surpassing 2001's record of \$2.0 trillion by 29 percent. Our market—residential mortgage debt outstanding—increased 12 percent in 2002 to \$7.0 trillion as the demand for housing continued to grow, marking the first two consecutive years of double-digit residential mortgage debt outstanding ("MDO") growth since 1988-1989.

During 2002, we made progress on several key strategic initiatives to support our mission of increasing homeownership and affordable rental housing for all Americans. We align our strategies with and measure our performance against six long-term corporate goals.

1. *Acknowledged Leadership in Increasing Access to Affordable Housing:* One of our most significant initiatives to increase homeownership rates and serve 18 million targeted American families is our ten-year, \$2 trillion American Dream Commitment. In 2002, we provided \$670 billion for 5.5 million targeted families to own or rent a home, bringing us almost two-thirds of the way toward achieving this ten-year goal in three years.
2. *Leading Presence in the Secondary Market and Partner of Choice:* Our goal is to be the secondary market partner of choice for mortgage lenders. We now have alliance agreements with 17 of the 30 largest lenders, and our business with smaller lenders has grown by over 150 percent during the past year. We achieved a net gain in major partnership accounts during 2002. We have provided increased liquidity to mortgage markets by owning approximately 11 percent of mortgage debt outstanding and guaranteeing 15 percent owned by other investors.
3. *Optimal Risk Management:* Our financial success depends on the ability of our two core lines of business to effectively manage interest rate risk and credit risk on home mortgages. By taking an active, highly disciplined approach in managing these risks, we have honed our risk management tools over the years to reduce our risk exposure, expand our service to American homebuyers, and deliver double-digit core business earnings growth for the last 16 years through all kinds of economic scenarios.
4. *Record Financial Performance:* One of our key financial performance goals, announced in 1999, is a five-year goal to double Fannie Mae's core business diluted earnings per share to \$6.46 by the end of 2003. With an increase in core business earnings of nearly 90 percent over the last 4 years, we are on track to achieve this five-year goal.
5. *Corporate Culture to Enhance Strategy Execution:* Developing a corporate culture that ensures a diverse and fully engaged workforce is critical in executing our key strategic initiatives and fulfilling Fannie Mae's mission to help more families achieve the American Dream of homeownership. In 2002, Fannie Mae received several awards in recognition of our commitment to being a world-class, diverse organization.
6. *E-Commerce Company Infrastructure to Increase Capabilities and Lower Costs:* Our e-commerce strategy is intended to help us grow our business, while lowering the cost of mortgages and reducing our underwriting risk. For example, by expanding utilization of Desktop Underwriter® ("DU"), our automated underwriting system, we can help lenders streamline their processes and enhance further our credit risk management effectiveness. Today, approximately 60 percent of our total single-family business is processed through DU. In addition, we committed significant resources in 2002 to upgrading our core technology infrastructure to enhance the acquisition of mortgages through multiple channels, facilitate new products, and generate cost reductions for our customers.

Because of Fannie Mae's critical role in the housing finance system, one of our core commitments is to maintain the highest standard of transparency in our financial disclosures. In our ongoing efforts to enhance Fannie Mae's transparency, we announced in 2002 our voluntary initiative to register Fannie Mae's common stock with the Securities and Exchange Commission under Section 12(g) of the Securities Exchange Act of 1934. This report is our first periodic report filed pursuant to our voluntary initiative.

## ABOUT FANNIE MAE

Fannie Mae's purpose is to facilitate the flow of low-cost mortgage capital to increase the availability and affordability of homeownership for low-, moderate-, and middle-income Americans. We operate under a federal charter, and our primary regulator is the Office of Federal Housing Enterprise Oversight ("OFHEO"). However, we are a private, shareholder-owned company. The U.S. government does not guarantee, directly or indirectly, Fannie Mae's debt securities or other obligations.

As the nation's largest source of funds for mortgage lenders and investors, Fannie Mae provides resources for our customers to make additional mortgage loans or investments in mortgage-related securities. We provide liquidity to the mortgage market for the benefit of borrowers; however, we do not lend money directly to consumers. We operate exclusively in the secondary mortgage market by purchasing mortgages and mortgage-related securities, including Fannie Mae MBS, from primary market institutions, such as commercial banks, savings and loan associations, mortgage companies, securities dealers, and other investors. We provide additional liquidity in the secondary market by issuing and guaranteeing mortgage-related securities.

We have two lines of business that generate revenue. These business lines also focus on managing our key business risks. We measure the results of our lines of business based on core business earnings. We evaluate the results of our business lines as though each were a stand-alone business. Hence, we allocate certain income and expenses to each line of business for purposes of business segment reporting. We eliminate certain inter-segment allocations in our consolidated core business earnings results (see "MD&A—Core Business Earnings and Business Segment Results").

**Portfolio Investment Business:** The Portfolio Investment business has two principal components: a mortgage portfolio and a liquid investment portfolio ("LIP"). The mortgage portfolio purchases mortgage loans, mortgage-related securities, and other investments from lenders, securities dealers, investors, and other market participants. The LIP serves as an alternative source of funds to meet our cash flow needs by investing in high quality, short-term investments that provide an ongoing supply of funds. We can use these funds as necessary for liquidity purposes or to reinvest in readily marketable, high credit quality securities that can be sold to raise cash. We fund the purchase of the assets in our Portfolio Investment business from our equity capital and by issuing debt in the global capital markets. The Portfolio Investment business generates profits by ensuring that the interest income from the mortgages, MBS, mortgage-related securities, and liquid investments we purchase is greater than our borrowing costs. A primary measure of profitability for the Portfolio Investment business is our "net interest margin". Our net interest margin reflects the difference between taxable-equivalent income on our mortgage assets and non-mortgage investments and our borrowing expense divided by average interest earning assets.

Our Portfolio Investment business focuses on managing Fannie Mae's interest rate risk. Interest rate risk is the risk that changes in interest rates could change cash flows on our mortgage assets and debt in a way that adversely affects Fannie Mae's earnings or long-term value.

**Credit Guaranty Business:** Our Credit Guaranty business has primary responsibility for managing all of our mortgage credit risk. Credit risk is the risk of loss to future earnings and future cash flows that may result from the failure of a borrower or counterparty to fulfill its contractual obligation to Fannie Mae. The Credit Guaranty business primarily generates income from guaranty fees for guaranteeing the timely payment of scheduled principal and interest on mortgage-related securities we guarantee that are not owned by the Portfolio Investment business. The primary source of income for the Credit Guaranty business is the

difference between the guaranty fees earned and the costs of providing this service. Income is also allocated to the Credit Guaranty business for the following activities:

- *Managing the credit risk on mortgage-related assets held by the Portfolio Investment business.* The Portfolio Investment business compensates the Credit Guaranty business through a guaranty fee comparable to an MBS guaranty fee. These fees are recognized as guaranty fee income by the Credit Guaranty business. Similarly, all credit expenses, including credit losses on loans and on MBS and other mortgage-related securities held in Fannie Mae’s mortgage portfolio, are allocated to the Credit Guaranty business for business segment reporting purposes. Net interest income for the Credit Guaranty business is net of charges paid to the Portfolio Investment business for forgone interest on delinquent loans.
- *Providing capital to the Portfolio Investment business.* The Portfolio Investment business also compensates the Credit Guaranty business for the temporary use of capital generated by the Credit Guaranty business, which the Portfolio Investment business uses to fund investments. This compensation is classified as net interest income.
- *Temporarily investing principal and interest payments on loans underlying MBS and other mortgage-related securities prior to remittance to investors.* Interest income on the temporary investment of these funds is allocated to the Credit Guaranty business.

Our Credit Guaranty business manages Fannie Mae’s mortgage credit risk by managing the profile and quality of mortgages in the mortgage credit book of business, using credit enhancements to reduce our losses, assessing the sensitivity of credit losses to changes in economic conditions, and aggressively managing problem assets to mitigate losses.

Revenue growth in our business lines is driven fundamentally by growth in residential mortgage debt outstanding. This market has usually been one of the strongest growth markets in the U.S. economy, typically growing faster than the gross domestic product (“GDP”). During the 1990s, mortgage debt outstanding grew 7 percent annually. Since 2000, MDO has grown at an average annual rate of 11.3 percent. Our economic projections indicate an average annual growth rate of 8 to 10 percent during the current decade due to four fundamental demographic and economic drivers: (1) projected growth in immigration, population, and household formation; (2) increased rates of homeownership particularly by minorities, whose homeownership rates lag the average by 20 percentage points; (3) continued growth in property values as the average home grows larger, demand remains strong, and supply remains constrained because of land shortages and growth restrictions; and (4) projected growth in debt-to-value ratios as consumers increasingly use the equity in their homes as a financial investment option. In addition, our business has typically grown faster than our market because of our efficiency, innovation, and low costs, which have helped make Fannie Mae a preferred source of liquidity for fixed-rate mortgages.

The expenses related to our lines of business stem largely from costs incurred to manage our two primary business risks—interest rate risk and credit risk. We have highly skilled teams of experienced risk management professionals who take an active, highly disciplined approach in managing these risks to meet our objective of delivering consistent earnings growth and target returns on capital in a wide range of economic environments. They have been successful in dispersing Fannie Mae’s risk and loss exposure over the years within the global financial system by developing various mortgage risk management tools that increase our level of expertise and efficiency in managing mortgage prepayment and credit risk.

## RESULTS OF OPERATIONS

The following discussion of our results of operations is based on Fannie Mae’s reported results. We have reclassified certain amounts in our prior years’ reported results to conform to our current presentation. We provide a separate discussion of our core business earnings and business segment results in “MD&A—Core Business Earnings and Business Segment Results.”

## Net Interest Income

Reported net interest income is the difference between interest income and interest expense. Net interest income represents a principal source of earnings for Fannie Mae and is affected by net volume, asset yield, and the cost of debt and certain derivatives. Reported net interest income subsequent to our adoption of FAS 133 only includes a portion of the cost associated with using purchased options to hedge the borrowers' prepayment option in mortgages. Prior to the adoption of FAS 133, we amortized purchased options premiums on a straight-line basis and reflected the cost in our net interest income as a component of our interest expense. With the adoption of FAS 133, we now report the change in the fair value of the time value of purchased options in a separate income statement category "purchased options expense." We also present net interest income and the related net interest yield on a taxable-equivalent basis to consistently reflect income from taxable and tax-exempt investments based on a 35 percent marginal tax rate.

Table 1 presents Fannie Mae's net interest yield based on our reported net interest income adjusted for tax-exempt investments and average balances of mortgage assets, nonmortgage investments, and debt. The net interest yield calculation subsequent to our adoption of FAS 133 does not fully reflect the cost of our purchased options (see "MD&A—Core Business Earnings and Business Segment Results—Core Net Interest Income" for a discussion of our supplemental non-GAAP measures, core net interest income and net interest margin).

Table 1: Taxable-Equivalent Net Interest Income and Average Balances

	2002	2001	2000
	(Dollars in millions)		
<b>Interest income:</b>			
Mortgage portfolio	\$ 49,265	\$ 46,478	\$ 39,403
Nonmortgage investments and cash equivalents	1,588	2,692	3,378
Total interest income	50,853	49,170	42,781
<b>Interest expense<sup>(1)</sup>:</b>			
Short-term debt	2,978	5,897	4,204
Long-term debt	37,309	35,183	32,903
Total interest expense	40,287	41,080	37,107
Net interest income	10,566	8,090	5,674
Taxable-equivalent adjustment on tax-exempt investments <sup>(2)</sup>	502	470	414
Taxable-equivalent net interest income	\$ 11,068	\$ 8,560	\$ 6,088
<b>Average balances<sup>(3)</sup>:</b>			
<b>Interest-earning assets<sup>(4)</sup>:</b>			
Mortgage portfolio, net	\$735,943	\$658,195	\$553,531
Nonmortgage investments and cash equivalents	68,658	58,811	51,490
Total interest-earning assets	804,601	717,006	605,021
Interest-free funds <sup>(5)</sup>	(23,992)	(23,630)	(20,595)
Total interest-earning assets funded by debt	\$780,609	\$693,376	\$584,426
<b>Interest-bearing liabilities<sup>(1)</sup>:</b>			
Short-term debt	\$141,727	\$137,078	\$ 73,351
Long-term debt	638,882	556,298	511,075
Total interest-bearing liabilities	\$780,609	\$693,376	\$584,426
<b>Average interest rates<sup>(2, 3)</sup>:</b>			
<b>Interest-earning assets:</b>			
Mortgage portfolio, net	6.73%	7.11%	7.16%
Nonmortgage investments and cash equivalents	2.34	4.63	6.60
Total interest-earning assets	6.35	6.90	7.11
Interest-free return <sup>(5)</sup>	.18	.21	.25
Total interest-earning assets funded by debt	6.53	7.11	7.36
<b>Interest-bearing liabilities<sup>(1)</sup>:</b>			
Short-term debt	1.90	4.16	5.70
Long-term debt	5.88	6.35	6.44
Total interest-bearing liabilities	5.15	5.92	6.35
Net interest yield	1.38%	1.19%	1.01%

(1) Classification of interest expense and interest-bearing liabilities as short-term or long-term is based on effective maturity or repricing date, taking into consideration the effect of derivative financial instruments.

(2) Reflects non-GAAP adjustments to permit comparison of yields on tax-exempt and taxable assets based on 35 percent marginal tax rate.

(3) Averages have been calculated on a monthly basis based on amortized cost.

(4) Includes average balance of nonaccrual loans of \$4.6 billion in 2002, \$2.6 billion in 2001, and \$2.1 billion in 2000.

(5) Interest-free funds represent the portion of our investment portfolio funded by equity and non-interest bearing liabilities.

Taxable-equivalent net interest income totaled \$11.068 billion in 2002, compared with \$8.560 billion in 2001 and \$6.088 billion in 2000. The increase of \$2.508 billion, or 29 percent, in taxable-equivalent net interest income was due primarily to 12 percent growth in our average net mortgage portfolio and a higher net interest yield, which was favorably affected by the low interest rate environment and unusually steep yield curve. As mortgage interest rates fell to the lowest level in 40 years and fixed-rate mortgage originations reached record levels, we took advantage of opportunities to grow our mortgage portfolio at attractive spreads relative to our debt costs. Our net interest yield continued to benefit and remained elevated during 2002 because of actions we took during 2002 and 2001 to lower our debt costs by calling or retiring higher-cost debt and temporarily replacing it with shorter-term, lower-cost debt.

During 2001, taxable-equivalent net interest income increased \$2.472 billion or 41 percent over 2000, partially due to the effect of the change in accounting for our purchased options under FAS 133. Our taxable-equivalent net interest income in 2001 does not include all of the cost of purchased options. However, our taxable-equivalent net interest income in 2000 includes \$231 million of expense related to the amortization of purchased options premiums on a straight-line basis. Prior to the adoption of FAS 133, we recorded purchased options premiums as interest expense in our reported net interest income. FAS 133 changed our accounting for purchased options, requiring that we report changes in the fair value of the time value of purchased options instead of expensing purchased options premiums on a straight-line basis. We report changes in the fair value of the time value of our purchased options in a separate income statement category "purchased options expense." Our taxable-equivalent net interest income in 2001 also benefited from 19 percent growth in our average net mortgage portfolio and a significant decrease in our debt costs that elevated our net interest yield. A reduction in intermediate-term rates during 2001 boosted mortgage refinancings and originations, fueling an increase in the supply of mortgage assets in the secondary market and attractive mortgage-to-debt spreads.

Table 2 shows the changes in our reported and taxable-equivalent net interest income between 2002 and 2001 and 2001 and 2000 attributable to changes in rates and volume on our mortgage assets, nonmortgage investments, and debt.

**Table 2: Rate/ Volume Analysis of Reported Net Interest Income**

	Increase (Decrease)	Attributable to Changes in <sup>(1)</sup>	
		Volume	Rate
(Dollars in millions)			
<b>2002 vs. 2001</b>			
Interest income:			
Mortgage portfolio	\$ 2,787	\$5,292	\$(2,505)
Nonmortgage investments and cash equivalents	(1,104)	394	(1,498)
Total interest income	1,683	5,686	(4,003)
Interest expense: <sup>(2)</sup>			
Short-term debt	(2,919)	194	(3,113)
Long-term debt	2,126	4,959	(2,833)
Total interest expense	(793)	5,153	(5,946)
Change in net interest income	\$ 2,476	\$ 533	\$ 1,943
Change in taxable-equivalent adjustment on tax-exempt investments <sup>(3)</sup>	32		
Change in taxable-equivalent net interest income	\$ 2,508		



	Increase (Decrease)	Attributable to Changes in <sup>(1)</sup>	
		Volume	Rate
(Dollars in millions)			
<b>2001 vs. 2000</b>			
Interest income:			
Mortgage portfolio	\$7,075	\$7,393	\$ (318)
Nonmortgage investments and cash equivalents	(686)	434	(1,120)
<b>Total interest income</b>	<b>6,389</b>	<b>7,827</b>	<b>(1,438)</b>
Interest expense: <sup>(2)</sup>			
Short-term debt	1,693	2,945	(1,252)
Long-term debt	2,280	2,868	(588)
<b>Total interest expense</b>	<b>3,973</b>	<b>5,813</b>	<b>(1,840)</b>
Change in net interest income	\$2,416	\$2,014	\$ 402
Change in taxable-equivalent adjustment on tax-exempt investments <sup>(3)</sup>	56		
Change in taxable-equivalent net interest income	\$2,472		

(1) Combined rate/volume variances, a third element of the calculation, are allocated to the rate and volume variances based on their relative size.

(2) Classification of interest expense and interest-bearing liabilities as short-term or long-term is based on effective maturity or repricing date, taking into consideration the effect of derivative financial instruments.

(3) Reflects non-GAAP adjustments to permit comparison of yields on tax-exempt and taxable assets based on a 35 percent marginal tax rate.

#### Guaranty Fee Income

Guaranty fee income reported in our total corporate results and our average guaranty fee rate primarily include guaranty fees we receive on mortgage-related securities we issue that are held by other investors. We classify guaranty fees on Fannie Mae mortgage-related securities held in our portfolio as net interest income. The guaranty fee income allocated for line of business reporting purposes to the Credit Guaranty business on mortgage-related securities held in our portfolio is eliminated by an equal and offsetting allocation of guaranty expense to the Portfolio Investment business. We exclude the administrative costs of managing outstanding MBS and other mortgage-related securities from guaranty fee income.

Guaranty fee income increased 23 percent or \$334 million in 2002 to \$1.816 billion and 10 percent in 2001 to \$1.482 billion. The increases were driven primarily by a 22 percent increase in average outstanding MBS (MBS and other mortgage-related securities guaranteed by Fannie Mae and held by investors other than Fannie Mae) during 2002 and a 12 percent increase during 2001.

Our average guaranty fee rate on outstanding MBS during 2002 increased slightly to 19.1 basis points from 19.0 basis points in 2001. During the last half of 2002, our average effective guaranty fee rate rose as a result of higher fee rates on new business and the faster amortization of deferred fees as we adjusted our prepayment amortization rates to reflect the acceleration of mortgage prepayments in the heavy refinance environment. Our average effective guaranty fee rate declined by .5 basis points between 2000 and 2001, primarily due to increased competition and general market conditions. Recently, rates on new credit guaranty products have been higher because of our efforts to better align our pricing with the relative underlying risks of loans we guarantee and expansion into market segments that demand higher guaranty fees. As a result of these trends, we anticipate a modest increase in our average effective guaranty fee rates in the future. Table 3 presents our average effective guaranty fee rate for the past three years.

**Table 3: Guaranty Fee Data**

	Year Ended December 31,		
	2002	2001	2000
	(Dollars in millions)		
Guaranty fee income	\$ 1,816	\$ 1,482	\$ 1,351
Average balance of outstanding MBS <sup>(1)</sup>	950,232	779,647	694,165
Average effective guaranty fee rate (basis points)	19.1	19.0	19.5

(1) "Outstanding MBS" refers to MBS and other mortgage-related securities guaranteed by Fannie Mae and held by investors other than Fannie Mae. If an MBS has been resecuritized into another MBS, we only include the principal amount once in the outstanding balance.

#### Fee and Other Income (Expense), Net

*Fee and other income (expense) consists of transaction fees, technology fees, multifamily fees, and other miscellaneous items and is net of costs associated with the purchase of additional mortgage insurance to protect against credit losses ("credit enhancement expense") and operating losses from certain tax-advantaged investments in affordable housing projects. These tax-advantaged investments represent equity interests in limited partnerships that own rental housing and generate tax credits, which reduce Fannie Mae's effective federal income tax rate. We account for the majority of these investments using the equity method. We do not guarantee any obligations of these partnerships, and our exposure is limited to the amount of our investments. We record the tax benefit related to these investments as a reduction in the provision for federal income taxes and as an increase in taxable-equivalent revenues.*

We recorded \$232 million of fee and other income in 2002, up from \$151 million of income in 2001. The \$81 million increase in fee and other income was driven by a \$114 million increase in transaction and technology fees resulting primarily from increased REMIC transaction volumes and a \$69 million increase in net gains from the sale of securities. These increases were offset partially by a \$78 million increase in credit enhancement expenses and a \$61 million increase in impairment write-downs on a variety of investments. The increase in credit enhancement expenses was attributable to an increase in the volume of business covered by credit enhancements purchased directly by Fannie Mae, stemming from our expansion into new products and markets.

Fee and other income totaled \$151 million for 2001, up \$195 million over expense of \$44 million recorded in 2000 primarily because of a \$146 million increase in technology and transaction fees. The increase in technology and transaction fees resulted largely from greater use of Fannie Mae's Desktop Underwriter and Desktop Originator systems and higher structured transaction fees, such as REMIC fees, attributable to record mortgage business volumes. A hedging loss on an anticipated Benchmark Notes® issuance that occurred in April 2000 also contributed to the year-over-year increase in fee and other income in 2001.

#### Credit-Related Expenses

*Credit-related expenses include foreclosed property expenses (income) and the provision for losses. In 2002, we reclassified recoveries in excess of charged-off amounts on foreclosed properties from "charge-off recoveries" to "foreclosed property expense (income)." In addition, with the rescission of the American Institute of Certified Public Accountants ("AICPA") Statement of Position 92-3, "Accounting for Foreclosed Assets" ("SOP 92-3") in the fourth quarter of 2002, we now include estimated selling costs in the determination of our initial charge-off when we foreclose on a loan. We adjusted our provision for losses to reflect a charge equal to the net change in charge-offs. We have also retroactively reclassified any excess recoveries in previous periods for comparability purposes.*

Credit-related expenses increased \$14 million over 2001 to \$92 million, primarily due to an increase in multifamily credit-related losses stemming from two properties. We recorded a provision for losses of \$128 million in 2002, an increase of \$34 million over 2001. The increase in our provision was partially offset by \$20 million in additional foreclosed property income primarily due to gains on foreclosed property dispositions. Foreclosed property income totaled \$36 million in 2002, compared with \$16 million in 2001. The 2002

increase in credit-related expenses follows a \$16 million decline in 2001 that was largely due to a reduction in our provision for losses. Our provision for losses decreased \$28 million in 2001 to \$94 million. We also had forgone interest on non-performing assets that reduced our net interest income by \$148 million in 2002, \$70 million in 2001, and \$43 million in 2000. Although foreclosed single-family property acquisitions increased in 2002 to 19,500 from 14,486 in 2001 and 14,351 in 2000, average severities declined due to strong home prices and credit enhancement proceeds.

We previously recorded gains from the sale of foreclosed properties and related mortgage insurance claims against our allowance for losses as a recovery of charge-offs. During 2002, we reclassified these gains to foreclosed property expense (income). Additionally, the AICPA rescinded SOP 92-3 during the fourth quarter of 2002. Under SOP 92-3, we recorded selling costs related to the disposition of foreclosed properties in our income statement under foreclosed property expense (income). We now include selling costs in our initial charge-off estimate. All prior periods have been reclassified to conform to the current year presentation. The reclassified amounts result in equal and offsetting changes to our provision for losses and foreclosed property expense (income) line items within our previously reported income statements. These reclassifications have no impact on previously reported net income, total credit-related expenses, total credit-related losses, or the combined balance of the allowance for loan losses and guaranty liability.

Despite significant growth in our book of business and overall weaker economic conditions during 2002 and 2001, credit losses as a percentage of Fannie Mae's average book of business have steadily declined to .5 basis points in 2002, from .6 basis points in 2001, and .7 basis points in 2000. Our book of business includes mortgages and MBS in our mortgage portfolio and outstanding MBS held by other investors. Credit losses include charge-offs (net of recoveries) and foreclosed property income. The strong appreciation in home prices during 2002 and 2001 helped in strengthening the credit risk profile of our book of business. In addition, we have been able to effectively manage credit risk by using credit enhancements to minimize our credit losses during the economic slowdown, monitoring and assessing the sensitivity of our credit risk to changes in the economic environment, and taking an aggressive approach to problem asset management.

## **Administrative Expenses**

*Administrative expenses include those costs incurred to run our daily operations, such as personnel costs and technology expenses.*

Administrative expenses increased 20 percent to \$1.219 billion in 2002. The above average growth in administrative expenses was due primarily to costs incurred on a multi-year project initiated in 2001 to re-engineer our core infrastructure systems and expenses associated with relocating our primary data center. In addition, compensation expense increased 13 percent to \$683 million in 2002, resulting primarily from a 5 percent increase in the number of employees and annual salary increases.

Administrative expenses grew 12 percent to \$1.017 billion in 2001 from \$905 million in 2000, primarily due to increased compensation expense related to 8 percent growth in the number of employees and annual salary increases, increased costs related to the multi-year core infrastructure project, and a contribution of \$10 million in 2001 to support victims and families of victims affected by the September 11 tragedy.

We evaluate growth in administrative expenses based on growth in taxable-equivalent revenues and our average book of business. Taxable-equivalent revenues is a supplemental non-GAAP measure discussed further in "MD&A — Core Business Earnings and Business Segment Results." While administrative expenses have grown in the past two years, the ratio of administrative expenses to taxable-equivalent revenues, which we refer to as our efficiency ratio, has increased only modestly to 10.2 percent from 10.0 percent in 2001. Our efficiency ratio for 2002 and 2001 remained fairly steady and improved over the 11.6 percent level of 2000 primarily due to strong growth in net interest income during both years. The ratio of administrative expenses to our average book of business has also remained relatively stable at .072 percent in 2002, compared with .071 percent in 2001, and .072 percent in 2000.

## Special Contribution

*Special contribution expense reflects a contribution we made to the Fannie Mae Foundation.*

We committed during the fourth quarter of 2001 to contribute \$300 million of our common stock to the Fannie Mae Foundation. The Fannie Mae Foundation creates affordable homeownership and housing opportunities through innovative partnerships and initiatives that build healthy, vibrant communities across the United States. It is a separate, private, nonprofit organization that we do not consolidate, but is supported solely by Fannie Mae. We expect the 2001 contribution to the Fannie Mae Foundation to reduce the Foundation's need for contributions over the next several years. We acquired the shares through open market purchases and contributed them to the Foundation in the first quarter of 2002.

## Purchased Options Expense

*Purchased options expense includes the change in the fair value of the time value of purchased options in accordance with FAS 133. The change in the fair value of the time value of purchased options will vary from period to period with changes in interest rates, market pricing of options, and our derivative activity.*

Our reported income results for 2002 were unfavorably affected by \$4.545 billion in purchased options expense related to changes in the time value of purchased options, significantly more than the \$37 million expense recorded in 2001. The substantial increase in expense during 2002 was caused by an increase in the average notional balance of caps and swaptions, two types of purchased options we commonly use to manage interest rate risk, to \$287 billion in 2002 from \$154 billion in 2001, coupled with a sharp decline in interest rates that resulted in a decrease in time value. Under FAS 133, we are not allowed to recognize in earnings changes in the intrinsic value of some of these options, which, in combination with the fair value of options in our mortgage assets and callable debt, would have more than offset the decrease in the time value of these options during 2002. Prior to the adoption of FAS 133 on January 1, 2001, we amortized premiums on purchased options into interest expense on a straight-line basis. In 2000, we recorded \$231 million in purchased options amortization expense that is included as a component of net interest income.

During the fourth quarter of 2002, we refined our methodology for estimating the initial time value of interest rate caps at the date of purchase and prospectively adopted a preferred method that resulted in a \$282 million pre-tax reduction in purchased options expense and increased our diluted EPS for 2002 by \$.18. Under our previous valuation method, we treated the entire premium paid on purchased "at-the-money" caps as time value with no allocation to intrinsic value. Our new methodology allocates the initial purchase price to reflect the value of individual caplets, some of which are above the strike rate of the cap, which results in a higher intrinsic value and corresponding lower time value at the date of purchase. This approach is more consistent with our estimation of time value subsequent to the initial purchase date. This change does not affect the total expense that will be recorded in our income statement over the life of our caps and has no effect on our non-GAAP core business earnings measure.

## Debt Extinguishments

*Fannie Mae strategically repurchases or calls debt securities and related interest rate swaps on a regular basis as part of our interest rate risk management efforts and to reduce future debt costs. We record gains and losses on debt extinguishments in this category.*

We recognized a pre-tax loss of \$710 million in 2002 from the call and repurchase of debt, compared with a pre-tax loss of \$524 million in 2001. Market conditions during 2002 and 2001 made it advantageous for us to repurchase \$8 billion and \$9 billion, respectively, of debt securities that were trading at historically wide spreads to other fixed-income securities. We also called over \$174 billion of high-coupon debt securities and notional principal of interest rate swaps in 2002 and \$173 billion in 2001. The weighted-average cost of redeemed debt and interest rate swaps in 2002 and 2001 was 5.36 percent and 6.23 percent, respectively. During 2000, we repurchased or called \$18 billion in debt securities and notional principal of interest rate swaps carrying a weighted-average cost of 7.10 percent and recognized a gain of \$49 million.

During the second quarter of 2002, we adopted Financial Accounting Standard No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections* ("FAS 145"). This standard eliminates the extraordinary treatment of the gains and losses on our debt

repurchases because debt extinguishment is a normal and recurring component of our interest rate risk management strategy. For comparative purposes, we have reclassified all prior periods to conform to the current presentation.

## Income Taxes

The provision for federal income taxes, including tax related to the cumulative effect of change in accounting principle, decreased to \$1.429 billion in 2002 from \$2.131 billion in 2001. The 2002 decrease in tax expense was primarily related to the tax benefit recorded on the increased purchased options expense. Our tax provision totaled \$1.583 billion in 2000. The combined effect of our low income housing tax credits and the reduction in our 2002 pre-tax income from purchased options expense caused our effective tax rate on reported net income to decline to 24 percent from 27 percent in 2001 and 26 percent in 2000. Our effective tax rate based on our core business earnings, which is adjusted for the impact of FAS 133 on our purchased options, was 27 percent in 2002 and 26 percent in 2001 and 2000. See “MD&A—Core Business Earnings and Business Segment Results.”

## Cumulative Effect of Change in Accounting Principle

Effective January 1, 2001, we adopted FAS 133, as amended by Financial Accounting Standard No. 138, *Accounting for Derivative Instruments and Certain Hedging Activities— an amendment of FASB Statement No. 133*. Our adoption of FAS 133 on January 1, 2001, resulted in a cumulative after-tax increase to income of \$168 million (\$258 million pre-tax) in 2001. The cumulative effect on earnings from the change in accounting principle was primarily attributable to recording the fair value of the time value of purchased options, which are used as a substitute for callable debt securities.

## CORE BUSINESS EARNINGS AND BUSINESS SEGMENT RESULTS

Management relies primarily on core business earnings, a supplemental non-GAAP measure developed in conjunction with our January 1, 2001 adoption of FAS 133, to evaluate Fannie Mae’s financial performance. While core business earnings is not a substitute for GAAP net income, we rely on core business earnings in operating our business because we believe core business earnings provides our management and investors with a better measure of our financial results and better reflects our risk management strategies than our GAAP net income. Core business earnings excludes the unpredictable volatility in the time value of purchased options because we generally intend to hold these options to maturity, and we do not believe the period-to-period variability in our reported net income from changes in the time value of our purchased options accurately reflects the underlying risks or economics of our hedging strategy. Core business earnings includes amortization of purchased options premiums on a straight-line basis over the original expected life of the options. The net amount of purchased options amortization expense recorded under our core business earnings measure will equal the net amount of purchased options expense ultimately recorded under FAS 133 in our reported net income over the life of our options. However, our amortization treatment is more consistent with the accounting for embedded options in our callable debt and more accurately reflects the underlying economics of our use of purchased options as a substitute for issuing callable debt—two alternate hedging strategies that are economically very similar but require different accounting under FAS 133.

Management also relies on several other non-GAAP performance measures related to core business earnings to evaluate Fannie Mae’s performance. These key performance measures include taxable-equivalent revenues, core net interest income, and net interest margin. We discuss these measures further in this section and provide a discussion of our business segments, which we also evaluate based on core business earnings. Our core business earnings measures are not defined terms within GAAP and may not be comparable to similarly titled measures reported by other companies.

## Core Business Earnings

We delivered record core business earnings in 2002 for the 16th consecutive year. Core business earnings increased 19 percent over 2001 to \$6.394 billion due primarily to strong mortgage portfolio and net interest

margin growth. Our core business earnings in 2001 grew 21 percent over 2000 to \$5.367 billion, also due to strong portfolio and net interest margin growth.

*2002 financial highlights include:*

- *17 percent increase in total taxable-equivalent revenues*
- *12 percent growth in the average net mortgage portfolio*
- *16 percent increase in the total book of business*
- *4 basis point increase in the net interest margin*
- *Decline in our credit loss ratio to .5 basis points from .6 basis points in 2001*

While our core business earnings measures should not be construed by investors as an alternative to net income and other measures determined in accordance with GAAP, they are critical performance indicators for Fannie Mae's management. Core business earnings is the primary financial performance measure used by Fannie Mae's management not only in developing the financial plans of our lines of business and tracking results, but also in establishing corporate performance targets and determining incentive compensation. In addition, the investment analyst community has traditionally relied on our core business earnings measures to evaluate Fannie Mae's earnings performance and to issue earnings guidance. We believe these measures also can serve as valuable assessment tools for investors to judge the quality of our earnings because they provide more consistent accounting and reporting for economically similar interest rate risk hedging transactions, which allows investors to more readily identify sustainable trends and gauge potential future earnings trends.

Table 4 shows our line of business and consolidated core business earnings results for 2002, 2001, and 2000. We have reclassified certain amounts in our prior years' results to conform to our current presentation. The only difference in core business earnings and reported net income relates to the FAS 133 accounting treatment for purchased options, which affects our Portfolio Investment business. The FAS 133 related reconciling items between our core business earnings and reported results have no effect on our Credit Guaranty business.

Table 4: Reconciliation of Core Business Earnings to Reported Results

	2002 <sup>(1)</sup>				
	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
	(Dollars in millions)				
Net interest income	\$ 9,869	\$ 697	\$10,566	\$ —	\$10,566
Purchased options amortization expense	(1,814)	—	(1,814)	1,814 <sup>(a)</sup>	—
Core net interest income	8,055	697	8,752	1,814	10,566
Guaranty fee income (expense)	(1,374)	3,190	1,816	—	1,816
Fee and other income (expense), net	348	(116)	232	—	232
Credit-related expenses <sup>(2)</sup>	—	(92)	(92)	—	(92)
Administrative expenses	(357)	(862)	(1,219)	—	(1,219)
Purchased options expense under FAS 133	—	—	—	(4,545) <sup>(b)</sup>	(4,545)
Debt extinguishments, net	(710)	—	(710)	—	(710)
Income before federal income taxes	5,962	2,817	8,779	(2,731)	6,048
Provision for federal income taxes	(1,747)	(638)	(2,385)	956 <sup>(d)</sup>	(1,429)
Net income	\$ 4,215	\$2,179	\$ 6,394	\$ (1,775)	\$ 4,619
	2001 <sup>(1)</sup>				
	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
Net interest income	\$ 7,369	\$ 721	\$ 8,090	\$ —	\$ 8,090
Purchased options amortization expense	(590)	—	(590)	590 <sup>(a)</sup>	—
Core net interest income	6,779	721	7,500	590	8,090
Guaranty fee income (expense)	(1,109)	2,591	1,482	—	1,482
Fee and other income (expense), net	211	(60)	151	—	151
Credit-related expenses <sup>(2)</sup>	—	(78)	(78)	—	(78)
Administrative expenses	(302)	(715)	(1,017)	—	(1,017)
Special contribution	(192)	(108)	(300)	—	(300)
Purchased options expense under FAS 133	—	—	—	(37) <sup>(b)</sup>	(37)
Debt extinguishments, net	(524)	—	(524)	—	(524)
Income before federal income taxes and effect of accounting change	4,863	2,351	7,214	553	7,767
Cumulative effect of accounting change, net of tax effect	—	—	—	168 <sup>(c)</sup>	168
Provision for federal income taxes	(1,374)	(473)	(1,847)	(194) <sup>(d)</sup>	(2,041)
Net income	\$ 3,489	\$1,878	\$ 5,367	\$ 527	\$ 5,894
	2000				
	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
Net interest income	\$ 5,055	\$ 619	\$ 5,674	\$ —	\$ 5,674
Purchased options amortization expense	—	—	—	—	—
Core net interest income	5,055	619	5,674	—	5,674
Guaranty fee income (expense)	(1,079)	2,430	1,351	—	1,351
Fee and other income (expense), net	27	(71)	(44)	—	(44)
Credit-related expenses <sup>(2)</sup>	—	(94)	(94)	—	(94)
Administrative expenses	(254)	(651)	(905)	—	(905)
Debt extinguishments, net	49	—	49	—	49
Income before federal income taxes	3,798	2,233	6,031	—	6,031
Provision for federal income taxes	(1,053)	(530)	(1,583)	—	(1,583)
Net income	\$ 2,745	\$1,703	\$ 4,448	\$ —	\$ 4,448

(1) Reported net income for 2002 and 2001 includes the effect of FAS 133, which was adopted on January 1, 2001.

(2) Credit-related expenses include the income statement line items "Provision for losses" and "Foreclosed property expense (income)."

While the reconciling items to derive our core business earnings are significant components in understanding and assessing our reported results and financial performance, investors may not be able to directly discern the underlying economic impact of our interest rate risk management strategies without our core business results. We believe our core business earnings measures help to improve transparency and enhance investors' understanding of our operations, as well as facilitate trend analysis. The specific FAS 133 related adjustments affecting our Portfolio Investment business that we identify in Table 4 include:

- (a) *Purchased options amortization expense:* This amount represents the straight-line amortization of purchased options premiums over the original expected life of the options that we include in our core net interest income. We include this amount in core business earnings instead of recording changes in the time value of purchased options because it is more consistent with the accounting for the embedded options in our callable debt and the vast majority of our mortgages.
- (b) *Purchased options expense:* This amount, which is recorded in our income statement under purchased options expense, represents changes in the fair value of the time value of purchased options recorded in accordance with FAS 133. We exclude this amount from our core business earnings measure because the period-to-period fluctuations in the time value portion of our options does not reflect the economics of our current risk management strategy, which generally is to hold our purchased options to maturity or exercise date. Consequently, we do not expect to realize the period-to-period fluctuations in time value.
- (c) *Cumulative after-tax gain upon adoption of FAS 133:* This non-recurring amount represents the one-time transition recorded upon the adoption of FAS 133 on January 1, 2001. We exclude the transition gain from core business earnings because it relates to unrealized gains on purchased options that were recorded when we adopted FAS 133.
- (d) *Provision for federal income taxes adjustment:* Represents the net federal income tax effect of core business earnings adjustments based on the applicable federal income tax rate of 35 percent.

Core business earnings does not exclude any other accounting effects related to the application of FAS 133 or any other non-FAS 133 related adjustments. The guaranty fee income that we allocate to the Credit Guaranty business for managing the credit risk on mortgage-related assets held by the Portfolio Investment business is offset by a corresponding guaranty fee expense allocation to the Portfolio Investment business in our line of business results. Thus, there is no inter-segment elimination adjustment between our total line of business guaranty fee income and our reported guaranty fee income. We allocate transaction fees received for structuring and facilitating securities transactions for our customers primarily to our Portfolio Investment business. We allocate technology-related fees received for providing Desktop Underwriter and other on-line services and fees received for providing credit enhancement alternatives to our customers primarily to our Credit Guaranty business.

As discussed in "MD&A—Risk Management—Interest Rate Risk—Derivative Instruments," we use various funding alternatives, including option-based derivative instruments, that produce similar economic results to manage interest rate risk and protect against the prepayment option in mortgages. The adjustments made to our Portfolio Investment business to derive core business earnings provide consistent accounting treatment for purchased options and the embedded option in callable debt securities—economically equivalent funding transactions—by allocating the cost of purchased options on a straight-line basis over the original expected life of the option in a manner similar to our accounting for options in callable debt. We calculate the original expected life of "European" options based on the exercise date. We calculate the original expected life of "American" options based on the expected life at the time the option is purchased. There is a difference in the original expected lives of European and American options because European options are exercisable only on one specific date in the future, while American options are exercisable any time after a specific future date. The actual life of an American option may differ from our original expected life because of movements in interest rates subsequent to the exercise date that may affect the value and benefit of exercising the option at a given time.

We can protect our net interest margin against changes in interest rates by either issuing callable debt to fund the purchase of mortgages or using a combination of callable debt, purchased options, and noncallable



debt. We generally use the method that helps us achieve our desired funding flexibility and lowest cost. If interest rates fall and our mortgages prepay, we have the option of retiring callable debt and issuing debt at a lower rate to preserve our interest spread on new mortgage purchases. If interest rates fall and we have instead used a combination of noncallable debt and purchased options—such as a swaption that would allow us to enter into a pay-variable interest rate swap—we can exercise our option to allow us to pay a variable or lower interest rate and receive a fixed rate of interest. The fixed rate of interest that we receive would offset the cost of our noncallable, fixed-rate debt. This hedging strategy would lower our funding costs and preserve our net interest margin as interest rates fall in a manner very similar to retiring callable debt and issuing new, lower cost debt. However, because the accounting for this hedging strategy is different under FAS 133, the cost of the purchased option would not be reflected in our reported net interest yield. We would be required to record the change in the fair value of the time value of the purchased option as a separate amount in our income statement. On the other hand, if interest rates increase, we would not exercise the option to call debt since the cost of issuing new debt would be higher. Similarly, we would not exercise the option provided by a purchased swaption to enter a pay-variable swap because under a higher interest rate environment, we could enter into a similar transaction with more favorable terms. See “MD&A—Risk Management—Interest Rate Risk Management—Derivative Instruments” for further discussion on how we use purchased options to simulate callable debt.

If we issue noncallable debt and purchased options to fund the purchase of mortgages and protect against the prepayment option in mortgages, we are required under FAS 133 to record the unrealized period-to-period fluctuations in the changes in time value of the purchased options in earnings. If instead, we issue callable debt to fund the purchase of the same mortgages, the expense related to the option in our callable debt would be recognized ratably over the option period as part of interest expense. Although the two transactions produce similar economic results, GAAP requires different accounting treatment. Under our core business earnings measure, the accounting treatment for purchased options is consistent and also comparable to the accounting treatment applied to these items in periods prior to the adoption of FAS 133.

**Taxable-Equivalent Revenues**

*Taxable-equivalent revenues represent total revenues adjusted to reflect the benefits of investment tax credits and tax-exempt income based on applicable federal income tax rates and is net of the straight-line amortization of purchased options expense that would have been recorded prior to the adoption of FAS 133. For analytical purposes, we calculate revenues on a taxable-equivalent basis to measure income from lower yielding investments that are tax-exempt or generate tax credits on a basis comparable to higher yielding taxable investments.*

Table 5 compares taxable-equivalent revenues and the components for 2002, 2001, and 2000.

Table 5: Taxable-Equivalent Revenues

	Year Ended December 31,		
	2002	2001	2000
	(Dollars in millions)		
Net interest income	\$10,566	\$ 8,090	\$5,674
Guaranty fee income	1,816	1,482	1,351
Fee and other income (expense), net <sup>(1)</sup>	232	151	(44)
Total revenues	12,614	9,723	6,981
Taxable-equivalent adjustments:			
Investment tax credits <sup>(2)</sup>	594	584	430
Tax-exempt investments <sup>(3)</sup>	502	470	414
Purchased options amortization expense <sup>(4)</sup>	(1,814)	(590)	—
Taxable-equivalent revenues	\$11,896	\$10,187	\$7,825

- (1) Includes net losses on certain tax-advantaged investments totaling \$225 million, \$222 million, and \$188 million in 2002, 2001, and 2000, respectively.
- (2) Represents non-GAAP taxable-equivalent adjustments for tax credits related to losses on certain affordable housing tax-advantaged equity investments and other investment tax credits using the applicable federal income tax rate of 35 percent.
- (3) Reflects non-GAAP adjustments to permit comparisons of yields on tax-exempt and taxable assets based on a 35 percent marginal tax rate.
- (4) Represents non-GAAP adjustment for straight-line amortization of purchased options premiums that would have been recorded prior to the adoption of FAS 133 in 2001. This expense is included in net interest income in 2000.

Taxable-equivalent revenues increased 17 percent to \$11.896 billion in 2002, compared with a 30 percent increase in 2001 to \$10.187 billion. The increase in both years was primarily attributable to growth in net interest income resulting from the low rate environment that contributed to strong mortgage portfolio growth and a reduction in our average cost of debt relative to our mortgage asset yields. Tighter mortgage-to-debt spreads reduced mortgage portfolio growth during the first half of 2002 and slowed the increase in taxable-equivalent revenues to levels more in line with our expectations. Our 2001 growth rate was higher than expected because of the increased supply of mortgages in the secondary market and attractive mortgage-to-debt spreads.

#### Core Net Interest Income

*Core net interest income and our related net interest margin are supplemental non-GAAP measures that management uses to evaluate Fannie Mae's performance. Core net interest income includes our reported net interest income adjusted for the non-GAAP amortization of purchased options premiums on a straight-line basis over the original expected life of the options to reflect the cost associated with using purchased options to hedge the borrowers' prepayment option in mortgages. We also calculate core net interest income on a taxable-equivalent basis to determine our net interest margin. We believe these measures are beneficial in understanding and analyzing Fannie Mae's performance because they reflect consistent accounting for purchased options and callable debt, two of the principal instruments we use interchangeably to hedge the prepayment option in our mortgage investments. These measures also consistently reflect income from taxable and tax-exempt investments.*

Table 6 reconciles taxable-equivalent core net interest income to our reported net interest income and presents an analysis of our net interest margin based on the average balances and yields of mortgage assets, nonmortgage investments, and debt. Our taxable-equivalent core net interest income and net interest margin are significantly different than our reported taxable-equivalent net interest income and net interest yield because our core measures include the amortization of our purchased options premiums on a straight-line basis over the life of the option, which is not in accordance with GAAP.

**Table 6: Taxable-Equivalent Core Net Interest Income and Average Balances**

	2002	2001	2000
	(Dollars in millions)		
Net interest income	\$ 10,566	\$ 8,090	\$ 5,674
Purchased options amortization expense <sup>(1)</sup>	(1,814)	(590)	—
Core net interest income	8,752	7,500	5,674
Taxable-equivalent adjustment on tax-exempt investments <sup>(2)</sup>	502	470	414
Taxable-equivalent core net interest income	\$ 9,254	\$ 7,970	\$ 6,088
Average balances: <sup>(3)</sup>			
Interest-earning assets: <sup>(4)</sup>			
Mortgage portfolio, net	\$735,943	\$658,195	\$553,531
Nonmortgage investments and cash equivalents	68,658	58,811	51,490
Total interest-earning assets	804,601	717,006	605,021
Interest-free funds <sup>(5)</sup>	(23,992)	(23,630)	(20,595)
Total interest-earning assets funded by debt	\$780,609	\$693,376	\$584,426
Interest-bearing liabilities: <sup>(6)</sup>			
Short-term debt	\$141,727	\$137,078	\$ 73,351
Long-term debt	638,882	556,298	511,075
Total interest-bearing liabilities	\$780,609	\$693,376	\$584,426
Average interest rates: <sup>(2, 3)</sup>			
Interest-earning assets:			
Mortgage portfolio, net	6.73%	7.11%	7.16%
Nonmortgage investments and cash equivalents	2.34	4.63	6.60
Total interest-earning assets	6.35	6.90	7.11
Interest-free return <sup>(5)</sup>	.18	.21	.25
Total interest-earning assets funded by debt	6.53	7.11	7.36
Interest-bearing liabilities: <sup>(6)</sup>			
Short-term debt	2.15	4.28	5.70
Long-term debt	6.10	6.43	6.44
Total interest-bearing liabilities	5.38	6.00	6.35
Net interest margin	1.15%	1.11%	1.01%

(1) Reflects non-GAAP adjustment for straight-line amortization of purchased options premiums that would have been recorded prior to the adoption of FAS 133 in 2001.

(2) Reflects non-GAAP adjustments to permit comparison of yields on tax-exempt and taxable assets based on a 35 percent marginal tax rate.

(3) Averages have been calculated on a monthly basis based on amortized cost.

(4) Includes average balance of nonaccrual loans of \$4.6 billion in 2002, \$2.6 billion in 2001, and \$2.1 billion in 2000.

(5) Interest-free funds represent the portion of our investment portfolio funded by equity and non-interest bearing liabilities.

(6) Classification of interest expense and interest-bearing liabilities as short-term or long-term is based on effective maturity or repricing date, taking into consideration the effect of derivative financial instruments. The cost of debt includes expense for the amortization of purchased options.

Taxable-equivalent core net interest income totaled \$9.254 billion in 2002, compared with \$7.970 billion in 2001 and \$6.088 billion in 2000. The \$1.284 billion or 16 percent increase in taxable-equivalent core net interest income during 2002 was due primarily to a 12 percent increase in our average net mortgage portfolio and a 4 basis point increase in the net interest margin to 1.15 percent. During 2001, taxable-equivalent core net interest income increased \$1.882 billion or 31 percent as the average net mortgage portfolio grew by 19 percent, and the net interest margin expanded by 10 basis points to 1.11 percent. Table 7 shows the changes in taxable-equivalent core net interest income for 2002 and 2001 attributable to changes in rates and the

volume of our mortgage assets, nonmortgage investments, and debt and changes in purchased options amortization expense and taxable-equivalent adjustments.

**Table 7: Rate/ Volume Analysis of Core Net Interest Income**

	Increase (Decrease)	Attributable to Changes in <sup>(1)</sup>	
		Volume	Rate
(Dollars in millions)			
<b>2002 vs. 2001</b>			
Interest income:			
Mortgage portfolio	\$ 2,787	\$5,292	\$(2,505)
Nonmortgage investments and cash equivalents	(1,104)	394	(1,498)
Total interest income	1,683	5,686	(4,003)
Interest expense <sup>(2)</sup> :			
Short-term debt	(2,919)	194	(3,113)
Long-term debt	2,126	4,959	(2,833)
Total interest expense	(793)	5,153	(5,946)
Change in net interest income	\$ 2,476	\$ 533	\$ 1,943
Change in purchased options amortization expense <sup>(3)</sup>	(1,224)		
Change in core net interest income	1,252		
Change in taxable-equivalent adjustment on tax-exempt investments <sup>(4)</sup>	32		
Change in taxable-equivalent core net interest income	\$ 1,284		
<b>2001 vs. 2000</b>			
Interest income:			
Mortgage portfolio	\$ 7,075	\$7,393	\$ (318)
Nonmortgage investments and cash equivalents	(686)	434	(1,120)
Total interest income	6,389	7,827	(1,438)
Interest expense <sup>(2)</sup> :			
Short-term debt	1,693	2,945	(1,252)
Long-term debt	2,280	2,868	(588)
Total interest expense	3,973	5,813	(1,840)
Change in net interest income	\$ 2,416	\$2,014	\$ 402
Change in purchased options amortization expense <sup>(3)</sup>	(590)		
Change in core net interest income	1,826		
Change in taxable-equivalent adjustment on tax-exempt investments <sup>(4)</sup>	56		
Change in taxable-equivalent core net interest income	\$ 1,882		

(1) Combined rate/volume variances, a third element of the calculation, are allocated to the rate and volume variances based on their relative size.

(2) Classification of interest expense and interest-bearing liabilities as short-term or long-term is based on effective maturity or repricing date, taking into consideration the effect of derivative financial instruments.

(3) Reflects non-GAAP adjustment for straight-line amortization of purchased options premiums that would have been recorded prior to the adoption of FAS 133 in 2001.

(4) Reflects non-GAAP adjustments to permit comparison of yields on tax-exempt and taxable assets based on a 35 percent marginal tax rate.

## Business Segment Results

### Portfolio Investment Business

Core business earnings for our Portfolio Investment business totaled \$4.215 billion in 2002, compared with \$3.489 billion in 2001, and \$2.745 billion in 2000. Core business earnings grew 21 percent in 2002, down from 27 percent growth in 2001. Growth in mortgage debt outstanding, combined with our ability to offer reliable, low-cost mortgage funds, helped us grow our average net mortgage portfolio by 12 percent in 2002

despite a record level of liquidations. The Portfolio Investment business also capitalized on opportunities presented by the decline in interest rates that began in 2001 to reduce our debt costs and increase the net interest margin 4 basis points to 115 basis points. In 2001, the average net mortgage portfolio grew 19 percent and the net interest margin increased 10 basis points to 111 basis points.

Low mortgage rates boosted originations of fixed-rate mortgages in the primary market to record levels in 2002. However, during the first half of 2002, primary market lenders retained a higher than traditional level of mortgage loans in their own portfolios. The demand for mortgage investments also increased among other secondary market participants. We believe this occurrence was in response to equity market volatility and the perceived safety of mortgage-related investments in a period of significant uncertainty about the impact of the economy on corporate creditworthiness. In addition, the steep yield curve lowered borrowing costs for banks and other primary market participants, which made it more attractive to hold mortgage investments. The increased competition for mortgages in the first half of 2002 resulted in tighter spreads between mortgage yields and our debt costs (mortgage-to-debt spreads), which slowed our overall portfolio growth. Our portfolio growth accelerated in the second half of the year as a sharp drop in mortgage rates sparked a refinancing wave that increased the supply of mortgages in the secondary market and generated wider mortgage-to-debt spreads. We substantially increased our mortgage commitments in response to these more attractive spreads. We also experienced higher portfolio growth in 2001 because of attractive mortgage-to-debt spreads stemming from an increased supply of mortgage assets in the secondary market because of a reduction in intermediate-term rates that boosted mortgage refinancings and originations.

The sharp decline in short-term interest rates relative to long-term interest rates during 2001 resulted in a steeper yield curve that persisted throughout 2002. Our net interest margin in 2002 continued to benefit from actions taken during 2001 in response to opportunities presented by the unusually steep yield curve and low short-term interest rates. The Portfolio Investment business was able to replace significant amounts of called or maturing debt in 2001 with lower cost, shorter-term debt more quickly than our mortgage assets matured or prepaid. These actions temporarily reduced our debt cost relative to asset yield and elevated our net interest margin in 2001. Our net interest margin remained elevated in 2002 as the unusually steep yield curve and low interest rate environment persisted, and we called or otherwise retired additional high-cost debt.

Primary investing activities for the Portfolio Investment business include purchasing mortgage loans, mortgage-related securities, and other investments from lenders, securities dealers, investors, and other market participants. The Portfolio Investment business also issues real estate mortgage investment conduits ("REMICs"), Megas, and SMBS as a source of fee income. The Portfolio Investment business maintains the LIP, which consists of nonmortgage investments and serves as an alternative source of liquidity and an investment vehicle for our surplus capital. Our primary financing activities involve issuing various debt securities to fund our mortgage purchases and other business activities.

### *Mortgage Portfolio*

Our mortgage portfolio includes whole loan mortgages, mortgage-related securities, and other mortgage investments, including other agency securities purchased from lenders, securities dealers, investors, and other market participants. We grew our net mortgage portfolio by 13 percent to \$798 billion at December 31, 2002. In comparison, we expanded our net mortgage portfolio by 16 percent in 2001. We grew our portfolio more selectively and at a slower pace in 2002 in accordance with our disciplined approach to growth because of tighter mortgage-to-debt spreads during the first half of 2002. Table 8 shows the distribution of Fannie Mae's mortgage portfolio by product type.

**Table 8: Mortgage Portfolio Composition**<sup>(1)</sup>

	2002	2001	2000	1999	1998
	(Dollars in millions)				
<b>Mortgages</b>					
Single-family:					
Government insured or guaranteed	\$ 5,458	\$ 5,070	\$ 4,762	\$ 4,472	\$ 4,404
Conventional:					
Long-term, fixed-rate	103,220	96,417	87,005	86,787	87,739
Intermediate-term, fixed-rate <sup>(2)</sup>	54,503	43,522	39,134	43,878	47,818
Adjustable-rate	9,045	10,410	13,243	6,058	7,632
Total conventional single-family	166,768	150,349	139,382	136,723	143,189
Total single-family	172,226	155,419	144,144	141,195	147,593
Multifamily:					
Government insured or guaranteed	1,353	1,551	1,814	2,347	2,594
Conventional	12,218	8,987	6,547	5,564	5,591
Total multifamily	13,571	10,538	8,361	7,911	8,185
Total mortgages	\$185,797	\$165,957	\$152,505	\$149,106	\$155,778
<b>Mortgage-related securities</b>					
Single-family:					
Government insured or guaranteed	\$ 33,293	\$ 37,111	\$ 39,404	\$ 36,557	\$ 17,401
Conventional:					
Long-term, fixed-rate	510,435	456,046	367,344	298,534	209,367
Intermediate-term, fixed-rate <sup>(2)</sup>	39,409	25,890	27,965	25,317	23,948
Adjustable-rate	13,946	10,355	13,892	8,049	4,241
Total conventional single-family	563,790	492,291	409,201	331,900	237,556
Total single-family	597,083	529,402	448,605	368,457	254,957
Multifamily:					
Government insured or guaranteed	7,370	6,481	5,370	4,392	2,765
Conventional	7,050	5,636	3,642	1,986	1,015
Total multifamily	14,420	12,117	9,012	6,378	3,780
Total mortgage-related securities	\$611,503	\$541,519	\$457,617	\$374,835	\$258,737
<b>Mortgage portfolio, net</b>					
Single-family:					
Government insured or guaranteed	\$ 38,751	\$ 42,181	\$ 44,166	\$ 41,029	\$ 21,805
Conventional:					
Long-term, fixed-rate	613,655	552,463	454,349	385,321	297,106
Intermediate-term, fixed-rate <sup>(2)</sup>	93,912	69,412	67,099	69,195	71,766
Adjustable-rate	22,991	20,765	27,135	14,107	11,873
Total conventional single-family	730,558	642,640	548,583	468,623	380,745
Total single-family	769,309	684,821	592,749	509,652	402,550
Multifamily:					
Government insured or guaranteed	8,723	8,032	7,184	6,739	5,359
Conventional	19,268	14,623	10,189	7,550	6,606
Total multifamily	27,991	22,655	17,373	14,289	11,965
Total mortgage portfolio	797,300	707,476	610,122	523,941	414,515
Unamortized premium (discount) and deferred price adjustments, net <sup>(3)</sup>	472	(2,104)	(2,520)	(964)	919
Allowance for loan losses <sup>(4)</sup>	(79)	(48)	(51)	(56)	(79)
Mortgage portfolio, net	\$797,693	\$705,324	\$607,551	\$522,921	\$415,355

(1) Amounts presented have been restated to conform to the current year presentation. Data represents unpaid principal balance adjusted to include mark-to-market gains and losses on available-for-sale securities.

(2) Intermediate-term, fixed-rate consists of portfolio loans with contractual maturities at purchase equal to or less than 20 years and MBS and other mortgage-related securities held in portfolio with maturities of 15 years or less at issue date.

(3) Includes net unamortized premiums of \$135 million, \$536 million, and \$559 million at December 31, 2002, 2001, and 1998, respectively, and net unamortized discounts of \$2,311 million and \$586 million at December 31, 2000 and 1999, respectively, related to available-for-sale and held-to-maturity mortgage-related securities.

(4) Guaranty liability for probable losses on loans underlying Fannie Mae guaranteed MBS is included in "Guaranty liability for MBS."

The average yield on our net mortgage portfolio decreased to 6.73 percent in 2002, from 7.11 percent in 2001, and 7.16 percent in 2000. The decrease in yield during 2002 and 2001 resulted largely from the general decline in mortgage rates on loans originated in the primary market and sold into the secondary market plus an increase in the level of liquidations of older, higher-rate loans. The liquidation rate on mortgages in portfolio (excluding sales) increased to 37 percent in 2002 from 25 percent in 2001— more than triple the 2000 liquidation rate of 10 percent. Mortgage liquidations in 2002, 2001, and 2000 totaled \$277 billion, \$164 billion, and \$57 billion, respectively. Liquidations increased significantly in 2002 and 2001 largely because of extensive refinancing in response to falling mortgage interest rates.

Table 9 summarizes mortgage portfolio activity on a gross basis and average yields from 2000 through 2002.

**Table 9: Mortgage Portfolio Activity<sup>(1)</sup>**

	Purchases			Sales			Repayments <sup>(2)</sup>		
	2002	2001	2000	2002	2001	2000	2002	2001	2000
(Dollars in millions)									
Single-family:									
Government insured or guaranteed	\$ 9,493	\$ 6,001	\$ 6,940	\$ 139	\$ —	\$ 521	\$ 13,057	\$ 8,125	\$ 3,423
Conventional:									
Long-term, fixed-rate	280,815	226,516	113,444	8,253	7,621	9,219	216,218	120,787	35,208
Intermediate-term, fixed-rate	62,102	26,146	11,607	464	442	599	37,544	23,391	13,105
Adjustable-rate	10,739	3,777	17,683	347	228	374	8,806	9,937	4,293
Total conventional single-family	353,656	256,439	142,734	9,064	8,291	10,192	262,568	154,115	52,606
Total single-family	363,149	262,440	149,674	9,203	8,291	10,713	275,625	162,240	56,029
Multifamily	7,492	8,144	4,557	379	690	269	1,794	2,172	1,204
Total	\$370,641	\$270,584	\$154,231	\$9,582	\$8,981	\$10,982	\$277,419	\$164,412	\$57,233
Average net yield	5.92%	6.56%	7.62%				6.83%	7.23%	7.18%
Repayments as a percentage of average mortgage portfolio							37.4%	24.7%	10.3%

(1) Excludes premiums, discounts, and other deferred price adjustments.

(2) Includes mortgage loan prepayments, scheduled amortization, and foreclosures.

We classify mortgage loans on our balance sheet as either held-for-investment or held-for-sale. Our mortgage portfolio also includes MBS and other mortgage-related securities that we classify as either held-to-maturity or available-for-sale. On September 13, 2002, concurrent with the implementation of a new risk-based capital rule issued by OFHEO, we reclassified \$124 billion of securities in our mortgage portfolio from held-to-maturity to available-for-sale in accordance with Financial Accounting Standard No. 115, *Accounting for Certain Investments in Debt and Equity Securities* ("FAS 115"). At the time of this noncash transfer, these mortgage-related securities had gross unrealized gains of \$5.364 billion and unrealized losses of \$53 million. Table 10 shows gross unrealized gains and losses on our MBS and mortgage-related securities at the end of 2002, 2001, and 2000.

Table 10: Mortgage-Related Securities in Mortgage Portfolio

	2002			
	Amortized Cost <sup>(1)</sup>	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in millions)				
Held-to-maturity:				
MBS <sup>(2)</sup>	\$286,422	\$11,173	\$ (1)	\$297,594
REMICs and Stripped MBS	110,423	4,339	(87)	114,675
Other mortgage-related securities	41,087	2,813	(45)	43,855
<b>Total</b>	<b>\$437,932</b>	<b>\$18,325</b>	<b>\$(133)</b>	<b>\$456,124</b>
Available-for-sale:				
MBS <sup>(2)</sup>	\$116,081	\$ 5,425	\$ (1)	\$121,505
REMICs and Stripped MBS	33,763	678	(369)	34,072
Other mortgage-related securities	17,358	782	(11)	18,129
<b>Total</b>	<b>\$167,202</b>	<b>\$ 6,885</b>	<b>\$(381)</b>	<b>\$173,706</b>
2001				
	Amortized Cost <sup>(1)</sup>	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Held-to-maturity:				
MBS <sup>(2)</sup>	\$333,896	\$3,536	\$ (54)	\$337,378
REMICs and Stripped MBS	127,675	2,432	(579)	129,528
Other mortgage-related securities	47,584	1,411	(87)	48,908
<b>Total</b>	<b>\$509,155</b>	<b>\$7,379</b>	<b>\$(720)</b>	<b>\$515,814</b>
Available-for-sale:				
MBS <sup>(2)</sup>	\$ 9,119	\$ 105	\$ (27)	\$ 9,197
REMICs and Stripped MBS	1,083	211	(240)	1,054
Other mortgage-related securities	22,236	425	(12)	22,649
<b>Total</b>	<b>\$ 32,438</b>	<b>\$ 741</b>	<b>\$(279)</b>	<b>\$ 32,900</b>
2000				
	Amortized Cost <sup>(1)</sup>	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Held-to-maturity:				
MBS <sup>(2)</sup>	\$272,829	\$3,414	\$(1,414)	\$274,829
REMICs and Stripped MBS	114,022	1,736	(652)	115,106
Other mortgage-related securities	57,021	760	(178)	57,603
<b>Total</b>	<b>\$443,872</b>	<b>\$5,910</b>	<b>\$(2,244)</b>	<b>\$447,538</b>
Available-for-sale:				
MBS <sup>(2)</sup>	\$ 2,814	\$ 18	\$ (7)	\$ 2,825
REMICs and Stripped MBS	220	57	(64)	213
Other mortgage-related securities	8,403	33	(40)	8,396
<b>Total</b>	<b>\$ 11,437</b>	<b>\$ 108</b>	<b>\$ (111)</b>	<b>\$ 11,434</b>

(1) Amortized cost includes unamortized premiums, discounts, and other deferred price adjustments.

(2) Excludes REMICs and Stripped MBS.

#### Nonmortgage Investments

Nonmortgage investments consist of the LIP and other investments. We classify and account for these investments as either held-to-maturity or available-for-sale according to FAS 115. Concurrent with the September 13, 2002 implementation of our new risk-based capital rule, we reclassified securities in our nonmortgage investment portfolio that had an amortized cost of \$11 billion from held-to-maturity to available-for-sale in accordance with FAS 115. These nonmortgage securities had gross unrealized gains of \$139 million and unrealized losses of \$6 million at the time of this noncash transfer. Nonmortgage investments decreased 20 percent to \$60 billion at December 31, 2002, from \$75 billion at December 31, 2001. Our nonmortgage investments totaled \$55 billion at December 31, 2000. Tables 11 and 12 show the composition, weighted-average maturities, and credit ratings of our held-to-maturity and available-for-sale nonmortgage investments.



Table 11: Nonmortgage Investments Classified as Held-to-Maturity

2002						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
(Dollars in millions)						
Held-to-maturity:						
Repurchase agreements	\$20,732	\$ —	\$ —	\$20,732	.5	100.0
Eurodollar time deposits	1,398	—	—	1,398	.8	100.0
Auction rate preferred stock	402	—	—	402	1.0	100.0
Federal funds	150	—	—	150	1.9	100.0
Commercial paper	100	—	—	100	.7	100.0
Other	268	1	—	269	4.9	100.0
Total	\$23,050	\$ 1	\$ —	\$23,051	.6	100.0
2001						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
Held-to-maturity:						
Repurchase agreements	\$ 9,380	\$ —	\$—	\$ 9,380	.5	100.0
Eurodollar time deposits	11,185	—	—	11,185	.3	100.0
Auction rate preferred stock	2,127	—	—	2,127	1.7	100.0
Federal funds	4,904	—	—	4,904	.4	100.0
Commercial paper	2,844	1	—	2,845	.6	100.0
Asset-backed securities	6,065	89	(1)	6,153	10.6	100.0
Other	2,166	73	—	2,239	16.7	56.4
Total	\$38,671	\$163	\$ (1)	\$38,833	3.0	97.5
2000						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
Held-to-maturity:						
Repurchase agreements	\$ 2,722	\$ —	\$—	\$ 2,722	.5	100.0
Eurodollar time deposits	4,046	—	—	4,046	1.2	100.0
Auction rate preferred stock	1,812	—	—	1,812	1.9	98.6
Federal funds	3,493	—	—	3,493	2.1	100.0
Commercial paper	8,893	2	—	8,895	.7	90.1
Asset-backed securities	9,043	30	(7)	9,066	22.6	100.0
Other	3,823	40	(11)	3,852	17.6	100.0
Total	\$33,832	\$ 72	\$(18)	\$33,886	8.7	97.3

Table 12: Nonmortgage Investments Classified as Available-for-Sale

2002						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
(Dollars in millions)						
Available-for-sale:						
Asset-backed securities	\$22,281	\$ 98	\$ (68)	\$22,311	30.0	100.0
Floating-rate notes <sup>(1)</sup>	11,754	10	(29)	11,735	10.6	87.6
Corporate bonds	1,149	42	—	1,191	12.8	25.2
Taxable auction notes	949	—	—	949	.2	100.0
Auction rate preferred stock	112	—	(4)	108	2.5	43.5
Commercial paper	100	—	—	100	2.2	100.0
Other	400	—	—	400	1.1	100.0
Total	\$36,745	\$150	\$(101)	\$36,794	22.0	93.5
2001						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
Available-for-sale:						
Asset-backed securities	\$14,876	\$ 21	\$(25)	\$14,872	26.2	99.9
Floating-rate notes <sup>(1)</sup>	12,114	12	(45)	12,081	18.2	84.3
Commercial paper	8,879	1	—	8,880	.9	100.0
Other	50	—	—	50	9.5	100.0
Total	\$35,919	\$ 34	\$(70)	\$35,883	17.2	94.7
2000						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted- Average Maturity in Months	% Rated A or Better
Available-for-sale:						
Asset-backed securities	\$ 8,469	\$ —	\$ —	\$ 8,469	49.6	100.0
Floating-rate notes <sup>(1)</sup>	12,237	4	(17)	12,224	18.5	99.7
Commercial paper	443	—	—	443	.6	100.0
Other	—	—	—	—	—	—
Total	\$21,149	\$ 4	\$(17)	\$21,136	30.6	99.8

(1) As of December 31, 2002, 2001, and 2000, 100 percent of floating-rate notes repriced at intervals of 90 days or less.

Nonmortgage investments rated below single A totaled \$2.4 billion and equaled 8.5 percent of our core capital at December 31, 2002, \$2.9 billion and 11.4 percent of core capital at December 31, 2001, and \$1 billion and 4.6 percent of core capital at December 31, 2000.

Our nonmortgage investments serve as Fannie Mae's primary source of liquidity and an investment vehicle for our surplus capital. Nonmortgage investments include our early funding portfolio, which consists primarily of repurchase agreements, and our LIP. Our LIP consists primarily of high-quality securities that are short-term or readily marketable and includes investments in nonmortgage assets, such as federal funds and time deposits, commercial paper, asset-backed securities, and corporate floating-rate notes. The majority of LIP investments classified as held-to-maturity consist of federal funds and time deposits and auction rate preferred stock with maturities of three months or less. We obtain liquidity from our LIP through maturity of short-term investments or the sale of assets. Investments in our LIP totaled \$39 billion at December 31, 2002, compared with \$65 billion at year-end 2001 and \$52 billion at year-end 2000. At the end of 2001, our LIP balance was at the highest level of the past three years because of delayed settlement of 2001 portfolio purchase commitments, which resulted in additional temporary capital for short-term investment in the LIP.

The LIP combined with our early funding portfolio and cash and cash equivalents represent our total liquid investments. The average yield on liquid investments during 2002, 2001, and 2000 was 2.34 percent, 4.63 percent, and 6.60 percent, respectively. The average yield decreased during 2002 and 2001 because of the sharp drop in short-term interest rates.

#### *Debt Securities*

As part of our disciplined interest rate risk management strategy, we issue a variety of noncallable and callable debt securities in the domestic and global capital markets in a wide range of maturities to meet our large and consistent funding needs. We strive to structure debt products that match the needs of our portfolio with the interests of debt investors. A description of our principal debt securities follows.

- **Benchmark Securities® Program**

Our Benchmark Securities program encompasses large, regularly scheduled issues of noncallable and callable debt securities designed to provide enhanced liquidity to investors while reducing the relative cost of debt. By issuing Benchmark Securities, we have consolidated much of our debt issuances from a large number of smaller, unscheduled issues to a smaller number of larger, more liquid scheduled issues.

During 2002, we issued noncallable and callable Benchmark Securities in every month. Benchmark Bills® served as our weekly source for three-month and six-month discount debt issuances during the year. We issued one-year Benchmark Bills on a biweekly schedule during 2002 and 2001. Our issuances of Benchmark Bills totaled \$420 billion, \$437 billion, and \$334 billion in 2002, 2001, and 2000, respectively. Issuances of Benchmark Bonds® and Benchmark Notes totaled \$89 billion, \$100 billion, and \$77 billion, respectively, during the same period. Benchmark Notes have maturities of one to ten years, and Benchmark Bonds have maturities of more than ten years. We reintroduced Fannie Mae's Callable Benchmark Notes in June 2001 and issued \$22 billion and \$10 billion of these securities during 2002 and 2001, respectively.

- **Discount Notes and Other Debt Securities**

We also issue other debt securities outside Fannie Mae's Benchmark Securities program. These debt securities have various maturities, interest rates, and call provisions. We issue short-term debt securities called "Discount Notes" outside of our Benchmark Bills program. We sell discount notes at a market discount from the principal amount payable at maturity. They have maturities ranging from overnight to 360 days from the date of issuance and are available in minimum amounts of \$1,000. We issued \$1.107 trillion and \$1.216 trillion of Discount Notes during 2002 and 2001, respectively. Outstanding discount notes increased to \$134 billion at year-end 2002 from \$93 billion at year-end 2001.

- Subordinated Debt

As part of our voluntary safety and soundness initiatives announced in October 2000, we began issuing Subordinated Benchmark Notes in the first quarter of 2001 on a periodic basis, which created a new class of fixed-income investments for investors under the Benchmark Securities program. We issued subordinated debt securities totaling \$3.5 billion and \$5.0 billion during 2002 and 2001, respectively. Outstanding Subordinated Benchmark Notes totaled \$8.5 billion at December 31, 2002, versus \$5.0 billion at the end of 2001.

Total debt outstanding increased 11 percent to \$851 billion at December 31, 2002, from \$763 billion at December 31, 2001. Table 13 summarizes our outstanding debt due within one year at the end of 2002, 2001, and 2000. Table 14 shows a comparison of our debt issuances and repayments for 2002, 2001, and 2000, the total outstanding at the end of each year, and the average cost.



Table 14: Short-Term and Long-Term Debt Activity

	2002	2001	2000
(Dollars in millions)			
<b>Issued during the year:</b>			
Short-term <sup>(1)</sup> :			
Amount	\$1,635,919	\$1,756,691	\$1,143,131
Average cost	1.67%	3.69%	6.27%
Long-term <sup>(1)</sup> :			
Amount	\$ 238,467	\$ 249,352	\$ 110,215
Average cost	3.78%	4.83%	6.92%
Total issued:			
Amount	\$1,874,386	\$2,006,043	\$1,253,346
Average cost	2.21%	3.97%	6.34%
<b>Repaid during the year:</b>			
Short-term <sup>(1)</sup> :			
Amount	\$1,620,644	\$1,691,240	\$1,106,956
Average cost	1.84%	4.22%	6.15%
Long-term <sup>(1)</sup> :			
Amount	\$ 175,809	\$ 196,610	\$ 50,335
Average cost	4.85%	6.03%	6.33%
Total repaid:			
Amount	\$1,796,453	\$1,887,850	\$1,157,291
Average cost	2.34%	4.47%	6.14%
<b>Outstanding at year-end:</b>			
Due within one year:			
Net amount	\$ 382,412	\$ 343,492	\$ 280,322
Cost <sup>(2)</sup>	1.95%	2.81%	6.40%
Average term in months <sup>(4)</sup>	5	4	5
Due after one year:			
Net amount	\$ 468,570	\$ 419,975	\$ 362,360
Cost <sup>(2)</sup>	5.14%	5.52%	6.46%
Average term in months <sup>(4)</sup>	67	70	76
Total debt:			
Net amount	\$ 850,982	\$ 763,467	\$ 642,682
Cost <sup>(3)</sup>	4.81%	5.49%	6.47%
Average term in months <sup>(4)</sup>	58	66	69

(1) "Short-term" refers to the face amount of debt issued with an original term of one year or less. "Long-term" refers to the face amount of debt issued with an original term greater than one year.

(2) Cost includes the effects of currency, debt, and amortization of premiums, discounts, issuance costs, and hedging results.

(3) Cost includes the effects of currency, debt, and interest rate swaps and amortization of premiums, discounts, issuance costs, and hedging results.

(4) Average term includes the effects of interest rate swaps.

We took advantage of opportunities to repurchase \$8 billion of debt in 2002 and \$9 billion of debt in 2001 that was trading at historically wide spreads to other fixed-income securities. In addition, we continued to call significant levels of debt in 2002 as a result of the sharp decline in interest rates that began in 2001. We called \$174 billion in debt and interest rate swaps in 2002 and \$173 billion in 2001. We reissued much of this debt with short-term maturities in anticipation of the expected increase in mortgage liquidations. Interest rate swaps lengthened the weighted-average final maturity of our outstanding debt by 20 months at December 31, 2002, down from 26 months at December 31, 2001. Table 15 shows our adjusted effective short- and long-term debt at the end of 2002, 2001, and 2000.

Table 15: Effective Short-Term and Long-Term Debt

	2002	2001	2000
(Dollars in millions)			
<b>Outstanding at year-end:</b>			
Short-term <sup>(1)</sup> :			
Net amount	\$192,702	\$138,986	\$103,852
Cost	1.52%	2.75%	6.13%
Weighted-average maturity (in months)	3	5	5
Percent of total debt outstanding	23%	18%	16%
Long-term <sup>(2)</sup> :			
Net amount	\$651,827	\$627,196	\$543,964
Cost	5.48%	5.96%	6.48%
Weighted-average maturity (in months)	75	78	79
Percent of total debt outstanding	77%	82%	84%
Total:			
Net amount <sup>(3)</sup>	\$844,529	\$766,182	\$647,816
Cost	4.81%	5.49%	6.47%
Weighted-average maturity (in months)	58	66	69

- (1) Represents the redemption value of short-term debt adjusted to include the effect of derivative instruments that replicate short-term, variable-rate debt securities and exclude short-term debt securities that have been economically converted into long-term debt funding through interest rate swaps.
- (2) Represents the redemption value of long-term debt adjusted to include the effect of short-to-long interest rate swaps that economically convert short-term debt securities into long-term debt securities and exclude long-term debt securities that have been economically converted into short-term funding through interest rate swaps.
- (3) Represents the redemption value of outstanding debt at year-end. Excludes the effect of amortization of premiums, discounts, issuance costs, and hedging results.

Our asset-liability management strategies, combined with favorable market conditions for borrowing, had the following effect on the debt portfolio:

- The average cost of outstanding debt during 2002 decreased to 5.38 percent from 6.00 percent in 2001. At December 31, 2002 and 2001, the cost of debt outstanding was 4.81 percent and 5.49 percent, respectively.
- Effective long-term debt, which takes into consideration the effect of derivative instruments on the maturity of long- and short-term debt, decreased to 77 percent of total debt outstanding at December 31, 2002 from 82 percent at year-end 2001.
- The weighted-average maturity of effective long-term, fixed-rate debt outstanding decreased to 75 months at year-end 2002 from 78 months at year-end 2001.
- Effective long-term debt as a percentage of the net mortgage portfolio decreased to 82 percent at the end of 2002 from 89 percent at the end of 2001.
- Option-embedded debt outstanding as a percentage of the net mortgage portfolio temporarily increased above historic levels to 75 percent at year-end 2002 versus 54 percent at the end of 2001. Table 16 presents option-embedded debt instruments as a percentage of our net mortgage portfolio for the past three years. Option-based derivative instruments represented 42 percent and callable debt accounted for 58 percent of the \$601 billion in option-embedded debt outstanding at December 31, 2002. In comparison, option-based derivative instruments and callable debt represented 38 percent and 62 percent, respectively of the \$378 billion in option-embedded debt outstanding at December 31, 2001.

**Table 16: Option-Embedded Debt Instruments**

	2002	2001	2000
	(Dollars in billions)		
Issued during the year	\$384	\$286	\$ 65
Outstanding at year-end	601	378	280
Percentage of total net mortgage portfolio	75%	54%	46%

**Credit Guaranty Business**

Core business earnings for our Credit Guaranty business grew 16 percent in 2002 to \$2.179 billion and 10 percent in 2001 to \$1.878 billion. The increase in 2002 core business earnings was driven primarily by a 23 percent increase in guaranty fee income. Guaranty fee income for our Credit Guaranty business increased largely due to 17 percent growth in our average book of business and a .9 basis point increase in the average fee rate to 18.9 basis points. The average fee rate for our Credit Guaranty business includes the effect of guaranty fee income allocated to the Credit Guaranty business for managing the credit risk on mortgage-related assets held by the Portfolio Investment business. It therefore differs from our consolidated effective average guaranty fee rate, which excludes guaranty fees on Fannie Mae MBS held in our portfolio because these fees are reported as interest income. Growth in earnings for the Credit Guaranty business lagged growth in guaranty fee income primarily due to increases in credit enhancement expenses, higher administrative expenses, and an increase in the effective tax rate. Administrative expenses increased primarily due to higher compensation costs and expenses related to re-engineering our core infrastructure systems and relocating our primary data center.

Record expansion of residential mortgage debt outstanding during 2002 and 2001, combined with our ability to offer reliable, low-cost mortgage funds, fueled growth in our book of business. The demand for housing was strong throughout 2002 and 2001, and borrowers also took advantage of the low interest rate environment to refinance their mortgages and extract equity from the appreciation in their homes. Residential mortgage debt outstanding increased 12.4 percent in 2002 to \$7.0 trillion, 10.3 percent in 2001 to \$6.2 trillion, and 8.9 percent in 2000 to \$5.6 trillion. Refinancings represented 62 percent of total market originations in 2002 and 57 percent in 2001, compared with 19 percent in 2000. Growth in Fannie Mae's mortgage credit book of business outpaced growth in residential mortgage debt outstanding during 2002, 2001, and 2000.

Earnings growth in 2001 for the Credit Guaranty business was also driven by an increase in guaranty fees. Guaranty fees rose 7 percent, stemming from 15 percent growth in the average book of business that more than offset a 1.4 basis point drop in the average fee rate to 18.0 basis points. Despite significant growth in our mortgage credit book of business and a softer economy, the Credit Guaranty business was successful in reducing credit losses as a percentage of Fannie Mae's average book of business to .5 basis points in 2002, from .6 basis points in 2001 and .7 basis points in 2000.

In the third quarter of 2002, we announced increases in the upfront-price adjustment Fannie Mae charges on cash-out refinance mortgages with loan-to-value ("LTV") ratios between 70.01 and 85 percent that we plan to implement during 2003. As a result of these increases, which will better compensate us for the higher risk on these loans, the upfront-price adjustments on cash-out refinance mortgages we purchase or guarantee with LTV ratios greater than 70 percent will range from 50 to 75 basis points.

In conjunction with these increases and to better align our underwriting, pricing policy, and relative risk profile of refinance transactions, we modified our loan purpose definitions on refinance transactions. We now define cash-out refinance transactions as a refinance transaction in which the funds are used for purposes other than to pay off an existing first mortgage lien, to pay off any permissible subordinate mortgage liens, and to provide limited unrestricted cash proceeds to the borrower. We expect the increased price adjustments, which will be allocated to our Credit Guaranty business, to modestly increase our future guaranty fees.



## OFF-BALANCE SHEET TRANSACTIONS

We enter into certain off-balance sheet financial arrangements to facilitate our statutory purpose of providing mortgage funds to the secondary market and reduce Fannie Mae's exposure to interest rate fluctuations. These arrangements, which may involve elements of credit and interest rate risk in excess of amounts recognized on Fannie Mae's balance sheet, primarily include guaranteed MBS and other mortgage-related securities and commitments to purchase mortgage assets or issue and guarantee MBS. Following is an overview of our off-balance sheet exposure related to these transactions, including a description of how our MBS are created and our role in the process.

### Guaranteed MBS and Other Mortgage-Related Securities

We issue MBS that are backed by mortgage loans from a single lender or from multiple lenders, or that are transferred from our held-for-sale mortgage portfolio. Single-lender MBS are typically issued through lender swap transactions whereby a lender exchanges pools of mortgages for MBS. Multiple-lender MBS allow several lenders to pool mortgages and receive, in return, MBS (referred to as "Fannie Majors") representing a proportionate share of a larger pool. Lenders may retain the MBS or sell them to other investors. When we issue MBS, we assume trustee responsibilities. The loans underlying MBS are not our assets. Therefore, we do not record them on our balance sheet except when acquired and held in our mortgage portfolio for investment purposes, nor do we record them as liabilities. In some instances we buy mortgage loans or mortgage-related securities and concurrently enter into a forward sale commitment. We designate these loans as held-for-sale when acquired, and we sell them from the mortgage portfolio as MBS.

The Credit Guaranty business receives a guaranty fee for assuming the credit risk and guaranteeing timely payment of scheduled principal and interest to MBS investors and investors in other mortgage-related securities. The guaranty fee varies, depending on factors such as the risk profile of the loans securitized as well as the level of credit risk we assume. We are ultimately responsible for guaranteeing timely payment of scheduled principal and interest to investors whether or not we share primary default risk on loans underlying outstanding MBS. We accrue a liability on our balance sheet for our guaranty obligation based on the probability that mortgages underlying the \$1.029 trillion of outstanding MBS will not perform according to contractual terms. At December 31, 2002, we have accrued a liability of \$471 million for estimated losses on our guaranty of outstanding MBS, compared with \$598 million at December 31, 2001. These amounts are a component of the "Guaranty liability for MBS" line on our balance sheet.

We issue REMICs backed by single-class MBS, Stripped MBS ("SMBS"), Government National Mortgage Association ("Ginnie Mae") mortgage-related securities, other REMIC securities, or whole loans that are not owned or guaranteed by Fannie Mae. The Portfolio Investment business receives transaction fees for structuring REMICs backed by MBS, SMBS, Ginnie Mae securities, or existing Fannie Mae REMIC classes. When we issue REMICs, we assume trustee responsibilities. REMICs backed by guaranteed MBS do not subject us to any additional mortgage credit risk. We are only subject to additional credit risk if Fannie Mae guarantees REMICs backed by whole loans owned by other entities or private label securities. REMICs are not our assets except when acquired and held in our mortgage portfolio for investment purposes, nor do we record them as liabilities.

Table 17 summarizes issued and outstanding amounts for guaranteed MBS and other mortgage-related securities, including REMICs, for the years ended December 31, 2002, 2001, and 2000.

**Table 17: Guaranteed MBS and Other Mortgage-Related Securities<sup>(1)</sup>**

	Outstanding		Issues	
	Held by Other Investors	Total <sup>(2)</sup>	Acquired by Others	Total Issued <sup>(3)</sup>
	(Dollars in millions)			
2002	\$1,029,456	\$1,538,287	\$478,260	\$723,299
2001	858,867	1,290,351	344,739	525,321
2000	706,684	1,057,750	105,407	210,311

- (1) MBS may be resecuritized to back Fannie Megs, SMBS, or REMICs. With respect to those MBS, the amounts shown only include the principal amount of the MBS once. Amounts also include REMICs created from whole loans not owned or guaranteed by Fannie Mae.
- (2) Includes \$509 billion, \$431 billion, and \$351 billion at December 31, 2002, 2001, and 2000, respectively, of MBS and other mortgage-related securities in Fannie Mae’s portfolio.
- (3) Total issued includes \$245 billion, \$181 billion, and \$105 billion of MBS purchased by Fannie Mae in 2002, 2001, and 2000, respectively. Total issued excludes \$16 billion, \$3 billion, and \$2 billion of MBS in 2002, 2001, and 2000, respectively, that Fannie Mae issued from loans in our portfolio.

Guaranteed MBS and other mortgage-related securities held by investors other than Fannie Mae, which we refer to as outstanding MBS, grew 20 percent to \$1.029 trillion at December 31, 2002, from \$859 billion at December 31, 2001. REMICs that could subject Fannie Mae to additional credit exposure totaled \$35 billion at December 31, 2002 or 3 percent of outstanding MBS held by investors other than Fannie Mae. Total MBS, which includes guaranteed MBS and other mortgage-related securities held in our mortgage portfolio, grew 19 percent to \$1.538 trillion at year-end 2002 from \$1.290 trillion at year-end 2001.

MBS issues acquired by investors other than Fannie Mae increased \$134 billion to \$478 billion in 2002, while liquidations of outstanding MBS increased \$124 billion to \$324 billion. The increase in MBS issuances and liquidations in 2002 was attributable to the decline in mortgage interest rates during the year resulting in higher levels of mortgage originations, including refinancings. Total MBS issues, excluding MBS issued from Fannie Mae’s portfolio, increased 38 percent to \$723 billion in 2002 from \$525 billion in 2001, while total MBS liquidations grew 69 percent to \$499 billion from \$296 billion in 2001.

REMIC issuances totaled \$144 billion in 2002, compared with \$124 billion in 2001. Our REMIC issuances rebounded in 2001 with the rest of the REMIC market and steadily increased in 2002. The steeper yield curve made the REMIC market more attractive, resulting in an increased demand for REMICs. In addition, lower interest rates contributed to higher MBS issuances and increased collateral available for REMICs. The outstanding balance of REMICs (including REMICs held in Fannie Mae’s portfolio) was \$347 billion at December 31, 2002, compared with \$346 billion at December 31, 2001.

**Commitments**

Fannie Mae enters into master delivery commitments on either a mandatory or an optional basis. Under a mandatory master commitment, a lender must either deliver loans under an MBS contract at a specified guaranty fee rate or enter into a mandatory portfolio commitment with the yield established upon executing the portfolio commitment. We also accept mandatory or lender-option delivery commitments not issued pursuant to a master commitment. These commitments may be for our portfolio or for issuances of Fannie Mae MBS. The guaranty fee rate on MBS lender-option commitments is specified in the contract, while the yield for portfolio lender-optional commitments is set at the date of conversion to a mandatory commitment. We generally hedge the cost of funding future portfolio purchases upon issuance of, or conversion to, a mandatory commitment. Therefore, we largely mitigate the interest rate risk relating to loans purchased pursuant to those commitments. Our outstanding mandatory portfolio commitments, excluding commitments under master agreements, totaled \$85 billion and \$55 billion at December 31, 2002 and 2001, respectively.

## APPLICATION OF CRITICAL ACCOUNTING POLICIES

Fannie Mae's financial statements and reported results are based on GAAP, which requires us in some cases to use estimates and assumptions that may affect our reported results and disclosures. We describe our significant accounting policies in the Notes to Financial Statements under Note 1, "Summary of Significant Accounting Policies." Several of our accounting policies involve the use of accounting estimates we consider to be critical because: (1) they are likely to change from period to period because they require significant management judgment and assumptions about highly complex and uncertain matters; and (2) the use of a different estimate or a change in estimate could have a material impact on our reported results of operations or financial condition. Our critical accounting estimates include determining the adequacy of the allowance for loan losses and guaranty liability for MBS; projecting mortgage prepayments to calculate the amortization of deferred price adjustments on mortgages and mortgage-related securities held in portfolio and guaranteed mortgage-related securities; and estimating the time value of our purchased options. Management has specifically discussed the development and selection of each critical accounting estimate with the Audit Committee of Fannie Mae's Board of Directors. Our Audit Committee has also reviewed our disclosures in this MD&A regarding Fannie Mae's critical accounting estimates.

### Allowance for Loan Losses and Guaranty Liability for MBS

We establish an allowance for loan losses and guaranty liability for MBS on single-family and multifamily loans in our book of business. We maintain a separate allowance for loan losses and guaranty liability for MBS. However, we use the same methodology to determine the amounts of each because the risks are the same. The allowance for loan losses is held against loans in our mortgage portfolio. We also have a guaranty liability for our guaranty of MBS held by us or by other investors. Our allowance and guaranty liability for MBS consist of the following key elements:

- *Single family*: We evaluate various risk characteristics such as product type, original loan-to-value ratio, and loan age to determine the allowance and guaranty liability for single-family assets. We estimate defaults for each risk characteristic based on historical experience and apply a historical severity to each risk category in accordance with Financial Accounting Standard No. 5, *Accounting for Contingencies* ("FAS 5"). Severity refers to the amount of loss suffered on a default relative to the unpaid principal balance of the loan. In addition, we apply Financial Accounting Standard No. 114, *Accounting by Creditors for Impairment of a Loan* ("FAS 114"), to determine the amount of impairment on specific loans that have been restructured. We charge-off single-family loans when we foreclose on the loans.
- *Multifamily*: We determine the multifamily allowance and guaranty liability by separately evaluating loans that are impaired and all other loans. Impaired loans consist of loans that are not performing according to their original contractual terms. For loans that we consider impaired, we apply FAS 114 to estimate the amount of impairment. For all other loans, we apply FAS 5 to establish an allowance and guaranty liability by rating each loan not individually evaluated for impairment and segmenting the loan into one of the main risk categories we use to monitor the multifamily portfolio. We then apply historical default rates, adjusted for current conditions, and a corresponding severity to the loans in each segment to estimate the probable loss amount at each balance sheet date.

We believe the accounting estimate related to our allowance for loan losses and guaranty liability for MBS is a "critical accounting estimate" because it requires us to make significant judgments about probable future losses in our book of business as of the balance sheet date based on assumptions that are uncertain. We may have to increase or decrease the size of our overall allowance for loan losses and guaranty liability based on changes in delinquency levels, loss experience, economic conditions in areas of geographic concentration, and profile of mortgage characteristics. Different assumptions about default rates, severity, counterparty risk, and other factors that we could use in estimating our allowance for loan losses and guaranty liability could have a material effect on our results of operations.

We include the allowance for loan losses in the balance sheet under "Mortgage portfolio, net." We include the guaranty liability for estimated losses on MBS held by us or other investors as a liability under

“Guaranty liability for MBS.” Table 18 shows the amounts of these components and summarizes the changes for the years 1998 to 2002.

**Table 18: Allowance for Loan Losses and Guaranty Liability for MBS**

	2002	2001	2000	1999	1998
(Dollars in millions)					
<b>Allowance for loan losses<sup>(1)</sup>:</b>					
Beginning balance	\$ 48	\$ 51	\$ 56	\$ 79	\$ 131
Provision	44	7	9	(5)	(16)
Charge-offs <sup>(2)</sup>	(13)	(10)	(14)	(18)	(36)
Ending balance	\$ 79	\$ 48	\$ 51	\$ 56	\$ 79
<b>Guaranty liability for MBS<sup>(1)</sup>:</b>					
Beginning balance	\$ 755	\$ 755	\$ 745	\$ 720	\$ 668
Provision	84	87	113	156	261
Charge-offs	(110)	(87)	(103)	(131)	(209)
Ending balance	\$ 729	\$ 755	\$ 755	\$ 745	\$ 720
<b>Combined allowance for loan losses and guaranty liability for MBS<sup>(3)</sup>:</b>					
Beginning balance	\$ 803	\$ 806	\$ 801	\$ 799	\$ 799
Provision	128	94	122	151	245
Charge-offs <sup>(2)</sup>	(123)	(97)	(117)	(149)	(245)
Ending balance	\$ 808	\$ 803	\$ 806	\$ 801	\$ 799
<b>Balance at end of each period attributable to<sup>(3)</sup>:</b>					
Single-family	\$ 641	\$ 636	\$ 639	\$ 634	\$ 632
Multifamily	167	167	167	167	167
	\$ 808	\$ 803	\$ 806	\$ 801	\$ 799
<b>Percent of allowance and guaranty liability in each category to related total book of business<sup>(4)</sup>:</b>					
Single-family	.037%	.042%	.051%	.055%	.063%
Multifamily	.211	.247	.313	.359	.412
	.044%	.051%	.061%	.067%	.076%
<b>Charge-offs<sup>(2)</sup>:</b>					
Single-family	\$ 104	\$ 96	\$ 114	\$ 145	\$ 237
Multifamily	19	1	3	4	8
	\$ 123	\$ 97	\$ 117	\$ 149	\$ 245
<b>Charge-offs as a percentage of average book of business</b>					
	.007%	.007%	.009%	.013%	.026%
<b>Credit losses as a percentage of average book of business</b>					
	.005	.006	.007	.011	.027

- (1) In 2002, we reclassified from our “Allowance for loan losses” to a “Guaranty liability for MBS” the amount associated with the guaranty obligation for MBS that we own. Prior period balances, the provision for losses, and charge-off amounts have been reclassified to reflect the current year’s presentation.
- (2) Charge-offs exclude \$1 million in 2002 and \$1 million in 1998 on charge-offs related to foreclosed Federal Housing Administration loans that are reported in the balance sheet under “Acquired property and foreclosure claims, net.”
- (3) The total excludes \$2 million at year-end 2002 and \$3 million at the end of 2001, 2000, 1999, and 1998 related to foreclosed Federal Housing Administration loans that are reported in the balance sheet under “Acquired property and foreclosure claims, net.”
- (4) Represents ratio of allowance and guaranty liability balance by loan type to book of business by loan type.

Over the past five years, our combined allowance for loan losses and guaranty liability for MBS have remained relatively stable although our book of business has expanded. This trend reflects improvements in the credit performance of our book of business. Fannie Mae’s allowance and guaranty liability as a percentage of the book of business has declined to .04 percent in 2002, from .05 percent in 2001 and .06 percent in 2000, based on positive credit trends. Over the last three years, our credit loss ratio has declined in each year to .5 basis points in 2002, from .6 basis points in 2001, and .7 basis points in 2000. We recorded a provision for losses of \$128 million, \$94 million, and \$122 million, respectively, in 2002, 2001, and 2000. Our provision represented between 1 and 2 percent of our pre-tax reported income and core business earnings in each of the past three years. Management believes the combined balance of our allowance for loan losses and guaranty liability for MBS are adequate to absorb losses inherent in Fannie Mae’s book of business.

## Deferred Price Adjustments

When Fannie Mae buys MBS, loans, or mortgage-related securities, we may not pay the seller the exact amount of the unpaid principal balance (“UPB”). If we pay more than the UPB and purchase the mortgage assets at a premium, the premium reduces the yield we recognize on the assets below the coupon amount. If we pay less than the UPB and purchase the mortgage assets at a discount, the discount increases the yield above the coupon amount. In addition, we may charge an upfront payment in lieu of a higher guaranty fee for certain loan types that have higher credit risk. To facilitate the pooling of mortgages into a Fannie Mae MBS, we also may adjust the monthly MBS guaranty fee rate that we receive by either negotiating an upfront cash disbursement to the lender (a “buy-up”) or an upfront cash receipt from the lender (a “buy-down”) when the MBS is formed. The upfront payment results in an adjustment to the monthly guaranty fee so that the coupons on MBS are always in increments of whole or half interest rates, which are more easily traded.

We recognize the impact of premiums, discounts, and other purchase price adjustments over the estimated life of the purchased assets as an adjustment to income in accordance with Financial Accounting Standard No. 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases* (“FAS 91”). We amortize deferred premium and discount into interest income, which affects the results of our Portfolio Investment business. Amortization of deferred price adjustments relating to our guaranty fees affects guaranty fee income, which affects the results of our Credit Guaranty business.

We apply the interest method to amortize the premiums, discounts, and other purchase price adjustments into income. We estimate future mortgage prepayments to calculate the constant effective yield necessary to apply the interest method. We believe the accounting estimates related to deferred premium/discount and deferred guaranty fees are “critical accounting estimates” because they require us to make significant judgments and assumptions about borrower prepayment patterns in various interest rate environments that involve a significant degree of uncertainty. On a periodic basis, we evaluate whether we should change the estimated prepayment rates used in the amortization calculation. We reassess our estimate of the sensitivity of prepayments to changes in interest rates and compare actual prepayments versus anticipated prepayments. If changes are necessary, we recalculate the constant effective yield and adjust net interest income or guaranty fee income for the amount of premiums, discounts, and other purchase price adjustments that would have been recorded if we had applied the new effective yield since acquisition of the mortgage assets or inception of a guaranty. Table 19 presents an analysis of the effect of our deferred price adjustments in 2002, 2001, and 2000.

Table 19: Deferred Price Adjustments

	2002		2001		2000	
	Deferred Premium/(Discount)	Deferred Guaranty Fees	Deferred Premium/(Discount)	Deferred Guaranty Fees	Deferred Premium/(Discount)	Deferred Guaranty Fees
	(Dollars in millions)					
Unamortized premium (discount) and deferred price adjustments, net <sup>(1)</sup>	\$472	\$(1,454)	\$(2,104)	\$(382)	\$(2,520)	\$305
Increase (decrease) in net interest income/guaranty fee income from net amortization <sup>(2)</sup>	71	104	358	(87)	207	(22)
Percentage effect on reported net income <sup>(3)</sup>	1%	1%	4%	(1)%	3%	—%
Percentage effect on net interest income/guaranty fee income of: <sup>(4)</sup>						
100 basis point increase in interest rates	(.3)	—	—	.1	—	.8
50 basis point increase in interest rates	—	—	—	—	—	—
Percentage effect on net interest income/guaranty fee income of: <sup>(4)</sup>						
50 basis point decrease in interest rates	1.0	.8	.3	(.3)	1.0	(6.1)
100 basis point decrease in interest rates	2.4	3.1	2.2	(2.7)	1.9	(9.9)

(1) Includes unamortized premium (discount) and deferred price adjustments for available-for-sale and held-to-maturity mortgage-related securities and loans held-for-investment.

(2) Amortization of premium/discount amounts is recorded in net interest income, while amortization of deferred price adjustments related to guaranty fees is recorded in guaranty fee income.

(3) Reflects after-tax effect on reported net income from the change in net amortization based on the applicable federal income tax rate of 35 percent.

(4) Calculated based on an instantaneous change in interest rates.

#### **Deferred Premium/Discount**

As shown in Table 19, Fannie Mae moved to a net premium position of \$472 million in our mortgage portfolio at the end of 2002 from a net discount position of \$2.104 billion at year-end 2001 and \$2.520 billion at year-end 2000. Because of declining interest rates throughout 2002, we paid premiums on a higher than average proportion of our mortgage purchases during the year. Net interest income recognized from the amortization of deferred price adjustments related to our mortgage portfolio increased our reported net income by 1 percent in 2002, 4 percent in 2001, and 3 percent in 2000.

Table 19 discloses the estimated adjustments that we would have to make to our net interest income based on 50 and 100 basis point instantaneous changes in interest rates at year-end beyond the levels assumed in our base prepayment rate models. Our prepayment sensitivity analysis indicates that a 100 basis point instantaneous increase in interest rates beyond the levels assumed in base prepayment rate models would have resulted in less than a .4 percent decrease in net interest income in 2002, 2001, and 2000. We estimate that a 100 basis point decrease in interest rates at December 31, 2002, 2001, and 2000 would have increased our net interest income in each of those years by approximately 2 percent.

The effect of declines in interest rates has a larger impact on net interest income than interest rate increases because declines in interest rates result in prepayments that lower the weighted-average coupon of our mortgage assets more significantly than instantaneous increases in interest rates raise the weighted-average coupon of our mortgage assets. As a result, the adjustment of net interest income from a downward shift in interest rates would be larger than the adjustment of net interest income from a rising shift in interest rates. Despite being in a net premium position at year-end 2002, an instantaneous decrease in interest rates would

have a positive impact on 2002 net interest income largely because those mortgage assets in a net premium position have a lower average coupon than those mortgage assets in a net discount position. Consequently, the estimated downward adjustment of 2002 net interest income for the amortization of the premium after an instantaneous decline in interest rates would be lower than the estimated upward adjustment of 2002 net interest income for the amortization of the discount.

This sensitivity analysis is only one component of Fannie Mae's overall net interest income at risk assessment. It does not include the effect of new business or the impact of changes in interest rates on our debt costs or net cash flows related to our derivatives contracts. A comprehensive analysis of the impact of interest rate changes on projected net interest income is presented in "MD&A—Risk Management—Interest Rate Risk Management—Net Interest Income at Risk."

### ***Deferred Guaranty Fees***

Our net discount position on deferred guaranty fee price adjustments increased to \$1.454 billion at year-end 2002 from a net discount position of \$382 million at year-end 2001 and a net premium position of \$305 million at year-end 2000. A net discount position reflects that the combined up-front payments we collect in lieu of higher guaranty fees on more risky loans and the up-front payments we receive from lenders in exchange for a lower guaranty fee rate over time exceed the up-front payments we make to lenders in exchange for a higher guaranty fee rate over time. A net premium position indicates that our upfront payments to lenders exceed the upfront fees collected from lenders. The significant increase in our net discount position on deferred guaranty fees in 2002 was largely attributable to an increase in up-front payments collected on loans with higher credit risk.

Amortization of deferred guaranty fee adjustments increased guaranty fee income by \$104 million in 2002 (1 percent of reported net income) and reduced guaranty fee income by \$87 million in 2001 (1 percent of reported net income) and \$22 million in 2000 (less than 1 percent of reported net income). The upward adjustment to guaranty fee income in 2002 was primarily related to accelerating the recognition of discount during the second half of 2002 as interest rates fell to historically low levels and prepayments accelerated. In addition, we made enhancements in 2002 to better reflect the impact of interest rates on prepayment behavior and guaranty fee income that accelerated the recognition of discount.

Our prepayment sensitivity analysis at the end of each year for deferred guaranty fees indicates that a 100 basis point instantaneous increase in interest rates beyond the levels assumed in base prepayment rate models at year-end would have less than a 1 percent upward effect on guaranty fee income in 2002, 2001, and 2000. A 100 basis point instantaneous decrease in interest rates at year-end would have increased our guaranty fee income by approximately 3 percent in 2002 and reduced our guaranty fee income by approximately 3 percent and 10 percent in 2001 and 2000, respectively. The growth and age of the net discount position in 2002 is the primary driver of the positive impact on guaranty fee income from an instantaneous 100 basis point decrease in interest rates.

### **Time Value of Purchased Options**

Fannie Mae issues various types of debt to finance the acquisition of mortgages. We typically use derivative instruments to supplement our issuance of debt in the capital markets and hedge against the effect of fluctuations in interest rates on our debt costs to preserve our net interest margin. With the adoption of FAS 133, we began recording all derivatives on our balance sheet at estimated fair value. We record changes in the fair value of derivatives designated as cash flow hedges in accumulated other comprehensive income ("AOCI"). We recognize in our reported earnings changes in the fair value of the time value associated with purchased options and changes in the fair value of derivatives designated as fair value hedges.

Fannie Mae's purchased options portfolio currently includes swaptions and caps, which are discussed in more detail under "MD&A—Risk Management—Interest Rate Risk Management—Derivative Instruments." The total fair value for purchased options consists of the time value plus the intrinsic value. Under FAS 133, the mark-to-market on the time value component of our purchased options flows through our reported earnings. The time value of purchased options will vary from period to period with changes in interest

rates, expected interest rate volatility, and derivative activity. However, the total expense included in earnings over the original expected life of an option will generally equal the initial option premium paid. Since adopting FAS 133, we have reported significant fluctuations in our reported net income because of unrealized fluctuations in the estimated time value of purchased options. As a result of the declining interest rate environment in 2002 and the increase in the notional value of our purchased options, we recorded \$4.545 billion in purchased options expense in 2002, compared with \$37 million in 2001.

Our methodology for valuing purchased options is based on commonly used market conventions and assumptions. We obtain quoted market prices for a benchmark set of interest rate options, which include caps and swaptions. Based on these quoted market prices, we apply our valuation model, which effectively utilizes these prices to estimate the fair value of our purchased options. We then allocate the fair value of our purchased options into the time value and intrinsic value components. Because the benchmark securities are only a subset of the purchased options that we hold, the estimation of time value is not exact and can vary depending on the market source and methodology used. This variation could have a material effect on our reported net income. Hence, we believe our estimate of the time value component of purchased options is a "critical accounting estimate."

During the fourth quarter of 2002, we refined our methodology for estimating the initial time value of interest rate caps at the date of purchase. Under our previous valuation method, we treated the entire premium paid on purchased "at-the-money" caps as time value with no allocation to intrinsic value. We now allocate the purchase price to reflect the value of individual caplets, some of which are above the strike rate of the cap. This approach, which is more consistent with our estimation of time value subsequent to the initial purchase date, results in a higher intrinsic value and lower time value at the date of purchase. We adopted this preferred valuation method prospectively on caps purchased after third quarter 2002, which resulted in a \$282 million pre-tax reduction in our 2002 purchased options expense. The change has no effect on the total expense that will be recorded in our income statement over the life of our caps and no effect on our core business earnings.

To gauge the potential sensitivity of changes in the estimated time value of our purchased options, we recalculated our estimates based on plus and minus changes of 5 percent and 10 percent in the time value portion of our outstanding purchased options at December 31, 2002 and 2001. An increase in the estimated time value of our purchased options would reduce our purchased options expense and increase our reported net income and stockholders' equity, while a decrease in the estimated time value would increase purchased options expense and reduce our reported net income and stockholders' equity. These changes are generally greater than changes we have observed historically in our valuation process. Table 20 shows the potential effect on our 2002 and 2001 reported results from these changes in time value. There would be no effect on our 2000 results as we adopted FAS 133 on January 1, 2001.

**Table 20: Impact of Changes in the Time Value of Purchased Options**

	Change in Fair Value Adjustment			Percentage of Reported Net Income <sup>(1)</sup>			Percentage of Total Stockholders' Equity		
	2002	2001	2000	2002	2001	2000	2002	2001	2000
	(Dollars in millions)								
10% change in time value	\$543	\$493	NA	8%	5%	NA	2%	2%	NA
5% change in time value	271	246	NA	4	3	NA	1	1	NA

(1) Reflects after-tax effect of time value adjustment based on applicable federal income tax rate of 35 percent.

Table 20 reveals that a plus or minus change of 10 percent in the time value portion of our purchased options at December 31, 2002 and 2001 would change our reported net income by 8 percent and 5 percent, respectively. A plus or minus change of 5 percent in the time value portion of our purchased options at December 31, 2002 and 2001 would change our reported net income by approximately 4 percent and 3 percent, respectively. Changing the time value portion of our purchased options by 10 percent or 5 percent would change our total stockholders' equity by approximately 2 percent or 1 percent, respectively, at December 31, 2002 and 2001. Our core business earnings results would not be affected by these estimates



because we amortize purchased options premiums on a straight-line basis over the original expected life of the option in measuring core business earnings and do not include mark-to-market changes in the fair value of purchased options.

## **RISK MANAGEMENT**

Fannie Mae is subject to three major areas of risk: interest rate risk, credit risk, and operations risk. Active management of these risks is an essential part of our operations and a key determinant of our ability to maintain steady earnings growth. The following discussion highlights the strategies we use to manage these three risks.

### **Interest Rate Risk Management**

Interest rate risk is the risk of loss to future earnings or long-term value that may result from changes in interest rates. Our interest rate risk is concentrated primarily in our mortgage portfolio where nearly 90 percent of our mortgages are intermediate-term or long-term, fixed-rate loans that borrowers have the option to prepay at any time without penalty. We are exposed to interest rate risk because the cash flows of our mortgage assets and the liabilities that fund them are not perfectly matched through time and across all possible interest rate scenarios. The cash flows from our mortgage assets are highly sensitive to changes in interest rates because of the borrower's prepayment option. As interest rates decrease, borrowers are more likely to refinance fixed-rate mortgages, resulting in increased prepayments and mortgage cash flows that are received earlier than expected. Replacing the higher-rate loans that prepay with lower-rate loans has the potential of reducing our interest spread unless we are able to also reduce our debt cost. Conversely, an increase in interest rates may result in slower than expected prepayments and mortgage cash flows that are received later than expected. In this case, we have the risk that our debt may reprice faster than our mortgage assets and at a higher cost, which could also reduce our interest spread. The objective of our interest rate risk management process is to maintain long-term value through a low variability of future earnings due to changes in interest rates, while preserving stable earnings growth and a competitive return on equity over time.

The Board of Directors oversees interest rate risk management through the adoption of corporate goals and objectives and the review of regular reports on performance against them. Senior management is responsible for ensuring that appropriate long-term strategies are in place to achieve the goals and objectives. Management establishes reference points for the key performance measures that we use to signal material changes in risk and to assist in determining whether we should adjust portfolio strategy to achieve long-term objectives. Management regularly reports these measures and reference points to the Board of Directors.

The Portfolio Investment Committee, which includes our senior mortgage portfolio managers, meets weekly and reviews current financial market conditions, portfolio risk measures, and performance targets. The Committee develops and monitors near-term strategies and the portfolio's standing relative to its long-term objectives. The results of Portfolio Investment Committee meetings are reported to the weekly Asset and Liability Management Committee, which is comprised of senior management and includes our Chief Executive Officer.

*Fannie Mae's overall objective in managing interest rate risk is to deliver consistent net interest income growth and target returns on capital over a wide range of interest rate environments. Central elements of our approach to managing interest rate risk include: (1) funding assets by issuing liabilities that have similar cash flow patterns through time and in different interest rate environments, (2) regularly assessing the portfolio's exposure to changes in interest rates using a diverse set of analyses and measures, and (3) setting parameters for rebalancing actions to help attain corporate objectives.*

#### **1. Funding mortgage assets with liabilities that have similar cash flow patterns through time and in different interest rate environments.**

When we purchase mortgages we attempt to match the initial estimated life, or duration, of our liabilities to our assets within a range to achieve a stable and competitive net interest margin. We issue a mix of debt securities across a broad spectrum of final maturities to achieve the desired liability durations. Because the estimated lives of mortgage assets change as interest rates change, we frequently issue

callable debt or use derivatives to alter the estimated life of our liabilities to partially match the expected change in duration of our mortgage assets. The duration of callable debt, like that of a mortgage, shortens when interest rates decrease and lengthens when interest rates increase. If interest rates decrease, we are likely to call debt that carries an interest rate higher than the current market. We use interest rate swaps and other derivatives with embedded interest rate options to achieve our desired liability structure and to better match both the duration and prepayment risk of our mortgage assets. These derivatives, coupled with appropriate debt securities, are close substitutes for callable and noncallable debt. Through the use of these derivatives, we can synthetically create debt with cash flows similar to our mortgage assets.

**2. Regularly assessing the portfolio's exposure to changes in interest rates using a diverse set of analyses and measures.**

***Interest Rate Risk Measurement***

We utilize a wide range of risk measures and analyses to manage the interest rate risk inherent in the mortgage portfolio. We categorize these risk measures and analyses into three types: ongoing business risk measures and analyses, run-off measures of the existing portfolio, and stress test scenarios. The combination of ongoing business and run-off risk measures and analyses present a comprehensive picture of Fannie Mae's current risk position that we use for day-to-day risk management decisions. Stress test scenarios provide information on our risk to more extreme but lower probability events.

Our ongoing business risk measures and analyses include net interest income at risk and repricing gap analyses. We base net interest income at risk measures on the mortgage portfolio as of a certain date plus projections of future business activity. Future business activity includes projected mortgage purchases and funding actions. Management believes that ongoing business risk measures and analyses provide a better perspective on the interest rate risk we face as a continuing business and a more comprehensive depiction of our risk profile than run-off measures. However, they contain more assumption risk due to the inherent uncertainty in projecting future business activity.

Run-off measures of interest rate risk include duration, convexity, and repricing gaps. We base run-off measures on the mortgage portfolio as of a certain date without incorporating future business activity. Run-off measures provide an assessment of the interest rate risk of the existing portfolio without the assumption risk inherent in projecting future business activity. However, we believe it is important to manage interest rate risk in the context of ongoing business activity because future business is highly probable and has a pronounced effect on our interest rate risk profile.

Stress test scenarios include extreme movements in risk factors on both ongoing business and run-off measures of risk. We periodically measure and analyze the effects that extreme movements in the level of interest rates and the slope of the yield curve would have on the company's risk position. In addition, we evaluate stress scenarios that include severe changes in expected prepayment speeds and the level of interest rate volatility. While stress testing is an integral part of our risk management process, the ongoing business and run-off measures of risk are the primary inputs in daily risk management decisions.

Many of our projections of mortgage cash flows in our interest rate risk measures depend on our proprietary prepayment models. While we are highly confident in the quality of these models, we recognize the historical patterns that serve as input for our models may not continue in the future. The models contain many assumptions, including those regarding borrower behavior in certain interest rate environments and borrower relocation rates. Other assumptions such as projections of interest rates, shape of the yield curve, and interest rate volatility are also critical components to our interest rate risk measures. We maintain a research program to constantly evaluate, update, and enhance these assumptions, models, and analytical tools as appropriate to reflect management's best assessment of the environment.

• Net Interest Income at Risk

Net interest income at risk is our primary ongoing business measure of interest rate risk. Net interest income at risk measures the projected impact of changes in the level of interest rates and the shape of the yield curve on the mortgage portfolio's expected or "base" core net interest income over the immediate future one- and four-year periods. To determine our base core net interest income, we estimate core net interest income over a wide range of interest rate environments using stochastic interest rate simulations. Stochastic interest rate simulations are a widely used statistical method to estimate the path and pattern of interest rates. Our stochastic simulations produce probability distributions of future interest rates based on expected interest rate volatility and are based on proprietary interest rate models. We generate several hundred interest rate paths distributed around the current Fannie Mae yield curve from these simulations. The Fannie Mae yield curve represents market assumptions regarding our expected cost of funds over a variety of maturities and takes into account the risk premium on our debt relative to benchmark interest rates. We project core net interest income for four years along each path based on the characteristics of the current mortgage portfolio and projected future business activity. The expected or "base" core net interest income is calculated based on the average core net interest income across all simulation paths and serves as the basis for determining our interest rate risk profile. Our projections of future business activity used in these simulations are reported to senior management and our Board of Directors and provide the basis for Fannie Mae's current earnings forecasts.

We determine the amount of net interest income at risk by assuming a sudden change or shock to the current yield curve and repeating the simulation. We regularly evaluate a wide range of instantaneous shocks to both the level and shape of the yield curve and create the net interest income at risk profile by comparing the percentage change in core net interest income between each shocked simulation and the base simulation. Our net interest income at risk disclosures, which we report to the public on a monthly basis, represent the extent to which our core net interest income over the next one-year and four-year periods is at risk due to a plus or minus 50 basis point parallel change in the current Fannie Mae yield curve and from a 25 basis point change in the slope of Fannie Mae's yield curve. We selected these shocks for our monthly disclosure because they capture approximately 95 percent of historical changes in interest rates over a one-month reporting period.

• Duration Gap

The portfolio duration gap is a run-off measure of interest rate risk. The duration gap is the difference between the estimated durations of portfolio assets and liabilities. Duration gap summarizes the extent to which estimated cash flows for assets and liabilities are matched, on average, over time and across interest rate scenarios. A positive duration gap signals a greater exposure to rising interest rates because it indicates that the duration of our assets exceeds the duration of our liabilities. A negative duration gap signals a greater exposure to declining interest rates because the duration of our assets is less than the duration of our liabilities. We apply the same interest rate process, prepayment models, and volatility assumptions used in our net interest income at risk measure to generate the portfolio duration gap. The duration gap reflects the current mortgage portfolio, including priced asset and debt commitments. We do not incorporate projected future business activity or nonmortgage investments into our duration gap measure.

We regularly evaluate the sensitivity of the duration gap over a wide range of instantaneous changes to both the level and shape of the yield curve. The duration gap provides a relatively concise and simple measure of the interest rate risk inherent in the existing mortgage portfolio, but it is not directly linked to expected future earnings performance. Future business activity, which is not reflected in the duration gap, can have a significant effect even over a very short horizon. We disclose on a monthly basis our duration gap at the end of each month along with our net interest income at risk, which together we believe provide a more informative profile of our overall interest rate risk position than either measure alone.

**3. *Setting the parameters for rebalancing actions to help attain corporate objectives.***

Management develops rebalancing actions based on a number of factors that include the relative standing of both net interest income at risk and duration gap, as well as analyses based on additional risk measures and current market activities and conditions. We establish internal reference points, or indicators, for our risk measures to signal when we should re-examine the risk profile of our assets. Our reference points are set by Fannie Mae's management, not by any external or regulatory requirement, to provide a tool for determining when and to what extent we should consider rebalancing actions. These reference points do not represent absolute risk limits. They are generally consistent with levels of interest rate risk that we project will not result in significant variability in future earnings and long-term value.

As these risk measures begin to move beyond our internally established reference points, we consider actions to bring them within our preferred ranges in a manner that is consistent with achieving Fannie Mae's earnings objectives. As a risk measure moves further outside our preferred range, we place significantly greater emphasis on reducing our risk exposure and less emphasis on earnings objectives. We have not established a specific time horizon over which rebalancing actions must take place.

***Risk Management Results***

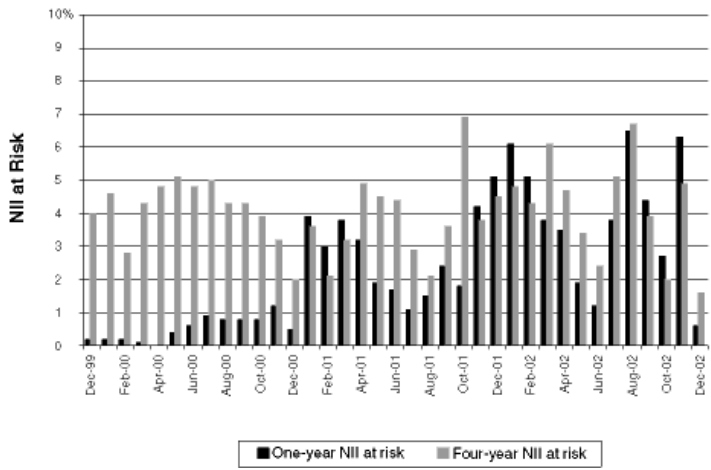
2002 was a year of significant interest rate movements coupled with unprecedented levels of interest rate volatility. Fannie Mae's disciplined risk management process was critical to successfully meeting the company's interest rate risk objectives throughout this challenging environment. During the first half of 2002, our interest rate risk measures were within our reference points, and no significant rebalancing actions were considered necessary. Between June and September 2002, interest rates declined significantly and our primary risk measures began to move outside of our preferred range. As these risk measures approached our internally established reference points, we developed strategies to moderately rebalance the portfolio. As rates continued to fall, we increased the pace of rebalancing significantly. After our interest rate risk measures reached peak levels in August 2002, we continued to aggressively rebalance to bring our risk measures within our established reference points. We utilized a wide range of tools to execute this rebalancing, including increased mortgage purchases, reduced fixed-rate debt issuances, debt repurchases, and derivative transactions.

**•Net Interest Income at Risk**

At December 31, 2002, our one-year and four-year net interest income at risk measures for a 50 basis point change across the Fannie Mae yield curve were .6 percent and 1.6 percent, respectively, compared with 5.1 percent and 4.5 percent, respectively, at December 31, 2001. The one-year and four-year net interest income at risk measures for a 25 basis point change in the slope of the Fannie Mae yield curve were 4.7 percent and 6.6 percent, respectively, compared with 2.4 percent and 4.3 percent, respectively, at December 31, 2001.

The following graphs show the monthly net interest income at risk for each of the last three years under both a 50 basis point change across the Fannie Mae yield curve and a 25 basis point change in the slope of the Fannie Mae yield curve. Compared to 2001 and 2000, the net interest income at risk was at somewhat higher levels and more variable during 2002. The results for 2002 reflect the extreme low level of interest rates as well as unprecedented levels of interest rate volatility related to uncertainty about the economic outlook.

**Mortgage Portfolio Net Interest Income at Risk - 50 Basis Point Level Shock**



**Mortgage Portfolio Net Interest Income at Risk - 25 Basis Point Slope Shock**

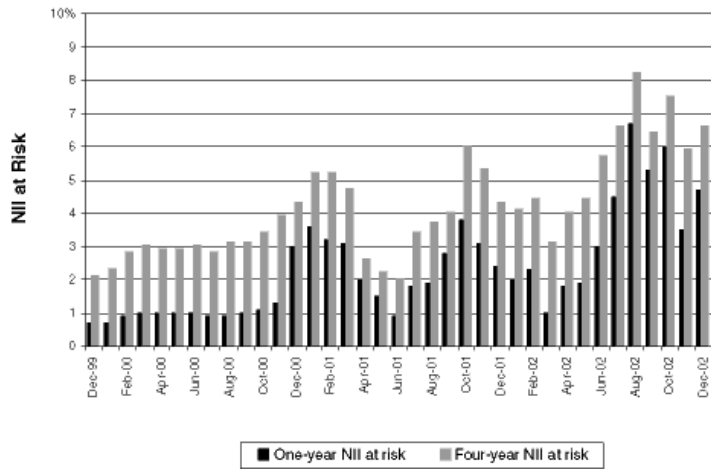


Table 21 presents our net interest income at risk based on an instantaneous 100 basis point increase and a 50 basis point decrease in interest rates. The risk measure is an extension of our voluntary monthly net interest income at risk disclosure, and we use the same data, assumptions, and methodology. We consider our net interest income at risk at December 31, 2002 to be low as our exposure to a 100 basis point instantaneous increase in interest rates was estimated not to exceed 4 percent and 6 percent over a 1-year and 4-year horizon, respectively, and our exposure to a 50 basis point instantaneous decrease in rates was estimated not to exceed more than 1 percent over a 1-year and 4-year horizon. In comparison, we had what we consider to be a moderate level of risk exposure at December 31, 2001 to increasing rates and a benefit from decreasing rates. The changes in the profile of net interest income at risk from December 31, 2001 to December 31, 2002 were driven by changes in the level of interest rates and shape of the yield curve, changes in the composition of the portfolio, and changes in forecast assumptions. Actual portfolio net interest income may differ from these estimates because of specific interest rate movements, changing business conditions, changing prepayments, and management actions.

**Table 21: Net Interest Income at Risk**

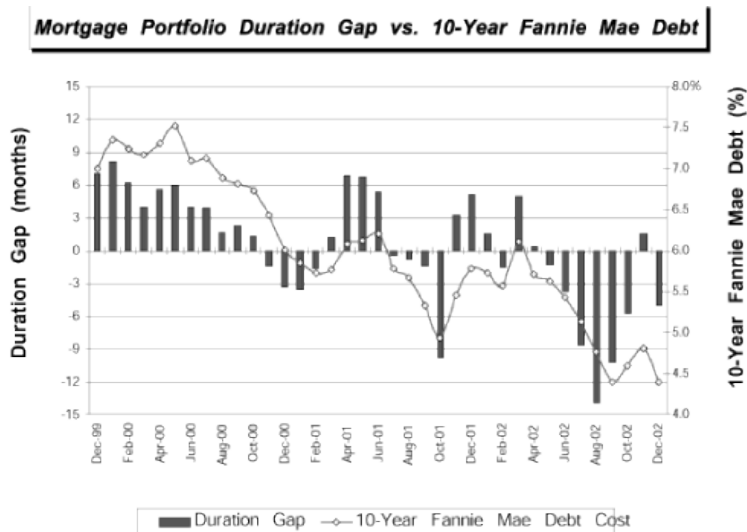
	December 31, 2002		December 31, 2001	
	1-Year Portfolio Net Interest Income at Risk	4-Year Portfolio Net Interest Income at Risk	1-Year Portfolio Net Interest Income at Risk	4-Year Portfolio Net Interest Income at Risk
Assuming a 100 basis point increase in interest rates	4%	6%	10%	10%
Assuming a 50 basis point decrease in interest rates	1	—	(4)	(2)

• Duration Gap

Fannie Mae’s duration gap was minus 5 months at December 31, 2002, versus plus 5 months at December 31, 2001. The negative shift in our duration gap during 2002 was primarily the result of historically low interest rates that resulted in a surge in expected refinancings. The significant increase in our expectation of mortgage prepayments caused the durations of our mortgages to shorten by more than the durations of our debt during 2002. Our monthly duration gap turned sharply negative during the year, falling to minus 14 months at the end of August 2002 before narrowing to minus 5 months by the end of the year. The movement in the duration gap during 2002 was not unusual given our historical experience during previous refinance waves or periods of significant interest rate volatility. Our duration gap also moved significantly during each of the prior major refinancing waves in 2001, 1998, and 1993. Over the past decade, Fannie Mae’s duration gap has been wider than plus or minus 6 months approximately one-third of the time. During 2002, our monthly duration gap was wider than plus or minus 6 months three times.

Although periods of heavy refinancing are typically associated with somewhat higher risk levels, these periods historically have provided positive opportunities for our portfolio. Through our normal business activities of buying mortgages and issuing debt, we historically have been able to bring our duration gap measure within our target range in a manner and pace that does not put undue demands on the market. Opportunities to add new business during the latter half of 2002 developed at about the pace we anticipated in a low rate environment. The increased business activity fueled our purchase of long-term, fixed-rate mortgages, which helped to lengthen the duration of our mortgage assets and offset our negative duration gap. In addition, we took a number of specific rebalancing actions in the latter half of 2002 to reduce our negative duration gap, including funding our longer duration mortgage purchases with shorter-term debt, repurchasing long-term outstanding debt, terminating certain long-term pay-fixed interest rate swaps, and entering into option-based derivatives transactions. If interest rates increase, some of our rebalancing actions could result in lower portfolio returns than would have occurred without the rebalancing. However, our objective is to maintain an interest rate risk profile that is balanced to protect us against both increases and decreases in interest rates. Because managing our duration gap through rebalancing actions is a routine part of our interest rate risk management strategy, we do not expect these actions to have a material adverse effect on our future earnings objectives.

The graph below shows Fannie Mae’s monthly duration gap compared with the yield on Fannie Mae 10-year debt for the last three years.



• Convexity

Convexity measures are commonly used as a supplement to duration measures to reflect the degree to which durations are likely to change in response to movements in interest rates. Convexity provides us with information on how quickly and by how much the portfolio’s duration gap may change in different interest rate environments. Our primary strategy for managing convexity risk is to either issue callable debt or purchase interest-rate derivatives with embedded options. We may also change the mix of assets we purchase to manage convexity risk. For example, ARMs, shorter-term fixed rate mortgages, and some seasoned loans have less prepayment risk relative to new 30-year fixed rate mortgages, and as a result, reduce convexity risk. Generally, our preferred option is to issue callable debt or purchase optionality rather than change the mix of our assets because we find greater value in investing in longer term, fixed-rate loans.

During 2002, we continued to take advantage of the opportunity to reduce our debt costs by redeeming significant amounts of callable debt in response to the sharp decline in short-term interest rates that began in 2001. At the same time, we continued to reduce the portfolio’s convexity by aggressively increasing the amount of option protection through the issuance of callable debt or the purchase of interest-rate derivatives with embedded options. These instruments give us the option to reduce the duration of our liabilities to offset potential increases in mortgage prepayments that usually occur when mortgage rates fall.

By the end of 2002, we had increased our option-embedded debt, which includes callable debt and option-based derivatives, as a percentage of our net mortgage portfolio to 75 percent from 54 percent at the end of 2001. As part of our rebalancing strategy during the last half of 2002, we increased our use of short-term European options, which temporarily increased the percentage of our mortgage portfolio with option-embedded rate protection beyond the average range of the past 3 years. At December 31, 2002, the remaining outstanding notional amount of these options totaled approximately 9 percent of our net mortgage portfolio. Callable debt and option-based derivative instruments debt represented 58 percent and 42 percent, respec-

tively of the \$601 billion in option-embedded debt outstanding at December 31, 2002. In comparison, callable debt and option based derivative instruments, represented 62 percent and 38 percent, respectively of the \$378 billion in option-embedded debt outstanding at December 31, 2001.

- Interest Rate Sensitivity of Net Asset Value

Another indicator of the interest rate exposure of Fannie Mae's existing business is the sensitivity of the fair value of net assets (net asset value) to changes in interest rates. Table 22 presents our estimated net asset value as of December 31, 2002 and 2001, and the impact on our estimated net asset value of a hypothetical plus 100 and minus 50 basis point instantaneous shock in interest rates. Our analysis is based on these interest rates changes because we believe they reflect reasonably possible near-term outcomes.

**Table 22: Interest Rate Sensitivity of Net Asset Value**

	2002		2001	
	Net Asset Value	Percentage of Net Asset Value	Net Asset Value	Percentage of Net Asset Value
	(Dollars in millions)			
December 31	\$22,130	—%	\$22,675	—%
Assuming a 100 basis point increase in interest rates	22,727	103	18,502	82
Assuming a 50 basis point decrease in interest rates	18,819	85	22,215	98

Changes in net asset value incorporate various factors, including:

- estimated changes in the values of all mortgage assets and the debt funding these assets,
- estimated changes in the value of net guaranty fee income from off-balance-sheet MBS obligations,
- estimated changes in the value of interest rate derivatives.

As indicated in Table 22, the projected fair value of our net assets at December 31, 2002 for a 100 basis point instantaneous increase would increase by approximately 3 percent, while a 50 basis point instantaneous decline in interest rates would reduce the fair value by approximately 15 percent. The sensitivities at December 31, 2002 reflect that we have greater risk exposure to a decline in interest rates, similar to the results generated by our duration gap, but slightly different than the results of our net interest income at risk measure due to the effects of the future business activity included in that measure. The difference in the risk profile from December 31, 2002 and December 31, 2001 is largely due to lower interest rates and a change in the mix of the portfolio.

The net asset value at December 31, 2002, as presented in Table 22, is the same as that disclosed in the Notes to Financial Statements under Note 16, "Disclosures of Fair Value of Financial Instruments." We derived the net asset values for the hypothetical interest rate scenarios in a manner consistent with the estimation procedures described in Note 16. The net asset value sensitivities do not necessarily represent the changes that would actually occur because the sensitivities are based on liquidating business and do not include the going-concern effects of adding new business.

### *Derivative Instruments*

#### *Purpose and Benefit of Derivatives*

Derivative instruments are important tools that we use to manage interest rate risk and supplement our issuance of debt in the capital markets. We are an end user of derivatives and do not take speculative positions with derivatives or any other financial instrument. We use a combination of option embedded and non-option embedded derivatives to better match the cash flow variability inherent in mortgages. We also use derivative instruments to hedge against changes in interest rates prior to debt issuance. Interest rate derivatives allow us to essentially lock in our funding cost at the time we commit to purchase mortgages rather than at the time of our next benchmark debt issuance. In addition, we use currency derivatives to convert debt issued in foreign currencies to U.S. dollars to minimize or negate any currency risk.



*Fannie Mae primarily uses derivatives as a substitute for notes and bonds we issue in the debt markets.* When we purchase mortgage assets, we fund the purchases with a combination of equity and debt. The debt we issue is a mix that typically consists of short- and long-term, noncallable debt and callable debt. The varied maturities and flexibility of these debt combinations help us in reducing the cash flow mismatch between the performance of our assets and liabilities.

We can use a mix of debt issuances and derivatives to achieve the same duration matching that would be achieved by issuing only debt securities. The following is an example of funding alternatives that we could use to achieve similar economic results:

- Rather than issuing a 10-year noncallable fixed-rate note, we could issue short-term debt and enter into a 10-year interest rate swap with a highly rated counterparty. The derivative counterparty would pay a floating rate of interest to us on the swap that we would use to pay the interest expense on the short-term debt, which we would continue to reissue periodically. We would pay the counterparty a fixed rate of interest on the swap, thus achieving the economics of a 10-year fixed-rate note issue.
- Similarly, instead of issuing a 10-year fixed-rate note callable after three years, we could issue a 3-year note and enter into a pay-fixed swaption that would have the same economics as a 10-year callable note. If we want to extend the debt beyond three years, the swaption would give us the option to enter into a swap agreement where we would pay a fixed rate of interest to the derivative counterparty over the remaining 7-year period.

The ability to either issue debt securities or modify debt through the use of derivatives increases our funding flexibility and potentially reduces our overall funding costs. We may be able to obtain a specific funding structure using derivatives that we cannot obtain through the issuance of callable debt. In addition, it can be less expensive to use the mix of debt securities and derivatives to achieve a given funding objective. We generally use the method that provides the lowest funding costs and desired flexibility.

Table 23 gives an example of equivalent funding alternatives for a mortgage purchase with funding derived solely from debt securities versus funding with a blend of debt securities and derivatives. As illustrated by Table 23, we can achieve similar economic results by funding our mortgage purchases with either debt securities or a combination of debt securities and derivatives.

**Table 23: Equivalent Debt and Derivative Funding**

Fund With: <sup>(1)</sup>			
Debt Securities		Debt Securities and Derivatives	
Percentage	Type of Debt	Percentage	Type of Debt
10%	Short-term debt	10%	Short-term debt
15	3-year noncallable debt	15	3-year noncallable debt
25	10-year noncallable debt	25	Short-term debt plus 10-year swap
50	10-year callable in 3 years	50	3-year noncallable debt plus pay-fixed swaption
—		—	
100%		100%	

(1) This example indicates the possible funding mix and does not represent how an actual purchase would necessarily be funded.

*Fannie Mae also uses derivatives to hedge against fluctuations in interest rates on planned debt issuances.* The hedging of anticipated debt issuances enables us to maintain an orderly and cost-effective debt issuance schedule so we can fund daily loan purchase commitments without significantly increasing our interest rate risk or changing the spread of our funding costs versus other market interest rates. Most of the mortgages that Fannie Mae commits to purchase are for a future settlement date, typically two weeks to three months into the future. Fannie Mae would be exposed to additional interest rate risk from changes in market rates prior to settlement if we did not issue debt at the time of the commitment or did not lock in an interest rate by hedging the anticipated debt issuance. By hedging anticipated debt issuance versus issuing debt at the time of

commitment, we are able to issue debt in larger size and on a regular schedule so that liquidity is enhanced while our relative cost of funds is reduced.

*Fannie Mae uses derivatives to hedge foreign currency exposure.* We occasionally issue debt in a foreign currency. Because all of our assets are denominated in U.S. dollars, we enter into currency swaps to effectively convert the foreign-denominated debt into U.S. dollar-denominated debt. By swapping out of foreign currencies completely at the time of the debt issue, we minimize our exposure to any currency risk. Our foreign denominated debt represents less than one percent of total debt outstanding.

*Primary Types of Derivatives Used*

Table 24 summarizes the primary derivative instruments Fannie Mae uses along with the key hedging strategies we employ to manage our various interest rate risk exposures.

**Table 24: Primary Types of Derivatives Used**

<b>Derivative Hedging Instrument</b>	<b>Hedged Item</b>	<b>Purpose of the Hedge Transaction</b>
Pay-fixed, receive-variable interest-rate swap	Variable-rate debt Anticipated issuance of debt	To protect against an increase in interest rates by converting the debt's variable rate to a fixed rate.
Receive-fixed, pay-variable interest-rate swap	Noncallable fixed-rate debt	To protect against a decline in interest rates. Converts the debt's fixed rate to a variable rate.
Basis swap or spread-lock	Variable-rate assets and liabilities	To "lock in" or preserve the spread between variable-rate, interest-earning assets and variable-rate, interest-bearing liabilities.
Pay-fixed swaption	Variable-rate debt	To protect against an increase in interest rates by having an option to convert floating-rate debt to a fixed rate.
Caps	Variable-rate debt	To protect against an increase in interest rates by providing a limit on the interest costs on our debt in a rising rate environment.
Receive-fixed swaption	Noncallable fixed-rate debt	To protect against a decline in interest rates by having an option to convert fixed-rate debt to floating-rate debt.
Foreign currency swaps	Foreign currency-denominated debt	To protect against fluctuations in exchange rates on non-U.S. dollar- denominated debt by converting the interest expense and principal payment on foreign-denominated debt to U.S. dollar-denominated debt.

As Table 24 indicates, we use what the marketplace generally regards as relatively straightforward types of interest rate derivative instruments, primarily interest-rate swaps, basis swaps, swaptions, and caps. Swaps provide for the exchange of fixed and variable interest payments based on contractual notional principal amounts. These may include callable swaps (a combination of a swap and swaptions), which gives counterparties or Fannie Mae the right to terminate interest rate swaps before their stated maturities. They may also include foreign currency swaps in which Fannie Mae and counterparties exchange payments in different types of currencies. Basis swaps provide for the exchange of variable payments that have maturities similar to hedged debt, but have payments based on different interest rate indices. Swaptions give Fannie Mae the right to enter into a swap at a future date. Interest rate caps provide ceilings on the interest rates of

variable-rate debt. Purchased options are another important risk management tool we use to reduce the cash flow mismatches driven by the prepayment option in mortgages. American homeowners have “options” to pay off their mortgages at any time. We use options of our own to manage this prepayment option risk on the loans we hold in portfolio. We obtain these options by either issuing callable debt or purchasing stand-alone options and linking them to the debt they are hedging.

*Summary of Derivative Activity*

Table 25 summarizes the notional balances and fair values of our derivatives by type for the years ended December 31, 2002 and 2001.

**Table 25: Derivative Notional Amounts and Net Fair Values**

	December 31, 2002		December 31, 2001	
	Notional Amounts	Net Fair Values <sup>(1)</sup>	Notional Amounts	Net Fair Values <sup>(1)</sup>
	(Dollars in millions)			
Pay-fixed swaps	\$168,512	\$(17,892)	\$213,680	\$(9,792)
Receive-fixed swaps	52,370	4,010	39,069	899
Basis swaps	25,525	4	47,054	1
Caps and swaptions	397,868	12,834	219,943	6,267
Other	12,320	(987)	13,393	(1,490)
Total	\$656,595	\$ (2,031)	\$533,139	\$(4,115)

(1) Based on year-end fair values, estimated by calculating the cost, on a net present value basis, to settle at current market rates all outstanding derivative contracts.

Table 26 shows the additions and maturities of derivatives by type during 2001 and 2002, along with the expected maturities of derivatives outstanding at December 31, 2002.

**Table 26: Derivative Activity and Maturity Data**

	Pay-Fixed/Receive-Variable Swaps <sup>(2)</sup>			Receive-Fixed Pay-Variable/ Swaps	Basis Swaps	Caps and Swaptions	Other <sup>(4)</sup>	Total
	Amount	Pay Rate <sup>(3)</sup>	Receive Rate <sup>(3)</sup>					
(Dollars in millions)								
Notional Amounts: <sup>(1)</sup>								
Balance at January 1, 2001	\$153,737	6.74%	6.79%	\$59,174	\$14,559	\$ 82,528	\$14,742	\$324,740
Additions	90,787	5.39	3.95	33,230	46,150	168,350	100	338,617
Maturities <sup>(5)</sup>	30,844	6.41	4.20	53,335	13,655	30,935	1,449	130,218
Balance at December 31, 2001	213,680	6.21	2.47	39,069	47,054	219,943	13,393	533,139
Additions	35,117	5.17	1.90	57,949	13,275	239,925	7,889	354,155
Maturities <sup>(5)</sup>	80,285	5.00	1.70	44,648	34,804	62,000	8,962	230,699
Balance at December 31, 2002	\$168,512	6.07%	1.67%	\$52,370	\$25,525	\$397,868	\$12,320	\$656,595
Future Maturities of Notional Amounts: <sup>(6)</sup>								
2003	\$ 26,230	5.03%	1.68%	\$15,422	\$18,090	\$122,718	\$ —	\$182,460
2004	15,330	5.60	1.68	4,875	6,795	39,100	4,147	70,247
2005	10,600	6.28	1.67	6,355	170	28,200	1,200	46,525
2006	11,450	6.19	1.60	3,650	100	12,350	616	28,166
2007	15,350	5.45	1.69	6,050	100	23,275	—	44,775
Thereafter	89,552	6.51	1.66	16,018	270	172,225	6,357	284,422
Total	\$168,512	6.07%	1.67%	\$52,370	\$25,525	\$397,868	\$12,320	\$656,595

- (1) Dollars represent notional amounts that indicate only the amount on which payments are being calculated and do not represent the amount at risk of loss.
- (2) Notional amounts include callable swaps of \$35 billion and \$32 billion with weighted-average pay rates of 6.75 percent and 6.72 percent and weighted-average receive rates of 1.68 percent and 2.54 percent at December 31, 2002 and December 31, 2001, respectively.
- (3) The weighted-average interest rate payable and receivable is as of the date indicated. The interest rates of the swaps may be variable-rate, so these rates may change as prevailing interest rates change.
- (4) Includes foreign currency swaps, futures contracts, and derivative instruments that provide a hedge against interest rate fluctuations.
- (5) Includes matured, called, exercised, and terminated amounts.
- (6) Based on stated maturities. Assumes that variable interest rates remain constant at December 31, 2002 levels.

#### *Derivative Counterparty Risk*

At December 31, 2002, over 99 percent of the \$657 billion notional amount of our outstanding derivative transactions were with counterparties rated A or better both by Standard & Poor's ("S&P") and Moody's. Our derivative instruments were diversified among 21 and 23 counterparties at year-end 2002 and 2001, respectively, to reduce our credit risk concentrations. At December 31, 2002, eight counterparties with credit ratings of A or better represented approximately 76 percent of the total notional amount of outstanding derivatives transactions. The outstanding notional amount for each of these eight counterparties ranged between 5 percent and 15 percent of our total outstanding notional amount at December 31, 2002. Each of the remaining counterparties accounted for less than 5 percent of the total outstanding notional amount at December 31, 2002. In comparison, eight counterparties with credit ratings of A or better accounted for approximately 78 percent of the total notional outstanding amount at December 31, 2001.

The primary credit exposure that we have on a derivative transaction is that a counterparty might default on payments due, which could result in having to replace the derivative with a different counterparty at a higher cost. The exposure to counterparty default after offsetting arrangements, such as master netting

agreements and the value of related collateral, is the appropriate measure of the actual credit risk of derivative contracts.

*We believe the risk of loss on Fannie Mae's derivatives book is low for three primary reasons: (1) our stringent counterparty eligibility standards, (2) our conservative collateral policy, which has provisions requiring collateral on our derivative contracts in gain positions, and (3) our intensive exposure monitoring and management.*

Fannie Mae has never experienced a loss on a derivative transaction due to credit default by a counterparty. The credit risk on our derivative transactions is low because our counterparties are of very high credit quality. Our counterparties consist of large banks, broker-dealers, and other financial institutions that have a significant presence in the derivatives market, most of whom are based in the United States. We manage derivative counterparty credit risk by contracting only with experienced counterparties that have high credit ratings. We initiate derivative contracts only with counterparties rated A or better. As an additional precaution, we have a conservative collateral management policy with provisions for requiring collateral on our derivative contracts in gain positions.

We also monitor credit exposure on our derivatives daily by valuing them using internal pricing models and dealer quotes. We make collateral calls daily based on the results of our internal models and dealer quotes. We enter into master agreements that provide for netting of amounts due to us and amounts due to counterparties under those agreements. New York law governs all of our master derivatives agreements.

The estimated total notional balance of the global derivatives market was \$152 trillion at June 30, 2002 based on combined data from the Bank for International Settlements for over-the-counter derivatives and published figures for exchange-traded derivatives. Fannie Mae's outstanding notional principal balance of \$657 billion at December 31, 2002 represented less than .5 percent of the total estimated derivatives market. Although notional principal is a commonly used measure of volume in the derivatives market, it is not a meaningful measure of market or credit risk since the notional amount does not change hands other than in the case of foreign currency swaps. Counterparties use the notional amounts of derivative instruments to calculate contractual cash flows to be exchanged. However, the notional amount is significantly greater than the potential market or credit loss that could result from such transactions. The fair value of derivatives in a gain position is a more meaningful measure of our current market exposure on derivatives. Table 27 shows our exposure on derivatives by maturity at December 31, 2002 and 2001 and counterparty credit ratings based on these maturities.

**Table 27: Derivative Credit Loss Exposure<sup>(1)</sup>**

	December 31, 2002					December 31, 2001				
	Credit Rating				Total	Credit Rating				Total
	AAA	AA	A	BBB		AAA	AA	A	BBB	
	(Dollars in millions)									
Less than 1 year	\$ —	\$ 69	\$ 6	\$ —	\$ 75	\$ —	\$ —	\$ —	\$ —	\$ —
1 to 5 years	—	486	116	—	602	—	43	43	—	86
Over 5 years	21	1,334	2,328	—	3,683	136	671	826	—	1,633
Subtotal	21	1,889	2,450	—	4,360	136	714	869	—	1,719
Maturity distribution netting <sup>(2)</sup>	(21)	(368)	(670)	—	(1,059)	(136)	(528)	(289)	—	(953)
Exposure	—	1,521	1,780	—	3,301	—	186	580	—	766
Collateral held	—	1,382	1,722	—	3,104	—	95	561	—	656
Exposure net of collateral	\$ —	\$ 139	\$ 58	\$ —	\$ 197	\$ —	\$ 91	\$ 19	\$ —	\$ 110
Notional amount	\$21,045	\$316,813	\$318,487	\$250	\$656,595	\$71,173	\$316,588	\$145,128	\$250	\$533,139
Number of counterparties	2	11	7	1	21	3	16	3	1	23

(1) Represents the exposure to credit loss on derivative instruments, which is estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts in a gain position. Reported on a net-by-counterparty basis where a legal right of offset exists under an enforceable master settlement agreement. Derivative gains and losses with the same counterparty in the same maturity category are presented net within the maturity category.

(2) Represents impact of netting of derivatives in a gain position and derivatives in a loss position for the same counterparty across maturity categories.

We estimate exposure to credit loss on derivative instruments by calculating the replacement cost, on a present value basis, to settle at current market prices all outstanding derivative contracts in a gain position. Fannie Mae’s exposure on derivative contracts (taking into account master settlement agreements that allow for netting of payments and excluding collateral received) was \$3.301 billion at December 31, 2002, compared with \$766 million at December 31, 2001. We expect the credit exposure on derivative contracts to fluctuate with both changes in interest rates and implied volatility. We held \$3.104 billion of collateral through custodians for derivative instruments at December 31, 2002 and \$656 million of collateral at December 31, 2001. Assuming the highly unlikely event that all of our derivative counterparties to which Fannie Mae was exposed at December 31, 2002 were to default simultaneously, it would have cost an estimated \$197 million to replace the economic value of those contracts. This replacement cost represents approximately 2 percent of our 2002 pre-tax core business earnings. The replacement cost, or exposure after consideration of collateral held was \$110 million at December 31, 2001. Changes in both interest rates and the type of derivative transactions with specific counterparties increased our exposure at the end of 2002.

At December 31, 2002 and December 31, 2001, 100 percent of our exposure on derivatives, before consideration of collateral held, was with counterparties rated A or better by S&P and Moody’s. Five counterparties with credit ratings of A or better accounted for approximately 92 percent and 98 percent of our exposure on derivatives before consideration of collateral held at December 31, 2002 and 2001, respectively. Seventy-one percent of our net exposure of \$197 million at December 31, 2002 was with six counterparties rated AA or better by S&P and Aa or better by Moody’s. The percentage of our exposure with these six counterparties ranged from 2 to 23 percent. In comparison, five counterparties rated AA or better by S&P and Aa or better by Moody’s accounted for 83 percent of our net exposure of \$110 million at December 31, 2001. The percentage of our net exposure with counterparties rated AA or better by S&P and Aa or better by Moody’s fell during 2002 because of a change in the relative mix of our derivative products in response to changes in market conditions that shifted the relative level of activity and exposure between individual counterparties. We mitigate our net exposure on derivative transactions through a collateral management policy, which consists of four primary components: (1) minimum collateral thresholds; (2) collateral valuation percentages; (3) overcollateralization based on rating downgrades; and (4) daily monitoring procedures.

• Minimum Collateral Thresholds

Derivative counterparties are obligated to post collateral to Fannie Mae when we are exposed to credit losses exceeding agreed-upon thresholds that are based on counterparty credit ratings. We determine the collateral amount that counterparties are required to post based on their credit rating and our level of credit exposure. The amount of collateral generally must equal the excess of Fannie Mae’s exposure over the threshold amount. Table 28 presents Fannie Mae’s general ratings-based collateral thresholds.

**Table 28: Fannie Mae Ratings-Based Collateral Thresholds**

Credit Rating		Exposure Threshold
S&P	Moody’s	
		(Dollars in millions)
AAA	Aaa	Mutually agreed on
AA+	Aa1	\$100
AA	Aa2	50
AA-	Aa3	50
A+	A1	25
A	A2	10
A- or below	A3 or below	0 (see Table 29)

• Collateral Valuation Percentages

We require counterparties to post specific types of collateral to meet their collateral requirements. The collateral posted by our counterparties at December 31, 2002 was principally in the form of cash or

U.S. Treasury securities with a small amount of agency MBS. All of the collateral posted by our counterparties was in the form of cash or U.S. Treasury securities at December 31, 2001. We assign each type of collateral a specific valuation percentage based on its relative risk. For example, cash receives a 100 percent valuation, while certain U.S. Treasury instruments may receive only a 98 percent valuation percentage. In cases where the valuation percentage for a certain type of collateral is less than 100 percent, we require counterparties to post an additional amount of collateral to meet their requirements.

• Overcollateralization Based on Low Credit Ratings

We further reduce our net exposure on derivatives by generally requiring overcollateralization from counterparties whose credit ratings have dropped below predetermined levels. Counterparties falling below these levels must post collateral beyond the amounts previously noted to meet their overall requirements. Table 29 presents Fannie Mae’s standard valuation percentages for overcollateralization based on counterparty credit ratings. The percentage of additional collateral is applied to the initial amount of collateral required to be posted.

**Table 29: Fannie Mae Standard Collateral Valuation Percentages**

Credit Rating	Additional Percentage of Collateral to be Posted
A/A2 or above	0%
A-/A3 to BBB+/Baa1	10
BBB/Baa2 or below	25

• Frequent Monitoring Procedures

We mark our collateral position daily against exposure using both internal and external pricing models and compare these calculations to our counterparties’ valuations. Both Fannie Mae and our derivative counterparties transfer collateral within two business days based on the agreed-upon valuation. Pursuant to Fannie Mae’s collateral agreements we reserve the right to value exposure and collateral adequacy at any time. A New York-based third-party custodian holds all of the collateral posted to Fannie Mae and monitors the value on a daily basis.

**Credit Risk Management**

Credit risk is the risk of loss to future earnings or future cash flows that may result from the failure of a borrower or institution to fulfill its contractual obligation to make payments to Fannie Mae or an institution’s failure to perform a service for us. We assume and manage mortgage credit risk and institutional credit risk that arise through a variety of transactions. We actively manage credit risk to maintain credit losses within levels that generate attractive profitability and returns on capital and meet our expectations for consistent financial performance.

The Chief Credit Officer has primary responsibility for setting strategies to achieve the credit risk goals and objectives set by our Board of Directors. The Chief Credit Officer, who reports to our Chief Financial Officer, chairs Fannie Mae’s Credit Risk Policy Committee. The Credit Risk Policy Committee works in concert with the Portfolios and Capital Committee and the Operations, Transactions and Investments (“OTI”) Committee to provide corporate governance over Fannie Mae’s credit risk. Fannie Mae’s business units have primary responsibility for managing our business activities in conformity with the credit strategies and requirements set by our committees. Within each business unit, we have a credit officer who has responsibility for certain credit risk decisions outlined in a written delegation of credit authority approved by the Credit Risk Policy Committee. Our business unit credit officers report directly to the business unit leaders and indirectly to the Chief Credit Officer.

In addition, we have corporate credit risk management teams that report to the Chief Credit Officer and work with the business units to identify, measure, and manage credit risks. Our Policy and Standards team establishes and monitors credit policies, standards, and delegations of credit authority throughout the organization. Our Credit Research and Portfolio Management team is responsible for understanding and managing the aggregate risk exposure, risk sensitivity, and usage of risk capital. Our Counterparty Risk Management team is responsible for setting company-wide policies governing Fannie Mae's contractual exposures to institutional counterparties and identifying and measuring these exposures. Our Credit Management Information Systems team prepares analysis that monitors and identifies key credit risk trends in the credit book of business.

Our business units monitor and enforce compliance with credit risk standards and identify changes in market conditions that may warrant changes to credit policies and standards. For example, business units provide quality control oversight by requiring lenders to maintain a rigorous quality control process and by maintaining our own quality assurance process. Our regional offices, which are responsible for managing customer relationships, also play an important risk management role. Working with the business unit leaders, regional customer management teams ensure that pricing and transaction terms are structured appropriately to meet the unique needs and risks of Fannie Mae's various lender partners. Regional officers have credit authority to make credit decisions or develop customized mortgage solutions up to certain thresholds as outlined in the Credit Risk Policy Committee's written delegation of authority. Delegating certain credit authority and responsibility to our regional offices has allowed us to work closely with our lender partners, which has been integral to achieving a track record of effective credit risk management.

### ***Mortgage Credit Risk***

Our mortgage credit risk stems from our mortgage credit book of business, where we bear the risk that borrowers fail to make payments required on their mortgages. Our mortgage credit book of business consists of mortgages we own, mortgages and MBS we guarantee, and other contractual arrangements or guarantees. The Credit Guaranty business manages our mortgage credit risk. We are exposed to credit risk on our mortgage credit book of business because we either own the assets or have guaranteed the timely payment of scheduled principal and interest to third parties. For example, in the event of the default of a borrower on a mortgage underlying an MBS, we absorb any losses, net of the proceeds of any credit enhancements, that result and pay to the MBS investor all accrued interest and the full outstanding principal balance of the defaulted loan.

A certain level of credit losses is an inherent consequence of engaging in the Credit Guaranty business. Our risk management focus is on controlling the level and volatility of credit losses that result from changes in economic conditions. Table 30 presents the composition of our mortgage credit book of business for 2002, 2001, and 2000.





## *Single family*

The single-family mortgage credit book primarily consists of loans, MBS in our mortgage portfolio, MBS and other mortgage-related securities guaranteed by Fannie Mae and held by other investors (“outstanding MBS”), and other mortgage-related securities we own backed by loans on properties that have four or fewer residential units. This section details our single-family risk management practices, risk characteristics, and performance. While we manage the credit risk on the entire single-family mortgage credit book, in some cases we may not have certain loan-level information to report risk characteristics and performance disclosures. Therefore, unless otherwise noted, the credit statistics on Fannie Mae’s conventional single-family mortgage credit book presented in this section will generally include only mortgage loans in portfolio, MBS in portfolio, and outstanding MBS where we have more comprehensive, detailed loan-level transaction information. These loans represent 96 percent of our single-family mortgage credit book at the end of 2002. Most of the remaining 4 percent of our conventional single-family mortgage credit book consists of mortgage-related securities rated AAA at acquisition, including mortgage-related securities guaranteed by Freddie Mac and Ginnie Mae.

### *1. Managing the profile and quality of mortgages in the singlefamily mortgage credit book.*

Mortgage credit risk on a particular single-family loan is affected by numerous characteristics, including the type of loan, the down-payment amount, and the strength of the borrower’s credit history. These and other factors, such as home price appreciation, affect both the level of expected credit loss on a given loan and the sensitivity of that loss to changes in the economic environment. We attempt to understand the overall credit risk in our loans, earn an attractive risk-adjusted return from appropriate guaranty fee pricing, and mitigate our risks through the use of credit enhancements and effective asset management. Our risk mitigating activities reduce the incidence and severity of loss and minimize the volatility of credit losses, which helps Fannie Mae in achieving stable earnings growth and a competitive return on equity over time.

We establish detailed policies and employ various processes to validate that the characteristics of the loans purchased or guaranteed comply with key underwriting and eligibility criteria. We also assess the characteristics and quality of a lender’s loans and processes through an audit program and our customer relationship management teams. Mortgage loans that we buy or guarantee must comply with certain underwriting and eligibility characteristics to ensure that the overall risk of the particular loan is within acceptable limits.

Lenders represent and warrant compliance with our asset acquisition requirements when they sell mortgage loans or securities to us or seek a guarantee from us. We may require the lender to repurchase a loan or enforce some other remedy if we identify any deficiencies. Since 1995, we have developed and refined DU to assist lenders in underwriting and complying with our other loan eligibility criteria. DU consistently and objectively applies risk analytics, underwriting, and eligibility standards to prospective mortgage loans. Approximately 60 percent of the single-family conventional loans we purchased or guaranteed in 2002 were processed through DU, up from 59 percent in 2001 and 56 percent in 2000. We also buy or guarantee loans underwritten manually or through other automated underwriting systems, subject to appropriate lender representations and warranties. In certain circumstances involving use of automated underwriting, we may relieve lenders of a limited number of the standard representations and warranties.

### *2. Using credit enhancements to reduce credit losses.*

Credit enhancements are contracts in which a third party agrees to pay Fannie Mae if there is a credit event, such as a loan default. Credit enhancements enable us to transform the risk and return profile of the mortgage credit book of business to be consistent with our objectives. Single-family credit enhancements include primary loan-level mortgage insurance, pool mortgage insurance, recourse arrangements with lenders, and other customized risk-sharing contracts.

The majority of our single-family credit enhancement is primary loan-level mortgage insurance. When we require primary loan-level mortgage insurance on loans with loan-to-value ratios above 80 percent, we typically require greater coverage than the minimum level of credit enhancement required by our Charter Act if primary mortgage insurance is the only source used to meet our credit enhancement requirement. Subject to our policies and to the Homeowners Protection Act of 1998, primary loan-level mortgage insurance can be

cancelled either automatically or at the borrower's option in certain circumstances where the loan-to-value ratio has decreased below 80 percent. We also may require or acquire supplemental credit enhancement on loans based on risk and pricing. While credit enhancements reduce our mortgage-related credit losses, they also generate institutional counterparty risk that we discuss in the "Institutional Counterparty Credit Risk" section. We focus credit enhancement coverage on loans in our mortgage credit book of business with a higher risk profile. The percentage of our conventional single-family credit book of business with credit enhancements was 27 percent at December 31, 2002, down from 32 percent at December 31, 2001. The decrease in credit enhancement coverage during 2002 was primarily due to the high level of refinance loans acquisitions with lower loan-to-value ratios that did not require credit enhancement. Because of the lower risk profile of these loans, we elected not to purchase credit enhancement on these loans.

**3. *Assessing the sensitivity of the profitability of the single-family mortgage credit book of business to changes in composition and the economic environment.***

We use analytical tools to measure credit risk exposures, assess performance of our single-family mortgage credit book of business, and evaluate risk management alternatives. We continually refine our methods of measuring credit risk, setting risk and return targets, and transferring risk to third parties. We use our analytical models to establish forecasts and expectations for the credit performance of loans in the mortgage credit book of business and compare actual performance to those expectations. Comparison of actual versus projected performance and changes in other key trends may signal a change in risk or return profiles and provide the basis for changing policies, standards, guidelines, credit enhancements, or guaranty fees.

For example, we use models to project guaranty fee income and credit losses, including forgone interest on nonperforming assets, for the single-family mortgage credit book across a wide range of potential interest rate and home price environments. We use current data on home values, borrower payment patterns, non-mortgage consumer credit history, and management's economic outlook to assess our sensitivity to credit losses. We closely examine a range of potential economic scenarios to monitor the sensitivity of credit losses. As part of our voluntary safety and soundness initiatives, we elected to disclose on a quarterly lagged basis the sensitivity of the present value of future single-family credit losses to an immediate 5 percent decline in home prices. Table 31 shows the results at the end of 2002, 2001, and 2000. Our models indicate that home price movements are an important predictor of credit performance. We selected a 5 percent immediate decline in home prices because it is a stressful scenario. Based on housing data from OFHEO, the national average rate of home price appreciation over the last twenty years has been about 4.7 percent, while the lowest national average growth rate in any single year has been .2 percent. Historical statistics from OFHEO's housing index report indicate that there has never been a nationwide decline of 5 percent in home prices within a one-year period since the federal government began tracking this data in 1975.

**Table 31: Single-Family Credit Loss Sensitivity<sup>(1)</sup>**

	December 31,		
	2002	2001	2000
	(Dollars in millions)		
Gross credit loss sensitivity <sup>(2)</sup>	\$1,838	\$1,332	\$1,065
Projected credit risk sharing proceeds	1,242	845	770
Net credit loss sensitivity	\$ 596	\$ 487	\$ 295

(1) Represents total economic credit losses, which include net chargeoffs/recoveries, foreclosed property expenses, forgone interest, and the cost of carrying foreclosed properties.

(2) Measures the gross sensitivity of our expected future economic credit losses to an immediate 5 percent decline in home values for all single-family mortgages held in our single-family mortgage credit book, followed by an increase in home prices at the rate projected by Fannie Mae's credit pricing models.

#### 4. Managing problem assets to mitigate credit losses.

We closely manage single-family loans in partnership with the servicers of our loans to minimize both the frequency of foreclosure and the severity of loss in the event of foreclosure. We have developed detailed servicing guidelines and work closely with the loan servicers to ensure that they take appropriate loss mitigation steps on our behalf. Our loan management strategy begins with payment collection guidelines and work rules designed to minimize the number of borrowers who fall behind on their obligations and help borrowers who are delinquent from falling further behind on their payments. We seek alternative resolutions of problem loans to reduce the legal and management expenses associated with foreclosing on a home. Early intervention is critical to controlling credit expenses. Most of our servicers use Risk Profiler<sup>SM</sup>, a default prediction model created by Fannie Mae, to monitor the performance and risk of each loan and identify loans requiring problem loan management. Risk Profiler uses credit risk indicators such as mortgage payment record, updated borrower credit data, current property values, and mortgage product characteristics to evaluate the risk of the loan. In 2002, 86 percent of our conventional single-family loans were scored through Risk Profiler, up from 82 percent in 2001.

We may pursue various resolutions of problem loans as an alternative to foreclosure, including: (1) repayment plans in which borrowers repay past due principal and interest over a reasonable period of time (generally no longer than 4 months) through a temporarily higher monthly payment, (2) loan modifications in which past due principal and interest, net of any borrower contribution, are added to the loan amount and recovered over the remaining life of the loan and other terms of the loan may be adjusted, (3) deeds in lieu of foreclosure in which the borrower signs over title to the property without the added expense of a foreclosure proceeding, and (4) preforeclosure sales in which the borrower, working with the servicer, sells the home and pays off all or part of the outstanding loan, accrued interest, and other expenses with the sale proceeds. We use analytical models and work rules to determine which alternative resolution, if any, may be appropriate for each problem loan. We track the ultimate performance of alternative resolutions and adjust our models and rules as appropriate. Of the loans that recover through modification and repayment plans, our performance experience after at least three years following the inception of such plans has been that approximately two-thirds of these loans remain current or pay off in full. If we acquire the property in the event of default, we seek to maximize the sales proceeds and ensure we receive all credit enhancement payments. We maintain a centralized property disposition unit to manage the foreclosure process to minimize foreclosure costs. Table 32 presents statistics on our problem loans for 2002, 2001, and 2000.

**Table 32: Statistics on Conventional Single-Family Problem Loans**

	Number of Loans		
	2002	2001	2000
Repayment plans	5,470	4,237	5,320
Modifications	14,552	10,506	9,503
Pre-foreclosure sales	1,410	1,182	1,572
Properties acquired through foreclosure <sup>(1)</sup>	19,500	14,486	14,351
<b>Total conventional single-family problem loans</b>	<b>40,932</b>	<b>30,411</b>	<b>30,746</b>
Conventional single-family loans at December 31 <sup>(2)</sup>	14,492,034	13,414,100	12,092,295

(1) Includes properties acquired via deeds-in-lieu of foreclosure, which totaled 192 in 2002, 163 in 2001, and 235 in 2000.

(2) Represents approximately 96 percent of our conventional single-family mortgage credit book where we have more comprehensive, detailed loan-level transaction information.

*Single-Family Mortgage Credit Book Characteristics and Performance*

Economic conditions and home values strongly affect the credit risk profile of our single-family mortgage credit book and our credit losses and impact the likelihood of default and the severity of any losses.

• Economic Trends

Beginning in 2001 and extending through early 2002, the U.S. economy experienced a mild recession. Economic growth, as measured by the change in GDP, began to slowly recover in 2002. GDP growth was very robust at 5.0 percent in the first quarter of 2002, but fell to 1.4 percent during the fourth quarter. Unemployment, a lagging economic indicator, peaked at 6.0 percent in April 2002, gradually declined to 5.6 percent in September 2002, before rising again to 6.0 percent by year-end. In spite of these trends, home prices continued to grow at a rate above long-term historical averages in 2002 although home price growth has slowed from the record levels attained in the past few years. Based on OFHEO’s fourth quarter 2002 House Price Index report, average home prices at the national level increased 6.89 percent in 2002. No census region or state experienced negative home price growth in 2002. Over the last five years, U.S. home appreciation has averaged 7.66 percent annually.

• Single-Family Loan Risk Characteristics

We monitor an array of risk characteristics to assess the sensitivity of our credit losses to economic changes. Some of these risk characteristics are described below and quantified in Tables 33 and 34. We typically obtain the data for these statistics from the sellers or servicers of the mortgage loans. We receive representations and warranties as to the accuracy of the information from those providing it. Except for quality assurance efforts, we do not independently verify the reported information. We generally collect loan level statistics only on conventional single-family mortgage loans held in our portfolio and loans backing Fannie Mae guaranteed MBS. These loans, collectively, represent the vast majority of our single-family mortgage credit book of business.

- *Loan-to-value (“LTV”) ratio:* LTV ratio is the ratio of UPB to the value of the property that serves as collateral. Original LTV is based on the value reported to Fannie Mae at acquisition of the loan. Current LTV is based on current UPB and original value updated for subsequent changes in home values using Fannie Mae’s internal home valuation models. LTV ratio is a strong predictor of credit performance. The likelihood of default and the gross severity of a loss in the event of default are lower as the LTV ratio decreases, all other factors held equal. The estimated average current LTV ratio on the mortgage credit book of business (which is a weighted average based on current UPB) increased marginally to 62 percent at December 31, 2002 from 60 percent at the end of 2001, largely due to the substantial volume of new business purchased or guaranteed in 2002 that has not yet had the opportunity to experience home price appreciation.

- *Product type*: Product type is defined by the nature of the interest rate applicable to the mortgage (fixed for the duration of the loan or adjustable subject to contractual terms) and by the maturity of the loan. We divide our business into three categories: long-term, fixed-rate mortgages with original terms of greater than 20 years; intermediate-term, fixed-rate mortgages with original terms of 20 years or less; and adjustable-rate mortgages (ARMs) of any term. ARMs tend to have higher default risk than fixed-rate loans, all other factors held equal. Our single-family mortgage credit book of business continues to be heavily concentrated in long- and intermediate-term, fixed-rate products that are generally regarded as lower risk investments. At December 31, 2002, 93 percent of our single-family book of business consisted of long-term, fixed-rate or intermediate-term, fixed-rate mortgages.
- *Property type*: We classify mortgages secured by housing with up to four living units as single-family. Mortgages on one-unit properties tend to have lower credit risk than mortgages on multiple-unit properties, such as duplexes, all other factors held equal. The majority of Fannie Mae's book of business consists of loans secured by one-unit properties. The proportion of loans secured by multiple-unit properties has remained relatively stable over the past two years.
- *Occupancy type*: Borrowers may purchase a home as a primary residence, second or vacation home, or investment rental property. Mortgages on properties occupied by the borrower as a principal or second residence tend to have lower credit risk than mortgages on investment properties, all other factors held equal. The vast majority of Fannie Mae's book of business consists of mortgages on properties occupied by the borrower as the principal residence. The proportion of loans secured by investment properties has remained relatively stable over the past three years.
- *Credit score*: Borrower credit history is a record of the use and repayment of varying forms of credit by the borrower. Since this information is typically complex and voluminous, statistical models are employed to summarize the information—typically into a single numeric indicator of borrower credit quality. We use several internal proprietary models to assess borrower credit quality at acquisition. Credit score is one measure often used by the financial services industry, and by Fannie Mae in some cases, to assess borrower credit quality. Credit scores are generated by credit repositories and calculated based on proprietary statistical models that evaluate many types of information on a borrower's credit report and compare this information to the patterns in other credit reports. One statistical model used widely in the financial services industry was developed by Fair, Isaac & Company, Inc. ("Fair Isaac"). This model is used to create a credit score called the FICO® score. FICO® scores can vary depending on which credit repository is using the Fair Isaac model to supply the score. FICO® scores, as reported by the credit repositories, may range from a low of 150 to a high of 950. According to Fair Isaac, a high FICO® score indicates a lesser degree of risk. A higher credit score is an indicator of lower default risk, while a lower credit score indicates higher risk, all other factors held equal. On approximately two-thirds of the mortgages on which we acquire credit risk through purchase or guaranty, lenders provide credit scores that typically reflect the borrower's credit history just prior to our acquisition of the loan. For most of the remaining loans, we obtain credit scores soon after acquisition. For a small proportion of loans, credit scores are not available. The credit score of an individual borrower can vary depending upon several factors, including the timing of when the score is calculated and the credit repository from which the score is obtained. Management believes, however, that the average credit score across our book of business is a strong indicator of default risk within the single-family mortgage credit book of business. The credit quality of borrowers in our book remained high at December 31, 2002, as evidenced by an average credit score of 714 at the time of loan purchase or guarantee.
- *Loan purpose*: Loan purpose indicates how the borrower intends to use the funds. We designate the loan purpose as either purchase, cash-out refinance, or other refinance. The funds in a purchase transaction are used to acquire a property. The funds in a cash-out refinance transaction are used for purposes other than to pay off an existing first mortgage lien, to pay off any permissible subordinate mortgage liens, and to provide limited unrestricted cash proceeds to the borrower. All other refinance transactions are defined as other refinancings. Cash-out refinance transactions generally have a higher risk profile than purchase or other refinance transactions, all other factors held equal. The significant

refinance activity of the past two years resulted in a substantial shift in the proportion of refinance loans in our conventional single-family mortgage credit book to 62 percent at December 31, 2002 from 54 percent at the end of 2001.

- *Geographic concentration:* Local economic conditions affect borrowers' ability to repay loans and the value of the collateral underlying a loan, all other factors held equal. We analyze geographic exposure at a variety of levels of geographic aggregation, including at the regional level. Geographic diversification reduces mortgage credit risk, and our geographic distributions have been consistently well diversified. We have significant business volumes in the West, with 26 percent at the end of 2002, 2001, and 2000. However, this exposure is low relative to the distribution of the overall mortgage market because of our conforming loan limit, which restricts us in serving the financing needs of borrowers in higher cost areas such as California.
- *Loan age:* We closely track year of origination and loan age, defined as the number of years since origination. The peak ages for default are from three to seven years after origination. The average age of our portfolio has decreased in the past year largely due to the high level of refinancings. As of December 31, 2002, approximately 69 percent of our portfolio was three years old or less and only 26 percent of the loans were in the peak default years, down from 42 percent at the end of 2001. At December 31, 2001, 57 percent of the loans were three years old or less. At the end of 2000, 61 percent were three years old or less and 48 percent were within their peak default years.

Table 33 shows our conventional single-family mortgage credit book of business at December 31, 2002, 2001, and 2000, based on these risk characteristics. Table 34 shows conventional single-family purchase and guaranty acquisition volumes for the mortgage credit book of business based on these risk characteristics, while Table 35 presents a comparison of conventional single-family loans with some level of credit enhancement and loans without any credit enhancement based on selected risk characteristics. As we work to expand Fannie Mae's presence, activities, and customer base in underserved markets through products such as Expanded Approval/ Timely Payment Rewards™, the overall credit risk profile of our conventional single-family mortgage credit book of business may change.

**Table 33: Characteristics of Conventional Single-Family Mortgage Credit Book**

	Percent of Book of Business <sup>(1)</sup>		
	2002	2001	2000
<b>Original loan-to-value ratio<sup>(2)</sup>:</b>			
<= 60.00%	20%	17%	16%
60.01% to 70.00%	15	14	14
70.01% to 80.00%	42	43	42
80.01% to 90.00%	13	14	15
Greater than 90.00%	10	12	13
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Weighted average	73%	74%	75%
<b>Current loan-to-value ratio<sup>(2)</sup>:</b>			
<= 60.00%	41%	47%	45%
60.01% to 70.00%	18	19	24
70.01% to 80.00%	28	23	20
80.01% to 90.00%	9	7	8
Greater than 90.00%	4	4	3
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Weighted average	62%	60%	60%
Average loan amount	\$111,169	\$102,095	\$94,360
<b>Product type<sup>(3)</sup>:</b>			
Long-term, fixed-rate	70%	74%	73%
Intermediate-term, fixed-rate	23	20	20
Adjustable-rate	7	6	7
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

	Percent of Book of Business <sup>(1)</sup>		
	2002	2001	2000
<b>Property type:</b>			
1 unit	96%	96%	97%
2-4 units	4	4	3
Total	100%	100%	100%
<b>Occupancy type:</b>			
Principal residence	93%	94%	94%
Second/vacation home	3	2	2
Investor	4	4	4
Total	100%	100%	100%
<b>Credit score:</b>			
<620	6%	5%	4%
620 to< 660	11	11	10
660 to< 700	18	17	16
700 to< 740	22	22	21
>= 740	36	33	30
Not available	7	12	19
Total	100%	100%	100%
Weighted average	714	713	713
<b>Loan purpose:</b>			
Purchase	38%	46%	53%
Cash-out refinance	27	22	17
Other refinance	35	32	30
Total	100%	100%	100%
<b>Geographic concentration<sup>(4)</sup>:</b>			
Midwest	18%	19%	19%
Northeast	19	18	18
Southeast	21	21	21
Southwest	16	16	16
West	26	26	26
Total	100%	100%	100%
<b>Origination year:</b>			
<= 1993	6%	11%	18%
1994	2	3	4
1995	1	3	4
1996	2	3	6
1997	2	5	7
1998	11	18	27
1999	7	13	20
2000	4	9	14
2001	27	35	—
2002	38	—	—
Total	100%	100%	100%

(1) Percentages calculated based on unpaid principal balance at the end of each period.

(2) Excludes loans for which this information is not readily available.

(3) Intermediate-term, fixed-rate includes second mortgage loans.

(4) Midwest includes IL, IN, IA, MI, MN, NE, ND, OH, SD, and WI. Northeast includes CT, DE, ME, MA, NH, NJ, NY, PA, PR, RI, VT, and VI. Southeast includes AL, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA, and WV. Southwest includes AZ, AR, CO, KS, LA, MO, NM, OK, TX, and UT. West includes AK, CA, GU, HI, ID, MT, NV, OR, WA, and WY.



Table 34: Characteristics of Conventional Single-Family Mortgage Acquisitions

	Percent of Acquisition Volume <sup>(1)</sup>		
	2002	2001	2000
<b>Original loan-to-value ratio<sup>(2)</sup>:</b>			
<= 60.00%	23%	17%	13%
60.01% to 70.00%	16	14	11
70.01% to 80.00%	42	45	45
80.01% to 90.00%	11	13	15
Greater than 90.00%	8	11	16
Total	100%	100%	100%
Weighted average	71%	74%	77%
Average loan amount	\$145,553	\$136,376	\$118,776
<b>Product type<sup>(3)</sup>:</b>			
Long-term, fixed-rate	63%	73%	73%
Intermediate-term, fixed-rate	27	21	12
Adjustable-rate	10	6	15
Total	100%	100%	100%
<b>Property type:</b>			
1 unit	96%	96%	96%
2-4 units	4	4	4
Total	100%	100%	100%
<b>Occupancy type:</b>			
Principal residence	92%	93%	91%
Second/vacation home	3	3	3
Investor	5	4	6
Total	100%	100%	100%
<b>Credit score:</b>			
<620	6%	6%	6%
620 to < 660	11	12	12
660 to < 700	18	20	20
700 to < 740	23	24	24
>= 740	41	37	36
Not available	1	1	2
Total	100%	100%	100%
Weighted average	717	712	712
<b>Loan purpose:</b>			
Purchase	30%	37%	72%
Cash-out refinance	32	30	15
Other refinance	38	33	13
Total	100%	100%	100%
<b>Geographic concentration<sup>(4)</sup>:</b>			
Midwest	20%	21%	19%
Northeast	18	17	17
Southeast	20	20	21
Southwest	15	16	17
West	27	26	26
Total	100%	100%	100%

(1) Percentages calculated based on unpaid principal balance.

(2) Excludes loans for which this information is not readily available.

(3) Intermediate-term, fixed-rate includes second mortgage loans.

(4) See Table 33 for states included in each geographic region.

**Table 35: Conventional Single-Family Mortgage Credit Book Characteristics**

	Weighted Average Credit Characteristics Based on UPB <sup>(1)</sup>								
	2002			2001			2000		
	Credit Enhanced	Non-Credit Enhanced	Total	Credit Enhanced	Non-Credit Enhanced	Total	Credit Enhanced	Non-Credit Enhanced	Total
Weighted average original LTV	87%	67%	73%	87%	68%	74%	86%	68%	75%
Weighted average current LTV	75	58	62	71	55	60	72	53	60
Weighted average credit score	694	721	714	699	719	713	702	720	713

(1) Indicates the principal amount of loans that have credit enhancement but does not reflect the level of credit enhancement. Excludes assets for which loan level data is not available.

• Serious Delinquency

A key measure of credit performance and future defaults for the single-family mortgage credit book is the serious delinquency rate, although not all loans that become seriously delinquent result in a default. A serious delinquency occurs when a borrower has missed three or more consecutive monthly payments, and the loan has not yet been brought current or been extinguished through foreclosure, payoff, or other resolution. A loan referred to foreclosure but not yet foreclosed is also considered seriously delinquent. The serious delinquency rate is the number of mortgages that are seriously delinquent divided by the total number of loans outstanding. The rate at which new loans become seriously delinquent and the rate at which existing seriously delinquent loans are resolved significantly affects the level of future credit losses.

Effective December 31, 2002, we changed how we report our single-family serious delinquency rate to be more consistent with our current business and credit risk management practices. Traditionally, we reported our single-family serious delinquency rate for those loans where we have the primary risk of default. For example, we did not include loans that had substantial recourse to lenders or were covered by significant supplemental pool insurance from mortgage insurance companies in our serious delinquency statistics. A significant portion of our business represents loans where we bear some risk, but share a portion of that risk with others. As a result, we believe it is more meaningful to report our single-family delinquency rate on all of our conventional loans and distinguish between loans on which we benefit from credit enhancement and loans on which we do not benefit from credit enhancement. We have reclassified prior period statistics to conform to the current year's presentation. Table 36 compares the serious delinquency rates for conventional single-family loans with credit enhancements and without credit enhancements.

**Table 36: Conventional Single-Family Serious Delinquency Rates**

	2002		2001		2000	
	Book Outstanding <sup>(1)</sup>	Serious Delinquency Rate <sup>(2)</sup>	Book Outstanding <sup>(1)</sup>	Serious Delinquency Rate <sup>(2)</sup>	Book Outstanding <sup>(1)</sup>	Serious Delinquency Rate <sup>(2)</sup>
Credit enhanced	27%	1.29%	32%	1.05%	38%	.77%
Non-credit enhanced	73	.31	68	.33	62	.29
Total conventional loans	100%	.57%	100%	.55%	100%	.45%

(1) Reported based on unpaid principal balance.

(2) Reported based on number of loans.

For conventional loans in our single-family mortgage credit book, our total serious delinquency rate increased modestly to .57 percent at December 31, 2002, from .55 percent at December 31, 2001. This increase was primarily due to an increase in the serious delinquency rate of our credit-enhanced book. The serious delinquency rate for conventional loans in our single-family mortgage credit book without credit enhancement declined to .31 percent at December 31, 2002, from .33 percent at December 31, 2001, a level

more consistent with our delinquency rates prior to the September 11, 2001 terrorist attacks and reflective of the low risk profile of these loans. The serious delinquency rate for conventional loans in our single-family mortgage credit book with credit enhancement increased to 1.29 percent from 1.05 percent in 2001. These loans have a higher risk profile and tend to be more sensitive to changes in the economy than loans without credit enhancement.

- Nonperforming Single-Family Loans

We stop accruing interest on single-family loans that we own, including delinquent loans purchased from an MBS trust pursuant to the terms of the trust indenture, when: a) principal and interest on these loans is at least 90 days past due and b) collection of principal and interest is doubtful. These loans are classified as nonperforming. Table 37 provides a summary for each of the past five years of the following information on our single-family nonperforming loans: the amount of nonaccrual loans that we owned within our single-family mortgage portfolio at the end of each year, the amount of forgone interest income that we would have recorded each year if these loans had performed according to contractual terms during the year, and the amount of interest income recognized during the year on the loans when they were performing.

**Table 37: Nonperforming Single-Family Loans**

	2002	2001	2000	1999	1998
	<b>(Dollars in millions)</b>				
Nonaccrual loans at December 31	\$5,463	\$3,691	\$1,931	\$2,635	\$3,135
Interest income forgone <sup>(1)</sup>	155	101	91	119	110
Interest income recognized during year <sup>(2)</sup>	245	173	56	87	141
Accruing loans past due 90 days and greater at December 31 <sup>(3)</sup>	663	560	297	335	395

(1) Forgone interest income represents the amount of interest income that would have been recorded during the year on nonperforming loans at December 31 had the loans performed according to contractual terms.

(2) Represents estimated interest income recognized during the year on loans classified as nonperforming at December 31.

(3) Principal balance of loans at December 31 that are 90 days or greater past due and continuing to accrue interest because we believe collection of principal and interest is reasonably assured.

Forgone interest income on non-accrual loans increased significantly in 2002 because we purchased a higher level of seriously delinquent loans out of MBS pools and added them to our portfolio. We take this action pursuant to the terms of the relevant securities when the cost of advancing interest to MBS investors at the security coupon rate exceeds the cost of holding the nonperforming loan in our mortgage portfolio. Any net interest remitted to MBS investors but not received from the servicer is included as part of the charge-offs should the loan be foreclosed. Subsequent to a decision to purchase the seriously delinquent loan out of the MBS, the cost of holding the loan in our portfolio is reflected as a reduction to net interest income. We may recover a portion of forgone interest income when we liquidate foreclosed properties and collect credit enhancement proceeds.

- Single-Family Credit Losses

*The application of various credit risk management strategies throughout a loan's life helped minimize singlefamily credit losses in 2002 despite weak economic conditions.*

Single-family credit losses include charge-offs plus foreclosed property expense (income). Interest forgone on nonperforming loans and other assets in our mortgage portfolio, which is presented in Table 37, reduces our net interest income but is not reflected in our credit loss total.

As shown in Table 38, single-family credit-related losses decreased \$7 million in 2002 to \$69 million. The credit loss ratio (ratio of credit losses to the average mortgage portfolio and outstanding MBS) on our single-family credit book of business decreased by .2 basis points in 2002 to .4 basis points despite weaker economic conditions.

**Table 38: Single-Family Credit Loss Performance**

	2002	2001	2000
	(Dollars in millions)		
Charge-offs <sup>(1,2)</sup>	\$ 105	\$ 96	\$ 114
Foreclosed property income	(36)	(20)	(29)
Credit-related losses	\$ 69	\$ 76	\$ 85
Credit loss ratio <sup>(3)</sup>	.004%	.006%	.007%
Charge-off ratio <sup>(4)</sup>	.007	.007	.010

- (1) Prior period amounts have been reclassified to conform with the current year's presentation.
- (2) Charge-offs for 2002 include \$1 million in charge-offs related to foreclosed Federal Housing Administration loans that are reported in the balance sheet under "Acquired property and foreclosure claims, net."
- (3) Represents credit losses divided by average conventional single-family book of business.
- (4) Represents charge-offs divided by average conventional single-family book of business.

Strong housing prices helped boost recoveries on foreclosed properties, which offset the increase in foreclosed property expense associated with a larger number of foreclosed properties. The number of properties acquired through foreclosure increased to 19,500 in 2002 from 14,486 in 2001, contributing to a \$9 million increase in charge-offs. While the number of acquired properties increased 35 percent credit-related losses fell by \$7 million as average severities continued to drop, especially in the Northeast and West regions where foreclosure costs had been higher in the recent past. This trend is primarily due to the effect of strong home prices and proceeds from credit enhancements. Finally, low interest rates led us to repurchase a higher level of seriously delinquent loans out of MBS, resulting in an increased amount of forgone interest income.

Table 39 shows foreclosed property or REO activity in Fannie Mae's single-family mortgage credit book for the last three years.

**Table 39: Single-Family Foreclosed Property Activity**

	2002	2001	2000
Inventory of foreclosed properties (REO) <sup>(1)</sup>	9,975	7,073	6,414
Dispositions of REO	16,598	13,827	15,041
Geographic analysis of acquisitions <sup>(2)</sup> :			
Midwest	4,742	2,836	2,138
Northeast	2,053	2,165	2,788
Southeast	5,614	4,061	3,575
Southwest	4,461	2,691	2,333
West	2,630	2,733	3,517
Total properties acquired through foreclosure	19,500	14,486	14,351

- (1) Includes deeds-in-lieu of foreclosure.
- (2) See Table 33 for states included in each geographic region.

### *Multifamily*

We also purchase or guarantee loans on multifamily properties — properties with more than four residential units. We provide financing either in the form of a single asset loan, principally through the Delegated Underwriting and Servicing (DUS) product line, or through a negotiated transaction involving a pool of multifamily properties. The principal credit risks of multifamily property financings involve the following:

- Physical condition and financial performance of the property
- Market conditions in the geographic location of the property

- Ability and intent of the borrower to repay the loan
- Structure of the financing

### 1. *Managing the profile and quality of mortgages in the multifamily mortgage credit book.*

Numerous characteristics impact the mortgage credit risk on a particular multifamily loan. These characteristics include the type of mortgage loan, the type and location of the property, the condition and value of the property, counterparty strength, and the current and anticipated cash flows on the property. These and other factors affect both the amount of expected credit loss on a given loan and the sensitivity of that loss to changes in the economic environment. We attempt to understand and control the overall risk in each loan we purchase or guarantee. Under the DUS product line, we purchase or securitize mortgages from approved risk sharing lenders without prior review of the mortgages if the mortgages are less than \$20 million. Lenders represent and warrant that DUS loans they originate are consistent with our underwriting requirements. Approximately 67 percent of our multifamily mortgage credit book consisted of DUS products or business at December 31, 2002, compared with 62 percent at the end of 2001.

We manage multifamily mortgage credit risk throughout the investment life cycle. The cycle begins with the formulation of sound underwriting and servicing policies and procedures. When application of these policies and procedures is delegated to our lending partners, we actively monitor results through post-purchase underwriting reviews of loans delivered to us. We conduct on-site assessments of DUS lenders' servicing and their financial condition. We closely track property condition and financial performance throughout the life of the assets we finance. We also evaluate borrower, geographic, and other types of risk concentrations at the loan and portfolio level.

### 2. *Using credit enhancements to reduce credit losses.*

We use credit enhancements to transform the risk and return profile of multifamily loans that we purchase or guarantee consistent with our corporate credit risk management objectives. In most of our business arrangements, lenders in the DUS product line bear losses on the first five percent of UPB and share in remaining losses up to a prescribed limit. On structured transactions, we generally have full or partial recourse to lenders or third parties for loan losses. The recourse provider may back up its obligation with letters of credit, investment agreements, or pledged collateral. Third-party recourse providers for structured and other transactions include government and private mortgage insurers. While credit enhancements reduce our mortgage-related credit losses, they also generate institutional counterparty risk, which we discuss further in the Institutional Counterparty Credit Risk section. We seek to concentrate credit enhancement coverage on the riskier loans. Table 40 presents our multifamily credit risk sharing profile at December 31, 2002, 2001, and 2000.

**Table 40: Multifamily Credit Risk Sharing Profile<sup>(1)</sup>**

	December 31,		
	2002	2001	2000
Fannie Mae risk	15%	18%	16%
Shared risk <sup>(2)</sup>	66	65	60
Recourse <sup>(3)</sup>	19	17	24
Total	100%	100%	100%

(1) Prior year numbers have been restated to include Fannie Mae's credit enhancement of housing bonds issued by state and local government entities.

(2) Includes loans in which the lender initially bears losses of up to 5 percent of UPB and shares any remaining losses with Fannie Mae up to a prescribed limit.

(3) Includes loans not included in "shared risk" that have government mortgage insurance or full or partial recourse to lenders or third parties.

### 3. Assessing the sensitivity of the profitability of the multifamily mortgage credit book of business to changes in composition and the economic environment.

We use analytical tools to measure credit risk exposures, assess performance of our book, and evaluate risk management alternatives. We combine these analyses with assessments of any problem loan situations to develop forecasts of future guaranty fee revenue and credit losses. We carefully monitor the relevant local market economic indicators that may signal changing risk or return profiles in the book and cause a change in risk management policies, credit enhancements, or guaranty fees. For example, we closely monitor rental payment trends and vacancy levels in local markets to identify loans meriting closer attention or loss mitigation actions.

### 4. Managing problem assets to mitigate credit losses.

As part of our risk management activities, we perform detailed loss reviews, address borrower and geographic concentrations, assess lender qualifications, evaluate counterparty risk, and track property performance and contract compliance. The loss mitigation team manages troubled assets from default through foreclosure and property disposition, if necessary. Given the size of multifamily loans, we generally require servicers to submit periodic operating information and property condition reviews to monitor the performance of individual loans. We use this information to evaluate the credit quality of our book, identify potential problem loans, and initiate appropriate loss mitigation activities.

#### *Multifamily Mortgage Credit Book Performance*

The economic downturn in the U.S. economy had a modest impact on multifamily credit losses in 2002 because property values have remained strong. If the economy weakens further and property values decline, we would anticipate a higher level of credit losses in 2003 than we have experienced in the recent past. Multifamily credit-related losses totaled \$19 million in 2002, up \$14 million from 2001. The higher level of credit losses in 2002 was due primarily to two large properties in the Midwest. Although the level of multifamily losses increased in 2002, we have had historically low credit loss ratios of less than 3 basis points over the past three years as shown in Table 41.

**Table 41: Multifamily Credit Loss Performance**

	Year Ended December 31,		
	2002	2001	2000
	(Dollars in millions)		
Charge-offs	\$ 19	\$ 1	\$ 3
Foreclosed property expense	—	4	1
Credit-related losses	\$ 19	\$ 5	\$ 4
Credit loss ratio <sup>(1)</sup>	.025%	.008%	.007%
Serious delinquency rate <sup>(1)</sup>	.05	.27	.07
Properties acquired through foreclosure	2	1	3

(1) Prior year numbers have been restated to reflect our new method of reporting delinquencies and include Fannie Mae's credit enhancement of housing bonds issued by state and local government entities.

Multifamily serious delinquencies include loans that are 60 days or more past due. We base the multifamily serious delinquency rate on the UPB of delinquent loans divided by the UPB of multifamily loans we own or guarantee. Our multifamily serious delinquency rate declined to .05 percent at year-end 2002 from .27 percent at the end of 2001. At the end of 2000, our multifamily serious delinquency rate was .07 percent. The increase in 2001 was due to two seriously delinquent loans totaling \$118 million on properties in New York City affected by the World Trade Center disaster. These obligations were restructured or became current in 2002.

Over the last three years, multifamily credit losses and serious delinquencies have been at historically low levels. Management anticipates that multifamily credit losses, over time, will return to a level more reflective of the current economic environment.

We generally stop accruing interest on multifamily loans that we own when principal and interest on these loans is 90 days past due and collection of principal and interest is doubtful. Table 42 summarizes the amount of nonaccrual multifamily loans at December 31, 1998 through December 31, 2002. In addition, it identifies the amount of interest income that we would have recorded during those periods if nonperforming loans had performed according to contractual terms during the year, the amount of interest income accrued on those loans during the portion of the year when they were performing, and the amount of any interest income accrued on loans past 90 days due.

**Table 42: Nonperforming Multifamily Loans**

	2002	2001	2000	1999	1998
	(Dollars in millions)				
Nonaccrual loans at December 31	\$ 14	\$ 22	\$ —	\$ 4	\$ 29
Interest income forgone <sup>(1)</sup>	1	—	—	—	2
Interest income recognized during year <sup>(2)</sup>	—	1	—	—	—
Accruing loans past due 90 days and greater at December 31 <sup>(3)</sup>	10	5	3	9	11

(1) Forgone interest income represents the amount of interest income that would have been recorded during the year on nonperforming loans at December 31 had the loans performed according to contractual terms.

(2) Represents estimated interest income recognized during the year on loans classified as nonperforming at December 31.

(3) Principal balance of loans at December 31 that are 90 days or greater past due and continuing to accrue interest because we believe collection of principal and interest is reasonably assured.

*Equity Financing for Multifamily Properties*

We also provide equity financing for multifamily properties. Equity financing typically takes the form of limited partnership investments in affordable housing projects that produce low-income housing tax credits. The tax benefits we receive from these properties represents our primary economic return on our equity investments.

Because our equity financings have the same property-related credit risks as other multifamily financings, we track property condition and financial performance throughout the life of these investments. We also evaluate the strength of our investment sponsors and third party asset managers through periodic financial and operational assessments. Approximately 33 percent of our equity investments in low-income housing tax credit properties have an economic return guaranteed by an investment grade counterparty.

Internal Revenue Service requirements govern the recognition of tax credits. These requirements include maintaining the properties with a specified level of affordable housing units over a 15-year period. Failure to meet IRS requirements can trigger a recapture of tax credits from the IRS. For the years ended December 31, 2002, 2001, and 2000 the amounts of tax credit recapture were not significant.

*Institutional Counterparty Credit Risk*

A secondary credit risk is the possibility that institutional counterparties may be unable to fulfill their contractual obligations to us. For example, our credit losses would increase if a credit enhancement counterparty were unable to reimburse us in the event of loss on a covered mortgage loan. Accepting a certain level of counterparty risk is integral to our interest rate and credit risk management and liquidity objectives.

We have a dedicated Counterparty Risk Management team that quantifies aggregate counterparty risk exposures across business activities, maintains a corporate credit policy framework for managing counterparty risk, and manages the counterparty risk associated with mortgage insurance companies.

*Our overall objective in managing institutional counterparty credit risk is to maintain individual counterparty exposures within a range that allows us to achieve our overall financial performance objective of stable and predictable earnings. Central elements of our approach to managing institutional counterparty credit risk include: (1) stringent counterparty eligibility standards appropriate to each exposure type and level, (2) collateralization of exposures where appropriate, (3) policies to ensure our counterparty exposures are diversified to avoid excessive concentration of risk, and (4) intensive exposure monitoring and management.*

**1. Maintaining stringent counterparty eligibility standards appropriate to each exposure type.**

We generally require that our counterparties have an investment grade credit rating. A rating of BBB-/Baa3/BBB or higher by Standard & Poor's, Moody's Investor Service, and Fitch, respectively, is considered an investment grade rating. For mortgage insurance counterparties, we have generally required a minimum rating of AA-/Aa3. For our risk sharing, recourse, and mortgage servicing counterparties, we do not always require an investment grade credit rating because we believe the risk of loss is lower. We have ongoing, extensive mortgage purchase and mortgage servicing relationships with these counterparties. In some instances, we also have collateral, letters of credit, or investment agreements to secure the obligation.

Individual business units maintain policies and procedures governing the eligibility of counterparties and approval requirements for accepting exposure to them. For example, we maintain requirements governing eligibility of insurers to provide primary loan-level mortgage insurance on single-family loans we buy or guarantee. We conduct a comprehensive counterparty analysis before approving a mortgage insurance company. We review a mortgage insurer's business plan, financial statements, insurance portfolio characteristics, master insurance policies, reinsurance treaties, and ratings on ability to pay claims. We monitor approved insurers through a quarterly reporting and analysis process combined with onsite business reviews.

**2. Requiring collateralization of exposures, where appropriate.**

We may require collateral, letters of credit, or investment agreements as a condition to accepting exposure to a particular counterparty. We may also require that a counterparty post collateral in the event of an adverse event such as a ratings downgrade.

We also have contractual rights that can offset exposure in the event of a counterparty default. For example, if an insurer cannot provide mortgage insurance in accordance with our requirements, most of our mortgages have provisions that allow us to use borrower paid mortgage insurance premiums to obtain substantially equivalent protection. If this insurance is unavailable at an acceptable cost, we can retain the premium and use it to obtain other credit enhancement or as a loss reserve. Similarly, we have the contractual right to terminate a single-family or multifamily lender's status as a servicer in the event the lender fails to fulfill its servicing obligations or fails to reimburse Fannie Mae for losses that the lender assumed. In that event, we would either sell the servicing rights or use the servicing fees to offset any losses related to the lender's failure.

**3. Establishing policies to ensure diversification of our exposure.**

We monitor counterparty exposure in total by industry and by individual counterparty. In addition, we have established exposure tolerance levels by counterparty based on our assessment of each counterparty's credit strength. These tolerance thresholds allow us to prioritize our monitoring activities and avoid excessive concentrations of credit risk.

**4. Monitoring and managing exposures intensively within business lines and across Fannie Mae.**

Individual business units are responsible for managing the counterparty exposures routinely associated with their activities. The Counterparty Risk Management team reviews business unit policies, procedures, and approval authorities, and the Credit Risk Policy Committee approves these internal controls.

Non-derivative institutional counterparty risk primarily includes exposure created by mortgage insurance policies, other credit enhancement arrangements with lenders and others, mortgage servicing contracts with lenders, and liquidity investments in corporate obligations or nonmortgage asset-backed securities.



### *Lenders with Risk Sharing*

The primary risk associated with lenders where we have risk sharing agreements is that they will fail to reimburse us for losses as required under these agreements. We had recourse to lenders for losses on single-family loans totaling an estimated \$44 billion at December 31, 2002 and \$42 billion at December 31, 2001. The quality of these counterparties is high, with investment grade counterparties accounting for 53 percent and 59 percent of lender recourse obligations at the end of 2002 and 2001, respectively. We also require some lenders to pledge collateral to secure their recourse obligations. At December 31, 2002 and 2001, we held \$204 million and \$247 million in collateral, respectively, to secure single-family lender recourse transactions. In addition, single-family lenders with recourse obligations received servicing fees on \$1.452 trillion and \$1.288 trillion of mortgages at year-end 2002 and 2001, respectively. A portion of these servicing fees effectively serves as collateral.

We had recourse to lenders on multifamily loans totaling \$77 billion and \$63 billion at December 31, 2002 and 2001, respectively. Our multifamily recourse obligations were secured by reserves held in custodial accounts, insurance policies, letters of credit from investment grade counterparties rated A or better, and investment agreements. In addition, all multifamily lenders with recourse obligations received servicing fees, a portion of which effectively serves as collateral.

### *Mortgage Servicers*

The primary risk associated with mortgage servicers is that they will fail to fulfill their servicing obligations. Mortgage servicers collect mortgage and escrow payments from borrowers, pay taxes and insurance costs from escrow accounts, monitor and report delinquencies, and perform other required activities on our behalf. A servicing contract breach could result in credit losses for us, or we could incur the cost of finding a replacement servicer, which could be substantial for loans that require a specialized servicer. We mitigate this risk by requiring mortgage servicers to maintain a minimum reserve servicing fee rate to compensate a replacement servicer in the event of a servicing contract breach. We also manage this risk by requiring servicers to follow specific servicing guidelines and by monitoring each servicer's performance using loan-level data. We conduct on-site reviews of compliance with servicing guidelines and mortgage servicing performance. We also work on-site with nearly all of our major servicers to facilitate loan loss mitigation efforts and improve the default management process. In addition, we review quarterly financial information on servicers. Our ten largest single-family mortgage servicers serviced 63 percent of our single-family book of business at the end of 2002 and 2001. Fannie Mae's 15 largest multifamily mortgage servicers serviced 70 percent of our multifamily book of business at year-end 2002, compared with 67 percent at year-end 2001.

We have purchased mortgage-related securities secured by manufacturing housing that were issued by entities other than Fannie Mae both for our portfolio and, to a limited extent, for securitization into REMIC securities we have issued and guaranteed. We currently own or guarantee approximately \$10 billion of these securities. Due to weakness in the manufactured housing sector and the financial condition of Conseco Finance Corp., which services approximately 70 percent of these securities, the major securities rating agencies downgraded several of the securities. As of December 31, 2002, the vast majority of these securities were rated AA- or better, and the entire \$10 billion of securities either had investment grade ratings or were insured by counterparties which had investment grade ratings. Management believes that any potential impairment that might be recorded in the future will not be material to Fannie Mae's operating results.

On March 14, 2003, the U.S. Bankruptcy Court for the Northern District of Illinois issued a final order approving the servicing arrangements for the securities serviced by Conseco Finance Corp. The order, based upon an agreement reached between Conseco Finance, CFN Investment Holdings (the new owner and servicer), Fannie Mae and other certificate holders, provided for revised servicing fees and an enhanced servicing protocol. CFN is expected to complete the acquisition in the second quarter of 2003.

### *Mortgage Insurers*

The primary risk associated with mortgage insurers is that they will fail to fulfill their obligations to reimburse us for claims under insurance policies. We were the beneficiary of primary mortgage insurance coverage on \$316 billion of single-family loans in portfolio or underlying MBS at December 31, 2002 and

\$314 billion at December 31, 2001. Seven mortgage insurance companies, all rated AA or higher by Standard & Poor's, provided approximately 99 percent of the total coverage at the end of 2002 and 2001.

### *Liquid Investments*

The primary credit risk associated with our liquid investments, which includes the LIP, our early funding portfolio, and cash and cash equivalents, is that issuers will not repay us in accordance with contractual terms. The level of credit risk in our liquid investments is low because these investments are primarily high-quality, short and medium-term investments. These investments include our early funding portfolio, which consists primarily of repurchase agreements, and other high-quality short-term investments in nonmortgage assets, such as federal funds and time deposits, commercial paper, asset-backed securities, and corporate floating rate notes. The majority of our nonmortgage asset-backed securities are rated AAA by Standard & Poor's. Unsecured investments in the portfolio are generally rated A or higher by Standard & Poor's. Our LIP, which accounts for the majority of our liquid investments, totaled \$39 billion and \$65 billion at the end of 2002 and 2001, respectively. Approximately 94 percent of our LIP had a credit rating of A or higher at December 31, 2002, compared with 96 percent at December 31, 2001.

### **Operations Risk Management**

Operations risk is the risk of potential loss resulting from a breakdown in, or failure to establish, controls and procedures. Examples of control breakdowns include circumvention of internal controls, human error, systems failure and fraud. Management has implemented extensive policies and procedures to both establish and monitor internal controls to decrease the likelihood of any control breakdowns. Fannie Mae's Office of Auditing also independently tests the adequacy of, and adherence to, internal controls and related policies and procedures. We actively manage Fannie Mae's operations risk through numerous oversight functions, such as:

- Exception reporting and management oversight of financial and forecasting information through verification, reconciliation and independent testing
- Management questionnaires that identify key risks, controls in place to mitigate those risks, and control weaknesses
- Key performance indicators (KPIs) that track operational metrics and potential risk exposure
- Quarterly senior and executive management internal control certifications
- Internal audit work that substantiates the adequacy of the internal control environment as well as direct reporting of this work to the Audit Committee of the Board of Directors
- Comprehensive disaster recovery planning and testing

Management regularly reconciles financial and accounting information and model results to source documents to ensure completeness and accuracy of financial reporting. Financial forecast model results are regularly reconciled to actual results and the models are recalibrated as necessary to mitigate modeling risk. The Office of Auditing also periodically benchmarks the critical models, evaluates the reasonableness of the underlying assumptions, and validates the key algorithms embedded within them. Control weaknesses are identified as well as the steps being taken to address them. The Office of Auditing reviews and validates these assessments for reasonableness and accuracy.

KPIs have been established to monitor primary operational metrics and to facilitate quick and effective senior management attention should any adverse trends develop. KPIs focus on the following operational risks:

- Modeling: Losses due to improperly modeled interest rate risk and credit risk
- Underwriting Effectiveness: Losses due to the failure of management or our lender counterparties to apply appropriate underwriting techniques
- Counterparty: Losses due to inadequate monitoring and risk mitigation resulting in exposure to counterparties who fail to meet their obligations to Fannie Mae. These counterparties include

lender/servicers, providers of credit enhancement, document custodians, derivatives counterparties, and other service providers

- **Transaction Processing:** Losses due to inadequate transaction processing controls, such as ineffective management oversight and reconciliation processes. Examples include erroneous wire transfers or loan deliveries, fraud, trade failures, or release of inaccurate securities information
- **Systems Availability:** Inability to achieve corporate goals due to a lack of systems availability, consistent performance, or capacity to recover from a disaster
- **Information Security:** Financial loss and incurrence of additional liability due to unauthorized systems access, corruption or destruction of critical, proprietary or confidential data
- **Mission Alignment:** Ineffective leadership or inappropriate business models resulting in litigation, regulatory sanctions, and reputation damage due to noncompliance with applicable laws, regulations, and Charter Act requirements
- **Financial Reporting:** Economic and reputational loss or disruption due to erroneous or delayed release of financial reports

Each KPI is based upon clearly defined and quantifiable performance thresholds that are monitored by our Office of Auditing. Senior managers are responsible for evaluating and monitoring KPI activity as well as implementing prompt corrective action. The Office of Auditing also tests the integrity of this process on a periodic basis. The Operations, Transactions and Investments Committee headed by our Chief Operating Officer reviews the KPIs and ensures prompt and effective resolutions.

On a quarterly basis, senior and executive management certify that internal controls are adequate, questionnaires and KPIs are accurate, and that all significant issues or control weaknesses that could have a material impact on the financial statements have been disclosed. The Office of Auditing reviews these certifications for reasonableness. The quarterly certifications are one of the key inputs for our Chief Executive Officer and Chief Financial Officer's written certifications that our financial statements fairly present Fannie Mae's financial condition and results of operations in all material respects.

In addition to the oversight functions indicated above, the Office of Auditing assesses risk and the underlying control environment annually throughout the company and then implements a comprehensive audit plan to assess risk and validate key controls.

The Office of Auditing also performs third-party audits as an important part of assessing counterparty exposure as well as to further substantiate adequacy of related internal controls. A primary example is performing audits of entities that sell loans to Fannie Mae or who service loans for us. In these audits, we evaluate the financial and operational controls of these entities by:

- reviewing the financial statements and assessing compliance with our net worth and insurance coverage requirements to assess eligibility and capability of doing business with us;
- testing cash and custodial accounting controls to ensure both Fannie Mae and borrower funds are held in qualified institutions and that the funds are properly accounted for, safeguarded and remitted.
- determining that key controls associated with loan underwriting, accounting, reporting and servicing are in place and operating effectively, that activity is reported to us accurately and that our mortgage assets are protected.

Fannie Mae has also developed comprehensive disaster recovery plans covering both systems and business operations that are designed to restore critical operations with minimal interruption. Major elements of this plan are tested annually at established contingency sites.

### ***Controls and Procedures***

Within 90 days prior to the date of this report, we carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our

disclosure controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective. Disclosure controls and procedures are controls and procedures that are designed to ensure that information we disclose in our periodic reports is recorded, processed, summarized, and reported within the designated time periods.

In addition, based on this most recent evaluation, we have concluded that there were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their last evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

## LIQUIDITY AND CAPITAL RESOURCES

Fannie Mae's statutory mission requires that we provide ongoing assistance to the secondary market for mortgages. Our ability to continually raise low-cost capital is critical to fulfilling our housing mission of providing liquidity to the secondary mortgage market and promoting homeownership to low- and moderate-income families. We primarily rely on debt to purchase mortgage assets and to supply liquidity to the secondary market. In 2002, our mortgage asset purchases totaled \$371 billion based on unpaid principal balance. We issued \$1.874 trillion in debt to fund those purchases and to replace maturing, called or repurchased debt. We take a long-term approach to our funding and capital management strategy because of our continuous requirements for large amounts of funding. Fannie Mae's liquidity and capital position is actively managed to preserve stable, reliable, and cost-effective sources of cash to meet all current and future normal operating financial commitments, meet our regulatory capital requirements, and handle any unforeseen liquidity crisis.

### Liquidity

Fannie Mae's primary sources of liquidity include proceeds from the issuance of debt, principal and interest received on our mortgage portfolio, guaranty fees earned on our MBS, and principal and interest received on our liquid investment portfolio. Primary uses of liquidity include the purchase of mortgage assets, repayment of debt, interest payments, administrative expenses, taxes, and fulfillment of Fannie Mae's MBS guaranty obligations. Our liquid assets totaled \$62 billion at December 31, 2002, compared with \$76 billion at December 31, 2001. In 2001, we adopted the 14 principles for sound liquidity management established by the Basel Committee on Banking Supervision as part of our voluntary safety and soundness initiatives. These principles outline the appropriate structure for managing liquidity and market access, a process for measuring and monitoring net funding requirements, the need for contingency plans, the necessary controls for liquidity risk management, and the role of public disclosure and regulatory oversight. We monitor our liquidity position through a combination of daily, weekly and monthly reports to help set strategies and make funding decisions. Our analyses include:

- projected cash flows and funding needs,
- targeted funding terms and various funding alternatives for achieving those terms,
- cost of debt and the most efficient ways to achieve desired funding, and
- market conditions and upcoming economic indicators and other factors that could impact the capital markets and our funding capabilities.

We have historically had ready access to funding for the following reasons:

- **Our Credit Quality:** In February 2001, Standard & Poor's assigned Fannie Mae a AA- "risk to the government" rating. In February 2002, Moody's Investors Service assigned us an A-Bank Financial Strength Rating. The highest possible levels for these ratings are AAA from Standard & Poor's and A from Moody's. These ratings are continuously monitored by each rating agency. Additionally, our senior unsecured debt has been rated AAA, Aaa, and AAA by Fitch, Inc., Moody's Investors Service, and Standard & Poor's, respectively. Fitch, Moody's, and Standard & Poor's rated our short-term debt F1+, Prime-1 or P-1, and A-1+, respectively.

- **Our Standing in the Capital Market:** We are an active participant in the global financial markets and one of the world's largest private issuers of debt securities. Our debt obligations are traded in the "agency securities market." The agency securities market includes securities issued by government-sponsored enterprises (GSEs). While the U.S. government does not guarantee our debt, directly or indirectly, securities issued by GSEs are typically perceived to be of high credit quality.
- **Our Efficiency:** We have demonstrated a long-term commitment to investors in the organized way we bring debt issues to market and monitor performance in the secondary market. We have successfully developed new funding products and markets with a variety of terms and features to appeal to a wide spectrum of investors. In addition, we may transform the debt into terms and other features that better match our funding needs through our efficient use of derivatives.

Given the importance of debt to our funding strategy, we have a contingency plan to protect us in the event of a major market disruption that would prevent us from issuing debt. As part of our voluntary safety and soundness initiatives, we maintain contingency plans for handling a liquidity crisis under an assumption that we cannot access the new-issue debt markets for a period of at least three months.

Each day we update and analyze cash commitments and anticipated cash flows for the next 90 days. Our analysis indicates how we expect to obtain funds during that period in the event we cannot access the capital markets. In the event of a market disruption in which we could not issue debt, we could liquidate our liquid investment portfolio or borrow against our mortgage portfolio to meet our operational needs:

- **Fannie Mae's Liquid Investment Portfolio** primarily consists of high-quality securities that are readily marketable or have short-term maturities and serves as the primary means for ensuring that we maintain sufficient liquidity. If our access to the debt capital markets is ever impeded, we first will utilize assets in our LIP to generate the cash necessary to meet our liquidity needs. Our initial source of funds would come from the ongoing maturity of short-term investments in the portfolio. If additional funds were needed, we would sell assets from the LIP to generate these funds. As part of our voluntary commitments, we have publicly pledged to maintain a portfolio of high-quality, liquid, nonmortgage-related securities equal to at least 5 percent of total on-balance-sheet assets. Our LIP and other liquid assets together totaled \$62 billion and \$76 billion at December 31, 2002 and 2001, respectively. The ratio of our liquid assets to total assets was 6.9 percent and 9.5 percent at December 31, 2002 and 2001, respectively.
- **Fannie Mae's Mortgage Portfolio** consists of assets that could be pledged as collateral for financing in the repurchase agreement market. We are able to borrow against Fannie Mae's mortgage assets in the market for mortgage repurchase agreements. We test this capability through periodic issuance. At December 31, 2002 and 2001, we had approximately \$410 billion and \$359 billion, respectively, in eligible mortgage securities.

At December 31, 2002, we had \$85 billion in outstanding mandatory commitments and \$3 billion in outstanding optional commitments for the purchase and delivery of mortgages in 2003. At December 31, 2001, Fannie Mae had \$55 billion in outstanding mandatory commitments and \$2 billion in outstanding optional commitments for the purchase and delivery of mortgages in 2002.

### Capital Resources

Core capital (defined by OFHEO as the stated value of outstanding common stock, the stated value of outstanding noncumulative perpetual preferred stock, paid-in capital, and retained earnings, less treasury stock) grew to \$28.1 billion at December 31, 2002 from \$25.2 billion at December 31, 2001. Core capital excludes accumulated other comprehensive income because AOCI incorporates unrealized gains (losses) on derivatives and certain securities, but not the unrealized losses (gains) on the remaining mortgages and securities or liabilities used to fund the purchase of these items. Total capital (defined by OFHEO as core capital plus the general allowance for losses) grew to \$28.9 billion at year-end 2002 from \$26.0 billion at year-end 2001.

At December 31, 2002, AOCI totaled negative \$11.8 billion, compared with a negative balance of \$7.1 billion at December 31, 2001. Upon adoption of FAS 133 on January 1, 2001, we recorded a \$3.9 billion reduction in AOCI, which was primarily attributable to recording derivatives (mostly pay-fixed interest rate swaps) that qualify as cash flow hedges on the balance sheet at fair value. The decline in interest rates during 2002 and 2001 caused a decline in the fair value of these derivatives and has reduced AOCI since the adoption of FAS 133. In conjunction with the adoption of FAS 133, we also, in a non-cash transfer, reclassified investment securities and MBS with an amortized cost of approximately \$20 billion and unrealized gains and unrealized losses of \$164 million and \$32 million, respectively, from held-to-maturity to available-for-sale. On September 13, 2002, concurrent with the implementation of a new risk-based capital rule issued by OFHEO, we reclassified \$135 billion of securities in our mortgage and nonmortgage investment portfolios from held-to-maturity to available-for-sale in accordance with FAS 115. At the time of this noncash transfer, the securities had gross unrealized gains of \$5.503 billion and losses of \$59 million. Prior to OFHEO's risk-based capital rule, Fannie Mae was not subject to a risk-based capital standard. OFHEO's new risk-based capital rule establishes a risk weight for Fannie Mae's assets. FAS 115 specifically identifies "a significant increase in the risk weights of debt securities used for regulatory risk-based capital purposes" as a change in circumstance under which a company may reclassify securities from held-to-maturity to available-for-sale without calling into question the intent to hold other securities to maturity in the future. See "Government Regulation and Charter Act — Capital Requirements" for additional information on our risk-based capital rule.

Common shares outstanding, net of shares held in treasury, totaled approximately 989 million and 997 million at December 31, 2002 and 2001, respectively. During 2002, Fannie Mae issued 7.0 million common shares from treasury to fund our 2001 commitment of \$300 million to the Fannie Mae Foundation and for employee and other stock compensation plans. We issued 4.5 million common shares from treasury during 2001 for employee and other stock compensation plans. As part of the continuation of our capital restructuring program, we repurchased 15.4 million common shares at a weighted average cost per share of \$76.01 in 2002 and 6.0 million common shares at a weighted average cost per share of \$76.95 in 2001. We repurchased the stock pursuant to our Board of Directors' approval to repurchase up to 6 percent of outstanding common shares as of December 27, 1995 (adjusted for a stock split) and to offset the dilutive effect of common shares issued in conjunction with various stock compensation programs.

We raised additional equity of \$1 billion in 2002 and \$400 million in 2001 by issuing Non-Cumulative Preferred Stock. On February 28, 2002, we redeemed all outstanding shares of our 6.5 percent Non-Cumulative Preferred Stock, Series B at \$50.51458 per share, which represents the stated redemption price of \$50.00 per share plus an amount equal to the dividend for the quarterly dividend period ending March 31, 2002, accrued to, but excluding the redemption date of February 28, 2002. On July 31, 2002, we redeemed all outstanding shares of our 6.45 percent Non-Cumulative Preferred Stock, Series C at \$50.27771 per share, which represents the stated redemption price of \$50.00 per share plus an amount equal to the dividend for the quarterly dividend period ending September 30, 2002, accrued to, but excluding the redemption date of July 31, 2002. Preferred stock accounted for 9.5 percent of our core capital at December 31, 2002, versus 9.1 percent at December 31, 2001. On March 18, 2003, we issued 8 million shares or \$400 million of variable rate Non-Cumulative Preferred Stock, Series K.

In January 2003, our Board of Directors approved a quarterly common stock dividend for 2003 of \$.39 per common share. The quarterly dividend rate per common share was \$.33 and \$.30 in 2002 and 2001, respectively. Our Board of Directors also approved preferred stock dividends for the period commencing December 31, 2002, up to but excluding March 31, 2003, as identified in Table 43.

**Table 43: Preferred Stock Dividends**

	Issue Date	Shares Issued and Outstanding	Stated Value per Share	Annual Dividend Rate	Redeemable on or After
Series D	September 30, 1998	3,000,000	\$ 50	5.250%	September 30, 1999
Series E	April 15, 1999	3,000,000	50	5.100	April 15, 2004
Series F	March 20, 2000	13,800,000	50	3.540 <sup>(1)</sup>	March 31, 2002 <sup>(3)</sup>
Series G	August 8, 2000	5,750,000	50	1.830 <sup>(2)</sup>	September 30, 2002 <sup>(3)</sup>
Series H	April 6, 2001	8,000,000	50	5.810	April 6, 2006
Series I	October 28, 2002	6,000,000	50	5.375	October 28, 2007
Series J	November 26, 2002	14,000,000	50	3.780 <sup>(4)</sup>	November 26, 2004
Total		53,550,000			

(1) Rate effective March 31, 2002. Variable dividend rate that resets every two years thereafter at the Constant Maturity U.S. Treasury Rate minus .16 percent with a cap of 11 percent per year.

(2) Rate effective September 30, 2002. Variable dividend rate that resets every two years thereafter at the Constant Maturity U.S. Treasury Rate minus .18 percent with a cap of 11 percent per year.

(3) Represents initial call date. Redeemable every two years thereafter.

(4) Initial rate. Variable dividend rate that resets every two years thereafter at the two-year U.S. Dollar Swap Rate plus 1.38 percent with a cap of 8 percent per year.

During 2002, we issued \$3.5 billion of subordinated debt securities that received ratings of AA- from Standard & Poor's, Aa2 from Moody's Investors Service, and AA by Fitch Ratings. We issued \$5 billion of subordinated debt securities that received a rating of AA- from Standard & Poor's and Aa2 from Moody's Investors Service in 2001. Subordinated debt serves as a supplement to our equity capital, although it is not a component of core capital. It provides a risk-absorbing layer to supplement core capital for the benefit of senior debt holders and is intended to serve as a consistent and early market signal of credit risk for investors. By the end of 2003, we intend to issue sufficient subordinated debt to bring the sum of total capital and outstanding subordinated debt to at least 4 percent of on-balance-sheet assets, after providing adequate capital to support off-balance sheet MBS. Total capital and outstanding subordinated debt represented 3.7 percent of on-balance-sheet assets at December 31, 2002, compared with 3.4 percent at December 31, 2001.

#### ***Regulatory Environment***

Fannie Mae is subject to capital adequacy standards established by the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (1992 Act) and continuous examination by OFHEO, which was established by the 1992 Act. The capital adequacy standards require that our core capital equal or exceed a minimum capital standard and a critical capital standard. The Portfolios and Capital Committee, chaired by the Chief Financial Officer, ensures compliance with economic and regulatory risk-based capital requirements. Table 44 shows our core capital and total capital at year-end 2002 and 2001 compared with the requirements.

**Table 44: Capital Requirements**

	December 31,	
	2002	2001
	(Dollars in millions)	
Core capital <sup>(1)</sup>	\$28,079	\$25,182
Required minimum capital <sup>(2)(5)</sup>	27,203	24,182
Excess of core capital over minimum capital <sup>(5)</sup>	\$ 877	\$ 1,000
Total capital <sup>(3)</sup>	\$28,871	\$25,976
Required risk-based capital	17,434	NA
Excess of total capital over required risk-based capital	\$11,437	NA
Required critical capital <sup>(4)(5)</sup>	\$13,880	\$12,324
Excess of core capital over required critical capital <sup>(5)</sup>	14,199	12,859

- (1) The sum of (a) the stated value of common stock; (b) the stated value of outstanding noncumulative perpetual preferred stock; (c) paid-in capital; and (d) retained earnings less, treasury stock. Core capital excludes accumulated other comprehensive income (AOCI).
- (2) The sum of (a) 2.50 percent of on-balance sheet assets; (b) .45 percent of outstanding MBS; and (c) .45 percent of other off-balance sheet obligations, which may be adjusted by the Director of OFHEO under certain circumstances (See 12 CFR 1750.4 for existing adjustments made by the Director of OFHEO).
- (3) The sum of (a) core capital and (b) the total allowance for loan losses and guaranty liability, less (c) the specific loss allowance. Specific loss allowances totaled \$19 million and \$13 million at December 31, 2002 and 2001, respectively.
- (4) The sum of (a) 1.25 percent of on-balance sheet assets; (b) .25 percent of outstanding MBS; and (c) .25 percent of other off-balance sheet obligations, which may be adjusted by the Director of OFHEO under certain circumstances.
- (5) These amounts do not reflect the reclassification from our "Allowance for loan losses" to a "Guaranty liability for MBS" the amount associated with the guaranty obligation for MBS that we own that occurred in 2002. See Note 1 to the notes to the financial statements, Summary of Significant Accounting Policies — Allowance for Loan Losses and Guaranty Liability for MBS. The reclassification will not have a material effect on these amounts.

The 1992 Act also established our risk-based capital requirements, and it required OFHEO to adopt regulations establishing a risk-based capital test. OFHEO published regulations under the 1992 Act in September 2001, as amended on March 15, 2002, establishing a risk-based capital test to determine the amount of total capital we must hold under the risk-based capital standard on a quarterly basis. OFHEO implemented the risk-based capital standard on September 13, 2002. At December 31, 2002, our risk-based capital requirement was \$17.4 billion. Our total capital was \$28.9 billion at year-end 2002, \$11.4 billion higher than the risk-based capital requirement.

## PERFORMANCE OUTLOOK

We expect Fannie Mae's core business earnings to continue to increase in 2003, although at a growth rate below the above-average trend rates of 2002 and 2001. We project that our net interest margin will move lower in 2003 as the benefits from the actions we took during 2002 and 2001 to lower our debt costs begin to diminish. We anticipate some increase in our effective average guaranty fee rates because of recent pricing trends. We also believe that while credit expenses may move higher in 2003, they will remain at historically low levels. Should economic conditions deteriorate, we believe our book of business is well-positioned to perform better than in prior slowdowns because of improved loan underwriting through Desktop Underwriter, lower loan-to-value ratios, more third-party credit enhancements, and superior credit loss mitigation efforts. Our administrative expense growth rate should decline in 2003 but remain above historical levels as we complete our core infrastructure project and begin to expense stock-based compensation. See "MD&A — Forward Looking Information."



**NEW ACCOUNTING STANDARDS****Accounting for Stock Compensation**

We elected to adopt the expense recognition provisions of Financial Accounting Standard No. 123 (“FAS 123”), *Accounting for Stock-Based Compensation*, effective January 1, 2003. In accordance with FAS 123, we will recognize the fair value of stock-based compensation at grant date over the service period of the employee as an administrative expense in our income statement. We have elected to apply this change in accounting prospectively to all awards granted on January 1, 2003 and thereafter. We will continue to account for stock-based compensation awarded prior to January 1, 2003 under Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (“APB 25”). We estimate that the impact of adopting the expense recognition provisions of FAS 123 will result in additional expense of approximately \$28 million in 2003.

**Guarantor’s Accounting and Disclosure Requirements for Guarantees**

In November 2002, FASB issued Interpretation No. 45, *Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Other* (“FIN 45”). FIN 45 will primarily apply to guaranteed MBS issued to investors other than Fannie Mae on or after January 1, 2003 by Fannie Mae as trustee, and it will require that we recognize the fair value of our guarantee on MBS as an asset and the fair value of our guaranty obligations as a liability. Under FIN 45, we will amortize our guaranty asset and liability amounts equally over the estimated life of the loans underlying the MBS as an adjustment to guaranty fee income. There will be no effect on Fannie Mae’s guaranty fee income or stockholders’ equity from adopting this accounting rule because the guaranty asset and liability will be equal under FIN 45.

**Special Purpose Entities (“SPEs”)**

In January 2003, the FASB issued FASB Interpretation No. 46, *Consolidation of Variable Interest Entities* (“FIN 46”). FIN 46 provides guidance on when a company should include in its financial statements the assets, liabilities and activities of a variable interest entity (“VIE”). Under FIN 46, a variable interest entity must be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity’s activities or entitled to receive a majority of the entity’s residual returns or both. We have not identified any current Fannie Mae arrangements that meet the VIE consolidation criteria of FIN 46. Therefore, we do not believe that FIN 46 will have a material impact on Fannie Mae. Our off-balance sheet MBS activities are outside the scope of FIN 46 because we conduct those activities through trusts that are qualifying SPEs. Our investments in low-income housing tax credit partnerships are also outside the scope of FIN 46 because they do not meet the definition of variable interest entities.

**Item 7A. *Quantitative and Qualitative Disclosures About Market Risk***

Quantitative and qualitative disclosure about market risk is set forth on pages 61 to 72 of this Form 10-K under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations”.

**Item 8. Financial Statements and Supplementary Data**

	<b>Page</b>
<b>Financial Statements:</b>	
Statements of Income for the years ended December 31, 2002, 2001 and 2000	104
Balance Sheets as of December 31, 2002 and 2001	105
Statements of Changes in Stockholders' Equity for the years ended December 31, 2002, 2001 and 2000	106
Statements of Cash Flows for the years ended December 31, 2002, 2001 and 2000	107
Notes to Financial Statements	108
Independent Auditors' Report	146
Report of Management	147
<b>Supplemental Schedules:</b>	
Quarterly Results of Operations (unaudited)	148
Financial and Statistical Summary (unaudited)	149

## FANNIE MAE

## STATEMENTS OF INCOME

	Year Ended December 31,		
	2002	2001	2000
	(Dollars and shares in millions, except per common share amounts)		
Interest income:			
Mortgage portfolio	\$49,265	\$46,478	\$39,403
Nonmortgage investments and cash equivalents	1,588	2,692	3,378
Total interest income	50,853	49,170	42,781
Interest expense:			
Short-term debt	2,978	5,897	4,204
Long-term debt	37,309	35,183	32,903
Total interest expense	40,287	41,080	37,107
Net interest income	10,566	8,090	5,674
Other income:			
Guaranty fee income	1,816	1,482	1,351
Fee and other income (expense), net	232	151	(44)
Total other income	2,048	1,633	1,307
Other expenses (income):			
Provision for losses	128	94	122
Foreclosed property income	(36)	(16)	(28)
Administrative expenses	1,219	1,017	905
Special contribution	—	300	—
Purchased options expense	4,545	37	—
Debt extinguishments, net	710	524	(49)
Total other expenses (income)	6,566	1,956	950
Income before federal income taxes and cumulative effect of change in accounting principle	6,048	7,767	6,031
Provision for federal income taxes	1,429	2,041	1,583
Income before cumulative effect of change in accounting principle	4,619	5,726	4,448
Cumulative effect of change in accounting principle, net of tax effect	—	168	—
Net income	\$ 4,619	\$ 5,894	\$ 4,448
Preferred stock dividends	99	138	121
Net income available to common stockholders	\$ 4,520	\$ 5,756	\$ 4,327
Basic earnings per common share:			
Earnings before cumulative effect of change in accounting principle	\$ 4.56	\$ 5.58	\$ 4.31
Cumulative effect of change in accounting principle	—	.17	—
Net earnings	\$ 4.56	\$ 5.75	\$ 4.31
Diluted earnings per common share:			
Earnings before cumulative effect of change in accounting principle	\$ 4.53	\$ 5.55	\$ 4.29
Cumulative effect of change in accounting principle	—	.17	—
Net earnings	\$ 4.53	\$ 5.72	\$ 4.29
Cash dividends per common share	\$ 1.32	\$ 1.20	\$ 1.12
Weighted-average common shares outstanding:			
Basic	992	1,000	1,003
Diluted	997	1,006	1,009

See Notes to Financial Statements.

## FANNIE MAE

## BALANCE SHEETS

	December 31,	
	2002	2001
	(Dollars in millions, except share stated values)	
<b>Assets</b>		
Mortgage portfolio:		
Mortgage-related securities:		
Held-to-maturity	\$437,932	\$509,155
Available-for-sale	173,706	32,900
Total	611,638	542,055
Loans held-for-investment	185,652	165,917
Allowance for loan losses	(79)	(48)
Unamortized premiums (discounts) and deferred price adjustments, net	337	(2,640)
Loans held-for-sale	145	40
Mortgage portfolio, net	797,693	705,324
Nonmortgage investments:		
Held-to-maturity	23,050	38,671
Available-for-sale	36,794	35,883
Cash and cash equivalents	1,710	1,518
Accrued interest receivable	4,915	4,705
Acquired property and foreclosure claims, net	1,033	684
Derivatives in gain positions	3,666	954
Other	18,654	12,209
Total assets	\$887,515	\$799,948
<b>Liabilities and Stockholders' Equity</b>		
Liabilities:		
Debentures, notes and bonds, net:		
Senior debt:		
Due within one year	\$382,412	\$343,492
Due after one year	458,600	413,582
Subordinated debt:		
Due after one year	9,970	6,393
Total	850,982	763,467
Accrued interest payable	8,379	8,529
Derivatives in loss positions	5,697	5,069
Guaranty liability for MBS	729	755
Other	5,440	4,010
Total liabilities	871,227	781,830
Stockholders' Equity:		
Preferred stock, \$50 stated value, 100 million shares authorized — 53.6 million shares issued and outstanding in 2002 and 46 million shares issued and outstanding in 2001	2,678	2,303
Common stock, \$.525 stated value, \$1.32 of dividends per share paid in 2002 and \$1.20 of dividends per share paid in 2001, no maximum authorization — 1,129 million shares issued	593	593
Additional paid-in capital	1,839	1,651
Retained earnings	29,385	26,175
Accumulated other comprehensive loss	(11,792)	(7,065)
	22,703	23,657
Less: Treasury stock, at cost, 140 million shares in 2002 and 132 million shares in 2001	6,415	5,539
Total stockholders' equity	16,288	18,118
Total liabilities and stockholders' equity	\$887,515	\$799,948

See Notes to Financial Statements.

## FANNIE MAE

## STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Net Common Shares Outstanding	Preferred Stock	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Treasury Stock	Total Stockholders' Equity
(Dollars and shares in millions)								
<b>Balance, January 1, 2000</b>	1,019	\$1,300	\$593	\$1,585	\$18,417	\$ (246)	\$(4,020)	\$17,629
Comprehensive income:								
Net income	—	—	—	—	4,448	—	—	4,448
Other comprehensive income, net of tax effect:								
Unrealized gains on available-for-sale securities	—	—	—	—	—	256	—	256
Total comprehensive income								4,704
Dividends	—	—	—	—	(1,246)	—	—	(1,246)
Shares repurchased	(25)	—	—	—	—	—	(1,406)	(1,406)
Preferred stock issued	—	978	—	(10)	—	—	—	968
Treasury stock issued for stock options and benefit plans	5	—	—	13	—	—	176	189
<b>Balance, December 31, 2000</b>	999	2,278	593	1,588	21,619	10	(5,250)	20,838
Comprehensive income:								
Net income	—	—	—	—	5,894	—	—	5,894
Other comprehensive income, net of tax effect:								
Transition adjustment from the adoption of FAS 133.	—	—	—	—	—	(3,972)	—	(3,972)
Unrealized gain on securities transferred to available-for-sale	—	—	—	—	—	86	—	86
Net cash flow hedging losses	—	—	—	—	—	(3,387)	—	(3,387)
Unrealized gains on available-for-sale securities	—	—	—	—	—	198	—	198
Total comprehensive loss								(1,181)
Dividends	—	—	—	—	(1,338)	—	—	(1,338)
Shares repurchased	(6)	—	—	—	—	—	(464)	(464)
Preferred stock issued	—	400	—	(4)	—	—	—	396
Preferred stock redeemed	—	(375)	—	—	—	—	—	(375)
Treasury stock issued for stock options and benefit plans	4	—	—	67	—	—	175	242
<b>Balance, December 31, 2001</b>	997	2,303	593	1,651	26,175	(7,065)	(5,539)	18,118
Comprehensive income:								
Net income	—	—	—	—	4,619	—	—	4,619
Other comprehensive income, net of tax effect:								
Net cash flow hedging losses	—	—	—	—	—	(8,892)	—	(8,892)
Reclassification of securities from held to maturity to available-for-sale under FAS 115.	—	—	—	—	—	3,539	—	3,539
Unrealized gains on available-for-sale securities	—	—	—	—	—	626	—	626
Total comprehensive loss								(108)
Dividends	—	—	—	—	(1,409)	—	—	(1,409)
Shares repurchased	(15)	—	—	—	—	—	(1,167)	(1,167)
Preferred stock issued	—	1,000	—	(9)	—	—	—	991
Preferred stock redeemed	—	(625)	—	—	—	—	—	(625)
Treasury stock issued for stock options and benefit plans	3	—	—	61	—	—	127	188
Treasury stock issued for special contribution	4	—	—	136	—	—	164	300
<b>Balance, December 31, 2002</b>	989	\$2,678	\$593	\$1,839	\$29,385	\$(11,792)	\$(6,415)	\$16,288

See Notes to Financial Statements.

## FANNIE MAE

## STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2002	2001	2000
(Dollars in millions)			
<b>Cash flows from operating activities:</b>			
Net income	\$ 4,619	\$ 5,894	\$ 4,448
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Amortization of discount/premium and deferred price adjustments	5,801	11,045	10,278
Provision for losses	128	94	122
Loss (gain) on debt extinguishments	710	524	(49)
Cumulative effect of change in accounting principle, net of tax	—	(168)	—
Purchased options expense	4,545	37	—
Deferred income taxes	(1,626)	(190)	161
Other decreases, net	(2,039)	(2,904)	(659)
Net cash provided by operating activities	12,138	14,332	14,301
<b>Cash flows from investing activities:</b>			
Mortgage portfolio purchases	(373,169)	(270,609)	(153,837)
Proceeds from sales from mortgage portfolio	9,691	8,967	10,599
Mortgage portfolio principal repayments	274,941	164,408	56,568
Net proceeds from disposition of foreclosed properties	2,281	1,827	1,962
Purchases of held-to-maturity nonmortgage investments	(1,819,326)	(1,359,614)	(1,184,924)
Maturities of held-to-maturity nonmortgage investments	1,823,915	1,343,328	1,173,546
Purchases of available-for-sale nonmortgage investments	(54,534)	(78,632)	(13,610)
Maturities of available-for-sale nonmortgage investments	58,617	68,269	1,190
Proceeds from sales of available-for-sale nonmortgage investments	6,158	7,193	8,995
Net cash used in investing activities	(71,426)	(114,863)	(99,511)
<b>Cash flows from financing activities:</b>			
Proceeds from issuance of long-term debt	238,252	249,454	110,298
Payments to redeem long-term debt	(175,809)	(196,610)	(49,769)
Proceeds from issuance of short-term debt	1,631,404	1,746,381	1,130,698
Payments to redeem short-term debt	(1,620,644)	(1,690,806)	(1,104,694)
Proceeds from zero-coupon swap calls	478	203	—
Net payments to purchase or settle hedge instruments	(12,119)	(5,569)	(1,245)
Net payments from stock activities	(2,082)	(1,621)	(1,560)
Net cash provided by financing activities	59,480	101,432	83,728
Net increase (decrease) in cash and cash equivalents	192	901	(1,482)
Cash and cash equivalents at beginning of year	1,518	617	2,099
Cash and cash equivalents at end of year	\$ 1,710	\$ 1,518	\$ 617
<b>Supplemental disclosures of cash flow information:</b>			
Cash paid during the year for:			
Interest	\$ 40,401	\$ 40,361	\$ 34,863
Income taxes	3,032	2,088	1,595

See Notes to Financial Statements.

## FANNIE MAE

## NOTES TO FINANCIAL STATEMENTS

**1. Summary of Significant Accounting Policies**

Fannie Mae is a federally chartered and stockholder-owned corporation operating in the residential mortgage finance industry.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States of America. These principles require us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. We have reclassified certain amounts in prior years' financial statements to conform to the current presentation.

***Principles of Consolidation***

We regularly invest in qualified low-income housing tax credit partnerships as a limited partner. In accordance with American Institute of Certified Public Accountants (AICPA) Statement of Position 78-9, *Accounting for Investments in Real Estate Ventures*, we typically do not consolidate these partnerships because we are a limited partner and do not have voting rights or control the activities of these partnerships. We account for these non-consolidated investments using the equity method of accounting. Under the equity method of accounting, we record the amount of our investment as an asset on our balance sheet. We recognize our share of partnership income or losses in the income statement line item "Fee and other income, net" with an offset to the investment account on our balance sheet. Partnership losses reduce the size of our asset and partnership income increases our asset. We account for any cash received from these partnerships as a return of investment and reduce the asset balance. These limited partnership investments are qualified affordable housing projects that are eligible for tax credits. We record these tax credits as a reduction in our provision for federal income taxes in the income statement when received. We regularly evaluate these investments for impairment. If there is other-than-temporary impairment in the value of these investments, we recognize the decline in value as an expense in "Fee and other income, net." If an investment grade third party guarantees the return on these investments, we account for the investments using the effective yield method according to Emerging Issues Task Force Issue No. 94-1, *Accounting for Tax Benefits Resulting from Investments in Affordable Housing Projects*. Under this method, we recognize tax credits as they are allocated to us and amortize the initial cost of the investment to provide a level yield over the period we are allocated tax credits. We recognize both the tax credits and the amortization of the investment, net of taxes, in the provision for federal income taxes.

We also sponsor trusts that facilitate the issuance of Fannie Mae mortgage-backed securities (MBS). MBS include real estate mortgage investment conduits (REMICs). In this capacity, we serve as trustee for the creation and issuance of these MBS. To create MBS, lenders transfer loans to us and we immediately transfer these loans into a trust and deliver certificates to the lender or other purchaser. These certificates represent beneficial interests in the loans underlying the MBS that are held in trust. The trust pays us to guarantee the timely payment of scheduled principal and interest on MBS to investors. To create REMICs, investors transfer loans, MBS, or mortgage-related securities to us and we immediately transfer them into a trust and deliver certificates to the investor. These REMIC certificates represent beneficial interests in the underlying collateral held in trust by us.

The loans underlying MBS and the collateral underlying REMICs are not our assets, and we do not reflect them on our balance sheet unless our portfolio investment business buys them. In accordance with Financial Accounting Standard No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Debt* (FAS 140), we do not consolidate the trusts used to issue MBS because these trusts meet the definition of a qualifying special purpose entity. We recognize a guaranty liability for estimated losses on our guaranty obligation in accordance with Financial Accounting Standard No. 5, *Accounting for*



## NOTES TO FINANCIAL STATEMENTS — (Continued)

*Contingencies* (FAS 5). For more information on the accounting for our guaranty, refer to the sections in this footnote entitled “Guaranteed Mortgage-Related Securities,” “Mortgage-Related Securities,” and “Allowance for Loan Losses and Guaranty Liability for MBS.”

***Mortgage Portfolio******Loans***

Loans are mortgage loans. We classify mortgages that we have the original intent at the time of purchase to hold for investment purposes as “held-for-investment.” We measure these assets at their unpaid principal balance (UPB) adjusted for unamortized purchase discount or premium and other deferred price adjustments. We classify mortgages that we intend to sell as “held-for-sale.” We measure mortgages held-for-sale at the lower of cost or market, determined on a portfolio basis, with any unrealized losses included in current period earnings.

In accordance with Financial Accounting Standard No. 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases* (FAS 91), we use actual principal prepayment experience and estimate future principal prepayments to calculate the constant effective yield necessary to apply the interest method in the amortization of purchase discount or premium and other deferred price adjustments. We aggregate loans by similar characteristics such as loan type, acquisition date, interest rate, and maturity to evaluate prepayments. We use historical prepayment data and expected prepayment performance under varying interest rate scenarios to estimate future prepayments.

We do not accrue interest income on nonperforming loans. We classify conventional single-family and multifamily loans as nonperforming and reverse previously accrued interest against current period income when the loan is 90 days or more delinquent and we estimate the interest to be uncollectible. We return loans to accrual status when the borrower is less than 90 days delinquent because the probability of default is low and management believes collections of future payments are reasonably assured.

Pursuant to our guaranty obligation, we are required to purchase at par a loan underlying MBS pools when the borrower has not made a payment for 24 consecutive months. We have the option under the terms of the trust indenture to purchase the loan out of the pool after the borrower has missed their fourth consecutive payment. We usually purchase the loan out of the pool after the fourth consecutive missed payment. When the loan is purchased out of the pool, we record the loan at its approximate fair value. When estimating fair value, we take into account the underlying real-estate collateral, estimated costs to sell, and estimated receipts from third-party credit enhancements.

***Mortgage-Related Securities***

We classify mortgage-related securities that we have the ability and positive intent to hold to maturity as “held-to-maturity.” We measure these assets at their unpaid principal balance adjusted for unamortized purchase discount or premium and other deferred price adjustments. We classify mortgage-related securities that we intend to hold for an undetermined period, but not necessarily to maturity, as “available-for-sale.” We measure available-for-sale mortgage-related securities at fair value with any valuation adjustments reported as a component of accumulated other comprehensive income (AOCI), net of deferred taxes, in stockholders’ equity. We use the specific identification method for determining cost in computing realized gains or losses on these assets. Realized gains or losses from the sale of these investments are recognized through the “Fee and other income, net” line item on the income statement. We classify and account for these investments as either held-to-maturity or available-for-sale, according to Financial Accounting Standard No. 115, *Accounting for Certain Investments in Debt and Equity Securities* (FAS 115).

We record impairment for mortgage-related securities held in our mortgage portfolio by determining whether an other-than-temporary decline in fair value below a security’s amortized cost basis has occurred. If

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

such a decline has occurred, the cost basis of the security is written down to fair value and is accounted for as a realized loss through the “Fee and other income, net” line item on the income statement. The new cost basis is not changed for subsequent recoveries in fair value.

We also provide a guaranty liability on mortgage-related securities held in the mortgage portfolio that are guaranteed by Fannie Mae because we have the risk of loss of individual loans underlying these securities. See “Summary of Significant Accounting Policies — Allowance for Loan Losses and Guaranty Liability for MBS” for further discussion.

In accordance with FAS 91, we use actual principal prepayment experience and estimate future principal prepayments to calculate the constant effective yield necessary to apply the interest method in the amortization of purchase discount or premium and other deferred price adjustments. We aggregate mortgage-related securities by similar characteristics such as loan type, acquisition date, interest rate, and maturity to evaluate prepayments. We use historical prepayment data and expected prepayment performance under varying interest rate scenarios to estimate future prepayments.

***Nonmortgage Investments***

Nonmortgage investments consist of our liquid investment portfolio (LIP) and other investments. We classify and account for these investments as either held-to-maturity or available-for-sale, according to FAS 115. We measure held-to-maturity securities at historical cost, adjusted for unamortized discount or premium. We measure available-for-sale securities at fair value as of the balance sheet date, with any valuation adjustments reported as a component of AOCI, net of deferred taxes, in stockholders’ equity. We use the specific identification method for determining a security’s cost basis in computing realized gain or loss. We accrue interest income unless the collection of interest income is considered doubtful. If collection of interest is doubtful, we recognize interest income on a cash basis. We regularly evaluate these investments for impairment. If there is other-than-temporary impairment in the value of these investments, we recognize the decline in value as an expense in “Fee and other income, net.”

***Guaranteed Mortgage-Related Securities***

We charge a guaranty fee in return for guaranteeing the timely payment of scheduled principal and interest on MBS and other mortgage-related securities to investors. We accrue and collect guaranty fees monthly based on a fixed rate multiplied by the outstanding balance of the guaranteed MBS and other mortgage-related securities. We apply the effective yield method of accounting and amortize any upfront guaranty fee price adjustments over the estimated life of the loans underlying the MBS and other mortgage-related securities. For MBS and other mortgage-related securities not held in our mortgage portfolio, we record the guaranty fee in “Guaranty fee income.” For MBS and other mortgage-related securities held in our mortgage portfolio, we record the guaranty fee in “Interest income.”

In November 2002, the Financial Accounting Standards Board (FASB) issued *Interpretation No. 45: Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*. We are required to provide disclosures about guarantees beginning with our December 31, 2002 financial statements. The disclosures are located in Footnote 14, “Financial Instruments with Off-Balance-Sheet Risk.” The new interpretation also will require us to recognize the fair value of our MBS guaranty fee and other guaranty fees as assets and the fair value of our MBS guaranty obligation and other guaranty obligations as liabilities for MBS and other guarantees issued by us to investors other than Fannie Mae on or after January 1, 2003. Under this interpretation, we will record an asset representing the fair value of the guaranty along with a liability of equal value. We will amortize the asset and the liability over the estimated life of the loans underlying the MBS or other guarantees as an adjustment to guaranty fee income. However, because the asset and liability will be equal and the amortization rates will be the same, there will be no net effect on guaranty fee income or stockholders’ equity.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

***Allowance for Loan Losses and Guaranty Liability for MBS***

We have an allowance for loan losses for loans in the mortgage portfolio (excluding loans held-for-sale). The allowance for loan losses is included in the balance sheet under “Mortgage portfolio, net.” We also have a guaranty liability for loans underlying MBS held by us or other investors, which is included in the balance sheet under “Guaranty liability for MBS.”

The allowance for loan losses and the guaranty liability for MBS represent our estimate of probable credit losses arising from loans and loans underlying Fannie Mae MBS we own as well as MBS we guarantee for others as of the balance sheet date. We perform regular, ongoing reviews to identify probable losses. We monitor delinquency, default, loss rates, and other portfolio risk characteristics. These risk characteristics include geographic concentration, loan-to-value ratio, mortgage product type, and loan age.

We increase the allowance for loan losses and the guaranty liability for MBS by recording a provision for losses in the income statement. Charge-offs reduce the allowance or guaranty liability and loan recoveries increase the allowance or guaranty liability. We consider current delinquency levels, historical loss experience, current economic conditions, and mortgage characteristics when evaluating the adequacy of our allowance and guaranty liability.

We determine the adequacy of the allowance and guaranty liability for single-family assets by evaluating risk characteristics such as product type, original loan-to-value ratio, and loan age. We estimate defaults for each risk characteristic based on historical experience and apply a historical severity to each risk category, in accordance with FAS 5. In addition, we apply Financial Accounting Standard No. 114, *Accounting by Creditors for Impairment of a Loan* (FAS 114), to determine the amount of impairment on specific loans that have been restructured. We charge-off single-family loans when we foreclose on the loans.

We divide multifamily’s allowance and guaranty liability into two parts: loans that are impaired and loans that are not impaired. A loan is impaired when, based on current information and events, it is probable we will be unable to collect all amounts due according to the contractual terms of the loan agreement. We apply FAS 114 to determine the amount of impairment on specific loans that are not performing according to contractual terms. We apply FAS 5 to loans that are not individually assessed for impairment and set up an allowance for loan losses or guaranty liability for probable losses as of the balance sheet date. We individually rate loans and segment them into the main risk categories that we use to monitor the multifamily portfolio. We then apply historical default rates and a corresponding severity to the loans in each segment.

In 2002, we reclassified from our “Allowance for loan losses” to “Guaranty liability for MBS” the amount associated with the guaranty obligation for MBS that we own. The guaranty liability for MBS associated with MBS guaranteed for others has historically been included in the caption “Other liabilities” on the balance sheet. The balance sheet line item “Guaranty liability for MBS” now includes the liability associated with MBS on the balance sheet and MBS guaranteed for others. Prior period balances have been restated to reflect this reclassification.

We previously recorded gains from the sale of foreclosed properties and related mortgage insurance claims against our allowance for loan losses and guaranty liability as a recovery of charge-offs. During 2002, we reclassified these gains to “Foreclosed property income”. Additionally, the AICPA rescinded Statement of Position 92-3, *Accounting for Foreclosed Assets* (SOP 92-3), during the fourth quarter of 2002. Under SOP 92-3, we recorded selling costs related to the disposition of foreclosed properties in our income statement under “Foreclosed property income”. We now include selling costs in our initial charge-off estimate. All prior periods have been reclassified to conform to the current year presentation. The reclassified amounts result in equal and offsetting changes to our “Provision for losses” and “Foreclosed property income” line items within

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

our previously reported income statements. These reclassifications have no impact on previously reported net income, total credit-related expenses, or the balance of the allowance for losses.

***Acquired Property***

We measure foreclosed assets at fair value, less estimated cost to sell, at the time of foreclosure. Fair value is determined based on the estimated net proceeds the company will receive from the disposition of the foreclosed asset. We charge subsequent changes in the collateral's fair value as well as foreclosure, holding, and disposition costs, directly to earnings through foreclosed property income.

We account for and classify deeds in lieu of foreclosure similar to foreclosures. Our accounting for preforeclosure sales of properties by the borrower is slightly different because we do not have title to the underlying properties. In a preforeclosure situation, the loan remains in the mortgage-related security or our mortgage portfolio until the borrower sells the property. At that point, we reduce the carrying amount of the mortgage loan and create a receivable for the sale proceeds in the amount of the sales price. We classify the receivable for the sale proceeds as part of "Acquired property and foreclosure claims, net" on the balance sheet. If there is any remaining investment in the mortgage loan, we charge off the mortgage loan against the allowance for loan losses or guaranty liability for MBS. If the sale proceeds exceed the mortgage loan balance, we record it in "Foreclosed property income" on the income statement.

***Derivative Instruments and Hedging Activities***

On January 1, 2001, we adopted Financial Accounting Standard No. 133, *Accounting for Derivative Instruments and Hedging Activities* (FAS 133), as amended by Financial Accounting Standard No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities*. Under FAS 133, we recognize all derivatives as either assets or liabilities on the balance sheet at their fair value. Subject to certain qualifying conditions, we may designate a derivative as either a hedge of the cash flows of a variable-rate instrument or anticipated transaction (cash flow hedge) or a hedge of the fair value of a fixed-rate instrument (fair value hedge). For a derivative qualifying as a cash flow hedge, we report fair value gains or losses in a separate component of AOCI, net of deferred taxes, in stockholders' equity to the extent the hedge is effective. We recognize these fair value gains or losses in earnings during the period(s) in which the hedged item affects earnings. For a derivative qualifying as a fair value hedge, we report fair value gains or losses on the derivative in earnings along with fair value gains or losses on the hedged item attributable to the risk being hedged. For a derivative not qualifying as a hedge, or components of a derivative that are excluded from any hedge effectiveness assessment, we report fair value gains and losses in earnings.

If a derivative no longer qualifies as a cash flow or fair value hedge, we discontinue hedge accounting prospectively. We continue to carry the derivative on the balance sheet at fair value and record fair value gains and losses in earnings until the derivative is settled. For discontinued cash flow hedges, we recognize the gains or losses previously deferred in AOCI in earnings in the same period(s) that the hedged item affects earnings. For discontinued fair value hedges, we no longer adjust the carrying amount of the hedged asset or liability for changes in its fair value. We then amortize previous fair value adjustments to the carrying amount of the hedged item to earnings over the remaining life of the hedged item using the effective yield method.

Our adoption of FAS 133 on January 1, 2001, resulted in a cumulative after-tax increase in income of \$168 million and an after-tax reduction in AOCI of \$3.9 billion. In addition, we reclassified investment securities and MBS with an amortized cost of approximately \$20 billion from held-to-maturity to available-for-sale upon the adoption of FAS 133. At the time of this noncash transfer, we had gross unrealized gains and losses of \$164 million and \$32 million, respectively, on these securities.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

We reflect payments to purchase and terminate derivatives used as hedges of our debt as “net payments to purchase or settle hedge instruments” in our cash flow statement. We classify these payments as financing activities because we use these derivatives as hedges of our funding costs.

During the fourth quarter of 2002, we refined our methodology for estimating the initial time value of interest rate caps at the date of purchase and prospectively adopted a preferred method that resulted in a \$282 million pre-tax reduction in purchased options expense and increased our diluted earnings per share for 2002 by \$.18. Under our previous valuation method, we treated the entire premium paid on purchased “at-the-money” caps as time value with no allocation to intrinsic value. Our new methodology allocates the initial purchase price to reflect the value of individual caplets, some of which are above the strike rate of the cap, which results in a higher intrinsic value and corresponding lower time value at the date of purchase. This approach is more consistent with our estimation of time value subsequent to the initial purchase date. This change does not affect the total expense that will be recorded in our income statement over the life of our caps.

***Cash and Cash Equivalents***

We consider highly liquid investment instruments with an original maturity of three months or less to be cash equivalents. We record cash equivalents at cost. Cost is representative of fair value for these instruments because changes in short-term interest rates should have a minimal impact on the fair value of securities that have an original term of three months or less.

***Administrative Expenses***

Administrative expenses include those costs we incur to run our daily operations. A significant component of administrative expenses is compensation expense, which totaled \$683 million in 2002, \$602 million in 2001, and \$541 million in 2000.

***Debt Extinguishments***

During the second quarter of 2002, we adopted Financial Accounting Standard No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections* (FAS 145). This standard eliminates the extraordinary treatment of gains and losses on debt and related interest rate swaps for us because the early extinguishment of debt is an ordinary and frequent part of our business. We reclassified all prior periods to conform to the new classification.

***Income Taxes***

We establish deferred federal income tax assets and liabilities for temporary differences between financial and taxable income. We measure these deferred amounts using the current marginal statutory tax rate. We generally recognize investment and other tax credits when we record these items on the tax return.

***Comprehensive Income***

Comprehensive income is the change in equity, on a net of tax basis, resulting from transactions and other events and circumstances from nonowner sources during a period. It includes all changes in equity during a period, except those resulting from investments by owners and distributions to owners.

***Special Contribution***

We made a commitment during the fourth quarter of 2001 to contribute \$300 million of Fannie Mae common stock to the Fannie Mae Foundation. The Fannie Mae Foundation creates affordable homeownership and housing opportunities through innovative partnerships and initiatives that build healthy, vibrant communities across the United States. It is a separate, private nonprofit organization that is not consolidated.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

by Fannie Mae, but is supported solely by Fannie Mae. Fannie Mae acquired the shares through open market purchases and contributed the shares to the Foundation in the first quarter of 2002.

*Stock-Based Compensation*

At December 31, 2002, we had five stock-based compensation or benefits programs that we describe in Footnote 8, *Stock-Based Compensation Plans*. Financial Accounting Standard No. 123, *Accounting for Stock-Based Compensation* (FAS 123), gives companies the option of either recording an expense for all stock compensation awards based on the fair value at grant date or continuing to follow Accounting Principles Board Opinion No. 25 (APB 25). Companies that follow APB 25 must disclose, in a footnote, pro forma net income and earnings per share as if they had adopted the expense recognition provisions of FAS 123. Prior to January 2003, we elected to apply APB 25 and related interpretations in accounting for our plans. As a result of applying APB 25, we did not recognize compensation expense for nonqualified stock options and the Employee Stock Purchase Plan. We have elected to change our accounting for stock-based compensation and will record expense for all future stock compensation awards at fair value at grant date under FAS 123 beginning on January 1, 2003. We estimate that the impact of adopting the expense recognition provisions of FAS 123 will result in additional expense of approximately \$28 million in 2003.

In accordance with the disclosure requirements of Financial Accounting Standard No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure* (FAS 148), the following table summarizes our net income available to common stockholders and reported basic and diluted earnings per common share for the years 2000-2002 under APB 25, as well as proforma net income available to common stockholders and basic and diluted earnings per common share if we had recognized compensation expense according to FAS 123.

	2002	2001	2000
	(Dollars in millions, except per share amounts)		
Net income available to common stockholders, as reported	\$4,520	\$5,756	\$4,327
Plus: Stock-based employee compensation expense recorded under APB 25, net of related tax effects	25	27	31
Less: Stock-based employee compensation expense determined under fair value based method, net of related tax effects	(105)	(96)	(80)
Pro forma net income available to common stockholders	\$4,440	\$5,687	\$4,278
Earnings per share:			
Basic — as reported	\$ 4.56	\$ 5.75	\$ 4.31
Basic — pro forma	4.47	5.69	4.26
Diluted — as reported	4.53	5.72	4.29
Diluted — pro forma	4.45	5.65	4.24

We determined the fair value of our stock-based compensation using a Black-Scholes pricing model. The following table summarizes the major assumptions used in the model.

	2002	2001	2000
Risk-free rate <sup>(1)</sup>	3.235-4.995%	3.885-5.155%	5.085-6.815%
Volatility	31-33%	33-34%	29-34%
Dividend <sup>(2)</sup>	\$1.32	\$1.20	\$1.12
Average expected life	6 yrs.	5 yrs.	5 yrs.

(1) The synthetic 6-year zero-coupon U.S. Treasury strip yield formed by interpolating between the 5-year and 7-year zero-coupon U.S. Treasury strip yields in 2002.

(2) Dividend rate on common stock at date of grant. Dividend rate assumed to remain constant over the option life.

## FANNI MAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

2. Mortgage Portfolio, Net<sup>(1)</sup>

The mortgage portfolio, net is composed of whole loans and securities backed by loans. The following presents the composition of these two components at December 31,

	2002	2001
	(Dollars in millions)	
<b>Mortgages</b>		
Single-family:		
Government insured or guaranteed	\$ 5,458	\$ 5,070
Conventional:		
Long-term, fixed-rate	103,220	96,417
Intermediate-term, fixed-rate <sup>(2)</sup>	54,503	43,522
Adjustable-rate	9,045	10,410
Total conventional single-family	166,768	150,349
Total single-family	172,226	155,419
Multifamily:		
Government insured or guaranteed	1,353	1,551
Conventional	12,218	8,987
Total multifamily	13,571	10,538
Unamortized premium (discount) and deferred price adjustments	337	(2,640)
Allowance for loan losses <sup>(3)</sup>	(79)	(48)
Total mortgages	\$186,055	\$163,269
<b>Mortgage-related securities</b>		
Single-family:		
Government insured or guaranteed	\$ 33,293	\$ 37,111
Conventional:		
Long-term, fixed-rate	510,435	456,046
Intermediate-term, fixed-rate <sup>(2)</sup>	39,409	25,890
Adjustable-rate	13,946	10,355
Total conventional single-family	563,790	492,291
Total single-family	597,083	529,402
Multifamily:		
Government insured or guaranteed	7,370	6,481
Conventional	7,050	5,636
Total multifamily	14,420	12,117
Unamortized premium	135	536
Total mortgage-related securities	\$611,638	\$542,055
<b>Mortgage portfolio, net</b>		
Single-family:		
Government insured or guaranteed	\$ 38,751	\$ 42,181
Conventional:		
Long-term, fixed-rate	613,655	552,463
Intermediate-term, fixed-rate <sup>(2)</sup>	93,912	69,412
Adjustable-rate	22,991	20,765
Total conventional single-family	730,558	642,640
Total single-family	769,309	684,821
Multifamily:		
Government insured or guaranteed	8,723	8,032
Conventional	19,268	14,623
Total multifamily	27,991	22,655
Total mortgage portfolio	797,300	707,476
Unamortized premium (discount) and deferred price adjustments, net	472	(2,104)
Allowance for loan losses <sup>(3)</sup>	(79)	(48)
Mortgage portfolio, net	\$797,693	\$705,324

(1) Data represents unpaid principal balance adjusted to include mark-to-market gains and losses on available-for-sale securities.

(2) Intermediate-term, fixed-rate consists of portfolio loans with contractual maturities at purchase equal to or less than 20 years and MBS and mortgage-related securities held in portfolio with maturities of 15 years or less at issue date.





## FANNIE MAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

Nonaccrual loans totaled \$5.5 billion and \$3.7 billion at December 31, 2002 and 2001, respectively. Accruing loans past 90 days due totaled \$673 million and \$565 million at December 31, 2002 and 2001, respectively.

At December 31, 2002 and 2001, the balance of whole loans held for sale was \$145 million and \$40 million, respectively. There were no gross realized gains or losses on sales of whole loans held for sale in 2002, 2001, or 2000.

Within the mortgage portfolio are MBS and other mortgage-related securities that we classify as either held-to-maturity or available-for-sale. Below is a table of the securities held in each of these categories along with their gross unrealized gains and losses and total fair value for the years ending 2002 and 2001.

	December 31, 2002			
	Amortized Cost <sup>(1)</sup>	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in millions)				
<b>Held-to-maturity:</b>				
MBS <sup>(2)</sup>	\$286,422	\$11,173	\$ (1)	\$297,594
REMICs and Stripped MBS	110,423	4,339	(87)	114,675
Other mortgage-related securities	41,087	2,813	(45)	43,855
<b>Total</b>	<b>\$437,932</b>	<b>\$18,325</b>	<b>\$(133)</b>	<b>\$456,124</b>
<b>Available-for-sale:</b>				
MBS <sup>(2)</sup>	\$116,081	\$ 5,425	\$ (1)	\$121,505
REMICs and Stripped MBS	33,763	678	(369)	34,072
Other mortgage-related securities	17,358	782	(11)	18,129
<b>Total</b>	<b>\$167,202</b>	<b>\$ 6,885</b>	<b>\$(381)</b>	<b>\$173,706</b>
	December 31, 2001			
	Amortized Cost <sup>(1)</sup>	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in millions)				
<b>Held-to-maturity:</b>				
MBS <sup>(2)</sup>	\$333,896	\$3,536	\$ (54)	\$337,378
REMICs and Stripped MBS	127,675	2,432	(579)	129,528
Other mortgage-related securities	47,584	1,411	(87)	48,908
<b>Total</b>	<b>\$509,155</b>	<b>\$7,379</b>	<b>\$(720)</b>	<b>\$515,814</b>
<b>Available-for-sale:</b>				
MBS <sup>(2)</sup>	\$ 9,119	\$ 105	\$ (27)	\$ 9,197
REMICs and Stripped MBS	1,083	211	(240)	1,054
Other mortgage-related securities	22,236	425	(12)	22,649
<b>Total</b>	<b>\$ 32,438</b>	<b>\$ 741</b>	<b>\$(279)</b>	<b>\$ 32,900</b>

(1) Amortized cost includes unamortized premiums, discounts, and deferred price adjustments.

(2) Excludes REMICs and Stripped MBS.

## FANNIE MAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

On September 13, 2002, concurrent with the new risk-based capital rule issued by our regulator, Office of Federal Housing Enterprise Oversight (OFHEO), we reclassified \$124 billion of securities in our mortgage portfolio from held-to-maturity to available-for-sale. Prior to September 13, 2002, Fannie Mae was not subject to a risk-based capital standard. OFHEO implemented the risk-based standard on that date and this standard applied to all assets held by Fannie Mae. FAS 115 specifically identifies “a significant increase in the risk weights of debt securities used for regulatory risk-based capital purposes” as a change in circumstance under which a company may reclassify securities from held-to-maturity to available-for-sale without calling into question the intent to hold other securities to maturity in the future. At the time of this noncash transfer, these securities had gross unrealized gains and losses of \$5.364 billion and \$53 million, respectively.

Total gross realized gains and losses on sales of MBS and other mortgage-related securities in 2002 were \$78 million and \$21 million, respectively. Total net realized losses on sales of MBS and other mortgage-related securities were \$13 million in 2001 and \$21 million in 2000.

***REMICs and Stripped MBS***

Included in the table above are REMICs backed by MBS and whole loans and Stripped MBS (SMBS) backed by MBS. REMICs represent a beneficial interest in a trust having multiple classes of securities. The securities of each class entitle investors to cash flows structured differently from the payments on the underlying assets. SMBS are created by “stripping” or separating the principal and interest payments from the underlying pool of mortgages into two classes of securities, with each receiving a different proportion of the principal and interest payments. REMICs and SMBS do not subject us to additional credit risk if we already guarantee the underlying MBS. REMICs and SMBS generally have different interest rate risk than MBS. To estimate fair values for these securities, we use a stochastic simulation to model future interest rates and discount factors over a large number of scenarios. The simulation calibrates the distribution of interest rates to the current market yield curve and reflects current option adjusted spreads in its discount factors. To model prepayments, we use our proprietary prepayment models to develop an estimated prepayment level for each point in time along each scenario.

***Retained Interests***

In some cases, we create REMICs using assets from our mortgage portfolio and retain an interest in the REMICs. In these instances, we measure our retained interests by allocating the carrying amount of the assets we retained based on their fair value at the transfer date relative to the assets we sold. We are a passive investor with regard to the transferred assets, as our continuing involvement is limited to guaranteeing some of the assets underlying these REMICs.

The entire principal balance of REMICs outstanding at December 31, 2002 and December 31, 2001 was \$55.6 billion and \$21.0 billion, respectively. For the years ended December 31, 2002 and December 31, 2001, we recognized a \$25.4 million net gain and a \$24.4 million net loss, respectively, on the portion of assets we sold at the time of securitization, which totaled \$3.7 billion and \$2.2 billion, respectively. Cash proceeds received from the sale of these assets totaled \$3.7 billion and \$2.2 billion for the years ended December 31, 2002 and December 31, 2001, respectively. Because these REMIC securities are backed by guaranteed MBS, the cash flows from purchases of delinquent loans or foreclosed loans is immaterial. We did not sell any of our retained interests in either 2002 or 2001. Therefore, we did not incur any gains or losses on sales of retained interests for the years then ended. At December 31, 2002 and 2001, the book value of our retained interests was \$41.9 billion and \$18.9 billion, respectively. These securities are backed by MBS guaranteed by Fannie Mae. As a result, the delinquency and credit loss information associated with these REMIC securities is immaterial because all principal and interest is passed through to the REMIC regardless of how the underlying MBS perform.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

Our retained interests are essentially investments of principal in mortgages because there is only a small amount of original premium or discount associated with our investment. As a result, we classify our retained interests as held-to-maturity because they cannot be prepaid or settled in such a way that we would not recover substantially all of our investment. Our retained interests give us the right to receive repayment of the principal we have invested, and the borrowers' obligations are secured by the financed properties.

We use an option-adjusted spread (OAS) approach to measure the fair value of our retained interests, which is the same approach used to measure the fair value for MBS held in our portfolio. The OAS is the incremental spread over our debt rates after taking into account the variability of mortgage cash flows due to the embedded prepayment option. Our proprietary interest rate and prepayment models are key assumptions used in this valuation approach. The OAS approach starts with quoted market prices for a set of benchmark securities that are a representative sample of our portfolio holdings. We use our interest rate model in a stochastic simulation to generate a large number of scenarios. Our prepayment model provides estimated prepayment speeds to determine the cash flows for each time period in each scenario. After the interest rates (including discount factors) and cash flows are generated, the model solves for the OAS associated with the market price of each benchmark security. These option-adjusted spreads are mapped to similar securities, including our retained interests, and the stochastic simulation process is repeated, this time including the appropriate OAS as part of the discount rate to calculate the fair value of each security.

At December 31, 2002 and 2001, the fair value of our retained interests was \$42.7 billion and \$18.6 billion, respectively, with a weighted-average life of 3.7 years and 7.3 years, respectively. The key assumptions used in measuring the fair value of retained interests at the time of securitization are as follows:

	<u>2002</u>	<u>2001</u>
Weighted-average life	6.0 years	6.0 years
Average lifetime CPR prepayment speed assumption	16.1%	15.8%
Average discount rate assumption	5.2	5.2

To quantify the sensitivity of the fair values of these retained interests to changes in valuation assumptions, we adjust the parameters of the prepayment model in order to change prepayment speeds and directly change the discount factors. Changes in prepayment speeds are specified as the effect on the constant prepayment rate (CPR) over the first 12 months. This is typically the time period where immediate changes in prepayments will have the most significant effect on fair value. Changes in discount rate would incorporate both the debt rate and the OAS.

These sensitivities are hypothetical and should be used with caution. The effect of a variation in one of these assumptions on the fair value of our retained interests is calculated without changing any other assumptions. Changing one assumption could result in variation in another assumption, which may increase or decrease the corresponding sensitivities. These sensitivities only measure changes in the fair value of our retained interests and do not incorporate offsetting changes in the values of associated debt funding the retained interests. At December 31, 2002 and 2001, we modified the following assumptions to quantify the

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

impact of immediate 5 percent, 10 percent, and 15 percent adverse changes in these assumptions on the fair value of our retained interests.

	2002	2001
(Dollars in millions)		
Prepayment speed assumptions:		
Impact on year-end fair value from 5 percent adverse change in 12 month CPR prepayment speed	\$ (68)	\$ (24)
Impact on year-end fair value from 10 percent adverse change in 12 month CPR prepayment speed	(131)	(48)
Impact on year-end fair value from 15 percent adverse change in 12 month CPR prepayment speed	(203)	(73)
Average 12 month CPR prepayment speed assumption	49.2%	9.5%
Discount rate assumptions:		
Impact on year-end fair value from 5 percent adverse change	\$ (358)	\$(307)
Impact on year-end fair value from 10 percent adverse change	(711)	(609)
Impact on year-end fair value from 15 percent adverse change	(1,049)	(898)
Average discount rate assumption	3.3%	6.4%

### 3. Allowance for Loan Losses and Guaranty Liability for MBS

We maintain a separate allowance for loan losses for our mortgage portfolio as well as a guaranty liability for our guaranty of MBS. Changes for the years 2000 through 2002 are summarized below.

	2002	2001	2000
(Dollars in millions)			
Allowance for loan losses: <sup>(1)</sup>			
Beginning balance	\$ 48	\$ 51	\$ 56
Provision	44	7	9
Charge-offs <sup>(2)</sup>	(13)	(10)	(14)
Ending balance	\$ 79	\$ 48	\$ 51
Guaranty liability for MBS <sup>(1)</sup> :			
Beginning balance	\$ 755	\$755	\$ 745
Provision	84	87	113
Charge-offs	(110)	(87)	(103)
Ending balance	\$ 729	\$755	\$ 755
Combined allowance for loan losses and guaranty liability for MBS <sup>(3)</sup> :			
Beginning balance	\$ 803	\$806	\$ 801
Provision	128	94	122
Charge-offs <sup>(2)</sup>	(123)	(97)	(117)
Ending balance	\$ 808	\$803	\$ 806

(1) In 2002, we reclassified from our "Allowance for loan losses" to a "Guaranty liability for MBS" the amount associated with the guaranty obligation for MBS that we own. Prior period balances, the provision for losses, and charge-off amounts have been restated to reflect this reclassification.

(2) Charge-offs exclude \$1 million in 2002 on charge-offs related to foreclosed Federal Housing Administration loans that are reported in the balance sheet under "Acquired property and foreclosure claims, net."

(3) The total excludes \$2 million at year-end 2002 and \$3 million at the end of 2001 and 2000, related to foreclosed Federal Housing Administration loans that are reported in the balance sheet under "Acquired property and foreclosure claims, net."

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

The following table summarizes the UPB of impaired loans and corresponding specific loss allowances for the years 2000 through 2002. The majority of our impaired and restructured loans are multifamily loans. Single-family loans that have not been restructured are exempt from FAS 114 because they are considered to be a group of homogeneous loans that are collectively evaluated for impairment. A loan is impaired when it is probable that all contractual principal and interest payments will not be collected as scheduled in the loan agreement based on current information and events. In the event of impairment, we compare the UPB of impaired and restructured loans with the fair value of the underlying collateral to measure any impairment and provide a specific allowance for estimated losses.

	2002	2001	2000
	(Dollars in millions)		
UPB of impaired loans	\$314	\$320	\$186
UPB of impaired loans with specific loss allowance	137	213	67
Specific loss allowance on impaired and restructured loans	17	13	2
UPB of impaired loans without specific loss allowance	177	107	119
Average UPB of impaired loans <sup>(1)</sup>	285	204	210
Estimated interest income recognized while loans were impaired	7	8	3

(1) Averages have been calculated on a monthly average basis.

#### 4. Nonmortgage Investments

We classify securities in the LIP and other investments as either available-for-sale or held-to-maturity. We have presented below a schedule of available-for-sale nonmortgage investments at December 31, 2002 and 2001.

	2002			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(Dollars in millions)			
Available-for-sale:				
Asset-backed securities	\$22,281	\$ 98	\$ (68)	\$22,311
Floating-rate notes <sup>(1)</sup>	11,754	10	(29)	11,735
Corporate bonds	1,149	42	—	1,191
Taxable auction notes	949	—	—	949
Auction rate preferred stock	112	—	(4)	108
Commercial paper	100	—	—	100
Other	400	—	—	400
Total	\$36,745	\$150	\$(101)	\$36,794
	2001			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(Dollars in millions)			
Available-for-sale:				
Asset-backed securities	\$14,876	\$ 21	\$(25)	\$14,872
Floating-rate notes <sup>(1)</sup>	12,114	12	(45)	12,081
Commercial paper	8,879	1	—	8,880
Other	50	—	—	50
Total	\$35,919	\$ 34	\$(70)	\$35,883

(1) As of December 31, 2002 and 2001, 100 percent of floating-rate notes repriced at intervals of 90 days or less.

## FANNIE MAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

Total gross realized gains on nonmortgage investments that were classified as available-for-sale was \$4.5 million in 2002, \$9.9 million in 2001, and \$6.6 million in 2000. Total gross realized losses on nonmortgage investments that were classified as available-for-sale was \$1.7 million in 2002, \$6.1 million in 2001, and \$4.3 million in 2000.

On September 13, 2002, concurrent with the new risk-based capital rule issued by our regulator, OFHEO, we reclassified securities in our LIP that had an amortized cost of \$11.0 billion and a fair value of \$11.2 billion from held-to-maturity to available-for-sale. Prior to September 13, 2002, Fannie Mae was not subject to a risk-based capital standard. OFHEO implemented the risk-based standard on that date and this standard applied to all assets held by Fannie Mae. FAS 115 specifically identifies “a significant increase in the risk weights of debt securities used for regulatory risk-based capital purposes” as a change in circumstance under which a company may reclassify securities from held-to-maturity to available-for-sale without calling into question the intent to hold other securities to maturity in the future. At the time of this noncash transfer, these securities had gross unrealized gains and losses of \$139 million and \$6 million, respectively. We have presented below a schedule of held-to-maturity nonmortgage investments at December 31, 2002 and 2001.

2002				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in millions)				
Held-to-maturity:				
Repurchase agreements	\$20,732	\$ —	\$ —	\$20,732
Eurodollar time deposits	1,398	—	—	1,398
Auction rate preferred stock	402	—	—	402
Federal funds	150	—	—	150
Commercial paper	100	—	—	100
Other	268	1	—	269
Total	\$23,050	\$ 1	\$ —	\$23,051
2001				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in millions)				
Held-to-maturity:				
Repurchase agreements	\$ 9,380	\$ —	\$ —	\$ 9,380
Eurodollar time deposits	11,185	—	—	11,185
Auction rate preferred stock	2,127	—	—	2,127
Federal funds	4,904	—	—	4,904
Commercial paper	2,844	1	—	2,845
Asset-backed securities	6,065	89	(1)	6,153
Other	2,166	73	—	2,239
Total	\$38,671	\$163	\$ (1)	\$38,833

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

The following table shows the amortized cost, fair value, and yield of nonmortgage investments by investment classification and remaining maturity as well as the amortized cost, fair value, and yield of our asset-backed securities at December 31, 2002 and 2001.

	2002			2001		
	Amortized Cost	Fair Value	Yield	Amortized Cost	Fair Value	Yield
(Dollars in millions)						
Available-for-sale:						
Due within one year	\$ 8,844	\$ 8,851	2.31%	\$10,863	\$10,863	2.18%
Due after one year through five years	5,620	5,632	2.42	10,180	10,148	2.49
Due after five through ten years	—	—	—	—	—	—
Due after ten years	—	—	—	—	—	—
	14,464	14,483	2.35	21,043	21,011	2.33
Held-to-maturity:						
Due within one year	23,016	23,017	1.76	31,327	31,347	2.49
Due after one year through five years	34	34	6.21	1,279	1,333	7.11
Due after five through ten years	—	—	—	—	—	—
Due after ten years	—	—	—	—	—	—
	23,050	23,051	1.76	32,606	32,680	2.68
Asset-backed securities <sup>(1)</sup>	22,281	22,311	2.22	20,941	21,025	3.07
Total	\$59,795	\$59,845	2.08%	\$74,590	\$74,716	2.69%

(1) Contractual maturity of asset-backed securities is not a reliable indicator of their expected life because borrowers generally have the right to repay their obligations at any time.

## 5. Debentures, Notes, and Bonds, Net

### Borrowings Due Within One Year

Below is a summary of borrowings due within one year at December 31, 2002 and 2001, net of unamortized discount and premium.

	2002				
	Outstanding at December 31,		Average Outstanding During Year		Maximum Outstanding at Any Month-end
	Amount	Cost <sup>(1)</sup>	Amount	Cost <sup>(1)</sup>	
(Dollars in millions)					
Short-term notes	\$290,091	1.55%	\$252,857	1.98%	\$290,091
Other short-term debt	12,522	1.33	18,512	1.70	28,126
Current portion of borrowings due after one year <sup>(2)</sup> :					
Universal Standard Debt	41,681	2.25			
Universal Benchmark Debt	37,376	4.89			
Universal Retail Debt	73	9.52			
Other	669	3.24			
Total due within one year	\$382,412	1.95%			

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

	2001				
	Outstanding at December 31,		Average Outstanding During Year		Maximum Outstanding at Any Month-end
	Amount	Cost <sup>(1)</sup>	Amount	Cost <sup>(1)</sup>	
	(Dollars in millions)				
Short-term notes	\$256,905	2.58%	\$247,060	4.31%	\$265,953
Other short-term debt	29,891	1.96	31,479	4.40	43,811
Current portion of borrowings due after one year <sup>(2)</sup> :					
Universal Standard Debt	34,413	3.67			
Universal Benchmark Debt	21,987	5.31			
Universal Retail Debt	—	—			
Other	296	4.96			
Total due within one year	\$343,492	2.81%			

(1) Represents weighted-average cost, which includes the amortization of discounts, premiums, issuance costs, hedging results, and the effects of currency and debt swaps. Averages have been calculated on a monthly average basis.

(2) Information on average amount and cost of debt outstanding during the year and maximum amount outstanding at any month-end is not meaningful. See "Borrowings Due After One Year" for additional information.

Amounts payable for federal funds purchased and securities sold under agreements to repurchase were \$9.1 billion and \$6.0 billion at December 31, 2002 and 2001, respectively, and are included in the above table under the heading "Other short-term debt." These amounts include both secured and unsecured debt.



## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

**Borrowings Due After One Year**

Below is a summary of borrowings due after one year at December 31, 2002 and 2001, net of unamortized discount and premium.

	Maturity	2002		2001	
		Amount Outstanding	Average Cost <sup>(1)</sup>	Amount Outstanding	Average Cost <sup>(1)</sup>
(Dollars in millions)					
Senior debt:					
Universal Benchmark Debt, net of \$796 of deferred costs for 2002 (\$886 for 2001)	2002-2030	\$282,972	5.49%	\$246,458	5.88%
Universal Standard Debt, net of \$311 of deferred costs for 2002 (\$325 for 2001)	2002-2038	152,656	4.31	156,495	4.84
Universal Retail Debt, net of \$97 of deferred costs for 2002 (\$62 for 2001)	2002-2027	10,556	6.10	7,098	5.87
Long-term other, net of \$5,809 of deferred costs for 2002 (\$6,998 for 2001)	2002-2032	3,681	7.71	3,383	7.23
		449,865	5.12	413,434	5.50
Subordinated debt:					
Universal Benchmark Debt, net of \$43 of deferred costs for 2002 (\$10 for 2001)	2002-2012	8,457	5.58	4,990	5.78
Universal Standard Debt, net of \$7 of deferred costs for 2002 (\$7 for 2001)	2002-2019	244	9.31	243	9.31
Long-term other, net of \$5,481 of deferred costs for 2002 (\$5,655 for 2001)	2002-2019	1,269	10.01	1,160	9.97
		9,970	6.23	6,393	6.67
Total senior and subordinated debt		459,835	5.14%	419,827	5.52%
Fair value adjustment for FAS 133 <sup>(2)</sup>		8,889		1,423	
Adjustment for foreign currency translation		(154)		(1,275)	
Total due after one year		\$468,570		\$419,975	

(1) Represents weighted-average cost, which includes the amortization of discounts, premiums, issuance costs, hedging results, and the effects of currency and debt swaps. Averages have been calculated on a monthly average basis.

(2) Represents change in the fair value of hedged debt in fair value hedges.

We consolidated our outstanding debt agreements for various funding programs into one comprehensive offering document, the Universal Debt Facility. This supersedes and replaces the Global Debt Facility, Medium-Term Notes, Short-Term Notes, and Debenture Programs.

Debentures, notes, and bonds at December 31, 2002 included \$178 billion of callable debt. We can redeem this debt at our option any time on or after a specified date in whole or in part. At December 31, 2002, our debentures, notes, and bonds were not subject to mandatory redemptions tied to certain indices or rates after an initial nonredemption period.

We have summarized in the following table the amounts, call periods, and maturity dates for our option-embedded financial instruments at December 31, 2002. These instruments include callable debt, callable swaps, and receive-fixed swaptions (excluding \$9.9 billion of callable debt that was swapped to variable-rate

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

debt) as well as the notional amount of pay-fixed swaptions and caps. We also include universal debt that is redeemable at our option in the table.

	Call Date	Year of Maturity	Amount Outstanding	Average Cost <sup>(1)</sup>
(Dollars in millions)				
Callable debt, callable swaps and receive-fixed swaptions:	Currently callable	2004-2020	\$ 664	5.08%
	2003	2003-2031	192,419	4.82
	2004	2004-2022	75,191	5.95
	2005	2007-2030	25,831	6.05
	2006	2010-2031	22,384	6.25
	2007	2011-2032	16,733	6.36
	2008 and later	2012-2030	16,611	6.76
			349,833	5.41%
Pay-fixed swaptions			129,225	
Caps			122,393	
Total option-embedded financial instruments			\$601,451	

(1) Averages have been calculated on a monthly average basis.

Listed below are the principal amounts of total debt payable as of December 31, 2002, for the years 2004-2008, assuming we pay off callable debt at maturity and we redeem callable debt at the initial call date.

	Total Debt by Year of Maturity <sup>(1)</sup>	Assuming Callable Debt Redeemed at Initial Call Date <sup>(1)</sup>
(Dollars in millions)		
2004	\$105,232	\$96,020
2005	71,453	46,892
2006	47,415	29,235
2007	67,326	43,317
2008	21,160	15,020

(1) Includes \$9.9 billion of callable debt that was swapped to variable-rate debt.

We repurchased or called \$182 billion of debt and swaps with an average cost of 5.36 percent in 2002, \$183 billion of debt and swaps with an average cost of 6.23 percent in 2001, and \$18 billion of debt and swaps with an average cost of 7.10 percent in 2000. We recorded losses of \$710 million in 2002, losses of \$524 million in 2001, and gains of \$49 million in 2000 on our debt extinguishments.

As part of our voluntary safety and soundness initiatives, we began issuing Subordinated Benchmark Notes in the first quarter of 2001 on a periodic basis to create a new, liquid class of fixed-income assets for investors. We issued subordinated debt totaling \$3.5 billion and \$5.0 billion during 2002 and 2001, respectively. Outstanding Subordinated Benchmark Notes totaled \$8.5 billion at December 31, 2002 versus \$5.0 billion at the end of 2001. The total subordinated debt balance at December 31, 2002 and December 31, 2001 includes other subordinated debt issuances that preceded this initiative.

Pursuant to Fannie Mae's Charter Act, the Secretary of the Treasury has the authority to approve Fannie Mae's issuance of debt obligations.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

## 6. Income Taxes

The components of our federal income tax provision for the years ended December 31, 2002, 2001, and 2000 were as follows:

	2002	2001	2000
	(Dollars in millions)		
Current	\$ 3,055	\$2,231	\$1,422
Deferred	(1,626)	(190)	161
	1,429	2,041	1,583
Tax expense of cumulative effect of change in accounting principle	—	90	—
Net federal income tax provision	\$ 1,429	\$2,131	\$1,583

The table above does not reflect the tax effects of unrealized gains and losses on available-for-sale securities and derivatives. We record the unrealized gains and losses on these items in AOCI, net of deferred taxes. The tax expense associated with these items was a tax benefit of \$2.5 billion in 2002 and \$3.8 billion in 2001, and a tax expense of \$6 million in 2000.

The tax effects of temporary differences between financial income and taxable income that gave rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2002 and 2001 consisted of the following:

	2002	2001
	(Dollars in millions)	
Deferred tax assets:		
Derivatives in loss positions, net	\$ 9,423	\$3,679
Outstanding MBS and REMIC fees	1,337	915
Allowance for loan losses and guaranty liability for MBS	325	314
Other items, net	160	143
Deferred tax assets	11,245	5,051
Deferred tax liabilities:		
Unrealized gains on available-for-sale securities	2,401	158
Debt-related expenses	446	536
Benefits from tax-advantaged investments	214	125
Purchase discount and deferred fees	42	356
Other items, net	89	57
Deferred tax liabilities	3,192	1,232
Net deferred tax asset	\$ 8,053	\$3,819

We anticipate it is more likely than not that the results of future operations will generate sufficient taxable income to realize the entire balance of deferred tax assets.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

Our effective tax rates differed from statutory federal tax rates for the years ended December 31, 2002, 2001, and 2000 as follows:

	2002	2001	2000
Statutory corporate tax rate	35%	35%	35%
Tax-exempt interest and dividends received deductions	(5)	(4)	(5)
Equity investments in affordable housing projects	(6)	(4)	(4)
Effective tax rate	24%	27%	26%

We are exempt from state and local taxes, except for real estate taxes.

## 7. Earnings per Common Share

The following table sets forth the computation of basic and diluted earnings per common share.

	Year Ended December 31,					
	2002		2001		2000	
	Basic	Diluted	Basic	Diluted	Basic	Diluted
	<b>(Dollars and shares in millions, except per share amounts)</b>					
Net income before cumulative effect of change in accounting principle	\$4,619	\$4,619	\$5,726	\$5,726	\$4,448	\$4,448
Cumulative effect of change in accounting principle	—	—	168	168	—	—
Preferred stock dividend	(99)	(99)	(138)	(138)	(121)	(121)
Net income available to common stockholders	\$4,520	\$4,520	\$5,756	\$5,756	\$4,327	\$4,327
Weighted average common shares	992	992	1,000	1,000	1,003	1,003
Dilutive potential common shares <sup>(1)</sup>	—	5	—	6	—	6
Average number of common shares outstanding used to calculate earnings per common share	992	997	1,000	1,006	1,003	1,009
Earnings per common share before cumulative effect of change in accounting principle	\$ 4.56	\$ 4.53	\$ 5.58	\$ 5.55	\$ 4.31	\$ 4.29
Cumulative effect of change in accounting principle	—	—	.17	.17	—	—
Net earnings per common share	\$ 4.56	\$ 4.53	\$ 5.75	\$ 5.72	\$ 4.31	\$ 4.29

(1) Dilutive potential common shares consist primarily of the dilutive effect from employee stock options and other stock compensation plans.

For additional disclosures regarding our stock compensation plans and outstanding preferred stock, refer to Notes 8 and 12, respectively.

## 8. Stock-Based Compensation Plans

### *Employee Stock Purchase Plan*

We have an Employee Stock Purchase Plan that allows us to issue up to 41 million shares of common stock to qualified employees at a price equal to 85 percent of the fair market value of the stock on the grant date. This plan meets the definition of a noncompensatory plan under APB 25; therefore, we did not recognize any compensation expense for grants under the plan. Employees have the option of either receiving cash or shares through a Cashless Exercise Program or purchasing shares directly. In 2002, we granted each qualified employee, excluding certain officers and other highly compensated employees, the right to purchase up to 310 shares of common stock at \$68.46 per share in January 2003. Under the 2002 offering, qualified employees

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

purchased 5,580 shares at \$68.46 per share, compared with purchasing 1,274,396 common shares at \$66.00 per share under the 2001 offering.

***Employee Stock Ownership Plan***

We have an Employee Stock Ownership Plan (ESOP) for qualified employees who are regularly scheduled to work at least 1,000 hours in a calendar year. Participation is not open to participants in the Executive Pension Plan. We may contribute to the ESOP each year an amount based on achievement of defined corporate earnings goals, not to exceed 4 percent of the aggregate eligible salary for all participants. The Board of Directors determines the contribution percentage annually. We may contribute either shares of Fannie Mae common stock or cash to purchase Fannie Mae common stock. Such contributions are recorded as a current period expense. Unless employees elect to receive cash, ESOP dividends are automatically reinvested in Fannie Mae stock within the ESOP. Dividends are accrued four times a year and paid, pursuant to employees' elections, once a year in February for the four previous quarters. ESOP shares are included as outstanding for purposes of our EPS calculations. Vested benefits are based on years of service. Eligible employees are 100 percent vested in their ESOP accounts either upon attainment of age 65 or more than five years of service. Employees who are at least 55 years of age, and have at least 10 years of participation in the ESOP, may qualify to diversify vested ESOP shares into the same types of funds available under the Retirement Savings Plan without losing the tax deferred status of the value of the ESOP. Expense recorded in 2002, 2001, and 2000 in connection with the ESOP was \$7.6 million, \$6.5 million, and \$6.0 million, respectively. At December 31, 2002, 2001, and 2000, allocated shares held by the ESOP were 1,450,973 common shares, 1,396,610 common shares, and 1,358,486 common shares, respectively, and committed-to-be-released shares held by the ESOP were 115,127 common shares, 80,459 common shares, and 66,495 common shares, respectively. At December 31, 2002, 2001, and 2000, the ESOP shares held in suspense were 2,105 common shares, 729 common shares, and 7,684 common shares, respectively. The fair value of unearned ESOP shares was \$1.4 million, \$1.7 million, and \$1.8 million at December 31, 2002, 2001, and 2000, respectively.

***Performance Shares***

Fannie Mae's Stock Compensation Plan of 1993 authorizes eligible employees to receive performance awards. We generally issue awards with a performance period that can range from three to five years. The performance shares become actual awards only if we attain our goals set for the award period. At the end of the award period, we pay out common stock in either two or three installments over a period not longer than three years. For the 2003-2005, 2002-2004, and 2001-2003 performance periods, there were 466,216 common shares, 505,588 common shares, and 449,520 common shares, respectively, from outstanding contingent grants.

***Nonqualified Stock Options***

Fannie Mae may grant stock options to eligible employees and nonmanagement members of the Board of Directors. Employees cannot generally exercise them until at least one year after the grant date. Nonmanagement directors can exercise them on the grant date. The stock options generally expire ten years from the grant date for both groups. The exercise price of the common stock covered by each option is equal to the fair value of the stock on the date we grant the option. Thus, we have not recorded compensation expense for grants under this plan under APB 25.

Under the Stock Compensation Plan of 1993, our Board of Directors approved the EPS Challenge Option Grant in January 2000 for all regular full-time and part-time employees. At that time, all employees, other than management group employees, received an option grant of 350 shares at a price of \$62.50 per share, the fair market value of the stock on the grant date. Management group employees received option grants

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

equivalent to a percentage of their November 1999 stock grants. We tied vesting for options granted to the achievement of a core business diluted earnings per share (EPS) goal of \$6.46 by the end of 2003. Core business earnings is a non-GAAP performance measure developed by management that ratably allocates the cost of purchased options over the period they are held instead of recognizing unrealized gains and losses on purchased options in earnings. Core business diluted EPS reflects net income less the after-tax unrealized gain or loss on purchased options plus the after-tax purchased options amortization expense. If our core business diluted EPS for 2003 is \$6.46 or greater, then 100 percent of the EPS Challenge options will vest in January 2004. If we do not reach a core business diluted EPS of \$6.46 by the end of 2003, we delay vesting one year and then vesting begins at a rate of 25 percent per year. The Board of Directors has discretion to offset future option grants or other forms of compensation if the core business diluted EPS goal is not reached. These options expire January 18, 2010.

The following table summarizes our nonqualified stock option activity for the years 2000-2002.

	2002			2001			2000		
	Options	Weighted-Average Exercise Price	Weighted-Average Fair Value at Grant Date	Options	Weighted-Average Exercise Price	Weighted-Average Fair Value at Grant Date	Options	Weighted-Average Exercise Price	Weighted-Average Fair Value at Grant Date
	(Options in thousands)								
Balance, January 1,	26,234	\$57.06	\$19.22	25,310	\$50.86	\$16.90	22,349	\$40.90	\$12.81
Granted	865	78.38	26.23	4,173	80.37	28.07	7,741	66.79	24.11
Exercised	(1,484)	29.58	9.37	(2,611)	31.92	9.90	(4,003)	23.88	7.31
Forfeited	(484)	70.61	24.47	(638)	66.93	23.12	(777)	61.98	20.42
Balance, December 31,	25,131	\$59.16	\$22.76	26,234	\$57.05	\$19.22	25,310	\$50.86	\$16.90
Options vested, December 31,	15,619	\$51.48	\$16.71	13,919	\$44.10	\$13.92	13,551	\$36.83	\$11.36

The following table summarizes information about our nonqualified stock options outstanding at December 31, 2002.

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number of Options <sup>(1)</sup>	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number of Options <sup>(1)</sup>	Weighted-Average Exercise Price
\$18.00 – \$35.00	4,444	1.5 yrs.	\$22.96	4,444	\$22.96
35.01 – 53.00	4,010	4.6	46.14	3,827	45.82
53.01 – 70.00	6,717	6.5	64.06	3,140	66.48
70.01 – 87.00	9,960	8.1	77.25	4,208	75.56
Total	25,131	6.1 yrs.	\$59.16	15,619	\$51.48

(1) Options in thousands.

#### Restricted Stock

In 2002, we awarded, issued, and placed in escrow 85,927 shares of restricted stock under the Stock Compensation Plan of 1993 (117,447 shares in 2001). We released 106,062 shares in 2002 as awards vested (105,560 shares in 2001).

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

*Options Available for Future Issuance*

At December 31, 2002, 4,727,809 and 11,569,275 shares remained available for grant under the Employee Stock Purchase Plan and the Stock Compensation Plan of 1993, respectively. The Stock Compensation Plan of 1993 expires in May 2003, at which time we will ask shareholders to approve a new plan.

**9. Employee Retirement Benefits***Retirement Savings Plan*

All regular employees of Fannie Mae scheduled to work 1,000 hours or more in a calendar year are eligible to participate in our Retirement Savings Plan, which includes a 401(k) option. In 2002, employees could contribute up to the lower of 25 percent of their base salary or the current annual dollar cap established and revised annually by the Internal Revenue Service. Fannie Mae matches employee contributions up to 3 percent of base salary in cash. Under the plan, employees may allocate investment balances to a variety of investment options. As of December 31, 2002, there was no option to invest directly in stock of Fannie Mae. Expense recorded in 2002, 2001, and 2000 in connection with the Retirement Savings Plan was \$10.8 million, \$9.3 million, and \$8.5 million, respectively.

*Postretirement Benefit Plans*

All regular employees of Fannie Mae scheduled to work 1,000 hours or more in a calendar year are covered by a noncontributory corporate retirement plan or by the contributory Civil Service Retirement Law. Benefits payable under the corporate plan are based on years of service and compensation using the average pay during the 36 consecutive highest-paid months of the last 120 months of employment. Our policy is to contribute an amount no less than the minimum required employer contribution under the Employee Retirement Income Security Act of 1974. We contribute to the corporate plan in cash based on benefits attributed to employees' service to date and compensation expected to be paid in the future. A contribution of \$41 million was made to the corporate plan in 2002. Corporate plan assets consist primarily of listed stocks, fixed-income securities, and other liquid assets. Plan assets do not directly include any shares of Fannie Mae stock.

At December 31, 2002 and 2001, the projected benefit obligations for services rendered were \$391 million and \$319 million, respectively, while the plan assets were \$234 million and \$237 million, respectively. At December 31, 2002 and 2001, the pension liability (included on the balance sheet under "Other liabilities") was \$51 million and \$65 million, respectively. Net periodic pension costs were \$27 million, \$14 million, and \$5 million for the years ended December 31, 2002, 2001, and 2000, respectively. We use the straight-line method of amortization for prior service costs.

The assumptions we used to determine the net periodic pension costs and projected benefit obligations were as follows:

	2002	2001	2000
Discount rate used to determine pension expense	7.25%	7.75%	8.00%
Discount rate used to determine projected benefit obligation at year-end	6.75	7.25	7.75
Average rate of increase in future compensation levels	6.50	6.50	6.50
Expected long-term weighted average return on plan assets	8.50	9.50	9.00

Fannie Mae also has an Executive Pension Plan, Supplemental Pension Plan, and a bonus-based Supplemental Pension Plan, which supplement the benefits payable under the retirement plan. We fund accrued benefits under the Executive Pension Plan through a Rabbi trust. We accrue estimated benefits under the supplementary plans as an expense over the period of employment.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

We sponsor a post-retirement Health Care Plan that covers substantially all full-time employees. The plan pays stated percentages of most necessary medical expenses incurred by retirees, after subtracting payments by Medicare or other providers and after meeting a stated deductible. Participants become eligible for the subsidized benefits as follows: (1) for employees hired prior to January 1, 1998, if they retire from Fannie Mae after reaching age 55 with five or more years of service; or (2) for employees hired January 1, 1998, or later, if they retire from Fannie Mae after reaching age 55 with ten or more years of service. Employees hired January 1, 1998 or later who retire with less than ten years of service may purchase coverage by paying the full premium. The plan is contributory, with retiree contributions adjusted annually. We charge the expected cost of these benefits to expense during the years that the employees render service and we pay all benefits out of our general assets. We base cost-sharing percentages on length of service with Fannie Mae, eligibility for and date of retirement, and a defined dollar benefit cap.

Our accrued post-retirement health care cost liability for the years ended December 31, 2002 and 2001 was \$65 million and \$52 million, respectively. The net post-retirement health care costs were \$15 million, \$9 million, and \$8 million for the years ended December 31, 2002, 2001, and 2000, respectively. In determining the net post-retirement health care cost for 2002, we assumed a 13.50 percent annual rate of increase in the per capita cost of covered health care claims with the rate decreasing over the next five years to 4.50 percent and remaining at that level thereafter. In determining the net post-retirement health care cost for 2001, we assumed a 4.75 percent annual rate of increase in the per capita cost of covered health care claims with the rate decreasing gradually over the next year to 4.50 percent and remaining at that level thereafter. In determining the net post-retirement health care cost for 2000, we assumed a 5.00 percent annual rate of increase in the per capita cost of covered health care claims with the rate decreasing gradually over the next two years to 4.50 percent and remaining at that level thereafter. The health care cost trend rate assumption has a significant effect on the amounts reported. To illustrate, increasing the assumed health care cost trend rates by one percentage point in each year would increase the accumulated post-retirement benefit obligation as of December 31, 2002 by \$5 million and the aggregate of the service and interest cost components of net post-retirement health care cost for the year by \$1 million. Decreasing the assumed health care cost trend rates by one percentage point in each year would decrease the accumulated post-retirement benefit obligation as of December 31, 2002 by \$12 million and the aggregate of the service and interest cost components of net post-retirement health care cost for the year by \$2 million.

The weighted-average discount rates we used to determine the health care cost and the year-end accumulated post-retirement benefit obligation were 6.75 percent at December 31, 2002, 7.25 percent at December 31, 2001, and 7.75 percent at December 31, 2000.

**10. Line of Business Reporting**

We have two lines of business that generate revenue. These business lines also focus on managing our key business risks. We measure the results of our lines of business based on core business earnings. We evaluate the results of our business lines as though each were a stand-alone business. Hence, we allocate certain income and expenses to each line of business for purposes of business segment reporting. We eliminate certain inter-segment allocations in our consolidated core business earnings results.

*Portfolio Investment Business:* The Portfolio Investment business has two principal components: a mortgage investment portfolio and a liquid investment portfolio. The mortgage investment portfolio purchases mortgage loans, mortgage-related securities, and other investments from lenders, securities dealers, and other market participants. The LIP serves as an alternative source of funds to meet our cash flow needs by investing in high quality, short-term and medium-term investments that provide an ongoing supply of funds that can be used as necessary for liquidity or reinvestment, or readily marketable, high credit quality securities that can be sold to raise cash. We fund the purchase of the assets in our Portfolio Investment business by issuing debt in the global capital markets. The Portfolio Investment business generates profits by ensuring that the interest



## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

income from the mortgages, MBS, mortgage-related securities, and liquid investments we purchase is greater than our borrowing costs. A primary measure of profitability for the Portfolio Investment business is our net interest margin. Our net interest margin reflects the difference between taxable-equivalent income on our mortgage assets and non-mortgage investments and our borrowing expense, divided by average interest earning assets.

Our Portfolio Investment business focuses on managing Fannie Mae's interest rate risk. Interest rate risk is the risk that changes in interest rates could change cash flows on our mortgage assets and debt in a way that adversely affects Fannie Mae's earnings or long-term value.

*Credit Guaranty Business:* Our Credit Guaranty business has primary responsibility for managing all of our mortgage credit risk. Credit risk is the risk of loss to future earnings and future cash flows that may result from the failure of a borrower or counterparty to fulfill their contractual obligation to Fannie Mae. The Credit Guaranty business primarily generates income from guaranty fees for guaranteeing the timely payment of scheduled principal and interest on mortgage-related securities we guarantee that are not owned by the Portfolio Investment business. The primary source of income for the Credit Guaranty business is the difference between the guaranty fees earned and the costs of providing this service. Income is also allocated to the Credit Guaranty business for the following activities:

- Managing the credit risk on mortgage-related assets held by the Portfolio Investment business.
- Providing capital to the Portfolio Investment business.
- Temporarily investing principal and interest payments on loans underlying MBS prior to remittance to investors.

Our Credit Guaranty business manages Fannie Mae's mortgage credit risk by managing the profile and quality of mortgages in the mortgage credit book of business, using credit enhancements to reduce our losses, assessing the sensitivity of credit losses to changes in economic conditions, and aggressively managing problem assets to mitigate losses.

We assign actual direct revenues and expenses among our two lines of business. We use estimates to apportion overhead and other corporate items. For example, we allocate administrative expenses as direct expenses for the line of business. If we cannot allocate expenses to a particular business, we base the allocation on revenues, profits, or volumes as applicable. We allocate capital to the lines of business through an assessment of the interest rate risk and credit risk associated with each business.

*Core Business Earnings:* The difference between core business earnings and reported net income relates to the FAS 133 accounting treatment for purchased options. Core business earnings does not exclude any other accounting effects related to the application of FAS 133 or any other non-FAS 133 related adjustments. The guaranty fee income that we allocate to the Credit Guaranty business for managing the credit risk on mortgage-related assets held by the Portfolio Investment business is offset by a corresponding guaranty fee expense allocation to the Portfolio Investment business in our line of business results. Thus, there is no reconciling adjustment between our total line of business guaranty fee income and our reported guaranty fee income. We allocate transaction fees received for structuring and facilitating securities transactions for our customers primarily to our Portfolio Investment business. We allocate technology-related fees received for providing Desktop Underwriter and other on-line services and fees received for providing credit enhancement alternatives to our customers primarily to our Credit Guaranty business.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

The following table shows our line of business results for the years ended December 31, 2002, 2001, and 2000, and reconciles total core business earnings to reported GAAP results.

	2002 <sup>(a)</sup>				
	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
	Dollars in millions				
Net interest income	\$ 9,869	\$ 697	\$10,566	\$ —	\$10,566
Purchased options amortization expense	(1,814)	—	(1,814)	1,814 <sup>(c)</sup>	—
Core net interest income	8,055	697	8,752	1,814	10,566
Guaranty fee income (expense)	(1,374)	3,190	1,816	—	1,816
Fee and other income (expense), net	348	(116)	232	—	232
Credit-related expenses <sup>(b)</sup>	—	(92)	(92)	—	(92)
Administrative expenses	(357)	(862)	(1,219)	—	(1,219)
Purchased options expense under FAS 133	—	—	—	(4,545) <sup>(d)</sup>	(4,545)
Debt extinguishments, net	(710)	—	(710)	—	(710)
Income before federal income taxes	5,962	2,817	8,779	(2,731)	6,048
Provision for federal income taxes	(1,747)	(638)	(2,385)	956 <sup>(f)</sup>	(1,429)
Net income	<u>\$ 4,215</u>	<u>\$2,179</u>	<u>\$ 6,394</u>	<u>\$(1,775)</u>	<u>\$ 4,619</u>
	2001 <sup>(a)</sup>				
	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
	Dollars in millions				
Net interest income	\$ 7,369	\$ 721	\$ 8,090	\$ —	\$ 8,090
Purchased options amortization expense	(590)	—	(590)	590 <sup>(c)</sup>	—
Core net interest income	6,779	721	7,500	590	8,090
Guaranty fee income (expense)	(1,109)	2,591	1,482	—	1,482
Fee and other income (expense), net	211	(60)	151	—	151
Credit-related expenses <sup>(b)</sup>	—	(78)	(78)	—	(78)
Administrative expenses	(302)	(715)	(1,017)	—	(1,017)
Special contribution	(192)	(108)	(300)	—	(300)
Purchased options expense under FAS 133	—	—	—	(37) <sup>(d)</sup>	(37)
Debt extinguishments, net	(524)	—	(524)	—	(524)
Income before federal income taxes and effect of accounting change	4,863	2,351	7,214	553	7,767
Cumulative effect of accounting change	—	—	—	168 <sup>(e)</sup>	168
Provision for federal income taxes	(1,374)	(473)	(1,847)	(194) <sup>(f)</sup>	(2,041)
Net income	<u>\$ 3,489</u>	<u>\$1,878</u>	<u>\$ 5,367</u>	<u>\$ 527</u>	<u>\$ 5,894</u>

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

2000

	Portfolio Investment	Credit Guaranty	Total Core Business Earnings	Reconciling Items Related to Purchased Options	Reported Results
Dollars in millions					
Net interest income	\$ 5,055	\$ 619	\$ 5,674	\$ —	\$ 5,674
Purchased options amortization expense	—	—	—	—	—
Core net interest income	5,055	619	5,674	—	5,674
Guaranty fee income (expense)	(1,079)	2,430	1,351	—	1,351
Fee and other income (expense), net	27	(71)	(44)	—	(44)
Credit-related expenses <sup>(b)</sup>	—	(94)	(94)	—	(94)
Administrative expenses	(254)	(651)	(905)	—	(905)
Debt extinguishments, net	49	—	49	—	49
Income before federal income taxes	3,798	2,233	6,031	—	6,031
Provision for federal income taxes	(1,053)	(530)	(1,583)	—	(1,583)
Net income	\$ 2,745	\$ 1,703	\$ 4,448	\$ —	\$ 4,448

- (a) Reported net income for 2002 and 2001 includes the effect of FAS 133, which was adopted on January 1, 2001.
- (b) Credit-related expenses includes the income statement line items “Provision for losses” and “Foreclosed property income.”
- (c) This amount represents the straight-line amortization of purchased options expense that we allocate to interest expense over the original expected life of the options. We include this amount in core business earnings instead of recording the unrealized gains and losses on purchased options to make it consistent with the accounting for the embedded options in our callable debt and the vast majority of our mortgages.
- (d) This amount, which is recorded in our income statement under purchased options expense, represents unrealized gains and losses on purchased options recorded in accordance with FAS 133. We exclude this amount from our core business earnings measure because it does not reflect our strategy to hold options to maturity or exercise date and it is not our strategy to realize the period-to-period fluctuations in the value of options.
- (e) This non-recurring amount represents the one-time transition recorded upon the adoption of FAS 133 on January 1, 2001. We exclude the transition gain from core business earnings because it relates to unrealized gains on purchased options that were recorded when we adopted FAS 133.
- (f) This amount represents the net federal income tax effect of core business earnings adjustments based on the applicable federal income tax rate of 35 percent.

The Portfolio Investment business represented \$869 billion, or 98 percent of total assets, at December 31, 2002 and \$785 billion, or 98 percent of total assets, at December 31, 2001.

#### 11. Dividend Restrictions and Regulatory Capital Ratios

Our ability to pay dividends may be subject to certain statutory restrictions. We would need approval by the Director of OFHEO for any dividend payment that would cause our capital to fall below specified capital levels. We have exceeded the applicable capital standard since the adoption of these restrictions in 1992; therefore, we have been making dividend payments without the need for director approval. The capital adequacy standard requires that our core capital equal or exceed a minimum capital standard and a critical capital standard.

OFHEO published regulations under the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 in September 2001, as amended on March 15, 2002, establishing a risk-based capital test to determine the amount of total capital we must hold under the risk-based capital standard on a quarterly basis. The risk-based capital standard was implemented by OFHEO on September 13, 2002.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

The following table shows how our capital at December 31, 2002 and 2001 compared with these requirements.

	2002	2001
	(Dollars in millions)	
Core capital <sup>(1)</sup>	\$28,079	\$25,182
Required minimum capital <sup>(2)(5)</sup>	27,203	24,182
Excess of core capital over minimum capital <sup>(5)</sup>	\$ 877	\$ 1,000
Total capital <sup>(3)</sup>	\$28,871	\$25,976
Required risk-based capital	17,434	N/A
Excess of total capital over required risk-based capital	11,437	N/A
Required critical capital <sup>(4)(5)</sup>	\$13,880	\$12,324
Excess of core capital over required critical capital <sup>(5)</sup>	14,199	12,859

- (1) The sum of (a) the stated value of common stock; (b) the stated value of outstanding noncumulative perpetual preferred stock; (c) paid-in capital; and (d) retained earnings, less treasury stock. Core capital excludes accumulated other comprehensive income (AOCI).
- (2) The sum of (a) 2.50 percent of on-balance sheet assets; (b) .45 percent of outstanding MBS; and (c) .45 percent of other off-balance sheet obligations, which may be adjusted by the Director of OFHEO under certain circumstances (See 12 CFR 1750.4 for existing adjustments made by the Director of OFHEO).
- (3) The sum of (a) core capital and (b) the total allowance for loan losses and guaranty liability, less (c) the specific loss allowance. Specific loss allowances totaled \$19 million and \$13 million for the years ended December 31, 2002 and December 31, 2001, respectively.
- (4) The sum of (a) 1.25 percent of on-balance sheet assets; (b) .25 percent of outstanding MBS; and (c) .25 percent of other off-balance sheet obligations, which may be adjusted by the Director of OFHEO under certain circumstances.
- (5) These amounts do not reflect the reclassification from our "Allowance for loan losses" to a "Guaranty liability for MBS" the amount associated with the guaranty obligation for MBS that we own that occurred in 2002. See Note 1 to the notes to the financial statements, Summary of Significant Accounting Policies — Allowance for Loan Losses and Guaranty Liability for MBS. The reclassification will not have a material effect on these amounts.

Payment of dividends on common stock is subordinate to any payment of dividends on preferred stock outstanding. Payment of preferred stock dividends is not mandatory.

FANNIEMAE

NOTES TO FINANCIAL STATEMENTS — (Continued)

12. Preferred Stock

The following table presents preferred stock outstanding as of December 31, 2002.

	Issue Date	Shares Issued and Outstanding	Stated Value per Share	Annual Dividend Rate	Redeemable On or After
Series D	September 30, 1998	3,000,000	\$ 50	5.250%	September 30, 1999
Series E	April 15, 1999	3,000,000	50	5.100	April 15, 2004
Series F	March 20, 2000	13,800,000	50	3.540 <sup>(1)</sup>	March 31, 2002 <sup>(3)</sup>
Series G	August 8, 2000	5,750,000	50	1.830 <sup>(2)</sup>	September 30, 2002 <sup>(3)</sup>
Series H	April 6, 2001	8,000,000	50	5.810	April 6, 2006
Series I	October 28, 2002	6,000,000	50	5.375	October 28, 2007
Series J	November 26, 2002	14,000,000	50	3.780 <sup>(4)</sup>	November 26, 2004
Total		53,550,000			

- (1) Rate effective March 31, 2002. Variable dividend rate that resets every two years thereafter at the Constant Maturity U.S. Treasury Rate minus .16 percent with a cap of 11 percent per year.
- (2) Rate effective September 30, 2002. Variable dividend rate that resets every two years thereafter at the Constant Maturity U.S. Treasury Rate minus .18 percent with a cap of 11 percent per year.
- (3) Represents initial call date. Redeemable every two years thereafter.
- (4) Initial rate. Variable dividend rate that resets every two years thereafter at the two-year U.S. Dollar Swap Rate plus 1.38 percent with a cap of 8 percent per year.

In general, our preferred stock has no par value, has a stated value and liquidation preference of \$50 per share, and is not convertible into or exchangeable for any of our other stock or obligations. Holders of preferred stock are entitled to receive noncumulative, quarterly dividends when, and if, declared by our Board of Directors, but will have no right to require redemption of any shares of preferred stock. Payment of dividends on preferred stock is not mandatory, but has priority over payment of dividends on common stock. After a specified period, we have the option to redeem preferred stock at its stated value. All outstanding preferred stock is nonvoting.

We redeemed all 7.5 million of our outstanding Series B preferred stock on February 28, 2002 and all 5.0 million shares of our outstanding Series C preferred stock on July 31, 2002.

13. Derivative Instruments and Hedging Activities

Fannie Mae issues various types of debt to finance the acquisition of mortgages. We typically use derivative instruments to hedge against the impact of interest rate movements on our debt costs to preserve mortgage-to-debt spreads. We do not engage in trading or other speculative usage of derivative instruments.

We principally use interest-rate swaps, basis swaps, swaptions, and caps in our hedging activities. Swaps provide for the exchange of fixed and variable interest payments based on contractual notional principal amounts. These may include callable swaps, which give counterparties or us the right to terminate interest rate swaps before their stated maturities. Or, these may include foreign currency swaps, where Fannie Mae and our counterparties exchange payments in different types of currencies. Basis swaps provide for the exchange of variable payments that have maturities similar to hedged debt, but have payments based on different interest rate indices. Swaptions give us the option to enter into swaps at a future date, thereby mirroring the economic effect of callable debt. Interest rate caps provide ceilings on the interest rates of variable-rate debt.

We formally document all relationships between hedging instruments and the hedged items, including the risk management objective and strategy for undertaking various hedge transactions. We link all derivatives to specific assets and liabilities on the balance sheet or to specific forecasted transactions and designate them as cash flow or fair value hedges. We also formally assess, both at the hedge's inception and on an ongoing basis,

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

whether the derivatives that we use in hedging transactions are highly effective in offsetting changes in the cash flows or fair values of the hedged items.

The following table reflects the hedge classification of the notional balances of derivatives by type that we held at December 31, 2002 and 2001.

	2002			2001		
	Fair Value Hedges	Cash Flow Hedges	Total	Fair Value Hedges	Cash Flow Hedges	Total
(Dollars in millions)						
Interest rate swaps:						
Pay-fixed	\$ 16,355	\$152,157	\$168,512	\$ 7,063	\$206,617	\$213,680
Receive-fixed and basis	29,636	48,259	77,895	10,989	75,134	86,123
Interest rate caps	—	122,393	122,393	—	75,893	75,893
Swaptions:						
Pay-fixed	—	129,225	129,225	—	69,650	69,650
Receive-fixed	94,750	51,500	146,250	74,400	—	74,400
Other <sup>(1)</sup>	4,120	8,200	12,320	8,843	4,550	13,393
<b>Total</b>	<b>\$144,861</b>	<b>\$511,734</b>	<b>\$656,595</b>	<b>\$101,295</b>	<b>\$431,844</b>	<b>\$533,139</b>

(1) Includes foreign currency swaps, forward starting swaps, asset swaps, and other derivatives used to hedge anticipated debt issues.

We discontinue hedge accounting prospectively when

- the derivative is no longer effective in offsetting changes in the cash flows or fair value of a hedged item;
- the derivative expires or is sold, terminated, or exercised;
- the derivative is de-designated as a hedge instrument because it is unlikely that a forecasted transaction will occur; or,
- designation of the derivative as a hedge instrument is no longer appropriate.

#### Cash Flow Hedges

##### Objectives and Context

We employ cash flow hedges to lock in the interest spread on purchased assets by hedging existing variable-rate debt and the forecasted issuance of debt through our Benchmark Program. The issuance of short-term Discount Notes and variable-rate long-term debt during periods of rising interest rates can result in a mismatch of cash flows relative to fixed-rate mortgage assets. We minimize the risk of mismatched cash flows by converting variable-rate interest expense to fixed-rate interest expense in order to lock-in our funding costs and interest spread.

##### Risk Management Strategies and Policies

We enter into interest rate swaps, swaptions, and caps to hedge the variability of cash flows resulting from changes in interest rates. We enter into pay-fixed interest rate swaps to protect against an increase in interest rates by converting the debt's variable rate to a fixed rate and to protect against fluctuations in market prices of anticipated debt issuances.

We enter into pay-fixed interest rate swaps and swaptions as well as interest rate caps to change the variable-rate cash flow exposure on our short-term Discount Notes and long-term variable-rate debt to fixed-rate cash flows. Under the swap agreements, we effectively create fixed-rate debt by receiving variable interest

FANNIEMAE

NOTES TO FINANCIAL STATEMENTS — (Continued)

payments and making fixed interest payments. We purchase swaptions that give us the option to enter into a pay-fixed, receive-variable interest rate swap at a future date. Under interest rate cap agreements, we reduce the variability of cash flows on our variable-rate debt by purchasing the right to receive cash if interest rates rise above a specified level.

We continually monitor changes in interest rates and identify interest rate exposures that may adversely impact expected future cash flows on our mortgage and debt portfolios. We use analytical techniques, including cash flow sensitivity analysis, to estimate the expected impact of changes in interest rates on our future cash flows. We did not discontinue any cash flow hedges during the year because it was no longer probable that the hedged debt would be issued. We had no open positions for hedging the forecasted issuance of debt at December 31, 2002.

*Financial Statement Impact*

Consistent with FAS 133, we record changes in the fair value of derivatives used as cash flow hedges in AOCI to the extent they are effective hedges. We amortize fair value gains or losses in AOCI into the income statement and reflect them as either a reduction or increase in interest expense over the life of the hedged item. We recognize the income or expense associated with derivative instruments as an adjustment to the effective cost of the hedged debt. We will amortize an estimated \$4.7 billion, net of taxes, out of AOCI and into earnings during the next 12 months. Actual amortization results in 2003 will likely differ from the amortization estimate because actual swap yields during 2003 will change from the swap yield curve assumptions at December 31, 2002.

The reconciliation below reflects the change in AOCI, net of taxes, from January 1, 2001 through December 31, 2002 associated with FAS 133:

(Dollars in millions)	FAS 133 Impact on AOCI
Transition adjustment to adopt FAS 133, January 1, 2001	\$ (3,972)
Losses on cash flow hedges, net	(5,530)
Reclassifications to earnings, net	2,143
Balance at December 31, 2001	(7,359)
Losses on cash flow hedges, net	(14,274)
Reclassifications to earnings, net	5,382
Balance at December 31, 2002	\$(16,251)

If there is any hedge ineffectiveness or derivatives do not qualify as cash flow hedges, we record the ineffective portion in the “Fee and other income, net” line item on the income statement. We included a pre-tax loss of \$4 million in 2002 and \$3 million in 2001 related to the ineffective portion of cash flow hedges in “Fee and other income, net.”

We include only changes in the intrinsic value of swaptions and interest rate caps in our assessment of hedge effectiveness. Therefore, we exclude changes in the time value of these contracts from the assessment of hedge effectiveness and recognize them in the “Purchased options expense” line item on the income statement. We recorded a pre-tax loss of \$2.57 billion in 2002 and \$34 million in 2001 in “Purchased options expense” for the change in time value of options designated as cash flow hedges.

## NOTES TO FINANCIAL STATEMENTS — (Continued)

***Fair Value Hedges****Objectives and Context*

We employ fair value hedges to preserve our mortgage-to-debt interest spreads when there is a decline in interest rates by converting fixed-rate debt to variable-rate debt. A decline in interest rates increases the risk of mortgage assets repricing at lower yields while fixed-rate debt remains at above-market costs. We limit the interest rate risk inherent in our fixed-rate debt instruments by using fair value hedges to convert fixed-rate debt to variable-rate debt.

*Risk Management Strategies and Policies*

We enter into various types of derivative instruments, such as receive-fixed interest rate swaps and swaptions, to convert fixed-rate debt to floating-rate debt and preserve mortgage-to-debt interest spreads when interest rates decline. Under receive-fixed interest rate swaps, we receive fixed interest payments and make variable interest payments, thereby creating floating-rate debt. Receive-fixed swaptions give us the option to enter into an interest rate swap at a future date. In this event, we effectively create callable debt that reprices at a lower interest rate because we will receive fixed interest payments and make variable interest payments.

*Financial Statement Impact*

We record changes in the fair value of derivatives used as fair value hedges in the “Fee and other income, net” line item on the income statement along with offsetting changes in the fair value of the hedged items attributable to the risk being hedged. Our fair value hedges produced hedge ineffectiveness totaling \$.2 million of expense during the year ended December 31, 2002. Our fair value hedges produced no hedge ineffectiveness during the year ended December 31, 2001.

We only include changes in the intrinsic value of swaptions in our assessment of hedge effectiveness. We exclude changes in the time value of receive-fixed swaptions used as fair value hedges from the assessment of hedge effectiveness and record them in the “Purchased options expense” line item on the income statement. For the years ended December 31, 2002 and 2001, we recorded pre-tax purchased options expense of \$1.97 billion and \$3 million, respectively, in the income statement for the change in the time value of these contracts.

***Foreign Currency Hedges***

Fannie Mae uses derivatives to hedge foreign currency exposure on debt issued in a foreign currency. Because all of our assets are denominated in U.S. dollars, we enter into currency swaps to effectively convert the foreign currency debt into U.S. dollars. Our foreign denominated debt is not material, representing .5 percent of total debt outstanding.

**14. Financial Instruments with Off-Balance-Sheet Risk**

We are involved in financial instrument transactions that create off-balance-sheet risk. We enter into these transactions to fulfill our statutory purpose of meeting the financing needs of the secondary residential mortgage market and to reduce our own exposure to interest rate fluctuations. These financial instruments include guaranteed MBS and other mortgage-related securities, commitments to purchase mortgage portfolio assets or to issue and guarantee MBS, and credit enhancements. These instruments involve elements of credit and interest rate risk in excess of amounts recognized on the balance sheet to varying degrees.

***Guaranteed MBS and Mortgage-Related Securities***

As guarantor of MBS, we are obligated to disburse scheduled monthly installments of principal and interest at the certificate rate plus the UPB of any foreclosed mortgage to MBS investors whether or not they have been received. We are paid a guaranty fee for assuming this credit risk. We also are obligated to disburse



## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

unscheduled principal payments received from borrowers on MBS. The borrower, lender, or Fannie Mae may purchase credit enhancements, such as mortgage insurance, to protect against the risk of loss from borrower default. Occasionally, lenders may elect to remain at risk for the loans underlying MBS through recourse arrangements. Lenders that keep recourse retain the primary default risk, in whole or in part, in exchange for a lower guaranty fee. We may also enter into other credit enhancement arrangements. Fannie Mae, however, bears the ultimate risk of default on MBS. To a much more limited extent, we guarantee the payment of principal and interest on other mortgage-related securities.

At December 31, 2002, the maximum potential amount of future principal payments we could be required to make under our guarantee of MBS and other mortgage-related securities was \$1.029 trillion. We have recognized a liability of \$471 million at year-end 2002 for these guaranty obligations based on our estimate of probable credit losses in the loans underlying MBS and other mortgage-related securities as of December 31, 2002.

In the event we were required to make the maximum amount of future payments under the guarantees, we would first pursue recovering these payments by proceeding against the underlying collateral of the loans. If the value of the collateral was less than the payments made under our guarantees, then we would recover payments from third-party providers of credit enhancements. In the event that the principal amount of single-family loans exceeds the value of the underlying properties, then we have credit enhancements with maximum coverage totaling \$66.1 billion in primary mortgage insurance, \$7.0 billion in pool insurance, and \$31.5 billion in full recourse to lenders on single-family loans. If the collateral proceeds for multifamily loans were insufficient, then we have credit enhancements totaling \$4.2 billion in recourse to multifamily lenders.

***Commitments***

We enter into master delivery commitments with lenders on either a mandatory or an optional basis. Under a mandatory master commitment, a lender must either deliver loans under an MBS contract at a specified guaranty fee rate or enter into a mandatory portfolio commitment with the yield established upon executing the portfolio commitment.

We will also accept mandatory or lender-option delivery commitments not issued pursuant to a master commitment. These commitments may be for purchases for our mortgage portfolio or for issuances of our MBS. The guaranty fee rate on MBS lender-option commitments is specified in the contract, while the yield for portfolio lender-option commitments is set at the date of conversion to a mandatory commitment.

We generally hedge the cost of funding future portfolio purchases upon issuance of, or conversion to, a mandatory commitment. Therefore, we largely mitigate the interest rate risk relating to loans purchased pursuant to those commitments.

***Credit Enhancements***

Credit enhancements typically represent credit enhancement and liquidity support for taxable or tax-exempt housing bonds issued by state and local governmental entities to finance multifamily housing for low- and moderate-income families and for other obligations related to the financing. We issue MBS, pledge an interest in certain mortgages we own, or otherwise provide contractual assurance of payment to a trustee for the bonds or another party in the transaction. Our direct credit enhancement improves the rating on the bonds, thus resulting in lower-cost financing for multifamily housing.

## FANNIE MAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

*Credit Exposure for Off-Balance-Sheet Financial Instruments*

The following table presents the contractual amount of off-balance-sheet financial instruments at December 31, 2002 and 2001. Contractual or notional amounts do not necessarily represent the credit risk of the positions.

	2002	2001
	(Dollars in billions)	
Contractual amounts:		
Outstanding MBS <sup>(1)</sup>	\$1,029	\$859
Master commitments:		
Mandatory	41	24
Optional	6	16
Portfolio commitments:		
Mandatory	85	55
Optional	3	2
Other investments	3	2
Credit enhancements	12	16

(1) Includes MBS and other mortgage-related securities guaranteed by Fannie Mae and held by investors other than Fannie Mae.

**15. Concentrations of Credit Risk**

Concentrations of credit risk exist when a number of counterparties engage in similar activities and have similar economic characteristics that make them susceptible to similar changes in economic conditions that could affect their ability to meet contractual obligations. In our case, these counterparties include single-family borrowers, servicers, mortgage insurers, and derivative counterparties.

Regional economic conditions affect a borrower's ability to repay and the value of the collateral underlying a loan. Geographic concentrations increase the susceptibility of our portfolio to changes in credit risk. Our single-family geographic concentrations have been consistently diversified over the past three years with our largest exposure to the western region of the U.S. No region or state experienced negative home price growth. No significant concentration existed at the state level at December 31, 2002 and 2001 except for California, where 18 percent of the gross UPB of our conventional single-family mortgage loans in portfolio and those underlying MBS in portfolio and outstanding MBS was located at both December 31, 2002 and 2001. The following table presents the regional geographic distribution of properties underlying our conventional single-family mortgage loans in portfolio and those underlying MBS in portfolio and outstanding MBS at December 31, 2002 and 2001. Excluded from this population at December 31, 2002 and 2001 are non-Fannie Mae mortgage securities for which geographic information is not available.

	Geographic Distribution <sup>(1)</sup>					
	Midwest	Northeast	Southeast	Southwest	West	Total
2002	18%	19%	21%	16%	26%	100%
2001	19	18	21	16	26	100

(1) Midwest includes IL, IN, IA, MI, MN, NE, ND, OH, SD, WI; Northeast includes CT, DE, ME, MA, NH, NJ, NY, PA, PR, RI, VT, VI; Southeast includes AL, DC, FL, GA, KY, MD, NC, MS, SC, TN, VA, WV; Southwest includes AZ, AR, CO, KS, LA, MO, NM, OK, TX, UT; West includes AK, CA, GU, HI, ID, MT, NV, OR, WA, WY.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

To manage credit risk and comply with legal requirements, we require primary mortgage insurance or other credit enhancement if the current LTV ratio of a single-family conventional mortgage loan is greater than 80 percent when the loan is delivered to us. We may also require credit enhancement if the original LTV ratio of a single-family conventional mortgage loan is less than 80 percent when the loan is delivered to us.

The primary credit risk associated with mortgage insurers is that they will fail to fulfill their obligations to reimburse us for claims under insurance policies. We were the beneficiary of primary mortgage insurance coverage on \$316 billion of single-family loans in portfolio or underlying MBS at December 31, 2002 and \$314 billion at December 31, 2001. Seven mortgage insurance companies, all rated AA or higher by Standard & Poor's, provided approximately 99 percent of the total coverage at the end of 2002 and 2001.

The primary risk associated with mortgage lenders is that they will fail to fulfill their servicing obligations. Mortgage servicers collect mortgage and escrow payments from borrowers, pay taxes and insurance costs from escrow accounts, monitor and report delinquencies, and perform other required activities on our behalf. A servicing contract breach could result in credit losses for us, or we could incur the cost of finding a replacement servicer, which could be substantial for loans that require a special servicer. Our ten largest single-family mortgage servicers serviced 63 percent of our single-family book of business at both year-end 2002 and year-end 2001. Our fifteen largest multifamily mortgage servicers serviced 70 percent of our multifamily book of business at year-end 2002, compared with 67 percent at year-end 2001.

The primary credit exposure we have on a derivative transaction is that a counterparty might default on payments due, which could result in having to replace the derivative with a different counterparty at a higher cost. Over 99 percent of the \$657 billion and \$533 billion notional amount of our outstanding derivative transactions were with counterparties rated A or better both by Standard & Poor's (S&P) and Moody's at December 31, 2002 and 2001, respectively (one counterparty was downgraded below an A rating after the contract was entered into). Our derivative instruments were diversified among 21 and 23 counterparties at year-end 2002 and 2001, respectively, to reduce our credit risk concentrations. At December 31, 2002, eight counterparties with credit ratings of A or better represented approximately 76 percent of the total notional amount of outstanding derivatives transactions. At December 31, 2001, eight counterparties with credit ratings of A or better represented approximately 78 percent of the total notional amount of outstanding derivatives transactions.

Seventy-one percent of our net exposure of \$197 million at December 31, 2002 was with six counterparties rated AA or better by S&P and Aa or better by Moody's. The percentage of our exposure with these six counterparties ranged from 2 to 23 percent. In comparison, five counterparties rated AA or better by S&P and Aa or better by Moody's accounted for 83 percent of our net exposure of \$110 million at December 31, 2001. The percentage of our net exposure with counterparties rated AA or better by S&P and Aa or better by Moody's fell during 2002 because of a change in the relative mix of our derivative products in response to changes in market conditions that shifted the relative level of activity and exposure between individual counterparties.

**16. Fair Value of Financial Instruments**

The basic assumptions used and the estimates disclosed in the Fair Value Balance Sheets represent our best judgment of appropriate valuation methods. These estimates are based on pertinent information available to us as of December 31, 2002 and 2001. In certain cases, fair values are not subject to precise quantification or verification and may change as economic and market factors, and our evaluation of those factors, change. Although we use our best judgment in estimating the fair value of these financial instruments, there are inherent limitations in any estimation technique. Therefore, these fair value estimates are not necessarily indicative of the amounts that we would realize in a market transaction. The accompanying Fair Value Balance Sheets do not represent an estimate of the overall market value of Fannie Mae as a going concern, which would take into account future business opportunities.

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

## Fair Value Balance Sheets

	December 31, 2002		December 31, 2001	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
	(Dollars in millions)			
<b>Assets</b>				
Mortgage portfolio, net	\$797,693	\$826,870	\$705,324	\$720,174
Nonmortgage investments	59,844	59,845	74,554	74,716
Cash and cash equivalents	1,710	1,710	1,518	1,518
Other assets	24,602	19,316	17,598	13,020
Derivatives in gain positions	3,666	3,666	954	954
	<u>887,515</u>	<u>911,407</u>	<u>799,948</u>	<u>810,382</u>
Off-balance-sheet items:				
Guaranty fee income, net <sup>(1)</sup>	—	5,146	—	6,451
Mortgage purchase commitments <sup>(2)</sup>	—	1,650	—	(567)
	<u>—</u>	<u>6,800</u>	<u>—</u>	<u>5,884</u>
<b>Total assets</b>	<b>\$887,515</b>	<b>\$918,203</b>	<b>\$799,948</b>	<b>\$816,266</b>
<b>Liabilities and Net Assets</b>				
Liabilities:				
Senior debt				
Due within one year	\$382,412	\$382,453	\$343,492	\$343,648
Due after one year	458,600	485,297	413,582	427,209
Subordinated debt				
Due within one year	—	—	—	—
Due after one year	9,970	12,424	6,393	7,625
	<u>850,982</u>	<u>880,174</u>	<u>763,467</u>	<u>778,482</u>
Other liabilities	14,548	10,202	13,294	10,040
Derivatives in loss positions	5,697	5,697	5,069	5,069
	<u>871,227</u>	<u>896,073</u>	<u>781,830</u>	<u>793,591</u>
Net assets, net of tax effect	\$ 16,288	\$ 22,130	\$ 18,118	\$ 22,675

(1) At December 31, 2002 and 2001, total MBS was \$1,538 billion and \$1,290 billion, respectively. Refer to Note 14, "Financial Instruments with Off-Balance-Sheet Risk," for more information on the nature of this item.

(2) At December 31, 2002 and 2001, the amount of mandatory mortgage purchase commitments was \$85 billion and \$55 billion, respectively. Refer to Note 14, "Financial Instruments with Off-Balance-Sheet Risk," for more information on the nature of this item.

See accompanying Notes to Fair Value Balance Sheets.

**Notes to Fair Value Balance Sheets**

The following discussion summarizes the significant methodologies and assumptions we used to estimate the fair values in the accompanying Fair Value Balance Sheets.

*Mortgage Portfolio, Net*

The fair value calculations of our mortgage portfolio considered such variables as interest rates, credit quality, and loan collateral. Because an active market does not exist for a portion of mortgage loans in the portfolio, the portfolio's unsecuritized mortgages were aggregated into pools by product type, coupon, and maturity and converted into notional MBS. A normal guaranty fee that our securitization business would

## FANNIEMAE

## NOTES TO FINANCIAL STATEMENTS — (Continued)

charge for a pool of loans with similar characteristics was subtracted from the weighted-average coupon rate less servicing fees. We describe the method for estimating this guaranty fee and the credit risk associated with the mortgage portfolio under “Guaranty fee income.”

We then employed an option-adjusted spread (OAS) approach to estimate fair values for MBS held in portfolio and other mortgage-related securities. The OAS approach represents the risk premium or incremental interest spread over some market benchmark rates, typically our debt rates, that is included in a security’s yield to compensate an investor for the uncertain effects of embedded prepayment options on mortgages. The OAS was calculated using quoted market values for selected benchmark securities and provided a generally applicable return measure that considers the effect of prepayment risk and interest rate volatility.

*Nonmortgage Investments*

We based fair values of our nonmortgage investment portfolio on actual quoted prices or prices quoted for similar financial instruments.

*Cash and Cash Equivalents*

We used the carrying amount of cash and cash equivalents as a reasonable estimate of their fair value.

*Other Assets*

Other assets include accrued interest receivable, net currency swap receivables, and several other smaller asset categories. The fair value of other assets, excluding certain deferred items that have no fair value and net currency swap receivables, approximates their carrying amount. We estimated the fair value of net currency swap receivables based on either the expected cash flows or quoted market values of these instruments.

The fair value amount also includes the estimated effect on deferred income taxes of providing for federal income taxes for the difference between net assets at fair value and at cost at the statutory corporate tax rate of 35 percent.

*Derivatives*

We enter into interest rate swaps, including callable swaps that, in general, extend or adjust the effective maturity of certain debt obligations. Under these swaps, we generally pay a fixed rate and receive a floating rate based on a notional amount. We also enter into interest rate swaps that are linked to specific investments (asset swaps) or specific debt issues (debt swaps). We estimated the fair value of interest rate swaps based on either the expected cash flows or quoted market values of these instruments, net of tax. We included the effect of netting under master agreements in determining swap obligations in a gain position or loss position.

In addition, we enter into swaptions and interest rate caps. Under a swaption, we have the option to enter into a swap, as described above, at a future date. We use interest rate caps to effectively manage our interest expense in a period of rising interest rates by entering into an agreement whereby a counterparty makes payments to us for interest rates above a specified rate. We estimated the fair values of these derivative instruments based on either the expected cash flows or the quoted market values of these instruments, net of tax.

*Guaranty Fee Income*

Guaranteed MBS and other mortgage-related securities are not assets owned by us, except when acquired for investment purposes. We receive a guaranty fee calculated on the outstanding principal balance of the MBS or other mortgage-related assets held by third-parties. The guaranty fee represents a future income stream for us. Under generally accepted accounting principles, we recognize this guaranty fee as income over

**FANNIEMAE****NOTES TO FINANCIAL STATEMENTS — (Continued)**

the life of the securities. The Fair Value Balance Sheets reflect the present value of guaranty fees, net of estimated future administrative costs and credit losses, taking into account estimated prepayments.

We estimated the credit loss exposure attached to the notional amount of guaranteed MBS and other mortgage-related securities held by third-party investors. We deducted estimated credit losses from the projected guaranty fee cash flows to arrive at fair value. We calculated estimated credit losses with an internal forecasting model based on our actual historical loss experience. We then valued the net guaranty fee cash flows with reference to the pricing of similar assets.

*Noncallable and Callable Debt*

We estimated the fair value of our noncallable debt using quotes for selected Fannie Mae debt securities with similar terms. We estimated the fair value of callable debt with an OAS model similar to the valuation of the mortgage portfolio.

*Other Liabilities*

Other liabilities primarily include accrued interest payable, amounts payable to MBS holders, estimated losses on guaranteed MBS, net currency swap payables, and several other smaller liability categories. The fair value of other liabilities often approximates their carrying amount; however, certain deferred liabilities have no fair value. We included credit loss exposure for guaranteed MBS and other mortgage-related securities as a component of the net MBS guaranty fee. We estimated the fair value of net currency swap payables based on the expected cash flows or quoted market values of these instruments.

*Mortgage Purchase Commitments*

Mortgage purchase commitments include mandatory commitments to purchase MBS and loans. We estimated their fair value based on the prices for similar MBS that are being traded in the marketplace.

## INDEPENDENT AUDITORS' REPORT

### To the Board of Directors and Stockholders of Fannie Mae:

We have audited the accompanying balance sheets of Fannie Mae as of December 31, 2002 and 2001, and the related statements of income, changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2002. These financial statements are the responsibility of Fannie Mae's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Fannie Mae as of December 31, 2002 and 2001, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 13 to the financial statements, Fannie Mae changed its method of accounting for derivative instruments and hedging activities in 2001 in accordance with the adoption of Financial Accounting Standard No. 133, *Accounting for Derivative Instruments and Hedging Activities*.

We also have audited in accordance with auditing standards generally accepted in the United States of America the supplemental fair value balance sheets of Fannie Mae as of December 31, 2002 and 2001, included in Note 16 to the financial statements. As described in Note 16, the supplemental fair value balance sheets have been prepared by management to present relevant financial information that is not provided by the financial statements and is not intended to be a presentation in conformity with accounting principles generally accepted in the United States of America. In addition, the supplemental fair value balance sheets do not purport to present the net realizable, liquidation, or market value of Fannie Mae as a whole. Furthermore, amounts ultimately realized by Fannie Mae from the disposal of assets may vary significantly from the fair values presented. In our opinion, the supplemental fair value balance sheets included in Note 16 present fairly, in all material respects, the information set forth therein.

/s/ KPMG LLP

Washington, DC  
January 14, 2003

**REPORT OF MANAGEMENT****To The Stockholders Of Fannie Mae:**

The management of Fannie Mae is responsible for the preparation, integrity, and fair presentation of the accompanying financial statements and other information appearing elsewhere in this report. In our opinion, the financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America appropriate in the circumstances, and the other financial information in this report is consistent with such statements. In preparing the financial statements and in developing the other financial information, it has been necessary to make informed judgments and estimates of the effects of business events and transactions. We believe that these judgments and estimates are reasonable, that the financial information contained in this report reflects in all material respects the substance of all business events and transactions to which the corporation was a party, and that all material uncertainties have been appropriately accounted for or disclosed.

The management of Fannie Mae is also responsible for maintaining internal control over financial reporting that provides reasonable assurance that transactions are executed in accordance with appropriate authorization, permits preparation of financial statements in conformity with accounting principles generally accepted in the United States of America, and establishes accountability for the assets of the corporation.

Internal control over financial reporting includes controls for the execution, documentation, and recording of transactions, and an organizational structure that provides an effective segregation of duties and responsibilities. Fannie Mae has an internal Office of Auditing whose responsibilities include monitoring compliance with established controls and evaluating the corporation's internal controls over financial reporting. Organizationally, the internal Office of Auditing is independent of the activities it reviews.

Fannie Mae's financial statements are audited by KPMG LLP, the corporation's independent auditors, whose audit is performed in accordance with auditing standards generally accepted in the United States of America. In addition, KPMG LLP obtained an understanding of our internal controls over financial reporting and conducted such tests and other auditing procedures as they considered necessary to express the opinion on the financial statements in their report that follows.

The Board of Directors of Fannie Mae exercises its oversight of financial reporting and related controls through an Audit Committee, which is composed solely of directors who are not officers or employees of the corporation. The Audit Committee meets with management and the internal Office of Auditing periodically to review the work of each and to evaluate the effectiveness with which they discharge their respective responsibilities. In addition, the committee meets periodically with KPMG LLP, who has free access to the committee, without management present. The appointment of the independent auditors is made annually by the Board of Directors subject to ratification by the stockholders.

Management recognizes that there are inherent limitations in the effectiveness of any internal control environment. However, management believes that, as of December 31, 2002, Fannie Mae's internal control environment, as described herein, provided reasonable assurance as to the integrity and reliability of the financial statements and related financial information.

/s/ TIMOTHY HOWARD  
Timothy Howard  
*Executive Vice President and  
Chief Financial Officer*

/s/ LEANNE G. SPENCER  
Leanne G. Spencer  
*Senior Vice President and  
Controller*



**FANNIE MAE**  
**QUARTERLY RESULTS OF OPERATIONS (Unaudited)**

The following unaudited results of operations include, in the opinion of management, all adjustments necessary for a fair presentation of the results of operations for such periods.

	<b>2002 Quarter Ended</b>			
	<b>December</b>	<b>September</b>	<b>June</b>	<b>March</b>
	(Dollars in millions, except per common share amounts)			
Net interest income	\$ 3,012	\$ 2,591	\$2,532	\$2,431
Guaranty fee income	523	463	423	407
Fee and other income (expense), net	95	91	42	4
Provision for losses	(41)	(26)	(33)	(28)
Foreclosed property income	8	12	9	7
Administrative expenses	(313)	(315)	(301)	(290)
Purchased options expense	(1,881)	(1,378)	(499)	(787)
Debt extinguishments, net	(176)	(138)	(224)	(172)
Income before federal income taxes	1,227	1,300	1,949	1,572
Provision for federal income taxes	(275)	(307)	(485)	(362)
<b>Net income</b>	<b>\$ 952</b>	<b>\$ 993</b>	<b>\$1,464</b>	<b>\$1,210</b>
Preferred stock dividends	(20)	(22)	(24)	(33)
<b>Net income available to common stockholders</b>	<b>\$ 932</b>	<b>\$ 971</b>	<b>\$1,440</b>	<b>\$1,177</b>
Diluted earnings per common share	\$ .94	\$ .98	\$ 1.44	\$ 1.17
Cash dividends per common share	.33	.33	.33	.33
	<b>2001 Quarter Ended</b>			
	<b>December</b>	<b>September</b>	<b>June</b>	<b>March</b>
	(Dollars in millions, except per common share amounts)			
Net interest income	\$2,404	\$2,079	\$1,900	\$1,707
Guaranty fee income	398	384	357	343
Fee and other income (expense), net	51	49	24	27
Provision for losses	(21)	(18)	(24)	(31)
Foreclosed property income	5	3	6	2
Administrative expenses	(251)	(273)	(254)	(239)
Special contribution	(300)	—	—	—
Purchased options income (expense)	578	(413)	36	(238)
Debt extinguishments, net	(91)	(207)	(142)	(84)
Income before federal income taxes and cumulative effect of change in accounting principle	2,773	1,604	1,903	1,487
Provision for federal income taxes	(804)	(375)	(500)	(362)
Income before cumulative effect of change in accounting principle	1,969	1,229	1,403	1,125
Cumulative effect of change in accounting principle, net of tax effect	—	—	—	168
<b>Net income</b>	<b>\$1,969</b>	<b>\$1,229</b>	<b>\$1,403</b>	<b>\$1,293</b>
Preferred stock dividends	(35)	(35)	(35)	(33)
<b>Net income available to common stockholders</b>	<b>\$1,934</b>	<b>\$1,194</b>	<b>\$1,368</b>	<b>\$1,260</b>
Diluted earnings per common share:				
Earnings before cumulative effect of change in accounting principle	\$ 1.92	\$ 1.19	\$ 1.36	\$ 1.08
Cumulative effect of change in accounting principle	—	—	—	.17
<b>Net earnings</b>	<b>\$ 1.92</b>	<b>\$ 1.19</b>	<b>\$ 1.36</b>	<b>\$ 1.25</b>
Cash dividends per common share	\$ .30	\$ .30	\$ .30	\$ .30

**FANNIE MAE**  
**FINANCIAL AND STATISTICAL SUMMARY (Unaudited)**

For the Year	2002	2001	2000	1999	1998
(Dollars in millions, except per common share amounts)					
<b>Summary Statements of Income:</b>					
Interest income	\$ 50,853	\$ 49,170	\$ 42,781	\$ 35,495	\$ 29,995
Interest expense	(40,287)	(41,080)	(37,107)	(30,601)	(25,885)
Net interest income	10,566	8,090	5,674	4,894	4,110
Guaranty fee income	1,816	1,482	1,351	1,282	1,229
Fee and other income (expense), net	232	151	(44)	191	275
Provision for losses	(128)	(94)	(122)	(151)	(245)
Foreclosed property income (expense)	36	16	28	24	(16)
Administrative expenses	(1,219)	(1,017)	(905)	(800)	(708)
Special contribution	—	(300)	—	—	—
Purchased options expense	(4,545)	(37)	—	—	—
Debt extinguishments (loss) gain, net	(710)	(524)	49	(14)	(40)
Income before federal income taxes and cumulative effect of change in accounting principle	6,048	7,767	6,031	5,426	4,605
Provision for federal income taxes	(1,429)	(2,041)	(1,583)	(1,514)	(1,187)
Income before cumulative effect of change in accounting principle	4,619	5,726	4,448	3,912	3,418
Cumulative effect of change in accounting principle, net of tax effect	—	168	—	—	—
Net income	\$ 4,619	\$ 5,894	\$ 4,448	\$ 3,912	\$ 3,418
Preferred stock dividends	(99)	(138)	(121)	(78)	(66)
Net income available to common stockholders	\$ 4,520	\$ 5,756	\$ 4,327	\$ 3,834	\$ 3,352
<b>Basic earnings per common share:</b>					
Earnings before cumulative effect of change in accounting principle	\$ 4.56	\$ 5.58	\$ 4.31	\$ 3.75	\$ 3.26
Cumulative effect of change in accounting principle	—	.17	—	—	—
Net earnings	\$ 4.56	\$ 5.75	\$ 4.31	\$ 3.75	\$ 3.26
<b>Diluted earnings per common share:</b>					
Earnings before cumulative effect of change in accounting principle	\$ 4.53	\$ 5.55	\$ 4.29	\$ 3.72	\$ 3.23
Cumulative effect of change in accounting principle	—	.17	—	—	—
Net earnings	\$ 4.53	\$ 5.72	\$ 4.29	\$ 3.72	\$ 3.23
Cash dividends per common share	\$ 1.32	\$ 1.20	\$ 1.12	\$ 1.08	\$ .96
<b>Mortgages purchased:</b>					
Single-family	\$ 363,149	\$ 262,440	\$ 149,674	\$ 191,642	\$185,863
Multifamily	7,492	8,144	4,557	3,568	2,585
Total mortgages purchased	\$ 370,641	\$ 270,584	\$ 154,231	\$ 195,210	\$188,448
Average net yield on mortgages purchased	5.92%	6.56%	7.62%	6.88%	6.61%
<b>Debt issued:</b>					
Short-term debt	\$1,635,919	\$1,756,691	\$1,143,131	\$1,136,001	\$695,495
Long-term debt	238,467	249,352	110,215	139,020	147,430
Total	\$1,874,386	\$2,006,043	\$1,253,346	\$1,275,021	\$842,925
Average cost of debt issued	2.21%	3.97%	6.34%	5.33%	5.49%
MBS issues acquired by others	\$ 478,260	\$ 344,739	\$ 105,407	\$ 174,850	\$220,723

**FANNIE MAE**  
**FINANCIAL AND STATISTICAL SUMMARY (Unaudited)**

At December 31,

	2002	2001	2000	1999	1998
(Dollars in millions, except per common share amounts)					
Summary Balance Sheets:					
Mortgage portfolio:					
Mortgage-related securities:					
Held-to-maturity	\$ 437,932	\$ 509,155	\$ 443,872	\$ 365,749	\$ 250,274
Available-for-sale	173,706	32,900	11,434	8,501	9,021
Total	611,638	542,055	455,306	374,250	259,295
Loans held-for-investment	185,652	165,917	152,437	149,101	155,774
Allowance for loan losses	(79)	(48)	(51)	(56)	(79)
Unamortized premiums (discounts) and deferred price adjustments, net	337	(2,640)	(209)	(378)	360
Loans held-for-sale	145	40	68	4	5
Mortgage portfolio, net	797,693	705,324	607,551	522,921	415,355
Other assets	89,822	94,624	67,673	52,387	69,791
Total assets	\$ 887,515	\$ 799,948	\$ 675,224	\$ 575,308	\$ 485,146
Debtures, notes, and bonds, net:					
Due within one year	\$ 382,412	\$ 343,492	\$ 280,322	\$ 226,582	\$ 205,413
Due after one year	468,570	419,975	362,360	321,037	254,878
Total debtures, notes, and bonds, net	850,982	763,467	642,682	547,619	460,291
Guaranty liability for MBS	729	755	755	745	720
Other liabilities	19,516	17,608	10,949	9,315	8,682
Total liabilities	871,227	781,830	654,386	557,679	469,693
Stockholders' equity	16,288	18,118	20,838	17,629	15,453
Total liabilities and stockholders' equity	\$ 887,515	\$ 799,948	\$ 675,224	\$ 575,308	\$ 485,146
Core capital	\$ 28,079	\$ 25,182	\$ 20,827	\$ 17,876	\$ 15,465
Excess of core capital over minimum capital	877	1,000	533	106	131
Excess of core capital over required critical capital	14,199	12,859	10,490	8,748	7,602
Yield on net mortgage portfolio	6.45%	6.95%	7.24%	7.08%	7.12%
Yield on total interest earning assets	6.13	6.53	7.21	7.01	6.95
Cost of debt outstanding	4.81	5.49	6.47	6.18	6.10
Book value per common share	\$ 13.76	\$ 15.86	\$ 18.58	\$ 16.02	\$ 13.95
Common shares outstanding	989	997	999	1,019	1,025
Outstanding MBS	\$1,029,456	\$ 858,867	\$ 706,684	\$ 679,169	\$ 637,143
Book of business	1,820,256	1,564,034	1,314,083	1,201,949	1,052,366

**Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

There were no changes in or disagreements with our accountants on accounting and financial disclosure during the two most recent fiscal years.

**PART III**

**Item 10. *Directors and Executive Officers of the Registrant***

Information relating to directors and executive officers of Fannie Mae is set forth under Item 5 of the Form 10 and incorporated by reference herein.

**Section 16(a) Beneficial Ownership Reporting Compliance**

During 2002, no Fannie Mae executive officer or director failed to file any report required by Section 16(a) with respect to equity securities of Fannie Mae on a timely basis.

**Item 11. *Executive Compensation***

Information on certain transactions with directors and indebtedness of executive officers is set forth under Item 6 of the Form 10 and incorporated by reference herein.

**Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

Information about the beneficial ownership of Fannie Mae common stock by each Fannie Mae director, certain executive officers, and by all directors and executive officers as a group is set forth under Item 4 of the Form 10 and incorporated by reference herein.

The table setting forth information on our compensation plans under which common stock is authorized for issuance is set forth under Item 9 of the Form 10 and incorporated by reference herein. The material features of each plan are briefly described under Item 6 of the Form 10 and incorporated by reference herein.

**Item 13. *Certain Relationships and Related Transactions***

Information about certain relationships and related transactions is set forth under Item 7 of the Form 10 and incorporated by reference herein.

**Item 14. *Controls and Procedures***

Franklin D. Raines, our Chairman of the Board of Directors and Chief Executive Officer, and J. Timothy Howard, our Executive Vice President and Chief Financial Officer, have evaluated Fannie Mae's disclosure controls and procedures, as defined in Rule 13a-14(c), within 90 days of the filing date of this Annual Report and concluded that they have been effective. Mr. Raines and Mr. Howard have also indicated that there were no significant changes in Fannie Mae's internal controls or in other factors that could significantly affect internal controls subsequent to the date of their most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K**

**(a) Documents filed as part of this report**

1. Financial Statements

The financial statements required to be filed as part of this report are contained in Item 8 beginning on page 103, and included in this report following page 103.

2. Financial Statement Schedules

The financial statement schedule required to be filed as part of this report is listed on page 103 and appears on page 148. All other schedules have been omitted because they are not required or are not applicable or because the required information is included in the Financial Statements or the Notes.

3. Exhibits

An index to exhibits has been filed as part of this Report beginning on page E-1 and is incorporated herein by reference.

**(b) Reports on Form 8-K**

Fannie Mae filed no reports on Form 8-K during the period covered by this Report.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 31, 2003

FEDERAL NATIONAL MORTGAGE ASSOCIATION

By: /s/ FRANKLIN D. RAINES

Franklin D. Raines  
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ FRANKLIN D. RAINES Franklin D. Raines	Chairman of the Board of Directors and Chief Executive Officer	March 31, 2003
/s/ J. TIMOTHY HOWARD J. Timothy Howard	Executive Vice President and Chief Financial Officer	March 31, 2003
/s/ LEANNE G. SPENCER Leanne G. Spencer	Senior Vice President and Controller	March 31, 2003
/s/ VICTOR H. ASHE Victor H. Ashe	Director	March 31, 2003
/s/ STEPHEN B. ASHLEY Stephen B. Ashley	Director	March 31, 2003
/s/ MOLLY H. BORDONARO Molly H. Bordonaro	Director	March 31, 2003
/s/ KENNETH M. DUBERSTEIN Kenneth M. Duberstein	Director	March 31, 2003
/s/ THOMAS P. GERRITY Thomas P. Gerrity	Director	March 31, 2003
/s/ JAMIE S. GORELICK Jamie S. Gorelick	Vice Chair	March 31, 2003
/s/ WILLIAM R. HARVEY William R. Harvey	Director	March 31, 2003
/s/ MANUEL J. JUSTIZ Manuel J. Justiz	Director	March 31, 2003

<b>Signature</b>	<b>Title</b>	<b>Date</b>
<hr/> <i>/s/ ANN MCLAUGHLIN KOROLOGOS</i> <hr/> Ann McLaughlin Korologos	Director	March 31, 2003
<hr/> <i>/s/ FREDERIC V. MALEK</i> <hr/> Frederic V. Malek	Director	March 31, 2003
<hr/> <i>/s/ DONALD B. MARRON</i> <hr/> Donald B. Marron	Director	March 31, 2003
<hr/> <i>/s/ DANIEL H. MUDD</i> <hr/> Daniel H. Mudd	Vice Chairman and Chief Operating Officer	March 31, 2003
<hr/> <i>/s/ ANNE M. MULCAHY</i> <hr/> Anne M. Mulcahy	Director	March 31, 2003
<hr/> <i>/s/ JOE K. PICKETT</i> <hr/> Joe K. Pickett	Director	March 31, 2003
<hr/> <i>/s/ TAYLOR C. SEGUE, III</i> <hr/> Taylor C. Segue, III	Director	March 31, 2003
<hr/> <i>/s/ H. PATRICK SWYGERT</i> <hr/> H. Patrick Swygert	Director	March 31, 2003

**CERTIFICATIONS**

**PURSUANT TO SECURITIES EXCHANGE ACT RULE 13a-14**

I, Franklin D. Raines, certify that:

1. I have reviewed this annual report on Form 10-K of Fannie Mae (formally, the Federal National Mortgage Association);
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - (a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - (c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ FRANKLIN D. RAINES

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Franklin D. Raines  
*Chairman of the Board of Directors and  
Chief Executive Officer*

Date: March 31, 2003



I, J. Timothy Howard, certify that:

1. I have reviewed this annual report on Form 10-K of Fannie Mae (formally, the Federal National Mortgage Association);
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - (a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - (c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ J. TIMOTHY HOWARD

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J. Timothy Howard  
*Executive Vice President and Chief  
Financial Officer*

Date: March 31, 2003

## INDEX TO EXHIBITS

## Item 14(a)(3)

3.1	Fannie Mae Charter Act (12 U.S.C. § 1716 et seq.)*
3.2	Fannie Mae Bylaws, effective as of January 21, 2003*
4.1	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series D*
4.2	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series E*
4.3	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series F*
4.4	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series G*
4.5	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series H*
4.6	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series I*
4.7	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series J*
4.8	Certificate of Designation of Terms of Fannie Mae Preferred Stock, Series K*
10.1	Employment Agreement between Fannie Mae and Franklin D. Raines*†
10.2	Employment Agreement between Fannie Mae and Daniel H. Mudd*†
10.3	Employment Agreement between Fannie Mae and Jamie S. Gorelick*†
10.4	Letter Agreement between Fannie Mae and J. Timothy Howard*†
10.5	Letter Agreement between Fannie Mae and Robert J. Levin*†
10.6	Letter Agreement between Fannie Mae and Adolfo Marzol*†
10.7	Form of Indemnification Agreement for Non-Management Directors of Fannie Mae*
10.8	Form of Indemnification Agreement for Officers of Fannie Mae*
10.9	Federal National Mortgage Association Supplemental Pension Plan*†
10.10	Executive Pension Plan of the Federal National Mortgage Association*†
10.11	Fannie Mae Annual Incentive Plan*†
10.12	Fannie Mae Stock Compensation Plan of 1993*†
10.13	Fannie Mae Elective Deferred Compensation Plan*†
10.14	Fannie Mae Procedures for Deferral and Diversification of Awards*†
10.15	Fannie Mae Stock Option Gain Deferral Plan*†
10.16	Description of 2003 Supplemental Pension Plan*†
10.17	Director's Charitable Award Program*†
12.1	Statement re computation of ratios of earnings to fixed charges*
12.2	Statement re computation of ratios of earnings to combined fixed charges and preferred stock dividends*
99.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350
99.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350

\* Incorporated by reference to the corresponding exhibit to Fannie Mae's registration statement on Form 10.

† This exhibit is a management contract or compensatory plan or arrangement.

