

Prospectus

# Federal National Mortgage Association



## Guaranteed Mortgage Pass-Through Certificates

(Residential Mortgage Loans)

Principal and Interest payable on the 25th day of each month

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THE OBLIGATIONS OF THE FEDERAL NATIONAL MORTGAGE ASSOCIATION UNDER ITS GUARANTY ARE OBLIGATIONS SOLELY OF THE CORPORATION AND ARE NOT BACKED BY THE FULL FAITH AND CREDIT OF THE UNITED STATES. THE CERTIFICATES ARE EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT OF 1933 AND ARE "EXEMPTED SECURITIES" WITHIN THE MEANING OF THE SECURITIES EXCHANGE ACT OF 1934.

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The Guaranteed Mortgage Pass-Through Certificates ("Certificates") are issued and guaranteed by the Federal National Mortgage Association (the "Corporation" or "Fannie Mae"), a corporation organized and existing under the laws of the United States, under the authority contained in Section 304(d) of the Federal National Mortgage Association Charter Act (12 U.S.C. 1716 *et seq.*).

Each Certificate offered hereby and by the Supplement related hereto will represent an undivided interest in a pool of mortgage loans (a "Pool") to be formed by the Corporation. Each Pool will consist of residential mortgage loans ("Mortgage Loans") either previously owned by the Corporation or purchased by it in connection with the formation of the Pool. Each Pool will consist entirely of one of the following: (i) fixed-rate level installment Mortgage Loans, (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal, (iii) fixed-rate graduated payment Mortgage Loans having deferred interest features, (iv) conventional variable-rate California Mortgage Loans, (v) other adjustable-rate Mortgage Loans, some of which may have deferred interest features, (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which may have balloon payments or other unique features and (vii) adjustable-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which may have balloon payments, deferred interest or other unique features.

Interests in each Pool will be evidenced by a separate issue of Certificates. Information regarding the aggregate principal amount and characteristics of the related Pool (including the type of Mortgage Loans in the Pool) will be furnished in a Supplement to this Prospectus at the time of the identification of the Pool.

Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985 (other than Pools containing Mortgage Loans with deferred interest features) will be available in book-entry form only.

The Corporation will have certain contractual servicing responsibilities with respect to each Pool. In addition, the Corporation will be obligated to distribute scheduled monthly installments of principal and interest (adjusted to reflect the Corporation's servicing and guaranty fee) to Certificateholders, whether or not received. The Corporation also will be obligated to distribute to Certificateholders the full principal balance of any foreclosed Mortgage Loan, whether or not such principal balance is actually recovered.

**The date of this Prospectus is June 1, 1989**

*Retain this Prospectus for future reference. This Prospectus may not be used to consummate sales of Certificates unless accompanied by a Prospectus Supplement.*

No salesman, dealer, bank or other person has been authorized to give any information or to make any representation other than those contained in this Prospectus and, if given or made, such information or representation must not be relied upon as having been authorized by the Corporation. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the Certificates offered hereby and by the related Supplement nor an offer of the Certificates to any person in any state or other jurisdiction in which such offer would be unlawful.

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## SUMMARY OF PROSPECTUS

The following summary of certain pertinent information is qualified in its entirety by reference to the detailed information appearing elsewhere in this Prospectus and by reference to the information with respect to each pool of residential mortgage loans ("Mortgage Loans") contained in the supplement to this Prospectus (a "Prospectus Supplement") to be prepared in connection with the issue of Guaranteed Mortgage Pass-Through Certificates (the "Certificates") evidencing undivided interests in such pool of Mortgage Loans ("Pool").

Title of Security	Guaranteed Mortgage Pass-Through Certificates.
Issuer and Guarantor	Federal National Mortgage Association (the "Corporation"), a corporation organized and existing under the laws of the United States. See "Federal National Mortgage Association" and the remainder of the Prospectus following that section. The obligations of the Corporation under its guaranty are obligations solely of the Corporation and are not backed by, nor entitled to, the full faith and credit of the United States.
Description of Security	Each Certificate will represent a fractional undivided interest in a Pool of Mortgage Loans to be formed by the Corporation. A Certificate in definitive form will initially represent at least \$25,000 unpaid principal amount of Mortgage Loans. A Certificate in book-entry form will initially represent at least \$1,000 unpaid principal amount of Mortgage Loans. Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985 (other than Pools containing Mortgage Loans with deferred interest features) will be available in book-entry form only and will not be convertible to definitive form.
Interest.	Interest on each Mortgage Loan will be passed through monthly to Certificateholders, commencing on the 25th day of the month following the month of initial issuance of the related Certificates (or, if such 25th day is not a business day, on the first business day next succeeding such 25th day). For all Pools containing fixed-rate Mortgage Loans ("Fixed-Rate Pools"), interest will be passed through at a uniform Pass-Through Rate which will be specified in the Prospectus Supplement and will not be greater than the lowest annual interest rate borne by any Mortgage Loan in the related Pool, less a specified minimum annual percentage representing compensation for servicing and the Corporation's guaranty and less, in the case of Fixed-Rate Pools containing graduated payment Mortgage Loans, deferred interest, which is added to the principal balances of the underlying Mortgage Loans. For Pools containing variable-rate Mortgage Loans ("VRM Pools"), interest will be passed through on the basis of a Weighted Average Pass-Through Rate, which is equal at any time to the then-current weighted average of the Mortgage Interest Rates of all Mortgage Loans in the related VRM Pool, less a specified fixed annual percentage representing compensation for servicing and the Corporation's guaranty. For Pools containing adjustable-rate Mortgage Loans ("ARM Pools"), interest will be passed through on each Mortgage Loan at the interest rate at the time applicable thereto less (i) the Corporation's fixed servicing fee and guaranty fee applicable to such Mortgage Loan and (ii) any deferred interest that is added to the principal balance of such Mortgage Loan pursuant to its terms. See "Yield Considerations."

Principal (including prepayments)

Passed through monthly, commencing on the 25th day of the month following the month of initial issuance of the related Certificates (or, if such 25th day is not a business day, on the first business day next succeeding such 25th day). See "Maturity and Prepayment Assumptions" and "Description of Certificates."

Guaranty

The Corporation is obligated to distribute scheduled monthly installments of principal and interest (adjusted to reflect the Corporation's servicing and guaranty fee) on the Mortgage Loans in a Pool, whether or not received. The Corporation is also obligated to distribute to Certificateholders the full principal balance of any foreclosed Mortgage Loan, whether or not such principal balance is actually recovered. If the Corporation were unable to perform these guaranty obligations, distributions to Certificateholders would consist solely of payments and other recoveries on Mortgage Loans and, accordingly, delinquencies and defaults would affect monthly distributions to Certificateholders. See "Description of Certificates—The Corporation's Guaranty."

Servicing

The Corporation will be responsible for servicing the Mortgage Loans and will, in most cases, contract with mortgage lenders to perform certain servicing functions on its behalf. See "Description of Certificates—Servicing Through Lenders."

The Mortgage Pools

Each Pool will consist entirely of Mortgage Loans of only one of the following types: (i) fixed-rate level installment Mortgage Loans, (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal, (iii) fixed-rate graduated payment Mortgage Loans with deferred interest features, (iv) conventional variable-rate California Mortgage Loans, (v) other adjustable-rate Mortgage Loans, some of which may have deferred interest features, (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which may have balloon payments or other unique features and (vii) adjustable-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which may have balloon payments, deferred interest or other unique features. Unless the related Supplement to this Prospectus provides otherwise, the Mortgage Loans in each Pool will have unpaid principal balances aggregating not less than \$1,000,000. Each Mortgage Loan will be secured by a first lien on a residential property and each Mortgage Loan will meet the applicable standards set forth under "Purchase Program." Pool information as to the type of Mortgage Loans (including whether such Mortgage Loans are conventional Mortgage Loans or are insured by the Federal Housing Administration or guaranteed by the Veterans Administration), the aggregate principal balance of the Mortgage Loans as of the Issue Date, the Pass-Through Rate for Certificates evidencing interests in level installment Fixed-Rate Pools, the Pool Accrual Rate for Certificates evidencing interests in graduated payment Fixed-Rate Pools, the then-current Weighted Average Pass-Through Rate for Certificates evidencing interests in VRM Pools, the then-current Pool Accrual Rate for Certificates evidencing interests in ARM Pools, and the latest maturity date of any Mortgage Loan will be contained in the related Prospectus Supplement. For a VRM Pool or an ARM Pool, the related Prospectus Supplement will also contain information respecting the index upon which adjustments are based, the frequency of interest rate and payment adjustments and any maximum or minimum limitations thereon, the Corporation's fixed guaranty and servicing fee, and, in the case of an ARM Pool, whether the underlying Mortgage Loans contain provisions for the deferral of interest.

## Financial Results

Fannie Mae earned net income of \$507 million in 1988, compared with \$376 million in 1987 and \$105 million in 1986. Net income for the first quarter of 1989 was \$165 million, compared with \$153 million in the fourth quarter of 1988, and \$101 million in the first quarter of 1988.

The primary reasons for the growth in net income in the first quarter of 1989 from the previous quarter were an increase in the spread between the yield on the company's investment portfolio and the cost of debt outstanding, a reduction in the provision for losses, and continued growth in guaranty fee income. The increase in net income in 1988 over 1987 resulted from a wider interest spread on a larger asset base, increases in guaranty fees and gain on sale of mortgages, and a lower effective tax rate. The increase in net income in 1987 over 1986 resulted from improved interest spreads, increased guaranty fees, a lower effective tax rate, and additional interest income of \$290 million recognized through the implementation of Statement of Financial Accounting Standards No. 91.

The Corporation's net mortgage portfolio totaled \$98.9 billion at March 31, 1989, compared with \$96.6 billion at March 31, 1988. Mortgage-backed securities outstanding at March 31, 1989 totaled \$188.1 billion, compared with \$145.2 billion at March 31, 1988.

## THE MORTGAGE POOLS

The Federal National Mortgage Association (the "Corporation") has implemented a program for (a) the setting aside of residential mortgage loans (the "Mortgage Loans") into separate pools (the "Pools") bearing distinctive identification and (b) the issuance and sale of trust certificates of beneficial interest evidencing pro rata undivided ownership interests in the Mortgage Loans comprising each separate Pool (the "Guaranteed Pass-Through Certificates" or "Certificates"). The Mortgage Loans may be purchased by the Corporation expressly for the Pools or may be Mortgage Loans that have been held by the Corporation in its own portfolio. Each Pool will consist of Mortgage Loans evidenced by promissory notes (the "Mortgage Notes") secured by first mortgages or deeds of trust (the "Mortgages") on either one- to four-family (also referred to as "single-family") residential properties or multifamily projects consisting of five or more dwelling units (the "Mortgaged Properties"). A Pool will contain Mortgage Loans of only one of the following types: (i) fixed-rate level payment Mortgage Loans ("Level Payment Mortgage Loans"), (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal ("GEMs"), (iii) fixed-rate graduated payment Mortgage Loans with deferred interest features ("GPMs"), (iv) conventional variable-rate California Mortgage Loans ("VRMs"), (v) other adjustable-rate Mortgage Loans ("ARMs"), some of which may have deferred interest features, (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units ("Multifamily Mortgage Loans"), some of which may have balloon payments or other unique features and (vii) adjustable-rate Multifamily Mortgage Loans, some of which may have balloon payments, deferred interest or other unique features. The Mortgage Loans may be either conventional Mortgage Loans (i.e., not insured or guaranteed by any United States government agency) or Mortgage Loans that are either insured by the Federal Housing Administration or guaranteed by the Veterans Administration ("Conventional Mortgage Loans" and "FHA/VA Mortgage Loans," respectively). The Mortgage Loans purchased expressly for the Pools will be sold to the Corporation by eligible institutions that meet certain requirements set forth under "Purchase Program" and are referred to herein as "Lenders." Unless the related Supplement to this Prospectus provides otherwise, no Pool will consist of Mortgage Loans having an aggregate unpaid principal balance of less than \$1,000,000 on the first day of the month of issuance of the related Certificates. See "Purchase Program—Mortgage Loan Eligibility" for a description of certain criteria applicable to the eligibility of Mortgage Loans for inclusion in Pools.

Interests in each Pool will be evidenced by a separate series of Certificates (an "Issue"). The Corporation will acquire the Mortgage Loans that it has purchased expressly for Pools under purchase contracts. By entering into such contracts, the Corporation will obligate itself to issue Certificates to, or to the order of, the Lenders named in the contracts, upon delivery to the Corporation of the required Mortgage Loans conforming to the Corporation's standards. The Corporation will not insure or guarantee the performance by any Lender of its obligation to deliver Mortgage Loans and, correspondingly, does not insure or guarantee the performance by any person of any obligation to deliver Certificates.

The Mortgage Loans in each Pool of fixed-rate Mortgage Loans other than GPMs will be held for the benefit of the holders of Certificates ("Certificateholders" or "Holders") pursuant to the combined terms of a trust indenture, as amended, executed by the Corporation in its corporate capacity and in its capacity as Trustee (the Trust Indenture dated as of November 1, 1981, as modified and amended by a First Supplemental Indenture dated as of February 15, 1982, a Second Supplemental Indenture dated as of October 1, 1982, a Third Supplemental Indenture dated as of August 1, 1983, a Fourth Supplemental Indenture dated as of May 1, 1984, a Fifth Supplemental Indenture dated as of July 1, 1984, a Sixth Supplemental Indenture dated as of May 1, 1985, a Seventh Supplemental Indenture dated as of August 1, 1986, and an Eighth Supplemental Indenture dated as of January 1, 1987, being herein called the "Fixed-Rate Trust Indenture"), and a supplement thereto for the related Issue (the "Issue Supplement"). The Mortgage Loans in each Pool of VRMs will be held for the benefit of Certificateholders pursuant to the combined terms of an Issue Supplement and a Trust Indenture dated as of July 1, 1982, as modified and

amended by a First Supplemental Indenture dated as of December 1, 1983, a Second Supplemental Indenture dated as of September 1, 1984, a Third Supplemental Indenture dated as of February 1, 1985, a Fourth Supplemental Indenture dated as of August 1, 1985, and a Fifth Supplemental Indenture dated as of January 1, 1987, each executed by the Corporation in its corporate capacity and in its capacity as Trustee (such Trust Indenture, as amended, being hereinafter called the "VRM Trust Indenture"). The Mortgage Loans in each Pool of GPMs and ARMs will be held for the benefit of the Certificateholders pursuant to the combined terms of an Issue Supplement and a Trust Indenture dated as of July 1, 1984, as modified and amended by a First Supplemental Indenture dated as of January 1, 1987 (the "GPM Trust Indenture") and a Trust Indenture dated as of July 1, 1984, as modified and amended by a First Supplemental Indenture dated as of May 1, 1985, and a Second Supplemental Indenture dated as of January 1, 1987 (the "ARM Trust Indenture"), respectively, each executed by the Corporation in its corporate capacity and in its capacity as Trustee. The Fixed-Rate Trust Indenture, the VRM Trust Indenture, the GPM Trust Indenture, and the ARM Trust Indenture are herein, collectively, referred to as the "Trust Indenture" or "TI" where common terms and provisions are being referred to or described. Certain capitalized words or series of words in this Prospectus refer to and are further defined in the Trust Indenture. The Corporation will be responsible for the administration and servicing of the Mortgage Loans in the Pool, including the supervision of the servicing activities of Lenders, if appropriate, the collection and receipt of payments from Lenders, and the remittance of distributions and certain reports to Certificateholders. The Corporation will be entitled to receive a fee for its guaranty obligations and its services pursuant to the Trust Indenture. The fee to the Corporation for any Mortgage Loan (out of which it will compensate Lenders for servicing the Mortgage Loans) will, as to any Pool containing fixed-rate Mortgage Loans (a "Fixed-Rate Pool"), be equal to the difference between the annual interest rate borne by the Mortgage Loan and the annual rate of interest paid to Certificateholders at the Pass-Through Rate for the related Fixed-Rate Pool or the Accrual Rate for Fixed-Rate Pools containing GPMs (a "GPM Pool"). For any Pool containing ARMs or VRMs (an "ARM Pool" or "VRM Pool"), the Corporation will similarly compensate itself from interest payments on the underlying ARMs or VRMs in an amount, as to each ARM or VRM Pool, determinable from information in the related Prospectus Supplement. The Corporation will reserve the right to remove the servicing responsibility from a Lender at any time if it considers such removal to be in the best interest of Certificateholders. In such event, the Corporation will meet its obligation to provide servicing either by directly servicing the Mortgage Loans itself or by finding a replacement Lender.

The Corporation's obligations with respect to the Mortgage Loans will be limited to the servicing responsibilities under the Trust Indenture, and, in the event of any delinquency in payment or loss on any Mortgage Loan, its obligation to make supplemental payments in amounts described herein under "Description of Certificates—The Corporation's Guaranty."

Because the principal amount of the Mortgage Loans in a Pool will decline (with the exception of Fixed-Rate Pools containing GPMs and certain ARM Pools that contain ARMs providing for deferred interest) monthly as principal payments, including prepayments, are received, each Certificate Principal Balance (defined as to any Certificate to be the principal amount of Mortgage Loans in the related Pool evidenced thereby) will also decline over time. See "Maturity and Prepayment Assumptions."

## YIELD CONSIDERATIONS

### Effect of Delay

The effective yield to Certificateholders in all Pools will be reduced slightly below the yield otherwise produced by the applicable Pass-Through Rate, Pool Accrual Rate or Weighted Average Pass-Through Rate because the distribution of interest that accrues from the first day of each month will not be made until the 25th day of the month following the month of accrual.

### **Fixed-Rate Pools Not Containing GPMs**

Each Fixed-Rate Pool not containing GPMs will consist of Mortgage Loans that bear interest at fixed annual rates ("Mortgage Interest Rates"). Such a Fixed-Rate Pool may include Mortgage Loans that bear different Mortgage Interest Rates. The Pass-Through Rate of interest payable to Certificateholders of each such Issue will be equal to the lowest Mortgage Interest Rate borne by any Mortgage Loan in the related Pool, less a specified minimum annual percentage representing compensation for servicing and the Corporation's guaranty. Because the Pass-Through Rate for an Issue will not be greater than the lowest Mortgage Interest Rate for the related Pool, any disproportionate principal prepayments among Mortgage Loans bearing different Mortgage Interest Rates will not affect the return to Certificateholders.

When a Mortgage Loan is prepaid or otherwise liquidated, the proceeds of such prepayment or liquidation will, unless the Corporation elects in its discretion to make any distribution thereof in the following month, be passed through to Certificateholders in the second month following the month of such prepayment or other liquidation. Because the Corporation agrees to distribute on each Distribution Date to each Certificateholder an amount as to interest representing one month's interest at the Pass-Through Rate on the Certificate Principal Balance, any prepayment or other liquidation of a Mortgage Loan and the timing of the distribution of the proceeds thereof will have no effect on the interest return to Certificateholders.

Assuming performance by the Corporation of its obligations under its guaranty, the net effect of each distribution respecting interest will be the pass-through to each Certificateholder of an amount that is equal to one month's interest at the Pass-Through Rate on the Certificate Principal Balance of such Holder's Certificate. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates."

### **GPM Pools**

A GPM Pool will consist of fixed-rate fully amortizing Mortgage Loans providing for monthly payments that increase annually for a period of years (generally between three to seven) and are level thereafter. During all or part of the period in which monthly payments are increasing, those payments will not be sufficient to cover the full amount of interest on the GPM at the Mortgage Interest Rate borne thereby. The amount of each such interest insufficiency will be added to the principal balance of the GPM, which will accrue interest thereafter on this new increased amount.

GPM Pools will have characteristics similar to Fixed-Rate Pools described above commencing with the time at which payments are sufficient to cover interest on the principal balances of the underlying GPMs. Prior to that time, the Certificates evidencing interests in GPM Pools will provide for the monthly distribution of the scheduled interest payment on each Mortgage Loan in the Pool less the Corporation's servicing and guaranty fee attributable thereto, the amount of any such fee being equal to the difference between the fixed Mortgage Interest Rate at which interest accrues on the GPM and the Pool Accrual Rate borne by the related Certificates.

The Prospectus Supplement relating to a GPM Pool will set forth the period over which payments on the GPMs increase.

The Corporation's guaranty of Certificates evidencing interests in GPM Pools will cover the principal amount of each underlying GPM, including any portion thereof representing deferred interest. The Corporation will, following the period (the "Deferred Interest Period") during which such payments are insufficient to cover interest at the Mortgage Interest Rate on their then-outstanding principal balances, including deferred interest that has been added thereto, also be obligated to distribute on each Distribution Date one month's interest at the Pool Accrual Rate on the then-outstanding principal balances of the underlying GPMs. During the Deferred Interest Period, the Corporation's guaranty will cover, as to each underlying GPM, the amount of each scheduled payment less the Corporation's servicing and guaranty fee applicable thereto.



## VRM Pools

A VRM Pool will be composed of California home Mortgage Loans which bear interest at rates that will vary in response to the cost of funds index published by the Federal Home Loan Bank of San Francisco that is described herein under "ARM Pools—*The Indexes.*" The interest rates will be adjusted periodically at uniform specified intervals. The Prospectus Supplement to be prepared with respect to each Issue will specify the fixed annual percentage servicing fee or "Spread" (out of which the Corporation will compensate Lenders) that the Corporation will retain from interest payments on Mortgage Loans in the related Pool. The resultant interest rate, equal as to each Mortgage Loan to the related Mortgage Interest Rate less this fixed percentage servicing fee, is the "Pass-Through Rate" for that Mortgage Loan. The Corporation has agreed in the VRM Trust Indenture to pass through payments of interest on the Mortgage Loans in a Pool, whether or not received, in an amount equal to one month's interest at the then-current weighted average of the Pass-Through Rates of all Mortgage Loans in that Pool (the "Weighted Average Pass-Through Rate") multiplied by the Certificate Principal Balance as of the preceding Distribution Date (or, respecting the initial distribution, as of the Issue Date). The Weighted Average Pass-Through Rate as of the Issue Date as well as information regarding the original indexes, the initial Mortgage Interest Rates and the then-current Mortgage Interest Rates of all Mortgage Loans in a VRM Pool will be set forth in the Prospectus Supplement. This Weighted Average Pass-Through Rate will change with any changes in the underlying Mortgage Interest Rates and as disproportionate payments of principal are made on Mortgage Loans bearing different Mortgage Interest Rates.

When a Mortgage Loan is prepaid or otherwise liquidated, the proceeds of such prepayment or liquidation will, unless the Corporation elects in its discretion to make any distribution thereof in the following month, be passed through to Certificateholders in the second month after such prepayment or other liquidation. Since the Corporation will agree in each Certificate to distribute on each Distribution Date to the Holder thereof an amount as to interest representing one month's interest at the then-current Weighted Average Pass-Through Rate on the related Certificate Principal Balance, any prepayment or other liquidation of a Mortgage Loan and the timing of the distribution of the proceeds thereof will have no effect on the interest return to Certificateholders.

Assuming performance by the Corporation of its obligations under its guaranty, the net effect of each distribution respecting interest will be the pass-through to each Certificateholder of an amount which is equal to one month's interest at the then-current Weighted Average Pass-Through Rate on the Certificate Principal Balance of such Holder's Certificate. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates."

## ARM Pools

### *General Characteristics*

An ARM Pool will contain Mortgage Loans that bear interest at rates that will vary in response to a single specified index (such as, but not limited to, the indexes described below) and will adjust periodically at uniform specified intervals. The actual Mortgage Interest Rate at any time borne by an ARM will be equal to a specified percentage, or "Mortgage Margin," over the index rate then applicable thereto. ARMs may or may not contain provisions limiting the amount by which rates may be adjusted upward or downward and may or may not limit the amount by which monthly payments may be increased or decreased to accommodate upward or downward adjustments in the Mortgage Interest Rate. Certain ARMs may provide for periodic adjustments of scheduled payments in order to fully amortize the Mortgage Loan by its stated maturity while other ARMs may permit that maturity to be extended or shortened in accordance with the portion of each payment that is applied to interest in accordance with the periodic interest rate adjustments. Unless a Prospectus Supplement specifies otherwise, each ARM in the related Pool will provide for payment adjustments in the month following any interest rate change, each such

adjusted payment being in the amount necessary to pay interest at the Mortgage Interest Rate in effect during the month immediately prior to the month in which the first payment in the new amount is due and to fully amortize the outstanding principal balance of the ARM on a level debt service basis over the remainder of its term.

Where an ARM provides for limitations on the amount by which monthly payments may be increased or where changes to the Mortgage Interest Rate of the ARM are made more frequently than payment changes, it is possible that an increase in the rate of interest will not be covered by the amount of the scheduled payment. In that case, the uncollected portion of interest will be deferred and added to the principal balance of the Mortgage Loan.

Because the interest rates borne by Mortgage Loans in an ARM Pool will, following an initial fixed-rate period, adjust from time to time, and because a portion of the interest accrued thereon may be deferred and payable at a future time, Certificates evidencing interests in such Pools will not provide for the distribution of interest at a fixed Pass-Through Rate. Rather, interest on each ARM in an ARM Pool will accrue to Certificateholders during any period at a monthly Accrual Rate which is equal to the corresponding Mortgage Interest Rate at which interest accrued on such ARM net of the Corporation's fixed percentage servicing and guaranty fee. This percentage servicing and guaranty fee may vary among the ARMs in a Pool in order to produce a uniform margin (the "MBS Margin") specified in the related Prospectus Supplement at which, subject to certain exceptions described below, interest will float over the then-applicable index. For example, if the MBS Margin for a Pool is 1.75%, an ARM in that Pool that has a Mortgage Margin of 300 basis points would be assigned a servicing and guaranty fee of 125 basis points and another ARM in that Pool having a Mortgage Margin of 275 basis points would have a servicing and guaranty fee of 100 basis points. After all the ARMs in that Pool have undergone their initial interest rate changes and when an interest rate cap is not applicable to any ARM, interest for any month on each ARM in that Pool will, unless otherwise described in the related Prospectus Supplement, accrue to Certificateholders at a uniform rate equal to the index plus the assumed 1.75% MBS Margin. If one or more ARMs in a Pool are still in their initial fixed-rate periods, maximum or minimum caps are applicable or other features described in the related Prospectus Supplement exist, the Accrual Rates for all ARMs in that Pool may not be uniform and the effective rate at which interest accrues to Certificateholders for any period (the "Pool Accrual Rate") will be a weighted average of the Accrual Rates for all ARMs in the Pool.

The Corporation's guaranty of Certificates evidencing interests in ARM Pools will cover the principal of each underlying Mortgage Loan, including any portion thereof representing deferred interest. Its guaranty of interest will cover all interest due and payable by the mortgagor (net of the Corporation's servicing and guaranty fee). The Corporation will also agree to add to the amount of interest accompanying the prepayment of an underlying Mortgage Loan any amount by which such interest is less than one month's interest at the Accrual Rate on the prepaid principal balance thereof. As a consequence, the timing of the prepayment of a Mortgage Loan will have no effect on the interest return to Certificateholders.

#### *Caps on Mortgage Interest Rate*

The Mortgage Interest Rate for each ARM, when adjusted at each interest rate change date, typically may not be more than a specified percentage amount greater or less than the initial Mortgage Interest Rate, in the case of the first change date, or, in the case of any subsequent change date, the Mortgage Interest Rate that was in effect immediately preceding such change date. Such periodic caps will be specified in the related Prospectus Supplement. In addition, the Mortgage Interest Rate for an ARM is generally also subject to lifetime maximum and minimum caps, as specified in the related Mortgage Note.

In the event that the Mortgage Interest Rate for an ARM is prevented by either a periodic cap or any lifetime minimum or maximum caps from being equal to the applicable index plus the

Mortgage Margin, the Accrual Rate for that ARM will be equal to the applicable capped Mortgage Interest Rate less the fixed percentage servicing and guaranty fee (as described above, the difference between the Mortgage Margin and the MBS Margin). Because ARMs with differing Mortgage Margins and/or maximum and minimum Mortgage Interest Rates may be included in a Pool, the potential for a Pool Accrual Rate that represents a weighted average of the Accrual Rates of the ARMs exists when either all Mortgage Interest Rates are limited by their related caps or when the Mortgage Interest Rates of one or more ARMs in a Pool are limited by their related caps and the Mortgage Interest Rates of other ARMs in the Pool are not.

The range of Mortgage Margins for all ARMs in a Pool will be set forth in the Pool Statistics appearing on the back of the related Prospectus Supplement. Information as to the approximate maximum and minimum (if applicable) Pool Accrual Rates of the ARMs in a Pool (the weighted averages of the maximum and minimum Accrual Rates of the ARMs in the Pool) will also be included in the Pool Statistics. These weighted rates will be computed using the Issue Date Principal Balances of the ARMs and could deviate slightly over time because (i) ARMs with different Mortgage Interest Rates amortize at different speeds and therefore the balances of those ARMs would weight the averages differently and (ii) ARMs with different fixed percentage servicing and guaranty fees, different maximum Mortgage Interest Rates or different minimum Mortgage Interest Rates may prepay in differing proportions, causing a change in the maximum and minimum Pool Accrual Rates. In addition, if any assumption of an ARM by a new mortgagor may result in a change in the maximum Mortgage Interest Rate applicable thereto, any such assumption will, to the extent described in the related Prospectus Supplement, also affect the maximum Pool Accrual Rate.

#### *Maturity, Uniform Interest Rate Change Date*

The weighted average remaining term to maturity of the ARMs in a Pool is set forth in the Pool Statistics. ARMs pooled together must have the same interest rate change dates, although the first such change date may not necessarily occur in the same year for all ARMs in a Pool. The Pool Statistics for each Pool will specify the earliest interest rate change date of any ARM in such Pool.

#### *Assumptions*

The ARMs in each Pool are assumable by a new mortgagor and the Corporation's general policy, described herein under "Description of Certificates—Collection and Other Servicing Procedures," to require acceleration in the event of certain transfers of the underlying property is inapplicable.

#### *The Indexes*

The index for each ARM Pool will be identified in the applicable Prospectus Supplement. Two commonly used indexes are the weekly average yield on United States Treasury Securities adjusted to a constant maturity of one year or three years as published by the Board of Governors of the Federal Reserve System in the Federal Reserve Statistical Release: Selected Interest Rates H.15 (519) (the "One Year Treasury Index" and the "Three Year Treasury Index"). Another frequently used index is currently published by the Federal Home Loan Bank of San Francisco (the "FHLB of San Francisco") on or about the last working day of each month and is designed to represent the monthly weighted average cost of funds for savings institutions in Arizona, California, and Nevada that are member institutions of the Eleventh Federal Home Loan Bank District (the "Eleventh District") for the month prior to publication (the "COFI Index"). The COFI Index for a particular month reflects the interest costs paid on all types of funds held by Eleventh District member institutions and is calculated by dividing the cost of funds by the average of the total amount of those funds outstanding at the end of that month and of the prior month and annualizing and adjusting the result to reflect the actual number of days in the particular month. If necessary, before these calculations are made, the component figures are adjusted by the FHLB of San Francisco to neutralize the effect of events such as member

institutions leaving the Eleventh District or acquiring institutions outside the Eleventh District. The COFI Index is weighted to reflect the relative amount of each type of funds held at the end of the relevant month. There are three major components of funds of Eleventh District member institutions: (i) savings deposits, (ii) FHLB of San Francisco advances, and (iii) all other borrowings. Unlike most other interest rate measures, the COFI Index does not necessarily reflect current market rates because the component funds represent a variety of maturities whose costs may react in different ways to changing conditions.

A number of factors affect the performance of the COFI Index which may cause it to move in a manner different from indexes tied to specific interest rates, such as the One Year Treasury Index and the Three Year Treasury Index. Because of the various maturities of the liabilities upon which the COFI Index is based, the COFI Index may not necessarily reflect the average prevailing market interest rates on new liabilities of similar maturities. Additionally, the COFI Index may not necessarily move in the same direction as market interest rates at all times, because as longer term deposits or borrowings mature and are renewed at prevailing market interest rates, the COFI Index is influenced by the differential between the prior and the new rates on those deposits or borrowings. In addition, such movement of the COFI Index, as compared with other indexes tied to specific interest rates, may be affected by changes instituted by the FHLB of San Francisco in the method used to calculate the Index. The FHLB of San Francisco publishes the COFI Index in its monthly *Federal Home Loan Bank of San Francisco Information Bulletin* and such bulletins may be obtained from its Office of Public Information.

Listed below are some historical values for the above-mentioned indexes which are provided for selected months from June 1982 to June 1988 and monthly from December to April 1989. The values for the One Year Treasury Index and the Three Year Treasury Index are the first weekly values published in a given month. The values for the COFI Index represent the weighted average cost of funds for the given month.

<u>Year-Month</u>	<u>One Year Treasury Index</u>	<u>Three Year Treasury Index</u>	<u>COFI Index</u>
1982-June	13.000	13.710	12.673
-December	9.070	9.920	11.093
1983-June	9.230	9.950	9.824
-December	10.010	10.980	10.192
1984-June	12.100	13.250	10.434
-December	9.550	10.670	10.520
1985-June	8.090	9.360	9.565
-December	7.870	8.750	8.867
1986-June	6.790	7.470	8.374
-December	5.770	6.390	7.509
1987-June	6.950	8.010	7.274
-December	7.020	8.050	7.645
1988-June	7.580	8.400	7.618
-December	8.750	8.980	8.022
1989-January	9.070	9.200	8.125
-February	9.050	9.140	8.346
-March	9.400	9.430	8.423
-April	9.710	9.740	8.648

Unless otherwise specified in the Prospectus Supplement, for ARM Pools using the One Year Treasury Index, the Three Year Treasury Index or the COFI Index, the index value for a particular interest rate change date is that value that is most recently available 45 days prior to such interest rate change date. For a particular Distribution Date, the applicable index value is the value that was used to determine the interest rate of the ARMs in a Pool for the prior month.

## MATURITY AND PREPAYMENT ASSUMPTIONS

The original maturities of substantially all of the Conventional Level Payment Mortgage Loans are expected to be between either 8 to 15 years or 20 to 30 years. The maturities of substantially all of the FHA/VA Level Payment Mortgage Loans at origination are expected to be 30 years. Each Level Payment Mortgage Loan with an original maturity of 30 years will provide for amortization of principal according to a schedule that, in the absence of prepayments, would result in repayment of one-half of the original principal amount of such Mortgage Loan by approximately the 23rd to 27th year, with higher Mortgage Interest Rates resulting in slower amortization of principal. A 15-year fully amortizing Level Payment Mortgage Loan would, in the absence of prepayments, result in repayment of one-half of the original principal amount by approximately the 10th to 12th year, with higher Mortgage Interest Rates resulting in slower amortization of principal. The original maturities of the Mortgage Loans in an ARM Pool may range from 15 to 30 years.

A significant number of the Conventional Mortgage Loans may provide by their terms that in the event of the sale of all or some of the underlying property the full unpaid principal balance of the Mortgage Loan is due and payable at the option of the holder. FHA/VA Mortgage Loans contain no such "due-on-sale" provisions. As set forth under "Description of Certificates—Collection and Other Servicing Procedures," the Trust Indenture requires the Corporation to exercise its right to accelerate the maturity of a Conventional Mortgage Loan other than a VRM in such an event so long as acceleration is permitted under applicable law unless it elects to repurchase such Mortgage Loan. Further, the Corporation will not enforce "due-on-sale" provisions in the event that a property is transferred from one co-borrower to an unrelated co-borrower under the circumstances specified in the published guidelines of Fannie Mae governing assumability of the related Conventional Mortgage Loan.

The ability of mortgage lenders and their assignees and transferees to enforce "due-on-sale" clauses was addressed by the "Garn-St Germain Depository Institutions Act of 1982," which was passed by Congress and signed into law on October 15, 1982. This legislation, subject to certain exceptions, pre-empts state statutory and case law that prohibits the enforcement of "due-on-sale" clauses. Exempted from this pre-emption are mortgage loans (originated other than by federally chartered lenders) that were made or assumed during the period beginning on the date a state, by statute or statewide court decision, prohibited the exercise of "due-on-sale" clauses and ending on October 15, 1982 (the "window period"). Mortgage lenders, however, may require any successor or transferee of the borrower to meet customary credit standards. The exemption for such loans ended on October 15, 1985 unless the state acted to otherwise regulate these loans by that date. Several states passed legislation extending the assumability of the mortgage loans that were made or assumed during the window period. In the case of those states, the enforceability of "due-on-sale" clauses in loans made or assumed during the window period is limited by the provisions of the applicable state legislation. The federal legislation also enumerates nine circumstances under which a lender may not enforce "due-on-sale" clauses, *e.g.*, the creation of a subordinate encumbrance that does not relate to a transfer of rights of occupancy in the property, a transfer by devise, descent, or operation of law on the death of a joint tenant or tenant by the entirety, and the granting of a leasehold interest of three years or less not containing an option to purchase.

Conventional Mortgage Loans purchased by the Corporation from November 10, 1980, to October 15, 1982, in jurisdictions where, on the date of origination, the law substantially restricted lenders from enforcing "due-on-sale" provisions may provide that they are due and payable at the holder's option at the end of seven years. As described in "Description of Certificates—Collection and Other Servicing Procedures," the Trust Indenture provides that the Corporation will exercise or refrain from exercising any such "call option rider" in a manner that is consistent with then-current policies or practices employed by the Corporation respecting comparable mortgage loans held in its own portfolio.

Past experience of the Federal Housing Administration ("FHA") relating to government-insured single-family mortgage loans at various interest rates with original maturities of 26 to 30 years indicates that, while some of such mortgage loans remain outstanding until the scheduled maturity, a pool of 30-year FHA-insured single-family mortgage loans will produce an average loan life of 12 years. A 12-year prepayment assumption is the industry norm for quoting yields on 30-year single-family mortgage loans and is used in generally accepted yield tables. FHA data also indicate that for a pool of 15-year single-family mortgage loans a 7-year average loan life is produced.

There can be no assurance that the rate of prepayment will conform to past FHA experience. Based upon published information and the Corporation's own experience, the rate of prepayments on 30-year single-family loans has fluctuated significantly in recent years. For example, the table under "Business—Mortgage Loan Portfolio—*Repayments, Assumptions, and Sales*" shows the increase in the level of principal repayments as a percentage of the Corporation's mortgage loan portfolio from 1984 to 1987 with a decline in prepayments in 1988. In 1986, 1987 and 1988, there were \$19.6 billion, \$15.4 billion and \$10.7 billion, respectively, in mortgage repayments (exclusive of foreclosures) that the Corporation received, which included approximately \$17.5 billion, \$13.3 billion and \$8.4 billion, respectively, for mortgages that were prepaid.

In an environment of declining interest rates, lenders servicing mortgage loans often are asked by mortgagors to refinance the mortgage loans through issuance of new loans secured by mortgages on the same properties. The resultant prepayments, if they involve Mortgage Loans in Pools, result in the distribution to Certificateholders of the principal balances of the prepaid Mortgage Loans and their removal from the Pools. Under the Corporation's current policy, Lenders servicing Mortgage Loans are permitted to advertise in a general manner their availability to handle refinancings, although they may not specifically target mortgagors whose Mortgage Loans are in Pools. The Corporation does not, however, permit Lenders to remove Mortgage Loans from Pools for the purpose of Mortgage Loan modifications.

In general, when the level of interest rates declines significantly below the interest rates on mortgage loans, the rate of prepayment is likely to increase, although the prepayment rate is influenced by a number of other factors, including general economic conditions and homeowner mobility. In addition, certain Mortgage Loans may have provisions for prepayment penalties in varying amounts that may or may not influence prepayment rates. Accordingly, the Corporation cannot estimate what the prepayment experience of the Mortgage Loans in Pools will be or how it might compare with the FHA 12-year prepayment assumption respecting insured mortgage loans. See also "Description of Certificates—Termination" for a description of the Corporation's option to repurchase the Mortgage Loans in any Pool when the aggregate principal balance thereof becomes less than 10 percent of the aggregate principal balance of the Mortgage Loans in the Pool on the Issue Date.

A GEM provides for scheduled annual increases in the mortgagor's monthly payments. Because the additional scheduled portion of the monthly payments is applied to reduce the unpaid principal balance of a GEM, the scheduled maturity of a GEM will be significantly shorter than the 25- or 30-year term used as the basis for calculating the initial level installment of principal and interest applicable until the first adjustment. No GEM that matures by its terms more than 15 years subsequent to the Issue Date of the related Certificates will be eligible for inclusion in a Pool.

As set forth above under "Yield Considerations," GPMs provide for payments that increase annually for a period of years (generally between three and seven) and then amortize on a level payment basis to their stated maturity. Because the principal amount of a GPM will increase during its Deferred Interest Period, the time at which one-half of the principal amount of a GPM will be paid in accordance with its amortization schedule will be longer than for a Level Payment Mortgage Loan bearing a similar Mortgage Interest Rate. The maturities of substantially all VRMs at origination are expected to be 30 years, but the maturity of each Mortgage Loan may at

the option of the mortgagor be increased to a term not in excess of 40 years in the event of certain increases in the Mortgage Interest Rate. ARMs vary substantially as to their terms and it is impossible to generalize other than that, because of their adjustable feature, ARMs may be less subject to prepayment than fixed-rate Mortgage Loans should interest rates decline below levels prevailing at origination. Because both GPMs and ARMs have not been originated in quantity until recent periods, there are no reliable data available regarding their prepayment experience.

## **PURCHASE PROGRAM**

Set forth below is a description of certain aspects of the Corporation's purchase program for mortgage loans eligible for inclusion in a Pool (the "Program"). The Prospectus Supplement to be prepared with respect to each Issue will contain information on the Mortgage Loans in the Pool, including information as to the type of Mortgage Loans, the aggregate principal balance of the Mortgage Loans as of the Issue Date, for level installment Fixed-Rate Pools the Pass-Through Rate, for graduated payment Fixed-Rate Pools the Pool Accrual Rate, for ARM Pools the initial Pool Accrual Rate, for VRM Pools the initial Weighted Average Pass-Through Rate, and the latest maturity date of any Mortgage Loan.

### **Lender Eligibility**

The Corporation will purchase Mortgage Loans from eligible federally and state-chartered savings and loan associations, mutual savings banks, commercial banks, credit unions, and similar financial institutions, the deposits or accounts of which are insured by the Federal Savings and Loan Insurance Corporation ("FSLIC"), the Federal Deposit Insurance Corporation ("FDIC"), or the National Credit Union Administration ("NCUA"), from certain other state-insured financial institutions and from certain institutions, principally mortgage bankers, that are mortgage sellers approved by the Corporation. The Corporation, on an individual institution basis, will determine whether such institutions will be approved as Lenders for the Program by applying certain criteria, which may include depth of mortgage origination experience, servicing experience, and financial capacity. Approved Lenders will be party with the Corporation to a Mortgage Selling and Servicing Contract.

### **Mortgage Loan Eligibility**

#### *General*

The Mortgage Loans to be included in each Pool will be Mortgage Loans on residential properties. Each Mortgage Loan purchased for inclusion in a Pool will be subject to and must comply with the terms of the current Selling and Servicing Guide applicable to the Program unless Fannie Mae grants an exception with respect to certain requirements. These Mortgage Loans are permanent loans (as opposed to construction and land development loans) secured by Mortgages on properties comprised of (i) single-family dwelling units, including units in condominium projects, planned unit developments or (ii) multifamily projects consisting of five or more dwelling units. The Prospectus Supplement to be prepared with respect to each Issue backed by Multifamily Mortgage Loans will describe the eligibility criteria for such loans, which will differ in certain respects from the criteria described below. Each Mortgage Loan will be documented by the appropriate FNMA/FHLMC Uniform Instrument in effect at the time of origination, or an FHA or VA mortgage instrument or other instrument acceptable to the Corporation, and will comply with all applicable federal and local laws, including laws relating to usury, equal credit opportunity, and disclosure.

There is no requirement that Mortgage Loans be payable on the first day of the month in order to be eligible for inclusion in a Pool. The Mortgage Loans generally must have had maturities of not more than 30 years from their date of origination, although VRMs can be extended to 40 years at the option of the mortgagor in the event of certain increases in the Mortgage Interest Rates.

### *Conventional Mortgage Loans*

Pursuant to the requirements of the MBS Selling and Servicing Guide, Conventional Mortgage Loans must be real estate loans secured by first Mortgages on residential properties, with original principal balances that (when combined with the original principal balance of any second mortgage in which the Corporation has an interest) did not exceed certain federally imposed maximum principal balance limitations applicable to the Corporation. In 1989, the maximum dollar purchase limitations for Conventional Mortgage Loans are as follows: \$187,600 for mortgages secured by one-family residences (\$281,400 in Alaska and Hawaii); \$239,950 for mortgages secured by two-family residences (\$359,925 in Alaska and Hawaii), \$290,000 for mortgages secured by three-family residences (\$435,000 in Alaska and Hawaii); and \$360,450 for mortgages secured by four-family residences (\$540,675 in Alaska and Hawaii).

No Conventional Mortgage Loan with a loan-to-value ratio in excess of 95 percent will be included in any Pool. Conventional Mortgage Loans (other than Multifamily Mortgage Loans) with loan-to-value ratios exceeding 80 percent must have the principal amount of the indebtedness in excess of 75 percent of the appraised value of the Mortgaged Property insured by a policy of primary mortgage guaranty insurance. Each mortgage insurer must be licensed to transact a mortgage guaranty insurance business in the state where the Mortgaged Property is located and be acceptable to the Corporation as a mortgage insurer. As an alternative to the requirement to obtain mortgage insurance for Conventional Mortgage Loans with loan-to-value ratios in excess of 80 percent, Lenders may contract with the Corporation to repurchase such Conventional Mortgage Loans at a price equal to the unpaid principal balance thereof in the event of default before the loan-to-value ratio has been reduced to 80 percent of the original value.

The maximum loan-to-value ratio at the time of purchase for a Conventional Mortgage Loan secured by a first Mortgage on an owner-occupied property including the unpaid principal balances of all subordinate financing is 95 percent. In the case of a Conventional Mortgage Loan secured by a first Mortgage on a non-owner-occupied property, the maximum loan-to-value ratio including the unpaid principal balances of all subordinate financing is 90 percent. The maximum loan-to-value ratio for Mortgage Loans secured by non-owner-occupied properties is generally 70 percent but may vary based on the Corporation's evaluation of the age of a Mortgage Loan and its experience with the Lender from whom it purchases such Mortgage Loan.

Pursuant to the requirements of the MBS Selling and Servicing Guide, each Lender that sells a Conventional Mortgage Loan to the Corporation for the purposes of the Program must assume responsibility for underwriting such Conventional Mortgage Loan using the same underwriting criteria, as from time to time in effect, that must be met by mortgage loans eligible for Fannie Mae portfolio purchases. After delivery of the Conventional Mortgage Loans, the Corporation will conduct reviews of the quality of credit and property underwriting used in the origination of certain randomly selected Conventional Mortgage Loans.

### *FHA/VA Mortgage Loans*

Pursuant to the requirements of the MBS Selling and Servicing Guide, FHA/VA Mortgage Loans must be real estate loans with stated constant annual rates of interest, secured by first Mortgages on residential properties. The principal balance and loan-to-value ratio of each FHA Mortgage Loan must comply with the standards established by the FHA. In the case of VA Mortgage Loans, the Corporation has imposed a maximum principal balance limitation of \$144,000. In addition, the unguaranteed portion of the VA Mortgage Loan amount cannot be greater than 75 percent of the lesser of (i) the purchase price of the property or (ii) the VA's estimate of reasonable value. Each FHA/VA Mortgage Loan must be insured or guaranteed by a valid and subsisting policy or guaranty in full force and effect. Each FHA/VA Mortgage Loan must have been originated at least 12 months preceding the Corporation's purchase of the Mortgage Loan for inclusion in a Pool.



## DESCRIPTION OF CERTIFICATES

Each Issue of Certificates will be issued pursuant to the applicable Trust Indenture described above. The applicable Trust Indenture will, as to each Issue, be supplemented by an Issue Supplement, which will be prepared at the time of the creation of such Issue. The Issue Supplement will set forth the specific terms of the Issue, such as the Pass-Through Rate applicable thereto in the case of Fixed-Rate Pools (other than those containing GPMs) and the Issue Date. The Issue Supplement will also contain any variation from the basic Trust Indenture applicable to a particular Issue, any such variation also being described in the Prospectus Supplement relating to such Issue. As set forth under "Legal Opinion," the validity of each Issue of Certificates, the Trust Indenture, and the applicable Issue Supplement will be passed upon by the General Counsel of the Corporation upon the request of any Holder of Certificates of such Issue.

Mortgage Loans not previously held in the Corporation's portfolio will be purchased pursuant to a Pool Purchase Contract for cash or in exchange for Certificates in the related Pool. Such Mortgage Loans will be serviced by one of the Corporation-approved Lenders, normally the same entity as the loan originator, pursuant to the terms of the Pool Purchase Contract, as supplemented by the applicable MBS Selling and Servicing Guide, which is incorporated therein by reference. Copies of the Trust Indenture, together with the MBS Selling and Servicing Guides, may be obtained from the Corporation's Washington, D.C. office, or from any of the Corporation's regional offices in Philadelphia, Atlanta, Chicago, Dallas, and Los Angeles.

The following summaries describe certain provisions of the Trust Indenture. These summaries do not purport to be complete and are subject to, and qualified in their entirety by reference to, the more complete provisions of the Trust Indenture.

### General

The Certificates will represent Fractional Undivided Interests in the Trust Fund created pursuant to the Trust Indenture and Issue Supplement for each Issue. The Fractional Undivided Interest represented by a particular Certificate will be equal to the initial principal denomination of such Certificate set forth on the face thereof (or, if in book-entry form, entered on the books of a Federal Reserve Bank) divided by the aggregate Stated Principal Balance<sup>(1)</sup> of the Mortgage Loans in the Pool (the "Pool Principal Balance") as of the Issue Date. The Trust Fund for an Issue consists of (i) such Mortgage Loans as from time to time are subject to the Trust Indenture and Issue Supplement, (ii) such payments or other recoveries on Mortgage Loans as from time to time may be considered to be held by the Corporation for Certificateholders, (iii) property acquired by foreclosure of Mortgage Loans or by deed in lieu of foreclosure, and (iv) the interest of Certificateholders in the obligation of the Corporation to supplement payments and other recoveries on Mortgage Loans to the extent necessary to make required distributions to Certificateholders.

Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985, (other than Pools containing GPMs or Multifamily Mortgage Loans) will be available in book-entry form only and will not be convertible to definitive form. A Fiscal Agency Agreement between the Corporation and the Federal Reserve Bank of New York makes generally applicable to Certificates in book-entry form

(1) All references herein to the Stated Principal Balance of a Mortgage Loan or to the aggregate Stated Principal Balance of all Mortgage Loans in a Pool are to the principal balance or aggregate principal balance, as the case may be, utilized by the Corporation in calculating the then-outstanding principal balances of Certificates. Such Stated Principal Balances may differ from actual principal balances for a number of reasons, including supplemental payments by the Corporation on delinquent Mortgage Loans pursuant to its guaranty obligations and delays in the distribution of certain Mortgage Loan receipts.

(i) regulations governing the Corporation's use of the book-entry system, contained in 24 C.F.R. Part 81, Subpart E, (ii) such procedures, insofar as applicable, as may from time to time be established by regulations of the United States Department of the Treasury governing United States securities, as now set forth in Treasury Department Circular Number 300, 31 C.F.R. Part 306 (other than Subpart O), and (iii) the Federal Reserve Bank's operating circulars and letters. Certificates in book-entry form can be accommodated on the Federal Reserve Bank's book-entry system in a minimum denomination of \$1,000 and in additional increments of one dollar and will be freely transferable on the records of a Federal Reserve Bank.

Certificates will be maintained on the book-entry system of a Federal Reserve Bank in a manner that permits separate trading and ownership. The Federal Reserve Bank of New York will make payments on the Certificates on behalf of Fannie Mae on the applicable Distribution Dates by crediting accounts on its records or on the records of other Federal Reserve Banks. Certificates in book-entry form may be held of record only by entities eligible to maintain book-entry accounts with a Federal Reserve Bank. Such entities are not necessarily the beneficial owners of the Certificates. Beneficial owners will ordinarily hold Certificates through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations. A Certificateholder that is not the beneficial owner of a Certificate, and each other financial intermediary in the chain to the beneficial owner, will have the responsibility of establishing and maintaining accounts for its respective customers. The rights of the beneficial owner of a Certificate with respect to Fannie Mae and the Federal Reserve Bank may be exercised only through the financial intermediaries thereof. Fannie Mae and the Federal Reserve Bank will have no direct obligation to a beneficial owner of a Certificate that is not also the owner of record according to the account maintained by the Federal Reserve Bank. The Federal Reserve Bank will act only upon the instructions of the record owner in recording transfers of a Certificate.

In the event Certificates are issued in fully registered form, such Certificates may only be issued in initial principal denominations of not less than \$25,000 and integral multiples of \$5,000 in excess of \$25,000, with the exception of one odd denomination that may be issued for each Pool. (TI Section 7.01) Certificates issued in fully registered form will be freely transferable and exchangeable at the Federal Reserve Bank of New York. A service charge may be imposed for any exchange or registration of transfer of Certificates issued in fully registered form, and the Corporation may require payment of a sum sufficient to cover any tax or other governmental charge. (TI Section 7.02)

Distributions of principal and interest on each Issue of Certificates will be made by the Corporation on the 25th day of each month (the "Distribution Date") to the persons in whose names the Certificates are entered on the books of a Federal Reserve Bank (or registered in the Certificate Register in the case of fully registered Certificates) as of the close of business on the last day of the preceding month (the "Record Date"). The first distribution for each Issue of Certificates will be in the month following the month in which the Issue Date occurs. Distributions for each Issue will be made by wire (or by check in the case of fully registered Certificates) to the person entitled thereto as it appears on the Certificate not later than the 25th day of each month; provided, however, that the final distribution in retirement of fully registered Certificates of any Issue will be made only upon presentation and surrender of the Certificates at the office or agency of the Corporation specified in the notice to Certificateholders of such final distribution.

As described under "Rights Upon Event of Default," Holders of Certificates will have the right under certain circumstances to appoint a successor Trustee.

#### **Transfer of Mortgage Loans to Pools**

Each Mortgage Loan transferred to a Pool will be identified in a Mortgage Loan Schedule appearing as an exhibit to the Issue Supplement for the related Issue of Certificates. In addition, the Corporation, as Trustee of the Mortgage Loans, will retain on behalf of Certificateholders the original Mortgage Note, endorsed in blank, and an assignment to the Corporation of the

mortgage instrument. Usually assignments are in a form suitable for recording but they are not recorded. However, a blanket assignment may be used for the transfer of a large number of Mortgage Loans, even if the properties are not located in the same recording jurisdiction, depending on the Lender's servicing experience and its financial condition. At its option, the Corporation may choose to maintain such documents either with a custodian institution (the Lender or another institution) whose deposits or accounts are insured by the FDIC, FSLIC, or a state agency or with a subsidiary or affiliate of the Lender. The Corporation will review the Mortgage Loan Schedule prior to the issuance of the Certificates and will conduct random spot checks to confirm the sufficiency of the documents after issuance of the Certificates.

Although the above procedures are intended to protect the interests of the Holders of Certificates in the Mortgage Loans in the related Pool, the law applicable to a liquidation, reorganization, or similar proceeding involving the assets of a Lender or of the Corporation is unclear and as a result no opinion can be rendered as to the status of Certificateholders' interests in the event of any such proceeding. The Corporation's guaranty would, however, by its terms be available in the event of any such proceeding involving the assets of a Lender.

### **Servicing Through Lenders**

Pursuant to the Trust Indenture, the Corporation is responsible for servicing and administering the Mortgage Loans but, in its discretion, is permitted to contract with the originator of each Mortgage Loan, or another eligible servicing institution, to perform such functions under the supervision of the Corporation as more fully described herein. Any servicing contract or arrangement by the Corporation with a Lender for the direct servicing of Mortgage Loans is a contract solely between the Corporation and that Lender, and the Certificateholders are not deemed to be parties thereto and have no claims, rights, obligations, duties, or liabilities with respect to such Lender. (TI Section 5.01)

Lenders will be obligated pursuant to the applicable MBS Selling and Servicing Guide to perform diligently all services and duties customary to the servicing of mortgages, as well as those specifically prescribed by the MBS Selling and Servicing Guide. The Corporation will monitor the Lender's performance and has the right to remove any Lender for cause at any time it considers such removal to be in the best interest of Certificateholders. The duties performed by Lenders include general loan servicing responsibilities, collection and remittance of principal and interest payments, administration of mortgage escrow accounts, collection of insurance claims, and, if necessary, foreclosure.

The Corporation retains as to each Fixed-Rate Mortgage Loan the difference in interest between the annual Mortgage Interest Rate borne by the Mortgage Loan and the Pass-Through Rate or Pool Accrual Rate on the Certificates. For example, if a Mortgage Loan with a 12.25 percent Mortgage Interest Rate is included in a Pool against which a Certificate with an 11.25 percent Pass-Through Rate is issued, the Corporation would be entitled to receive total compensation of one percent per annum on the Mortgage Loan. For VRMs, the Corporation will retain from interest payments a fixed annual servicing fee, or "Spread," as described under "VRM Pools" above. For ARMs, the Corporation will retain an amount equal to the percentage Spread applicable thereto applied to the outstanding principal balance as increased by any deferred interest that has been included therein. See "Yield Considerations." The Corporation is also entitled to retain prepayment fees, late charges, assumption fees, and similar charges to the extent they are collected from borrowers. The Corporation will compensate Lenders in an amount up to, but never exceeding, the amount of interest retention described above, less a prescribed minimum amount to be retained by the Corporation for itself in consideration of its guaranty obligations and servicing responsibilities.

## **Payments on Mortgage Loans; Distributions on Certificates**

On the 25th day of each month (beginning with the month following the month of the Issue Date), or, if such 25th day is not a business day, on the first business day next succeeding such 25th day, the Corporation will, respecting each Issue, distribute to Certificateholders an amount equal to the total of (i) the principal due on the Mortgage Loans in the related Pool during the period beginning on the second day of the month prior to the month of such distribution and ending on the first day of such month of distribution (the "Due Period"), (ii) the Stated Principal Balance of any such Mortgage Loan that was prepaid in full during the second month next preceding the month of such distribution (including as prepaid for this purpose any Mortgage Loan repurchased by the Corporation as described herein because of the Corporation's election to repurchase the Mortgage Loan after it is delinquent, in whole or in part, with respect to four consecutive installments of principal and interest, or because of the Corporation's election to repurchase such Mortgage Loan under the circumstances described under "Collection and Other Servicing Procedures" below), (iii) the amount of any partial prepayment of a Mortgage Loan received in the second month next preceding the month of distribution, and (iv) in respect of all Fixed-Rate Mortgage Loans other than GPMs during their Deferred Interest Period, one month's interest at the Pass-Through Rate (or Accrual Rate in the case of GPMs) on the Certificate Principal Balance as reported to Certificateholders in connection with the previous distribution (or, respecting the first distribution, the Certificate Principal Balance on the Issue Date). For purposes of distributions, a Mortgage Loan will be considered to have been prepaid in full if, in the Corporation's reasonable judgment, the full amount finally recoverable on account of such Mortgage Loan has been received, whether or not such full amount is equal to the Stated Principal Balance of the Mortgage Loan. The Corporation may, in its discretion, include with any distribution principal prepayments, both full and partial, received during the month prior to the month of distribution but is under no obligation to do so.

For each GPM during its Deferred Interest Period and each ARM, the Corporation will, on each monthly Distribution Date, distribute an amount as to interest equal to the amount of interest payable on such Mortgage Loan during the applicable Due Period (which will, in the case of GPMs during their Deferred Interest Period, and may, in the case of ARMs having deferred interest features, be less than one month's interest at the Mortgage Interest Rate) less the amount retained by the Corporation as described under "Servicing Through Lenders" above. For each VRM Pool, the Corporation will, on each Distribution Date, distribute an amount as to interest equal to one month's interest at the then-current Weighted Average Pass-Through Rate on the Certificate Principal Balance of each Certificate.

Distributions on any Distribution Date will be made to Certificateholders of record on the prior Record Date (the close of business on the last day of the immediately preceding month). Each Certificateholder will be entitled to receive an amount equal to the total amount distributed multiplied by the Fractional Undivided Interest evidenced by such Holder's Certificate.

### **The Corporation's Guaranty**

The Corporation's obligation described above to distribute amounts representing scheduled principal and interest, whether or not received, and its obligation to distribute the full principal amount of any foreclosed or otherwise finally liquidated Mortgage Loan, whether or not such principal amount is actually recovered, constitute the Corporation's guaranty obligations in respect of the Certificates. If the Corporation were unable to perform such obligations, distributions to Certificateholders would consist solely of payments and other recoveries on Mortgage Loans and, accordingly, delinquencies and defaults would affect monthly distributions to Certificateholders.

### **Reports to Certificateholders**

With respect to each distribution, the Corporation will cause to be forwarded to each Certificateholder with respect to all Certificates held by such Certificateholder in each Pool, a statement setting forth, to the extent applicable, the following information:

- (i) the amount, if any, due on such Certificates on the related Distribution Date on account of total scheduled and unscheduled principal (including any Deferred Interest);
- (ii) the amount due on such Certificates on the related Distribution Date on account of interest;
- (iii) the total of the cash distribution on such Certificates on the related Distribution Date;
- (iv) the Certificate Principal Balances of such Certificates on the related Distribution Date after giving effect to any distribution of principal made on such date and to any Deferred Interest added to the principal balances of the underlying Mortgage Loans during the preceding Due Period;
- (v) the total amount of any Deferred Interest that was added to the principal balances of the underlying Mortgage Loans during the preceding Due Period;
- (vi) the amount, if any, of (i) above that is allocable to Deferred Interest;
- (vii) the amount, if any, of (iv) above that is allocable to Deferred Interest;
- (viii) for VRM Pools, the Weighted Average Pass-Through Rate applicable to such Distribution Date; and
- (ix) for ARM Pools, the Pool Accrual Rate applicable to such Distribution Date (or, in the event the underlying Mortgage Loans have different Accrual Rates, the approximate weighted average Pool Accrual Rate).

Within a reasonable period of time after the end of each calendar year, the Corporation will furnish to each Person who at any time during the calendar year was a Certificateholder a statement containing the information set forth in items (i), (ii), (v), and (vi) above, in summary form for such calendar year, or for any portion thereof during which such Person was a Certificateholder.

### **Servicing Compensation and Payment of Certain Expenses by the Corporation**

As compensation for its activities and obligations under the Trust Indenture, the Corporation will be entitled to retain the amounts applicable to interest that are not required to be distributed to Certificateholders as described above. In addition, the Corporation is entitled to retain any amounts by which the proceeds of the liquidation of a Mortgage Loan exceed (i) the Stated Principal Balance of that Mortgage Loan and (ii) interest thereon at the Pass-Through Rate in the case of a Fixed-Rate Mortgage Loan (other than a GPM) or a VRM or interest thereon at the Accrual Rate in the case of a GPM or an ARM. The Corporation will pay all expenses incurred by it in connection with its servicing activities, including, without limitation, the fees to Lenders, and is not entitled to reimbursement therefor out of the Trust Fund.

Additional servicing compensation in the form of prepayment charges, assumption fees, late payment charges, or otherwise will be retained by the Corporation.

### **Collection and Other Servicing Procedures**

The Corporation is responsible for servicing the Mortgage Loans in each Pool and may, as set forth above, conduct such servicing through Lenders or through other Corporation-approved mortgage servicers. In connection with its servicing activities, the Corporation has full power and authority to do or cause to be done any and all things as it may deem necessary or appropriate

in its sole discretion, including the foreclosure or comparable conversion of a defaulted Mortgage Loan. In lieu of undertaking any such foreclosure, the Corporation may, in its discretion and without obligation, repurchase from the Trust Fund any Mortgage Loan that is delinquent, in whole or in part, as to four consecutive installments of principal and interest. The purchase price will be equal to the Stated Principal Balance of the delinquent Mortgage Loan together with accrued interest at the Pass-Through Rate (or the Accrual Rate in the case of a GPM or an ARM) and will be distributed to Certificateholders in the same manner as full prepayments of Mortgage Loans. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates." (TI Sections 5.01 and 5.03)

With respect to each Mortgage Loan in a Pool, the Lender makes certain warranties to the Corporation concerning such matters as the recordation of the original Mortgage, the validity of the Mortgage Loan as a first lien on the Mortgaged Property, and compliance by such Mortgage Loan with applicable state and federal laws. In the event of a material breach of any such warranty or a material defect in the Mortgage Loan documentation, the Corporation may withdraw such Mortgage Loan from the Trust Fund at a price equal to its Stated Principal Balance together with interest thereon at the Pass-Through Rate (or the Accrual Rate in the case of a GPM or an ARM). Alternatively, the Corporation may, at its option, for all Pools other than Pools containing Multifamily Mortgage Loans, substitute a new Mortgage Loan for a defective Mortgage Loan; provided, however, that no such substitution may take place more than two years subsequent to the date of the original issue of the related Certificates, and any such substitute Mortgage Loan must satisfy certain eligibility criteria designed to assure that the nature of the Pool will not be altered by any such substitution. Any amount by which the Stated Principal Balance of the defective Mortgage Loan exceeds the principal balance of the substitute Mortgage Loan (the substitute Mortgage Loan may not be larger than the Mortgage Loan it is replacing) will be passed through to Certificateholders.

Subject to the following paragraph and to the extent consistent with then-current policies of the Corporation respecting mortgage loans held in its own portfolio, the Corporation in its discretion may enforce or waive enforcement of any of the terms of any Mortgage Loan or enter into an agreement for the modification of any of the terms of any Mortgage Loan, or take any action or refrain from taking any action in servicing any Mortgage Loan. In such connection, the Corporation may waive any prepayment charge, assumption fee, or late payment charge or may exercise or refrain from exercising any "call option rider"; provided, however, that any decision to exercise or refrain from exercising any "call option rider" must be consistent with then-current policies or practices employed by the Corporation respecting comparable mortgage loans held in its own portfolio and must be without consideration of the ownership status of the related Mortgage Loan.

In the VRM Trust Indenture, the Corporation agrees that any decision as to whether or not (i) to increase a Mortgage Interest Rate (where any such increase is permitted by the terms of such Mortgage Loan and by applicable law) or (ii) to shorten the maturity of any Mortgage Note, will be made in accordance with the then-current practice of the related Lender respecting similar Mortgage Notes and without consideration of the ownership status of the related Mortgage Note. If the Corporation is then directly servicing a VRM, it will increase the related Mortgage Interest Rate and shorten the maturity whenever any such change is permitted by the terms of such Mortgage Loan and by applicable law. Any adjustment downward by reason of a decrease in the applicable index is mandatory. See the Prospectus Supplement for criteria and procedures governing changes in Mortgage Interest Rates.

In connection with the transfer or prospective transfer of title to a Mortgaged Property (other than a Mortgaged Property securing a VRM), the Corporation is obligated to accelerate the maturity of the related Mortgage Loan where that Mortgage Loan contains a "due-on-sale" clause permitting acceleration under those conditions unless the Corporation is restricted by law from enforcing the "due-on-sale" clause, the transfer is from one co-borrower to another co-borrower under the circumstances specified in the Corporation's published guidelines or the

Corporation elects to withdraw such Mortgage Loan from the Pool. In the case of a VRM, the Corporation will enforce or refrain from enforcing any "due-on-sale" clause in the related Mortgage Note in accordance with the then-current practice of the related Lender without consideration of the ownership status of the Mortgage Note. If the Corporation is then directly servicing the Mortgage Loan, it will enforce the "due-on-sale" clause unless such enforcement is prohibited by law or the Corporation elects to withdraw such Mortgage Loan from the Pool. See "Maturity and Prepayment Assumptions." In the case of an ARM, the related Issue Supplement will provide that the Corporation will not enforce the "due-on-sale clause," but will permit creditworthy transferees of the Mortgaged Property securing the ARM to assume the ARM.

In the event that, for any reason, the Corporation is not obligated to accelerate the maturity of a Conventional Mortgage Loan upon the transfer, or prospective transfer, of title to the underlying Mortgaged Property, the Corporation may enter into a transaction by which the obligor is released from liability on the related Mortgage Loan and the transferee assumes such liability; provided, however, that no such transaction shall (i) be entered into which would not have been entered into had the Mortgage Loan been held in the Corporation's own portfolio, (ii) provide for reduction of the Mortgage Interest Rate or, in the case of any ARM, provide for any change in any interest rate adjustment provision or provision governing the calculation of scheduled payments if any such change would be adverse to the interests of Certificateholders, or (iii) in the case of any VRM, provide for any change in the original index applicable thereto.

The Trust Indenture provides that the Corporation may repurchase from the related Pool, at a price equal to the Stated Principal Balance thereof plus accrued interest thereon at the applicable Pass-Through Rate (or the applicable Accrual Rate in the case of a GPM or an ARM), any Mortgage Loan respecting which the underlying Mortgaged Property is transferred, or proposed to be transferred, under circumstances permitting the Corporation to accelerate the maturity of such Mortgage Loan pursuant to the terms of any "due-on-sale" clause contained therein.

#### **Certain Matters Regarding the Corporation**

The Trust Indenture provides that the Corporation may not resign from its obligations and duties thereunder, except upon determination that those duties are no longer permissible under applicable law. No such resignation will become effective until a successor has assumed the Corporation's obligations and duties under the Trust Indenture; provided, however, that no successor will succeed to the Corporation's guaranty obligations described above, the Corporation continuing to be responsible thereunder notwithstanding any termination of its other duties and responsibilities under the Trust Indenture. In the event that the Corporation is unable to fulfill its continuing guaranty obligations, the Trust Indenture may be modified to provide for monthly distributions to be made from then-available Mortgage Loan payments and other recoveries in a manner similar to practices and procedures followed in the servicing of whole loans for institutional investors. (TI Section 9.01)

The Trust Indenture also provides that neither the Corporation nor any director, officer, employee, or agent of the Corporation will be under any liability to the Trust Fund or to Certificateholders for any action taken, or for refraining from the taking of any action, in good faith pursuant to such Trust Indenture or for errors in judgment; provided, however, that neither the Corporation nor any such person will be protected against any liability that would otherwise be imposed by reason of willful misfeasance, bad faith, or gross negligence or by reason of willful disregard of obligations and duties.

In addition, the Trust Indenture provides that the Corporation is not under any obligation to appear in, prosecute, or defend any legal action that is not incidental to its responsibilities under the Trust Indenture and that in its opinion may involve it in any expense or liability. The

Corporation may, however, in its discretion undertake any such legal action that it may deem necessary or desirable in the interests of the Certificateholders. In such event, the legal expenses and costs of such action and any liability resulting therefrom will be expenses, costs, and liabilities of the Corporation that will not be reimbursable to the Corporation out of the Trust Fund. (TI Section 8.02)

Any corporation into which the Corporation may be merged or consolidated, or any corporation resulting from any merger, conversion, or consolidation to which the Corporation is a party, or any corporation succeeding to the business of the Corporation, will be the successor of the Corporation under the terms of the Trust Indenture. (TI Section 9.02)

#### **Events of Default**

Events of Default under the Trust Indenture will consist of (i) any failure by the Corporation to distribute to Certificateholders any required payment that continues unremedied for 15 days after the giving of written notice of such failure to the Corporation by the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than five percent of the related Trust Fund; (ii) any failure by the Corporation duly to observe or perform in any material respect any other of its covenants or agreements in the Trust Indenture which failure continues unremedied for 60 days after the giving of written notice of such failure to the Corporation by the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 25 percent of the related Trust Fund; and (iii) certain events of insolvency, readjustment of debt, marshalling of assets and liabilities, or similar proceedings and certain actions by or against the Corporation indicating its insolvency, reorganization, or inability to pay its obligations. (TI Section 9.03)

#### **Rights Upon Event of Default**

As long as an Event of Default under the Trust Indenture for any Issue remains unremedied, the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 25 percent of the related Trust Fund may, in writing, terminate all of the obligations and duties of the Corporation as Trustee and in its corporate capacity under the Trust Indenture in respect of such Issue (other than its guaranty obligations described above which continue notwithstanding any such termination) and name and appoint, in writing, a successor to succeed to all such responsibilities, duties, and obligations of the Corporation thereunder (other than the Corporation's guaranty obligations) and to the legal title to the Mortgage Loans held in such Trust Fund. (TI Section 9.03)

#### **Amendment**

The Corporation may amend the Trust Indenture as it relates to any Issue without the consent of or notice to any of the Certificateholders, for one or more of the following purposes: (i) to add to the covenants of the Corporation; (ii) to evidence the succession of another party or parties to the Corporation and the assumption by such successor or successors of the obligations of the Corporation thereunder in its corporate capacity or in its capacity as Trustee or in both such capacities; (iii) to eliminate any right reserved to or conferred upon the Corporation in its corporate capacity; (iv) to make provisions for the purpose of curing any ambiguity or correcting or supplementing any provision in the Trust Indenture or any Issue Supplement, provided such provisions do not adversely affect the interests of any Certificateholder; or (v) to modify the Trust Indenture under the circumstances and for the purposes set forth in the final sentence of the first paragraph under "Certain Matters Regarding the Corporation" above. (TI Section 11.01)

The Corporation may amend the Trust Indenture as it relates to any Issue with the consent of the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 66 percent of the related Trust Fund so as to waive compliance by the Corporation with any terms of the Trust Indenture or related Issue Supplement, or to allow the Corporation to eliminate,



change, add to, or modify the terms of the Trust Indenture or Issue Supplement. However, no such waiver or amendment may, without the consent of all Certificateholders, terminate or modify the guaranty obligations of the Corporation or reduce the percentages of Certificates the Holders of which are required to consent to any waiver or amendments. In addition, no waiver or amendment shall, without the consent of each Certificateholder affected thereby, reduce in any manner the amount of, or delay the timing of, payments received on Mortgage Loans that are required to be distributed on any Certificate. (TI Section 11.02)

### **Termination**

The Trust Indenture as it relates to each Issue terminates upon the final payment or liquidation of the last Mortgage Loan remaining in the related Pool and distribution of all proceeds thereof. The Trust Indenture as it relates to each Issue will terminate also upon repurchase by the Corporation, at its option, of all remaining Mortgage Loans in the related Pool at a price equal to 100 percent of the Stated Principal Balance of each such Mortgage Loan together with one month's interest thereon at the Pass-Through Rate (or, in the case of a VRM Pool, one month's interest on the Stated Principal Balance at the Weighted Average Pass-Through Rate, or, in the case of a GPM Pool or an ARM Pool, one month's interest on the Stated Principal Balance of each GPM or ARM, as the case may be, at the applicable Pool Accrual Rate). (TI Section 10.01) The exercise of such option will effect early retirement of the Certificates of that Issue, but the Corporation's right to repurchase is conditioned upon the Pool Principal Balance at the time of repurchase being less than ten percent of the Pool Principal Balance on the Issue Date. In addition, the Corporation has stated that it will be its policy not to exercise any such option in respect of any Pool if (i) it has knowledge that any related Certificate has been pledged to secure an issue of cash flow obligations or is included in a pool underlying an issue of cash flow obligations and (ii) the exercise of such option would take place prior to the earliest date upon which the issuer of such cash flow obligations or the sponsor of such Pool can exercise an option to redeem such obligations or purchase such Certificates without premium. In no event, however, will the trust relating to each Pool as created by the Trust Indenture continue beyond the expiration of 21 years from the death of the last survivor of the persons named in the Trust Indenture. For each Issue, the Corporation will give written notice of termination of the Trust Indenture as it relates to such Issue to each affected Certificateholder, and the final distribution will be made to the person entitled thereto; provided, however, that the final distribution for fully registered Certificates will be made only upon surrender and cancellation of the Certificates at an office of the Corporation specified in the notice of termination. (TI Section 10.01)

### **CERTAIN FEDERAL INCOME TAX CONSEQUENCES**

This is a discussion of certain federal income tax consequences to persons purchasing Certificates. The discussion does not purport to deal with all aspects of federal taxation that may be relevant to particular investors. Prospective investors are advised to consult their own tax advisors regarding the federal income tax consequences of holding and disposing of Certificates as well as any tax consequences arising under the laws of any state or other taxing jurisdiction.

Revenue Ruling 84-10, 1984-1 C.B. 155, sets forth certain federal income tax consequences relating to investments in the Certificates issued with respect to a Pool. Pursuant to Revenue Ruling 84-10, a Pool will not be classified as an association taxable as a corporation, but will be classified as a trust of which the beneficial owners of the Certificates (the "Owners") are the owners under Subpart E of Part I of Subchapter J of the Internal Revenue Code of 1986, as amended (the "Code"). Each Owner will be treated as the owner of a pro rata undivided interest in the ordinary income and corpus of the trust attributable to that particular Pool and will be considered to be the equitable owner of a pro rata undivided interest in each of the Mortgage Loans included therein, subject to the discussion below concerning a possible recharacterization of a portion of the servicing fee.

Accordingly, Owners of a particular series will be required to report on their federal income tax returns, consistent with their methods of accounting, their pro rata share of the entire income from the Mortgage Loans in that particular Pool, including interest, prepayment penalties, assumption fees and late payment charges attributable to the Mortgage Loans in the Pool, plus any amount paid by the Corporation as interest under its guaranty. Owners will be entitled to deduct their pro rata share of the servicing fee paid to the Corporation, as provided in section 162 or section 212 of the Code, consistent with their methods of accounting and subject to the discussions below.

The deduction for an Owner's share of the Corporation's servicing fee is limited under section 67 of the Code in the case of (i) estates and trusts, and (ii) individuals owning an interest in a Certificate directly or through an investment in a "pass-through entity" (other than in connection with such individual's trade or business). Pass-through entities include partnerships, S corporations, grantor trusts, and mutual funds but do not include estates, nongrantor trusts, cooperatives and real estate investment trusts. Generally, such deduction, when aggregated with certain of the Owner's other miscellaneous itemized deductions, is allowable only to the extent that such aggregate amount exceeds 2 percent of the Owner's adjusted gross income. Adjusted gross income for an estate or nongrantor trust is to be computed in the same manner as in the case of an individual except that deductions for administrative expenses of the estate or trust that would not have been incurred if the property were not held in such trust or estate are treated as allowable in arriving at adjusted gross income.

Owners must also report as ordinary income their pro rata share of any original issue discount on each of the Mortgage Loans in a manner consistent with the special rules of section 1272 of the Code. Under these rules, Owners are required to include their share of any original issue discount in income as it accrues, possibly before the receipt of cash attributable to that income, regardless of their methods of accounting. The special rules of section 1272 of the Code will not apply, however, with respect to Mortgage Loans originated before March 2, 1984, if the mortgagors of such Mortgage Loans were natural persons.

Proposed regulations were issued in April 1986 by the Treasury Department relating to the determination and treatment of original issue discount under sections 1271 through 1275 of the Code (the "Proposed Regulations"). Under the Proposed Regulations, certain arrangements in connection with the origination of the Mortgage Loans, such as the charging of points, may give rise to original issue discount subject to the special rules of section 1272 of the Code. In the case of Mortgage Loans originated after May 8, 1986, the Proposed Regulations provide that lenders that made the Mortgage Loans must give notice of original issue discount on such Mortgage Loans at the time they sell them to the Corporation. The Corporation will report annually to holders of record their share of any such original issue discount. However, the Owner's share of any original issue discount is income to the Owner regardless of whether it is reported to the Corporation by the Lender.

With respect to ARMs that provide for an incentive interest rate, the Proposed Regulations may require a reallocation of a portion of the interest from the periods when such rate is not in effect to the period during which such rate is in effect. Under the Proposed Regulations, an Owner is also required to treat any interest, the payment of which is deferred, as includible in income at the time such interest would have been payable in the absence of such deferral. Owners are advised to consult their own tax advisors concerning these matters.

With respect to any undivided interest in a Mortgage Loan purchased at a premium, an Owner may elect to allocate the premium among the interest payments received on the Mortgage Loan on a yield to maturity basis under the rules of section 171 of the Code if the Mortgage Loan was originated after September 27, 1985. The amount of any such premium so allocated shall be applied against (and operate to reduce) the amount of any such interest includible in income. Correspondingly, an Owner's basis in its undivided interest shall be decreased by the amount of premium applied to reduce any interest income. For Mortgage Loans originated before

September 28, 1985, an Owner will be entitled to premium amortization under section 171 only if the mortgagor is not an individual and the other conditions for the application of that section are met. If section 171 is inapplicable or if an Owner does not make an election thereunder, (i) such an Owner must include the full amount of each interest payment in income, and (ii) the premium must be allocated to the principal distributions on the Mortgage Loan and, when each such distribution is received, a loss equal to the premium allocated to such distribution will be recognized. Any tax benefit from the premium not previously recognized will be taken into account in computing gain or loss upon the sale or disposition of the Certificate.

The Internal Revenue Service also ruled in Revenue Ruling 84-10 as follows:

1. A Certificate owned by a domestic building and loan association is considered as representing "loans secured by an interest in real property" within the meaning of section 7701(a)(19)(C)(v) of the Code, provided the real property underlying each Mortgage is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code.

2. A Certificate is considered as representing "qualifying real property loans" within the meaning of section 593(d) of the Code, provided the real property underlying each Mortgage is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code. Thus, a Certificate owned by a domestic building and loan association or any other thrift institution described in section 593(a) of the Code will represent "qualifying real property loans" within the meaning of section 593(d) of the Code, provided the real property underlying each Mortgage is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code.

3. A Certificate owned by a real estate investment trust is considered as representing "real estate assets" within the meaning of section 856(c)(5)(A) of the Code, and the interest income is considered "interest on obligations secured by mortgages on real property" within the meaning of section 856(c)(3)(B) of the Code.

Although these rulings do not specifically refer to Mortgage Loans involving interest rate buydown accounts, the conclusions reflected in paragraphs 1 and 2 should be generally applicable to an Owner's investment in a Mortgage Loan secured by an interest rate buydown account that conforms with the requirements of the Corporation's applicable MBS Selling and Servicing Guide ("Buydown Mortgage Loan"), and which does not represent an account with the Owner, since the fair market value of the real property securing each Buydown Mortgage Loan would have exceeded the amount of such Buydown Mortgage Loan at the time it was made. Owners and their tax advisors are advised to review section 1.593-11(d) of the Treasury Regulations and to compare Revenue Ruling 81-203, 1981-2 C.B. 137. In the case of the rulings referred to in paragraph 3, an investment in a Buydown Mortgage Loan by a real estate investment trust should also be treated in its entirety as a "real estate asset" within the meaning of section 856(c)(5)(A) of the Code if the fair market value of the real property securing the Buydown Mortgage Loan equals or exceeds the principal amount of such Buydown Mortgage Loan at the time the real estate investment trust makes a commitment to acquire a Certificate. This conclusion is supported by Treasury Regulation section 1.856-5(c)(1)(i), which specifies that if a mortgage loan is secured by both real property and by other property and the value of the real property alone equals or exceeds the amount of the loan, then all interest income will be treated as "interest on obligations secured by mortgages on real property" within the meaning of section 856(c)(3)(B) of the Code. Since there are no directly applicable precedents with respect to the federal income tax treatment of investments in Buydown Mortgage Loans, Owners should consult with their tax advisors concerning such tax treatment.

In general, for purposes of sections 1276 and 1277 of the Code, an Owner's interest in a Mortgage Loan will be considered to be acquired at a market discount if the face amount of such interest exceeds the Owner's basis in such interest. Pursuant to section 1276 of the Code, an

Owner will be required to include as ordinary income, with respect to any Mortgage Loan originated after July 18, 1984 that is acquired at a market discount, (i) any partial principal payment on such Mortgage Loan to the extent such payment does not exceed the accrued market discount (as defined in section 1276 of the Code) on such Mortgage Loan, and (ii) gain realized on the disposition of such Mortgage Loan or of such Owner's Certificate representing an interest in such Mortgage Loan that is attributable to accrued market discount on such Mortgage Loan to the extent not previously included as ordinary income under section 1276 of the Code. Pursuant to section 1277 of the Code, an Owner's deduction for interest paid or accrued to purchase or carry a Certificate that represents Mortgage Loans acquired (by virtue of the acquisition of the Certificate) at a market discount after July 18, 1984 may have to be deferred to the extent such interest is attributed under section 1277 of the Code to the portion of such market discount that accrued during the taxable year. A deduction for such deferred interest or a portion thereof will, in general, be allowed only when such Mortgage Loans are disposed of or when an Owner disposes of its Certificate. Although the matter is not free from doubt, such a deduction should also be allowed to the extent that such market discount is included in ordinary income by virtue of a partial principal payment. Any gain recognized upon a disposition of a Mortgage Loan originated on or before July 18, 1984 or of a Certificate representing an interest in such Mortgage Loan will have to be recognized as ordinary income to the extent of the deferred interest deduction. The Treasury Department has not yet issued regulations implementing the market discount rules, and Owners should consult their tax advisors regarding the application of these rules as well as the advisability of making any elections relating to such rules.

Owners are advised to consult with their tax advisors as to the possibility that the Mortgage Loans could be treated by the Internal Revenue Service as a collection of "stripped bonds" and "stripped coupons" within the meaning of section 1286 of the Code. A debt obligation becomes a "stripped bond" within the meaning of section 1286 of the Code when the ownership of the right to receive some or all of the interest payments thereon is separated from the ownership of the right to receive some or all of the principal. Interest payments with respect to a stripped bond are "stripped coupons" within the meaning of section 1286 of the Code. The Mortgage Loans could be treated as a collection of "stripped bonds" and "stripped coupons" if the Corporation's servicing fee applicable to a particular Pool were considered by the Internal Revenue Service to exceed reasonable compensation for the services performed and the "excess" portion of such fee were recharacterized as a separate, retained right to receive a portion of the interest payments to be made by mortgagors pursuant to the Mortgage Loans. If the Mortgage Loans were so treated, one consequence may be, in effect, to require the current accrual of market discount and permit the amortization of premium on the Mortgage Loans (to the extent not otherwise allowable under section 171). Another consequence, if they are so treated, would be that the "excess" portion of such fee would be excluded from the income of the Owners of Certificates and thus would not be subject to the limitations on the deductibility of miscellaneous itemized deductions (discussed above). However, absent Treasury regulations, it is not clear what the applicable rules would be. There are also other possible ways to characterize the "excess" portion of a servicing fee. For example, it is possible that the Internal Revenue Service would recharacterize such a portion as additional purchase price paid under a deferred payment obligation incurred by an Owner at the time such Owner purchased its Certificate representing its individual interest in the Mortgage Loans. In this event, the Owner's initial deductions could be less than the deductions that would have been allowed if the portion of the servicing fee had not been so recharacterized.

The Corporation will furnish to each holder of record with each distribution a statement setting forth the amount of such distribution allocable to principal and to interest. In addition, the Corporation will furnish or make available, within a reasonable time after the end of each calendar year, to each holder who at any time during such year received a distribution from the Corporation, a statement setting forth such holder's pro rata share of interest received and administrative expense for such calendar year.

Payments of interest and principal, as well as payments of proceeds from the sale of Certificates, may be subject to the "backup withholding" tax under section 3406 of the Code at a

rate of 20 percent if the recipient of such a payment is not an "exempt recipient" and fails to furnish certain information, including its taxpayer identification number, to the Corporation or its agent, or otherwise fails to establish an exemption from such tax. Any amounts deducted and withheld from such a payment would be allowed as a credit against the Owner's federal income tax. Furthermore, certain penalties may be imposed by the Internal Revenue Service on a holder or Owner who is required to supply information but who does not do so in the proper manner.

Payments made to, or on behalf of, an Owner who is not a U.S. Person (a "Non-U.S. Person") on a Certificate that represents an undivided interest in a Pool of Mortgage Loans all of which were issued after July 18, 1984 generally will be exempt from U.S. federal income and withholding taxes, provided the following conditions are satisfied: (a) such Owner does not hold the Certificate in connection with the conduct by such person of a trade or business in the United States, (b) the Owner is not, with respect to the United States, a personal holding company or a corporation that accumulates earnings in order to avoid U.S. federal income tax, (c) the Owner is not a U.S. expatriate or former U.S. resident who is taxable in the manner provided in section 877(b) of the Code, (d) the Owner is not an "excluded person" (i.e., a 10 percent shareholder of the Corporation within the meaning of section 871(h)(3)(B) of the Code or a "controlled foreign corporation" related to the Corporation within the meaning of section 881(c)(3)(C) of the Code), (e) the Owner signs a statement under penalties of perjury that certifies that it is a Non-U.S. Person or, in the case of an individual, that the Owner is neither a citizen nor resident of the United States, and provides the name, address and taxpayer identification number, if any, of the Owner and (f) the last U.S. Person in the chain of payment to the Owner (the "Withholding Agent") receives such non-U.S. beneficial ownership statement from the Owner or a financial institution holding on behalf of the Owner and does not have actual knowledge that such statement is false. That portion of interest income of an Owner who is a Non-U.S. Person on a Certificate that represents an interest in one or more Mortgage Loans issued before July 19, 1984 will be subject to a U.S. withholding tax at the rate of 30 percent or lower treaty rate, if applicable. Regardless of the date of issuance of the Mortgage Loans, backup withholding will not apply to payments made to an Owner that is such a Non-U.S. Person if the Owner or a financial institution holding on behalf of the Owner provides the non-U.S. beneficial ownership statement to the Withholding Agent.

The non-U.S. beneficial ownership statement referred to in the preceding paragraph may be made on an Internal Revenue Service Form W-8 or substantially similar substitute form. The Owner or financial institution holding on behalf of the Owner must inform the Withholding Agent of any change in the information on the statement within 30 days of such change. In all cases, the Form W-8 or substitute form must be filed by the Withholding Agent with the Internal Revenue Service. "U.S. Person" means a citizen or resident of the United States, a corporation, partnership or other entity created or organized in or under the laws of the United States or any political subdivision thereof, or an estate or trust that is subject to U.S. federal income tax regardless of the source of its income.

#### LEGAL OPINION

Any purchaser of Certificates will be furnished upon request an opinion by Caryl S. Bernstein, Esq., Executive Vice President, General Counsel, and Secretary of the Corporation, as to the validity of the Certificates, the applicable Trust Indenture, and the relevant Issue Supplement.

## ERISA CONSIDERATIONS

The Department of Labor issued a final regulation on November 13, 1986, which provides that in the case where an employee benefit plan ("plan") subject to the Employee Retirement Income Security Act of 1974 ("ERISA") acquires a "guaranteed governmental mortgage pool certificate" then, for purposes of the fiduciary responsibility provisions of ERISA and the prohibited transaction provisions of the Code, the plan's assets include the certificate and all of its rights with respect to such certificate under applicable law, but do not, solely by reason of the plan's holding of such certificate, include any of the mortgages underlying such certificate. Under the regulation, the term "guaranteed governmental mortgage pool certificate" is specifically defined to include a certificate "backed by, or evidencing an interest in specified mortgages or participation interests therein" and with respect to which interest and principal payable pursuant to the certificate are guaranteed by the Corporation. The effect of such regulation is to make clear that the sponsor (that is, the entity that organizes and services the pool, in this case the Corporation), the trustee, and other persons, in providing services with respect to the mortgages in the pool, would not be subject to the fiduciary responsibility provisions of Title I of ERISA, nor be subject to the prohibited transaction provisions of section 4975 of the Code, merely by reason of the plan's investment in a certificate. The Corporation has been advised by its counsel, Brown & Wood, that, on the basis of the final regulation and class exemptions previously issued by the Department of Labor, the acquisition from the Corporation and holding of the Certificates by plans are not prohibited either by ERISA or related provisions of the Code.

## FEDERAL NATIONAL MORTGAGE ASSOCIATION

The Federal National Mortgage Association (the "Corporation" or "Fannie Mae") is a federally chartered and stockholder-owned corporation organized and existing under the Federal National Mortgage Association Charter Act, 12 U.S.C. 1716 *et seq.* (the "Charter Act"). See "Government Regulation and Charter Act." It is the largest investor in home mortgage loans in the United States, with a net portfolio of \$98.9 billion of mortgage loans as of March 31, 1989. The Corporation was originally established in 1938 as a United States government agency to provide supplemental liquidity to the mortgage market and was transformed into a stockholder-owned and privately managed corporation by legislation enacted in 1968.

The Corporation provides funds to the mortgage market by purchasing mortgage loans from lenders, thereby replenishing their funds for additional lending. The Corporation acquires funds to purchase loans from many capital market investors that may not ordinarily invest in mortgage loans, thereby expanding the total amount of funds available for housing. Operating nationwide, the Corporation helps to redistribute mortgage funds from capital-surplus to capital-short areas.

The Corporation also issues mortgage-backed securities ("MBS"). The Corporation receives guaranty fees for its guaranty of timely payment of principal of and interest on MBS certificates. The Corporation issues MBS primarily in exchange for pools of mortgage loans from lenders. The issuance of MBS enables the Corporation to further its statutory purpose of increasing the liquidity of residential mortgage loans. MBS outstanding as of March 31, 1989 totaled \$188.1 billion.

The principal office of the Corporation is located at 3900 Wisconsin Avenue, NW, Washington, DC 20016 (telephone: 202-752-7000).

Copies of the Corporation's most recent annual and quarterly reports and proxy statement are available without charge from Paul Paquin, Vice President for Investor Relations, Fannie Mae, 3900 Wisconsin Avenue, NW, Washington, DC 20016 (telephone: 202-752-7115).

## CAPITALIZATION

The following table sets forth the capitalization of the Corporation as of March 31, 1989.

	<u>Average Maturity</u>	<u>Average Cost (3)</u>	<u>Outstanding</u> (Dollars in millions)
<b>Bonds, notes, and debentures (1):</b>			
<b>Due within one year</b>			
Short-term notes . . . . .	4 mos.	8.91%	\$ 12,730
Debentures . . . . .	6 mos.	9.93	11,273
Subordinated capital debentures . . . . .	6 mos.	13.19	500
Other (2) . . . . .	—	8.84	11,081
<b>Total due within one year</b> . . . . .			<u>35,584</u>
<b>Due after one year</b>			
Debentures . . . . .	4 yrs. 11 mos.	9.13	63,485
Subordinated capital debentures . . . . .	13 yrs. 1 mo.	9.19	2,245
Other . . . . .	4 yrs. 4 mos.	8.37	3,352
<b>Total due after one year</b> . . . . .			<u>69,082</u>
<b>Total bonds, notes, and debentures</b> . . . . .			<u>\$104,666</u>
<b>Stockholders' equity</b> . . . . .			<u>\$ 2,420</u>

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- (1) See "Business—Corporate Indebtedness" for a description of certain limitations applicable to debt issued by the Corporation. Amounts shown are net of unamortized discount.
  - (2) Average maturity is indeterminate because the outstanding amount includes investment agreements that have varying maturities.
  - (3) The average cost includes the amortization of discounts, issuance costs, hedging results, and the effect of foreign currency swaps.

The Corporation issues debentures, notes, and other debt obligations frequently. The amount of bonds, notes, and debentures outstanding on any date subsequent to March 31, 1989 may differ from that shown in the table above.



## SELECTED FINANCIAL DATA

The following selected financial data for the years 1984 through 1988 (which data are not covered by the report of independent certified public accountants) have been summarized or derived from the audited financial statements. The financial data for the three months ended March 31, 1989 and 1988 are unaudited and include, in the opinion of management, all adjustments (consisting of normal recurring accruals) necessary for a fair presentation. The results of operations for the three months ended March 31, 1989 are not necessarily indicative of the results expected for the entire year. These data should be read in conjunction with the audited financial statements and notes to financial statements that are presented elsewhere herein.

### Condensed Statements of Income

(Dollars in millions, except per share amounts)

	Three Months Ended March 31,		Year Ended December 31,				
	1989	1988	1988	1987	1986	1985	1984
Interest income . . . . .	\$2,649	\$2,448	\$10,226	\$9,843	\$10,107	\$10,065	\$8,906
Interest expense . . . . .	<u>2,396</u>	<u>2,277</u>	<u>9,889</u>	<u>8,953</u>	<u>9,723</u>	<u>9,926</u>	<u>8,996</u>
Net interest income (expense) . . . . .	253	171	837	890	384	139	(90)
Guaranty fees . . . . .	95	75	323	263	175	112	78
Gain (loss) on sales of mortgages . . . . .	2	9	12	(81)	31	11	21
Miscellaneous income, net . . . . .	8	17	69	53	83	73	53
Provision for losses . . . . .	(80)	(95)	(365)	(360)	(306)	(206)	(86)
Administrative expenses . . . . .	<u>(56)</u>	<u>(49)</u>	<u>(218)</u>	<u>(197)</u>	<u>(175)</u>	<u>(142)</u>	<u>(112)</u>
Income (loss) before federal income taxes . . . . .	222	128	663	568	192	(13)	(186)
Provision for federal income taxes . . . . .	<u>(57)</u>	<u>(27)</u>	<u>(156)</u>	<u>(192)</u>	<u>(87)</u>	<u>6</u>	<u>65</u>
Net income (loss) . . . . .	<u>\$ 165</u>	<u>\$ 101</u>	<u>\$ 507</u>	<u>\$ 376</u>	<u>\$ 105</u>	<u>\$ (7)</u>	<u>\$ (71)</u>
Earnings (loss) per share:							
Primary . . . . .	\$ 2.00	\$ 1.28	\$ 6.43	\$ 4.66	\$ 1.44	\$ (.10)	\$(1.08)
Fully diluted . . . . .	1.98	1.27	6.32	4.63	1.42	(.10)	(1.08)
Cash dividends per share . . . . .	.24	.12	.72	.36	.20	.16	.16

### Condensed Balance Sheets

(Dollars in millions)

	March 31,		December 31,				
	1989	1988	1988	1987	1986	1985	1984
<b>Assets</b>							
Mortgage portfolio, net . . . . .	\$ 98,920	\$ 96,645	\$ 99,867	\$ 93,470	\$98,949	\$94,497	\$34,088
Other assets . . . . .	<u>12,770</u>	<u>9,495</u>	<u>12,391</u>	<u>9,989</u>	<u>5,672</u>	<u>4,579</u>	<u>8,760</u>
Total assets . . . . .	<u>\$111,690</u>	<u>\$106,140</u>	<u>\$112,258</u>	<u>\$103,459</u>	<u>\$99,621</u>	<u>\$99,076</u>	<u>\$87,798</u>
<b>Liabilities</b>							
Bonds, notes, and debentures, net:							
Due within one year . . . . .	\$ 35,584	\$ 31,418	\$ 36,599	\$ 29,718	\$31,294	\$31,939	\$31,261
Due after one year . . . . .	69,082	68,435	68,860	67,339	62,269	62,046	52,458
Other liabilities . . . . .	<u>4,604</u>	<u>4,389</u>	<u>4,539</u>	<u>4,591</u>	<u>4,876</u>	<u>4,082</u>	<u>3,161</u>
Total liabilities . . . . .	109,270	104,242	109,998	101,648	98,439	98,067	86,880
Stockholders' equity . . . . .	<u>2,420</u>	<u>1,898</u>	<u>2,260</u>	<u>1,811</u>	<u>1,182</u>	<u>1,009</u>	<u>918</u>
Total liabilities and stockholders' equity . . . . .	<u>\$111,690</u>	<u>\$106,140</u>	<u>\$112,258</u>	<u>\$103,459</u>	<u>\$99,621</u>	<u>\$99,076</u>	<u>\$87,798</u>

## Condensed Statements of Cash Flows

(Dollars in millions)

	Three Months Ended March 31,	
	1989	1988
Net cash provided by operating activities:	\$ 421	\$ (15)
Cash flows from investing activities:		
Purchases of mortgages.....	(3,378)	(6,599)
Sales of mortgages.....	1,765	1,089
Mortgage principal repayments, net of discount.....	2,363	2,159
Net increase in investments.....	(519)	(519)
Net cash provided (used) by investing activities.....	231	(3,870)
Cash flows from financing activities:		
Cash proceeds from issuance of debt.....	13,405	14,056
Cash payments to retire debt.....	(14,131)	(11,245)
Other.....	(18)	(16)
Net cash (used) provided by financing activities.....	(744)	2,795
Net decrease in cash and cash equivalents.....	(92)	(1,090)
Cash and cash equivalents at beginning of period.....	2,859	2,457
Cash and cash equivalents at end of period.....	\$ 2,767	\$ 1,367

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

**Annual Periods**

*Results of Operations*

Fannie Mae reported record earnings for 1988, resulting mainly from a wider spread on earning assets and a larger earning asset base. The Corporation earned net income of \$507 million in 1988, compared with \$376 million in 1987 and \$105 million in 1986. The continued growth of net income in 1988 was also attributable to increases in guaranty fees and gain on sales of mortgages and a reduction in the Corporation's effective federal income tax rate. Net income increased in 1987 compared with 1986 primarily due to the implementation of Financial Accounting Standard No. 91 ("FAS 91") discussed below. Other factors that contributed to the increase in net income in 1987 compared with 1986 include an increase in guaranty fees and a lower effective federal income tax rate. These increases were offset in part by a high level of foreclosures, increased administrative expenses, and certain actions taken by management in the fourth quarter of 1987.

A summary of selected financial information for the years 1986-1988 follows.

**Selected Financial Information: 1986-1988**

(Dollars in millions, except per share amounts)

	1988	1987	1986	Change	
				1988 Over 1987	1987 Over 1986
<b>Operating Results for the Year</b>					
<b>Ended December 31,</b>					
Net interest income (Note).....	\$ 837	\$ 890	\$ 384	\$ (53)	\$ 506
Guaranty fees .....	328	263	175	65	88
Gain (loss) on sales of mortgages .....	12	(81)	31	93	(112)
Miscellaneous income, net.....	69	53	83	16	(30)
Provision for losses .....	(365)	(360)	(306)	(5)	(54)
Administrative expenses .....	(218)	(197)	(175)	(21)	(22)
Income before federal income taxes .....	663	568	192	95	376
Provision for federal income taxes.....	(156)	(192)	(87)	36	(105)
Net income (Note) .....	<u>\$ 507</u>	<u>\$ 376</u>	<u>\$ 105</u>	<u>\$ 131</u>	<u>\$ 271</u>
<b>Per share:</b>					
<b>Earnings:</b>					
Primary .....	\$ 6.43	\$ 4.66	\$ 1.44	\$1.77	\$3.22
Fully diluted .....	6.32	4.63	1.42	1.69	3.21
Cash dividends .....	.72	.36	.20	.36	.16
				<b>% Change</b>	
				1988 Over 1987	1987 Over 1986
<b>Financial Condition at December 31,</b>					
Mortgage portfolio, net. ....	\$ 99,867	\$ 93,470	\$93,949	7%	(1)%
Total assets .....	112,258	103,459	99,621	9	4
<b>Borrowings:</b>					
Due within one year .....	36,599	29,718	31,294	23	(5)
Due after one year .....	68,860	67,339	62,269	2	8
Total liabilities .....	109,998	101,648	98,439	8	3
Stockholders' equity.....	2,260	1,811	1,182	25	53
MBS outstanding .....	178,250	139,960	97,174	27	44

Note: The 1987 and 1986 financial information reflects the retroactive implementation of a change in accounting discussed in the Notes to Financial Statements, "Commitment Fees and Mortgage Prepayments." Results for 1987 also include a cumulative adjustment for additional interest income associated with a higher level of mortgage repayments, net of adjustments for certain actions taken by management. Without these items, 1987 net interest income would have been \$467 million and net income would have been \$242 million (\$2.98 per share fully diluted).

Management has continued to execute strategies to reduce the Corporation's exposure to interest rate risk. This objective is being achieved by actively managing the maturities and repricing characteristics of the Corporation's assets and liabilities and by increasing Mortgage-Backed Securities ("MBS") outstanding. The issuance of MBS creates an income source without the financing risk associated with portfolio investing activities. Management believes the implementation of these strategies has assisted in reducing, and in the future will continue to reduce, the effect of interest rate fluctuations on earnings.

The sensitivity of the Corporation's earnings to changes in interest rates can be measured by a number of methods. One method used to measure this sensitivity is the one-year maturity gap, or the difference between the amount of assets and the amount of liabilities expected to mature, liquidate, or reprice over the next year. A positive one-year maturity gap occurs when more interest-sensitive assets than liabilities are expected to mature, liquidate, or reprice in one year. At the end of 1988, 1987, and 1986, the Corporation's one-year maturity gap was minimal as a percent of assets, ranging from negative one percent to positive one percent. By comparison, the one-year maturity gap at the end of 1984 was negative 16 percent, as the Corporation had \$15 billion more liabilities than assets maturing, liquidating, or repricing within one year.

Another method used to measure the sensitivity of future corporate earnings to changes in interest rates is the duration gap, or the difference between the estimated durations of the mortgage assets and the liabilities that fund the mortgages. Duration represents the estimated weighted-average maturity of the present values of future cash flows. At the end of 1988, 1987, and 1986, the Corporation's duration gap ranged from 8 to 11 months. By comparison, the gap at the end of 1984 was 29 months. The progress that the Corporation has made in narrowing both the one-year maturity gap and the duration gap has been achieved by acquiring shorter term assets, such as adjustable-rate and intermediate-term mortgages, and by issuing debt that more closely matches asset maturities.

#### *Financial Accounting Standard No. 91*

In 1987, the Corporation elected to implement, on a retroactive basis, Financial Accounting Standard No. 91. Under FAS 91, commitment fees are deferred and, together with purchase discount, are amortized over the estimated life of the related mortgages using the interest method. Prior to implementation of the new standard, Fannie Mae recognized fee income in the period in which the committing service was rendered.

During 1987, the Corporation determined that actual and projected mortgage prepayments substantially exceeded the rates assumed previously in reporting the effective yield on mortgage loans. Accordingly, the Corporation recorded additional interest income of \$478 million in the fourth quarter of 1987 to reflect current experience and expectations for future prepayments. Under the prior method of accounting, adjustments to purchase discount to reflect revised prepayment estimates would have been made prospectively. Although the retroactive deferral of commitment fee income reduced retained earnings at the beginning of 1987 by approximately \$411 million, this reduction was substantially offset by the increase in 1987 earnings of \$342 million on an after-tax basis, resulting from the prepayment adjustment discussed above and the amortization during 1987 of retroactively deferred fees. The 1987 cumulative adjustment to reflect revised mortgage yields under FAS 91, net of certain actions taken by management, added \$134 million to net income in 1987.

#### *Net Interest Income*

A major source of the Corporation's earnings is net interest income. Net interest income was \$837 million in 1988, compared with \$890 million in 1987 (\$467 million before the cumulative adjustment due to FAS 91 and certain management actions) and \$384 million in 1986.

Presented in the following table are selected average balances, effective interest rates earned and paid, and interest income and expense for the years ended December 31, 1988, 1987, and 1986.

### Net Interest Income and Average Balances

(Dollars in millions)

	1988			1987			1986		
	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)
<b>Interest-earning assets:</b>									
Mortgage portfolio, net(2)	\$ 98,012	\$ 9,629	9.90%	\$91,514	\$9,586(3)	10.51%	\$94,280	\$ 9,991	10.60%
Investments and cash equivalents	7,585	597	8.35	3,681	257	7.63	1,679	116	7.07
<b>Total interest-earning assets</b>	<b>\$105,597</b>	<b>\$10,226</b>	<b>9.78%</b>	<b>\$95,195</b>	<b>\$9,843</b>	<b>10.40%(4)</b>	<b>\$95,959</b>	<b>\$10,107</b>	<b>10.54%</b>
<b>Interest-bearing liabilities:</b>									
Borrowings due within 1 year	\$ 20,532	\$ 1,726	8.41%	\$11,196	\$ 973	8.69%	\$11,794	\$ 880	7.46%
Borrowings due after 1 year	81,228	7,668	9.43	80,524	7,980	9.91	80,981	8,843	10.93
<b>Total interest-bearing liabilities</b>	<b>\$101,760</b>	<b>\$ 9,389</b>	<b>9.23%</b>	<b>\$91,720</b>	<b>\$8,953</b>	<b>9.76%</b>	<b>\$92,725</b>	<b>\$ 9,723</b>	<b>10.49%</b>
Net interest income		\$ 837			\$ 890			\$ 384	
Interest spread			.55%			.64%(4)			.05%
Net yield on interest-earning assets(5)			.89%			1.00%(4)			.40%

(1) Tax equivalent basis.

(2) Includes an average of \$1.1 billion, \$1.5 billion, and \$1.4 billion of nonperforming loans in 1988, 1987, and 1986, respectively.

(3) Includes a cumulative adjustment of \$478 million related to implementation of FAS 91 and a reduction of \$55 million principally due to a revision in the manner of estimating uncollectible interest.

(4) Includes .44% relating to the adjustments described above.

(5) Represents the difference between rate of interest on earning assets and the effective rate paid on both interest-bearing and non-interest-bearing funds.

The increase in net interest income in 1988 compared with 1987, excluding the \$423 million adjustment related to FAS 91 and certain management actions is, in part, due to the reduction in the cost of debt outstanding. As high-cost debt matured, it was refinanced at more favorable rates. The average mortgage portfolio yield declined in 1988 compared with 1987. The decline in yield was caused by the high level of prepayments in 1987 of high-yielding mortgage assets and the increase in purchases of adjustable-rate mortgages ("ARMs"), which have a lower initial interest rate than fixed-rate mortgages. Income on investments and mortgages continued to improve due to increased volume.

Of the \$506 million increase in net interest income in 1987 compared with 1986, \$423 million is primarily attributable to the cumulative adjustment under FAS 91 to reflect actual prepayment experience and prepayment forecasts, which were higher than previously expected. A second reason is the decrease in the Corporation's cost of funds in 1987 compared with 1986. The increase in 1987 net interest income was offset in part by a change in the manner of estimating uncollectible interest, as discussed below.

A loan is classified as nonperforming when a payment is 90 days or more past due. Accrued interest is written off when the loan becomes nonperforming. In the fourth quarter of 1987, the Corporation revised the manner of estimating uncollectible interest primarily to include interest accrued on nonperforming loans during the first 90 days of delinquency. This revision reduced 1987 interest income by \$55 million. The amounts of nonperforming loans outstanding at December 31, 1988, 1987, and 1986 were \$0.9 billion, \$1.3 billion, and \$1.5 billion, respectively. If these assets had been fully performing, they would have contributed an additional \$89 million to interest income in 1988, \$200 million (including the effect of the change in the estimate) in 1987, and \$135 million in 1986.

The following rate/volume analysis shows the relative contribution of asset growth and interest rate changes to changes in net interest income for the years ended December 31, 1988, 1987, and 1986.

### Rate/Volume Analysis

(Dollars in millions)

	Increase (Decrease)	Attributable to Changes in (1)	
		Volume	Rate
<b>1988 vs. 1987</b>			
Interest income .....	\$ 806	\$1,011	\$(205)
Interest expense .....	436	944	(508)
Effect of accounting changes .....	370	67	303
	(423) (2)	—	(423)
Net interest income .....	<u>\$ (53)</u>	<u>\$ 67</u>	<u>\$(120)</u>
<b>1987 vs. 1986</b>			
Interest income .....	\$(687)	\$ (80)	\$(607)
Interest expense .....	(770)	(104)	(666)
Effect of accounting changes .....	83	24	59
	423 (2)	—	423
Net interest income .....	<u>\$ 506</u>	<u>\$ 24</u>	<u>\$ 482</u>

(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) Includes a cumulative adjustment of \$478 million related to implementation of FAS 91 and a reduction of \$55 million principally due to a revision in the manner of estimating uncollectible interest.

### Other Income

Guaranty fees increased to \$328 million in 1988 from \$263 million in 1987 and \$175 million in 1986. These fees are earned for guaranteeing the timely payment of principal and interest to investors in MBS. The increase in guaranty fee income is due primarily to the increase in the amount of MBS outstanding.

The following table shows guaranty fee income as a percentage of the average balance of MBS outstanding in 1988, 1987, and 1986.

	<u>1988</u>	<u>1987</u>	<u>1986</u>
	(Dollars in millions)		
Guaranty fee income ... ..	\$ 328	\$ 263	\$ 175
Average balance of MBS outstanding(1) .....	\$152,107	\$119,184	\$75,028
Effective guaranty fee rate .....	.22%	.22%	.23%

(1) Excludes \$6.4 billion, \$2.2 billion, and \$0.7 billion in 1988, 1987, and 1986, respectively, of average balance of MBS held in the mortgage portfolio.

Gain on sales of mortgages was \$12 million in 1988, compared with a loss in 1987 of \$81 million, and a gain of \$31 million in 1986. Mortgage sales are discussed under the section "Mortgage Portfolio."

Net miscellaneous income was \$69 million in 1988, compared with \$53 million in 1987 and \$83 million in 1986. The increase in miscellaneous income in 1988 compared with 1987 is partially due to \$28 million in unfavorable adjustments in 1987 resulting from the adoption of FAS 91 and the repurchase of high-cost debt at a premium over the issue price. In addition, \$16 million in fees for issuing real estate mortgage investment conduit securities ("REMICs") were earned in 1988 and are included in 1988 miscellaneous income. No REMIC fees were earned in 1987. The 1988 increase in miscellaneous income was offset in part by a decrease of \$36 million in fees realized for converting MBS to Stripped Mortgage-Backed Securities ("SMBS"). Such conversion fees in 1988 were \$6 million compared with \$42 million in 1987. This decrease is due primarily to a lower average conversion fee rate and, to a lesser extent, a smaller volume of SMBS issued. The decrease in net miscellaneous income in 1987 compared with 1986 was due to the FAS 91 adjustments and the repurchase of debt in 1987.

#### *Other Expenses*

The provision for losses increased to \$365 million in 1988 from \$360 million in 1987 and \$306 million in 1986. The increase in the provision for losses during the last three years reflects actions taken by management to maintain the allowance for losses at a level it believes is adequate, considering the levels of current and anticipated charge-offs and the higher level of MBS outstanding.

The Corporation evaluates the risk of loss on the mortgage loan portfolio and MBS outstanding based on loss experience and current economic conditions. During 1988, charge-offs on mortgages in the Corporation's loan portfolio and mortgages underlying MBS totaled \$315 million, compared with \$285 million in 1987 and \$201 million in 1986. Included in 1988 charge-offs is \$28 million that represents the estimated loss as of December 31, 1988 relating to pending mortgage insurance claims with Ticor Mortgage Insurance Company, Inc. ("TMIC"), on foreclosures that occurred between late 1985 and April 1988, and on TMIC-insured loans in foreclosure or seriously delinquent as of April 1988. TMIC is now in liquidation. No special addition to the allowance for losses was required because of these charge-offs. Charge-offs in 1988 also included \$17 million related to an adjustment of the carrying value of foreclosed properties related to Equity Programs Investment Corp. ("EPIC").

During 1988, the Corporation experienced a decline in the acquisition of foreclosed properties. The increase in charge-offs in 1987 compared with 1986 was due to both a higher volume of foreclosures and an increase in the average loss per case. Higher foreclosure losses have been due primarily to adverse economic conditions in certain geographical areas.

Administrative expenses increased to \$218 million in 1988 from \$197 million in 1987 and \$175 million in 1986. This increase is due to the Corporation's continued growth, including an increase in the average number of employees and the related compensation expense. In addition, corporate headquarters was consolidated into two buildings in 1988. Because of the move, several leases were canceled and miscellaneous moving expenses were incurred. In 1987, administrative expenses included the write-off of \$16 million of previously capitalized software costs.

#### *Income Taxes*

The effective tax rate in 1988 was 24 percent compared with 34 percent in 1987 and 45 percent in 1986. These decreases were due to decreases in the federal corporate income tax rate from 46 percent in 1986 to 40 percent in 1987 and 34 percent in 1988 and to additional income from tax-advantaged investments.

As discussed in the Notes to Financial Statements, "Income Taxes," the Corporation and the Internal Revenue Service have filed appeals to a Tax Court decision rendered in March 1988. This will have no adverse impact on earnings.

In December 1987, the Financial Accounting Standards Board issued Financial Accounting Standard No. 96, "Accounting for Income Taxes" ("FAS 96"), which requires, beginning in 1990, a change in the method of providing for income taxes. Based on current corporate tax rates, management expects that implementation of FAS 96 will have a positive impact on earnings.

#### *Mortgage Portfolio*

The Corporation's net mortgage portfolio totaled \$99.9 billion at December 31, 1988, compared with \$93.5 billion and \$93.9 billion at December 31, 1987 and 1986, respectively. ARMs constituted 20 percent of the outstanding mortgage portfolio at December 31, 1988 and 14 percent and 15 percent of the portfolio at December 31, 1987 and 1986, respectively. The Corporation also purchases intermediate-term mortgages that consist primarily of fixed-rate mortgages with terms not exceeding 20 years. Intermediate-term mortgages represented approximately 22 percent of the portfolio balances at December 31, 1988 and 1987, and 18 percent at December 31, 1986.

Mortgage purchases in 1988 were \$23.1 billion compared with \$20.5 billion and \$30.8 billion in 1987 and 1986, respectively. The primary reason for the increase in purchases in 1988 over 1987 was the increase in the Corporation's ARM market share coupled with an increase in the proportion of ARMs sold in the secondary market. Mortgage purchases in 1988 and 1987 continued to level off compared with 1986 primarily due to the lower level of mortgage refinance activity. Mortgage purchases, particularly of fixed-rate products, were at record levels in 1986 and the first half of 1987 due to the large volume of originations and refinancings.



As indicated in the following table, purchases of shorter term mortgages, including ARMs, intermediate-term, second, and multifamily mortgages, represented 59 percent of total purchase volume in 1988 as compared with 46 percent in 1987 and 47 percent in 1986. The purchase of these products assists in reducing the risks associated with rising interest rates.

### Mortgage Purchases

(Dollars in Millions)

				% Change				
	1988		1987		1986			
				1988 Over 1987	1987 Over 1986			
Mortgage type:								
Single-family:								
FHA/VA . . . . .	\$ 503	2.2%	\$ 1,784	8.7%	\$ 438	1.4%	(72)%	307%
Conventional:								
30-year fixed-rate . . . . .	8,957	38.7	9,223	44.9	16,001	51.9	(3)	(42)
Intermediate-term fixed-rate . . . . .	2,933	12.7	6,552	31.9	11,453	37.2	(55)	(43)
ARMs . . . . .	9,862	42.7	2,512	12.2	1,108	3.6	293	127
Second mortgages . . . . .	433	1.9	139	.7	498	1.6	212	(72)
Total single-family . . . . .	22,688	98.2	20,210	98.4	29,498	95.7	12	(31)
Multifamily . . . . .	422	1.8	321	1.6	1,328	4.3	31	(76)
Total . . . . .	<u>\$23,110</u>	<u>100.0%</u>	<u>\$20,531</u>	<u>100.0%</u>	<u>\$30,826</u>	<u>100.0%</u>	13	(33)
Average net purchase yield	9.40%		9.63%		9.68%		(2)	(1)

Mortgage repayments totaled \$10.7 billion in 1988, compared with \$15.4 billion in 1987 and \$19.6 billion in 1986. Included in mortgage repayments are \$8.4 billion, \$13.3 billion, and \$17.5 billion in 1988, 1987, and 1986, respectively, of mortgage prepayments. The high level of prepayments in 1987 and 1986, compared with 1988, was the result of the large number of refinancings that occurred in 1986 and continued through the first half of 1987 in response to declining mortgage interest rates. Mortgage interest rates increased in the second half of 1987 and stabilized in 1988. In general, when the level of interest rates declines significantly, the rate of prepayment increases, although the rate of prepayments also is influenced by a variety of economic, geographic, social, and other factors.

Sales from portfolio totaled \$5.0 billion in 1988, compared with \$5.2 billion in 1987 and \$11.0 billion in 1986. The sale of \$1.6 billion of low-yielding loans in 1987, conducted as part of the Corporation's strategy to improve future interest spreads on the portfolio, resulted in a before-tax loss on the sale of mortgages of \$128 million in the fourth quarter of 1987. The high volume of mortgage sales in 1986 was due to a special \$10 billion asset sale in that year.

#### Mortgage-Backed Securities

At December 31, 1988, the Corporation had \$178.3 billion of MBS outstanding. MBS are backed by loans from one of three sources: a single lender, multiple lenders, or Fannie Mae's portfolio. Single-lender MBS are issued through lender swap transactions in which a lender exchanges pools of mortgage loans for mortgage-backed securities. Multiple-lender MBS allow several lenders to pool together mortgage loans and, in return, each lender receives mortgage-backed securities representing a proportionate share of a larger pool. MBS also are issued as REMICs and SMBS, which are multiple-class securities.

MBS are not assets of the Corporation, except when acquired for investment purposes, nor are the related outstanding securities liabilities of the Corporation. However, the Corporation is liable under its guaranty to make timely payments to investors of principal and interest on the mortgage loans in the underlying pools. The issuance of MBS enables the Corporation to further its statutory purpose of increasing the liquidity of residential mortgage loans and creates a source of guaranty fee income without requiring that the Corporation take the debt refinancing risk on the underlying pooled mortgages.

Sellers of pools of mortgage loans may retain the primary default risk on loans comprising the pools or they may elect to transfer this risk to Fannie Mae for a higher guaranty fee.

The following table summarizes MBS activity for the years ended December 31, 1988, 1987, and 1986.

### Summary of MBS Activity

(Dollars in millions)

	1988		1987		1986		% Change	
							1988 Over 1987	1987 Over 1986
<b>MBS Issued:</b>								
Lender originated .....	\$ 48,942	89%	\$ 57,078	90%	\$48,886	81%	(14)%	17%
Fannie Mae originated ...	5,936	11	6,151	10	11,680	19	(8)	(47)
Total .....	<u>\$ 54,878</u>	<u>100%</u>	<u>\$ 63,229</u>	<u>100%</u>	<u>\$60,566</u>	<u>100%</u>	<u>(13)</u>	<u>4</u>
<b>MBS Outstanding(1):</b>								
Lender risk (2) .....	\$ 84,143	47%	\$ 62,402	45%	\$48,548	50%	35	29
Fannie Mae risk (3) .....	94,107	53	77,558	55	48,626	50	21	59
Total(4) .....	<u>\$178,250</u>	<u>100%</u>	<u>\$139,960</u>	<u>100%</u>	<u>\$97,174</u>	<u>100%</u>	<u>27</u>	<u>44</u>

(1) This table classifies MBS outstanding based on primary default risk category; however, Fannie Mae bears the ultimate risk of default.

(2) Included in lender risk are \$23.8 billion, \$10.2 billion, and \$3.5 billion at December 31, 1988, 1987, and 1986, respectively, on which Fannie Mae mitigates the default risk by requiring the seller to pledge collateral in varying amounts to secure its obligations.

(3) Included are \$11.2 billion, \$12.2 billion, and \$10.6 billion at December 31, 1988, 1987, and 1986, respectively, which are backed by government insured or guaranteed mortgages.

(4) Included are \$8.1 billion, \$4.2 billion, and \$1.6 billion at December 31, 1988, 1987, and 1986, respectively, of Fannie Mae MBS in portfolio.

MBS issued in 1988 were less than in 1987 primarily due to the availability of products in the primary market. The Corporation has historically securitized mostly fixed-rate mortgage loans; however, in 1988 the availability of fixed-rate mortgage loans decreased due to the popularity of ARMs. Fannie Mae also securitizes ARMs; however, the number of qualifying ARMs available for securitization has been more limited than the number of fixed-rate mortgage loans. The increase in MBS issued in 1987 compared with 1986 is due primarily to a higher volume of swap transactions.

*Sources and Uses of Cash*

Fannie Mae's primary sources of cash are mortgage loan repayments, issuances of debt obligations, interest income, fees, and proceeds from the sale of mortgages. Primary uses of cash include the purchase of mortgages, repayment of debt, and payment of interest expense.

*Financing Activities*

*Debt Issued and Outstanding*

The average cost of debt outstanding at December 31, 1988 decreased compared with December 31, 1987. This decrease is the result of higher cost debt maturing and being replaced with lower cost debt. Lower interest rates over the last three years have allowed the Corporation to reduce the average cost of debt outstanding while maintaining a desired maturity. The average maturity of debt outstanding at December 31, 1988, compared with 1987 and 1986, decreased due to a change in the asset maturity mix. The Corporation funds shorter term mortgages and investments with shorter term debt. The following table sets forth the amount, average cost, and average maturity of debt issued and paid during the last three years, and of debt outstanding at the end of each of those years.

	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>% Change</u>	
				<u>1988 Over 1987</u>	<u>1987 Over 1986</u>
(Dollars in millions)					
<b>Debt Issued During Year</b>					
Amount ...	\$ 64,260	\$45,726	\$39,997	41%	14%
Average cost(1) ...	7.84%	7.49%	7.10%	5	5
Average maturity (months) ...	20	36	47	(44)	(23)
<b>Debt Paid During Year</b>					
Amount ...	\$ 55,766	\$42,519	\$40,653	31	5
Average cost(1) ...	8.18%	8.42%	8.97%	(3)	(6)
<b>Debt Outstanding at Year-end</b>					
Amount, net ...	\$105,459	\$97,057	\$93,563	9	4
Average cost(1) ...	9.20%	9.46%	10.01%	(3)	(5)
Average maturity (months) ...	43	48	46	(10)	4

(1) Includes commissions, hedging, and swaps.

During 1988, Fannie Mae issued \$1.7 billion of Indexed Sinking Fund Debentures ("ISFDs"), a newly designed security with the principal amount subject to mandatory sinking fund redemptions after an initial non-redemption period. The amounts of sinking fund redemptions are tied to certain Treasury rates; the redemptions generally will increase as Treasury rates fall and decrease as Treasury rates rise. Management believes ISFDs represent a desirable asset/liability management tool because the repayment of the debentures is designed to match more closely the repayment of the mortgage portfolio, thus contributing to the reduction of interest rate risk associated with mortgage loan prepayments.

Fannie Mae continued to attract funds from a global investor base in 1988. In addition to continued overseas demand for Fannie Mae dollar debentures and medium-term notes, foreign currency liabilities were issued, primarily in foreign markets.

Presented in the following table are certain capital ratios monitored by the Corporation and defined under provisions of the Corporation's Charter Act and certain subordinated capital debenture agreements.

	<u>1988</u>	<u>1987</u>	<u>1986</u>
Debt-to-capital(1) . . . . .	19.1:1	22.2:1	28.0:1
Subordinated debt-to-equity . . . . .	1.2:1	1.2:1	1.5:1

(1) Capital, for this purpose, includes subordinated capital debentures, convertible debentures, and portfolio and MBS loss allowances.

The Secretary of Housing and Urban Development announced his intention to reduce the Corporation's statutory maximum debt-to-capital ratio from 25:1 to 20:1 in 1988. This ratio was 30:1 in 1986. The Corporation is also subject to a restriction in certain subordinated capital debenture agreements, which limits the amount of such debentures outstanding to not more than two times the sum of common stock, additional paid-in capital, and retained earnings.

#### *Common Stock*

During 1988 and 1987, the Corporation repurchased approximately 0.2 million shares and 3.2 million shares, respectively, of common stock at average per share prices of \$29.85 and \$29.73, respectively. The Corporation raised \$374 million of additional capital in 1987 by issuing eight million shares of common stock through offerings in the U.S. and Europe.

#### **Interim Periods**

##### *Results of Operations*

Fannie Mae's net income for the first three months of 1989 was \$165 million compared with \$101 million for the first three months of 1988. Net income increased as a result of increases in net interest income and guaranty fees and a reduction in the provision for losses.

Net interest income for the first three months of 1989 was \$82 million higher than the comparable period in 1988. The increase in net interest income is primarily due to a larger asset base and an increase in interest spread (the difference between the average effective interest rate earned on interest-earning assets and the average effective interest rate paid on interest-bearing liabilities).

Income on investments and mortgages continued to improve primarily due to increased volume and, to a lesser extent, the rise in interest rates. The average cost of debt outstanding decreased because, as high-cost debt matured, it was refinanced at more favorable rates.

Presented in the following table are selected average balances, interest rates earned and paid, and interest income and expense for the three months ended March 31, 1989 and 1988.

**Net Interest Income and Average Balances**

(Dollars in millions)

	Three Months Ended March 31,					
	1989			1988		
	Average Balance	Interest	Effective Interest Rate(2)	Average Balance	Interest	Effective Interest Rate(2)
<b>Interest-earning assets</b>						
Mortgage portfolio, net(1)	\$ 99,394	\$2,437	9.87%	\$ 94,791	\$2,334	9.92%
Investments	9,247	206	9.44	5,924	110	7.97
<b>Total interest-earning assets</b>	<b>\$108,641</b>	<b>2,643</b>	<b>9.84</b>	<b>\$100,715</b>	<b>2,444</b>	<b>9.81</b>
<b>Interest-bearing liabilities</b>						
Borrowings due within 1 year	\$ 23,114	487	8.43	\$ 16,834	313	7.43
Borrowings due after 1 year	81,343	1,910	9.39	80,500	1,964	9.76
<b>Total interest-bearing liabilities</b>	<b>\$104,457</b>	<b>2,397</b>	<b>9.18</b>	<b>\$ 97,334</b>	<b>2,277</b>	<b>9.36</b>
Net interest income before adjustments		246			167	
Out-of-period adjustments(3)		7			4	
<b>Net interest income</b>		<b>\$ 253</b>			<b>\$ 171</b>	
Interest spread			.66			.45
Net yield on interest-earning assets(4)			1.04			.78

- (1) Includes average nonperforming loans of \$0.9 billion and \$1.3 billion for the three months ended March 31, 1989 and 1988, respectively.
- (2) Tax equivalent basis.
- (3) Includes interest income other than that recognized on a normal one month accrual basis.
- (4) Represents the difference between the rate of interest on earning assets and the effective rate paid on both interest-bearing and non-interest-bearing funds.

**Rate/Volume Analysis**

(Dollars in millions)

	Increase (Decrease)	Attributable to Changes in(1)	
		Volume	Rate
Three months ended March 31, 1989 vs. 1988			
Interest income(2)	\$199	\$193	\$ 6
Interest expense	120	165	(45)
<b>Net interest income</b>	<b>\$ 79</b>	<b>\$ 28</b>	<b>\$ 51</b>

- (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) Excludes out-of-period adjustments discussed in table above.

Guaranty fees increased to \$95 million in the first three months of 1989 from \$75 million for the same period of 1988. The increase in guaranty fee income is primarily due to the increase in the amount of MBS outstanding.

Gain on sales of mortgages for the first three months of 1989 and 1988 was \$2 million and \$9 million, respectively. Sales from portfolio totaled \$1.8 billion for the first three months of 1989 compared with \$1.1 billion for the first three months of 1988. The decrease in gain on sales of mortgages and the increase in mortgage sales were a result of the Corporation's strategy for managing its assets and liabilities without generating significant gains or losses on sales.

Miscellaneous income decreased in the first three months of 1989 compared with the first three months of 1988 primarily due to an \$8 million estimated loss from the phase out of the Corporation's software systems division.

The Corporation reduced the provision for losses to \$80 million in the first three months of 1989, down from \$95 million in the first three months of 1988. This decrease is primarily due to moderation in the level of foreclosure activity. Total foreclosure losses charged off for portfolio loans and MBS were \$58 million in the first three months of 1989 compared with \$82 million in the first three months of 1988. Charge-offs in the first three months of 1988 included \$17 million related to a change in the Corporation's treatment of properties related to Equity Programs Investment Corp., which are now carried at estimated realizable values.

Administrative expenses increased 14 percent in the first three months of 1989 compared with the first three months of 1988 primarily due to business expansion.

The effective federal income tax rates for the first three months of 1989 and 1988 were 26 percent and 21 percent, respectively. The effective federal income tax rate increased in the first three months of 1989 primarily due to an increase in taxable income without a proportionate increase in tax-advantaged investments.

#### *Mortgage Portfolio*

The Corporation purchased \$3.4 billion of mortgages at an average yield of 10.26 percent in the first three months of 1989 compared with \$6.7 billion at an average yield of 9.10 percent in the first three months of 1988. The decrease in mortgage purchases is primarily due to a reduction in the amount of mortgages being offered for sale to the secondary market. More mortgages than before are being swapped for MBS instead of being sold for cash. As interest rates rise, fewer lenders are willing to sell from portfolio because the mortgages generally would have a lower yield than the current market rate. Such a sale could result in a loss to the lender.

At March 31, 1989 and 1988, the net mortgage portfolio (mortgage loans less unamortized discount and fees and less the allowance for losses) outstanding was \$98.9 billion with a yield of 9.89 percent and \$96.6 billion with a yield of 9.89 percent, respectively. Total commitments outstanding to purchase mortgages were \$4.8 billion and \$6.1 billion at March 31, 1989 and 1988, respectively.

#### *Mortgage-Backed Securities*

The Corporation issued \$14.4 billion in MBS during the first three months of 1989, compared with \$8.2 billion in the first three months of 1988. The increase in issuances is primarily due to the increase in the volume of mortgages available in the secondary market to form MBS.

The following table summarizes MBS activity for the three months ended March 31, 1989 and 1988. MBS issued may be exchanged subsequently for MegaPools, SMBS, or REMICs. The table below includes MBS issued and outstanding that underlie MegaPools, SMBS, and REMICs, but does not include the resulting MegaPools, SMBS, or REMICs.

### MBS Issued and Outstanding

(Dollars in millions)

	March 31, 1989		March 31, 1988		% Change 1989 Over 1988
<b>MBS Issued:</b>					
Lender originated .....	\$ 12,389	86%	\$ 6,726	82%	84%
Fannie Mae originated .....	1,969	14	1,498	18	31
<b>Total</b> .....	<u>\$ 14,358</u>	<u>100%</u>	<u>\$ 8,224</u>	<u>100%</u>	<u>75</u>
<b>MBS Outstanding(1):</b>					
Lender risk (2) .....	\$ 89,571	48%	\$ 65,779	45%	36
Fannie Mae risk (3) .....	98,500	52	79,463	55	24
<b>Total(4)</b> .....	<u>\$188,071</u>	<u>100%</u>	<u>\$145,242</u>	<u>100%</u>	<u>29</u>

(1) This table classifies MBS outstanding based on primary default risk category; however, Fannie Mae bears the ultimate risk of default.

(2) Included in lender risk are \$27.4 billion and \$12.6 billion at March 31, 1989 and 1988, respectively, on which Fannie Mae mitigates the default risk by requiring the seller to pledge collateral in varying amounts to secure its obligations.

(3) Included are \$11.0 billion and \$12.0 billion at March 31, 1989 and 1988, respectively, which are backed by government insured or guaranteed mortgages.

(4) Included are \$8.2 billion and \$5.5 billion at March 31, 1989 and 1988, respectively, of Fannie Mae MBS in portfolio.

MegaPools, SMBS, and REMICs issued during the first three months of 1989 were \$3.4 billion, \$1.1 billion, and \$3.7 billion, respectively. SMBS and REMICs issued during the same period in 1988 were \$1.4 billion and \$1.6 billion, respectively. MegaPools were not introduced until the second quarter of 1988. MegaPools can back SMBS or REMICs and SMBS can back REMICs.

At March 31, 1989, the Corporation had outstanding \$8.3 billion of mandatory delivery commitments to issue and guarantee MBS compared with \$10.6 billion at March 31, 1988. At March 31, 1989, the Corporation had optional delivery commitments outstanding to issue and guarantee \$16.6 billion of MBS compared with \$14.2 billion at March 31, 1988.

#### *Financing and Other Activities*

In the first three months of 1989, the Corporation issued \$13.6 billion of debt at an average cost of 9.34 percent, and redeemed \$14.4 billion at an average cost of 8.81 percent. In the first three months of 1988, debt issues totaled \$14.3 billion at an average cost of 7.19 percent; debt redemptions totaled \$11.4 billion at an average cost of 8.66 percent. The average cost of debt outstanding at March 31, 1989 and 1988 was 9.25 percent and 9.28 percent, respectively.

The Corporation's statutory debt-to-capital ratio at March 31, 1989 was 18:1. The Secretary of Housing and Urban Development requires that this ratio not exceed 20:1. Capital, for this purpose, includes subordinated capital debentures, convertible debentures, and portfolio and MBS

loss allowances. The Corporation is also subject to a restriction in certain subordinated capital debenture agreements, which limits the amount of subordinated obligations outstanding under Section 304(e) of the Charter Act to not more than two times the sum of the capital represented by its outstanding common stock, additional paid-in capital, and retained earnings. At March 31, 1989, the Corporation's subordinated debt-to-equity ratio was 1.1:1.

On April 18, 1989, the Board of Directors voted to increase the dividend on its common stock to 32 cents per share for the quarter ended March 31, 1989 from 24 cents. The dividend is payable on May 25, 1989 to shareholders of record on April 28, 1989.

### GOVERNMENT REGULATION AND CHARTER ACT

The Corporation is a federally chartered and stockholder-owned corporation organized and existing under the Charter Act (12 U.S.C. 1716 *et seq.*) whose purpose is to provide supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing.

The Federal National Mortgage Association originally was incorporated in 1938 pursuant to Title III of the National Housing Act as a wholly owned government corporation and in 1954, under a revised Title III called the Federal National Mortgage Association Charter Act, became a mixed-ownership corporate instrumentality of the United States. From 1950 to 1968, it operated in the Housing and Home Finance Agency or the Department of Housing and Urban Development ("HUD"). Pursuant to amendments to the Charter Act enacted in the Housing and Urban Development Act of 1968 (the "1968 Act"), the then Federal National Mortgage Association was constituted as a federally chartered corporation and the entire equity interest in the Corporation became stockholder-owned. The 1968 Act also partitioned that part of the Federal National Mortgage Association that carried on certain special financing assistance and management and liquidation functions into a separate corporation, the Government National Mortgage Association, a wholly owned corporate instrumentality of the United States within HUD.

Although the 1968 Act eliminated all federal ownership interest in the Corporation, it did not terminate government regulation of the Corporation. Under the Charter Act, approval of the Secretary of the Treasury is required for the Corporation's issuance of its debt obligations and approval of the Secretary of HUD is required for the Corporation's issuance of stock and securities convertible into stock. Obligations of the Corporation issued under section 304(b) of the Charter Act are subject to limitations imposed by the Charter Act and regulations adopted by HUD. See "Business—Corporate Indebtedness."

In addition to specific enumerated powers, the Secretary of HUD is granted general regulatory power over the Corporation under the Charter Act with authority to promulgate rules and regulations to carry out the purposes of the Charter Act. Also, the Secretary may require, pursuant to the Charter Act, that a reasonable portion of the Corporation's mortgage loan purchases be related to the national goal of providing adequate housing for low- and moderate-income families, but with a reasonable economic return to the Corporation.

While the Charter Act authorizes the Corporation to require entities selling mortgages to it to make nonrefundable capital contributions, as determined from time to time by the Corporation with the approval of the Secretary of HUD and subject to Charter Act restrictions, the Corporation currently imposes no such requirements on mortgage sellers.

The Charter Act requires that each servicer of the Corporation's mortgages own a minimum amount of common stock. The Secretary of HUD must approve stock holding requirements imposed upon such mortgage servicers. The common stock ownership requirement currently is one share.

The Charter Act also gives the Secretary of HUD the authority to audit and examine the books and financial transactions of the Corporation, but this authority has never been exercised.



Thirteen members of the Corporation's eighteen-member Board of Directors are elected by the holders of the Corporation's common stock, and the remaining five members are appointed by the President of the United States. One such appointed director is required to be from each of the home building, mortgage lending, and real estate industries. Any member of the Board of Directors, including a member elected by stockholders, may be removed by the President of the United States for good cause. Pursuant to authority in the Housing and Community Development Act of 1987, the Corporation's Board of Directors and shareholders in 1988 approved the elimination of cumulative voting by shareholders in elections of directors.

In addition to placing the Corporation under federal regulation, the Charter Act also grants to the Corporation certain privileges and immunities. For instance, securities issued by the Corporation are deemed to be "exempt securities" under laws administered by the Securities and Exchange Commission 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 the Corporation's securities are not filed with the Securities and Exchange Commission. The Corporation also is not required to file periodic reports with the Securities and Exchange Commission.

As described in "Business—Corporate Indebtedness," the Secretary of the Treasury of the United States has discretionary authority to purchase obligations of the Corporation up to a maximum of \$2.25 billion outstanding at any one time. This facility has not been used since the Corporation's transition from government ownership in 1968. Neither the United States nor any agency thereof is obligated to finance the Corporation's operations or to assist the Corporation in any other manner.

The Corporation is exempt from all taxation by any state or by any county, municipality, or local taxing authority except for real property taxes. The Corporation is not exempt from payment of federal corporate income taxes. Also, the Corporation may conduct its business without regard to any qualification or similar statute in any state of the United States or the District of Columbia.

The Federal Reserve Banks are authorized to act as depositaries, custodians, and fiscal agents for the Corporation, for its own account, or as fiduciary.

## BUSINESS

The Corporation purchases and holds in portfolio mortgage loans on residential properties. The Corporation obtains funds to purchase mortgage loans from various capital markets. The Corporation also issues MBS.

In this document, both whole loans and participation interests in loans are referred to as "loans," "mortgage loans," and "mortgages." The term "mortgage" also is used to refer to the security instrument securing a loan rather than the loan itself, and when so used also refers to a deed of trust.

### Spread

The table below reflects the spread between effective interest rates earned on total interest-earning assets and effective interest rates paid on total interest-bearing liabilities.

<u>For the Month</u> (Dollars in millions)	<u>Total Interest- earning Assets</u>	<u>Effective Interest Rate(1)</u>	<u>Total Interest- bearing Liabilities</u>	<u>Effective Interest Rate(1)</u>	<u>Interest Spread</u>
December 1984	\$ 84,824	11.00%	\$ 82,472	11.56%	(.56)%
December 1985	96,352	10.85	93,738	10.77	.08
December 1986	96,303	10.12	92,962	10.04	.08
December 1987	99,142	9.87(2)	95,774	9.49	.88(2)
<u>1988</u>					
March	102,013	9.76	98,651	9.28	.48
June	106,807	9.69	102,815	9.17	.52
September	108,874	9.70	104,624	9.17	.53
December	108,879	9.77	104,424	9.16	.61

(1) Average investment yield is calculated for the month shown and converted to an annual interest rate using as the numerator interest income on a tax equivalent basis (excluding out-of-cycle adjustments), and as the denominator the average outstanding unpaid investment less unamortized discount and fees. Similarly, the average cost of interest-bearing liabilities is calculated using net interest expense (including the amortization of issuance costs, hedging results and the effect of currency and interest rate swaps) and the average outstanding applicable net indebtedness during the month.

(2) Excludes the cumulative adjustment under FAS 91 to reflect prepayment experience. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Financial Accounting Standard No. 91."

The Corporation is managing the effective maturities and repricing characteristics of its assets and liabilities and has developed its MBS business to reduce its sensitivity to increases in interest rates. The operations and earnings of the Corporation continue to be influenced, however, by the level of interest rates and the availability of alternative sources of mortgage credit.

One of the factors affecting spread is the rate obtained by the Corporation on its refinancing of maturing debt. Approximately \$12.4 billion principal amount at maturity of debt obligations with an original term of one year or longer (having a weighted average cost of 10.38 percent at December 31, 1988) will mature during the 12 months following December 31, 1988. Further information on the maturity profile of the Corporation's debt obligations with an original term of at least one year is contained in "Corporate Indebtedness."

## Mortgage Loan Portfolio

### *Mortgage Loans Purchased*

The Corporation purchases primarily single-family, conventional, fixed- or adjustable-rate, first mortgage loans, but it also purchases other types of residential mortgage loans for its loan portfolio, including mortgage loans insured by the Federal Housing Administration ("FHA") or the Veterans Administration ("VA"), multifamily mortgage loans and second mortgage loans. The Corporation's purchases currently have a variety of maturities. The Corporation's purchases of adjustable-rate mortgage loans ("ARMs"), fixed-rate loans with intermediate terms (20 years or less), loans secured by second mortgages, and multifamily loans are designed to assist in mitigating the risks associated with rising interest rates, to match more closely the generally shorter maturities of its borrowings, and to provide a secondary market for a variety of loans that may be attractive to potential homeowners.

The composition of the Corporation's loan portfolio and of its loan purchases during the last five years is shown in the table in "Portfolio Composition and Purchases." Of the single-family mortgage loans that the Corporation purchased in 1988, approximately 41 percent were from mortgage banking companies, 25 percent were from savings and loan associations, 12 percent were from commercial and mutual savings banks, and 22 percent were from other companies.

*Principal Balance Limits.* Maximum principal balance limits apply to the Corporation's mortgage loan purchases. The Corporation may not purchase any conventional mortgage loan on a one-family dwelling if the original principal balance exceeds \$187,600, except for loans secured by properties in Alaska and Hawaii. Higher principal balance limits apply to loans secured by two or more family dwelling units. The maximum principal balance limits applicable to the Corporation's conventional mortgage loan purchases can be adjusted annually if there have been increases in the national average price of a one-family dwelling as surveyed by the Federal Home Loan Bank Board. On January 1, 1989, the limitation for one-family dwellings was raised from \$168,700 to the current level.

Conventional multifamily mortgage loans that the Corporation purchases are subject to certain maximum principal amounts, as set forth in the Charter Act, based on the number of units in the property being financed and its location.

FHA-insured mortgage loans are subject to statutory maximum amount limitations. The Corporation will not purchase VA-guaranteed mortgage loans that have principal amounts in excess of amounts the Corporation may specify from time to time.

*Conventional/FHA/VA.* In recent years the Corporation has purchased predominantly conventional mortgage loans (i.e., mortgage loans that are not federally insured or guaranteed). In 1988, the Corporation's purchases of conventional mortgage loans were 98 percent of the total amount of the loans purchased by the Corporation. The remainder were insured by the FHA or guaranteed by the VA.

*Fixed-Rate/Adjustable-Rate.* The interest rates on ARMs are determined by formulas providing for automatic adjustment, up or down, in accordance with changes in a specified index. Since October 1985, the Corporation has issued commitments to purchase ARMs only if the ARMs have a cap on the amount the interest rate may change. The volume of the Corporation's purchases of ARMs has fluctuated, in part, because the level of interest rates and the difference between the interest rates on fixed-rate loans and the initial interest rates on ARMs with the same maturity influence the number of ARMs originated. As a result of the relatively higher interest rate environment and the wide interest rate spread between fixed interest rates and initial interest rates on ARMs, the Corporation's purchases of ARMs in 1988 constituted 43 percent of the total amount of loans purchased, compared with 12 percent and 4 percent in 1987 and 1986, respectively. A substantial number of the ARMs purchased by the Corporation provide the mortgagor with the option, at specified times or during specified periods of time, to convert the ARM to a fixed-rate mortgage loan on payment of a small fee.

Substantially all fixed-rate mortgage loans purchased by the Corporation provide for level monthly installments of principal and interest. The Corporation also purchases some growing equity mortgage loans and graduated payment mortgage loans (one percent of loans purchased in 1988), which are fixed-rate loans with planned annual increases in the monthly payments over a specified period of time. With a growing equity mortgage loan, the increase in the payment applies solely to principal, resulting in faster amortization. With a graduated-payment mortgage loan, the increase in the payment applies to interest and additions previously made to the original principal balance because payments during the early years did not cover the full amount of interest on the loan at the fixed interest rate. Substantially all ARMs provide for adjustments (up or down) in the amount of monthly installments when the interest rate on the loan is adjusted because of changes in the applicable index. Installments on both fixed-rate loans and ARMs consist primarily of interest during the early and middle years with the major portion of the original principal balance scheduled to be paid during the years immediately preceding maturity.

*First Mortgage/Second Mortgage.* In addition to mortgage loans secured by first liens on residential properties ("first mortgage loans"), the Corporation also purchases fixed-rate, conventional loans secured by second liens ("second mortgage loans"). Second mortgage loans generally bear higher interest rates and have shorter maturities than first mortgage loans. During 1988, the Corporation's purchases of second mortgage loans constituted less than two percent of total loans purchased.

*Whole Loan/Participation Interest.* In addition to purchasing the complete ownership interest in mortgage loans (typically called whole loans), the Corporation also purchases less than 100 percent ownership of mortgage loans (typically called participation interests). The Corporation purchases percentage interests that range from 50 to 95 percent.

*Single-Family/Multifamily.* The mortgage loans secured by multifamily properties (i.e., properties with more than four dwelling units) that the Corporation purchases are conventional, fixed-rate mortgage loans that typically have a shorter term than mortgage loans secured by one- to four-family properties ("single-family" or "home" loans). During 1988, the Corporation's purchases of multifamily loans constituted two percent of the amount of loans it purchased.

*Maturity.* The Corporation currently purchases conventional, fixed-rate, single-family mortgage loans and ARMs with original maturities of up to 30 years, with a minimum of 10 years for ARMs. Prior to 1986, the large majority of the Corporation's single-family conventional loan purchases were 30-year loans. In 1985, the Corporation began to purchase actively 15-year, conventional, fixed-rate mortgage loans. In 1987, the Corporation also began to purchase actively 10- and 20-year conventional, fixed-rate loans and conventional, fixed-rate loans with 7- and 10-year balloon payments but 30-year amortization schedules. During 1987 and 1988, the Corporation's purchases of intermediate term fixed-rate loans constituted 32 percent and 18 percent, respectively, of its purchases. In February 1988, the Corporation commenced purchasing conventional fixed-rate loans with biweekly payments and original maturities of up to 30 years. During 1988, biweekly fixed-rate loans constituted one percent of the Corporation's purchases.

The multifamily mortgage loans that the Corporation currently purchases generally have an effective term not exceeding 15 years. The Corporation owns a significant amount of FHA-insured project loans that had an original maturity of 40 years.

*Portfolio Composition and Purchases.* The following table sets forth the composition of the Corporation's mortgage loan portfolio, purchase activity, and the weighted average yields (net of servicing) on the mortgage loan portfolio and on mortgage loans purchased.

The table below includes single-family and multifamily mortgage loans that back MBS held by the Corporation in the mortgage loan portfolio. At December 31, 1988, 1987, and 1986, respectively, \$8.1 billion, \$4.2 billion, and \$1.6 billion of MBS were so held.

### Mortgage Loan Portfolio Composition and Purchases

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
<b>Unpaid Principal Balances at End of Period</b>					
Single-Family: Government insured or guaranteed	\$ 12,235	\$13,306	\$15,968	\$27,414	\$29,016
Conventional: Fixed-rate	60,997	61,314	58,176	45,065	38,781
Adjustable-rate	21,040	13,722	14,343	16,955	11,729
Second mortgage	1,561	1,421	2,169	2,899	2,817
Multifamily: Government insured	4,397	4,482	4,852	4,951	5,060
Conventional	2,783	2,501	2,325	1,865	706
<b>Total unpaid balance</b>	<b>\$103,013</b>	<b>\$96,746</b>	<b>\$97,833</b>	<b>\$98,649</b>	<b>\$88,109</b>
Average net yield	9.84%	9.98%	10.17%	10.92%	11.06%
<b>Purchases During Period</b>					
Single-Family: Government insured or guaranteed	\$ 503	\$ 1,784	\$ 438	\$ 482	\$ 190
Conventional: Fixed-rate	11,890	15,775	27,454	12,398	9,544
Adjustable-rate	9,862	2,512	1,108	7,066	5,403
Second mortgage	433	139	498	871	987
Multifamily: Government insured	23	—	—	—	—
Conventional	399	321	1,328	693	647
<b>Total mortgage loans purchased</b>	<b>\$ 23,110</b>	<b>\$20,531</b>	<b>\$30,826</b>	<b>\$21,510</b>	<b>\$16,721</b>
Average net yield on mortgage loans purchased	9.40%	9.63%	9.68%	11.71%	12.89%

At December 31, 1988, the weighted average life (based on the underlying amortization schedules, balloon provisions, and assuming no prepayments) of the mortgage loans in the Corporation's mortgage loan portfolio was approximately 21 years.

#### *Underwriting Guidelines*

The Corporation has established certain underwriting guidelines for purchases of conventional mortgage loans in an effort to reduce the risk of loss from mortgagor defaults. These guidelines are designed to assess the creditworthiness of the mortgagor as well as the value of the mortgaged home relative to the amount of the mortgage loan. The Corporation, in its discretion, accepts deviations from the guidelines. The Corporation generally relies on lender representations to ensure that the mortgage loans it purchases conform to its underwriting guidelines. The Corporation changes these guidelines from time to time.

Generally, the Corporation requires that the unpaid principal amount of each conventional first mortgage loan it purchases not be greater than 80 percent of the value of the mortgaged property unless the excess over 75 percent is insured by a mortgage insurance company acceptable to the Corporation. Mortgage insurance is required for as long as the principal balance of the mortgage loan is greater than 80 percent of the original value (or of the appraised value as determined by a subsequent appraisal). Under the Charter Act, mortgage insurance is not required on mortgage loans with loan-to-value ratios greater than 80 percent if the mortgage loan seller retains a participation interest in the loan of not less than 10 percent. The Corporation, however, is requiring mortgage insurance in such cases, except where the lender agrees to repurchase the loan in the event of default or the lender agrees to bear a certain amount

of losses and pledges collateral to secure such obligation. The Corporation generally requires mortgage insurance for second mortgage loans if the combined loan-to-value ratios of the first and second mortgage loans on the property exceed 70 percent.

Because FHA-insured and VA-guaranteed mortgage loans, as a result of their government backing, involve less risk to the Corporation from a credit standpoint, the Corporation's basic eligibility criterion for their purchase is simply the FHA insurance or the VA guaranty.

### Commitments

The Corporation purchases mortgage loans by issuing commitments, by which it agrees in advance to purchase a specified dollar amount of loans. The Corporation purchases mortgage loans through standard product commitments with posted yields and through negotiated commitments. The Corporation's standard mortgage loan products currently include 10-, 15-, 20- and 30-year fixed-rate mortgage loans, several types of ARMs, and second mortgage loans. The Corporation negotiates commitment terms primarily when the mortgage loans or proposed commitment terms differ in some manner from one or more of the Corporation's standard mortgage loan products or standard commitments.

The Corporation purchases most of its mortgage loans pursuant to mandatory delivery commitments. Under such commitments, lenders are obligated to sell loans to the Corporation at the commitment yield.

The Corporation also issues to lenders standby commitments that commit the Corporation to purchase a designated dollar amount of mortgage loans from the lenders after they convert their standby commitments to mandatory delivery commitments. Until converted, the standby commitments do not obligate the lenders to sell the loans to the Corporation. The yield on the mortgage loans is established at the time of the conversion in the case of "market rate" standby commitments and at the time the lender obtained the commitment in the case of "rate-lock" standby commitments. The combined term of the standby and mandatory commitments currently can be up to 14 months.

Lenders often have paid fees for these commitments, with the amount of the fee depending on market conditions, the type of mortgage loan, and the length and characteristics of the commitment. Effective October 1, 1987, the Corporation eliminated its requirement of "upfront" commitment fees on all mandatory delivery transactions for its standard mortgage products. Concurrently, the Corporation began offering lenders the choice, in selected negotiated transactions for 15- and 30-year fixed-rate conventional mortgage loans, of obtaining a commitment without fees at competitive yields or a commitment at lower yields with fees. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Financial Accounting Standard No. 91" for a discussion of the standard the Financial Accounting Standards Board issued requiring a change in accounting for commitment fees.

The following table sets forth the Corporation's mortgage loan commitment issuance activity.

### Mortgage Loan Purchase Commitments Issued

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
Single-Family: Government insured or guaranteed . . . . .	\$ 264	\$ 1,699	\$ 210	\$ 197	\$ 68
Conventional: Fixed-rate . . . . .	12,684	17,188	29,910	11,902	11,838
Adjustable-rate . . . . .	9,547	6,252	1,085	6,525	7,072
Second mortgage . . . . .	484	152	461	808	1,240
Total single-family . . . . .	22,929	25,236	31,616	19,482	20,218
Multifamily . . . . .	506	179	1,871	798	789
Total . . . . .	<u>\$23,435</u>	<u>\$25,415</u>	<u>\$32,987</u>	<u>\$20,225</u>	<u>\$21,007</u>

Commitments outstanding at December 31, 1988 and 1987 were \$2.1 billion and \$4.9 billion, respectively, including standby commitments of \$1.0 billion at December 31, 1988 and \$3.3 billion at December 31, 1987.

### *Servicing*

Those who sell single-family mortgage loans and conventional multifamily loans to the Corporation generally retain, subject to the Corporation's guidelines, the responsibility for servicing the mortgage loans sold. With the Corporation's approval, they may transfer responsibility for servicing the loans to others. Servicing includes the collection and remittance of principal and interest payments, administration of escrow accounts, collection of insurance claims, and, if necessary, processing of foreclosures. The Corporation compensates servicers by permitting them to retain a specified portion of each interest payment on a serviced mortgage loan.

The Corporation services the government-insured multifamily loans in its portfolio.

### *Repayments, Assumptions, and Sales*

As shown by the table below, repayments during 1988 compared with 1987 decreased by 29 percent. This decrease is primarily due to greater stability of interest rates. The level of principal repayments in 1987 and 1986 substantially increased from the levels of previous years. Because the majority of mortgage loans in the Corporation's portfolio are prepayable by the borrower (in some cases with a small penalty), the decline in mortgage interest rates experienced in 1986 and during part of 1987 resulted in a significant increase in prepayments of the higher interest rate mortgage loans in the Corporation's loan portfolio. In general, when the level of interest rates declines significantly below the interest rates on portfolio mortgage loans, the rate of prepayment is likely to increase, although the rate of principal payments is influenced by a variety of economic, geographic, social, and other factors.

### **Mortgage Loan Portfolio Repayments**

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
<b>Single-Family:</b>					
Government insured or guaranteed .....	\$ 1,425	\$ 2,011	\$ 2,876	\$2,090	\$1,651
Conventional: Fixed-rate .....	7,310	10,206	12,396	4,796	2,846
Adjustable-rate .....	2,548	3,143	3,756	1,968	934
Second mortgage .....	293	887	1,228	788	505
<b>Multifamily:</b>					
Government insured .....	108	120	99	109	81
Conventional .....	121	150	382	45	14
Total mortgage loan repayments(1) .	<u>\$11,805</u>	<u>\$16,517</u>	<u>\$20,737</u>	<u>\$9,791</u>	<u>\$6,031</u>
Repayments as a percentage of total unpaid balance (annualized) .....	11.7%	17.3%	21.1%	10.4%	7.3%

(1) Repayments include \$1,115 million, \$1,123 million, \$1,142 million, \$835 million, and \$648 million in 1988, 1987, 1986, 1985, and 1984, respectively, of loans removed from portfolio as a result of foreclosures. Foreclosures included in repayments for 1988 include \$92 million related to EPIC properties (see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Other Expenses").

The Corporation currently enforces "due-on-sale" clauses in conventional fixed-rate mortgages purchased by the Corporation pursuant to commitments issued on and after November 10, 1980 and in conventional mortgages covering properties whose sale has been facilitated by "wraparound" or second mortgages made by institutional lenders. Because a significant portion of the Corporation's fixed-rate portfolio loans (including all FHA and VA loans) do not contain any such clause, the Corporation is unable to prevent assumptions on a significant portion of its portfolio.

The Corporation sold \$1.6 billion of low-yielding loans in the fourth quarter of 1987 to improve future interest spreads on the portfolio. In 1986, the Corporation sold \$11 billion of mortgage loans, including a special \$10 billion sale of mortgage loans that were primarily assumable FHA/VA mortgage loans. The following table shows the unpaid principal balances of mortgage loans sold from portfolio for the years 1984 through 1988.

### Mortgage Loan Sales from Portfolio

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
Single-Family:					
Government insured or guaranteed .....	\$ 150	\$2,436	\$ 9,011	\$ —	\$529
Conventional: Fixed-rate .....	4,897	2,528	1,946	1,319	450
Multifamily:					
Government insured .....	—	250	—	—	—
Total sales .....	<u>\$5,047</u>	<u>\$5,214</u>	<u>\$10,957</u>	<u>\$1,319</u>	<u>\$979</u>

### Mortgage-Backed Securities

MBS are guaranteed mortgage pass-through trust certificates issued by the Corporation that represent beneficial interests in pools of mortgage loans or other MBS. The Corporation serves as trustee for each trust. The pools of mortgage loans or MBS are not assets of the Corporation, except when acquired for investment purposes, nor are the related outstanding securities liabilities of the Corporation. The Corporation, however, is liable under its guaranty to make timely payments to investors of principal and interest on the mortgage loans in the pools, even if the Corporation has not received payments of principal or interest on the loans. MBS enable the Corporation to further its statutory purpose of increasing the liquidity of residential mortgage loans and create a source of guaranty fee income to the Corporation without requiring that the Corporation take the debt refinancing or "spread" risk on the underlying pooled mortgage loans.

The Corporation issues and guarantees several forms of MBS. With a standard MBS, an investor has an undivided interest in a pool of underlying mortgage loans that generally are provided either by one lender or by the Corporation out of the Corporation's mortgage loan portfolio. Interests in the pool are represented by a single class of certificates, so each investor receives a portion of the principal and interest payments on the pool equal to his undivided interest in the pool.

Fannie Majors, introduced by the Corporation in 1987, are MBS backed by large pools of mortgage loans from multiple lenders. Interests in the pool are represented by a single class of certificates, so each investor receives principal and interest payments proportionate to his undivided interest in the pool. Fannie Major issues totaled \$7.9 billion in 1988 and \$4.5 billion in 1987.

In 1988, the Corporation introduced MegaPools, which allow investors to consolidate small or partially paid down pools of MBS of the same type (and the same pass-through rate for fixed-rate MegaPools). In return for their MBS, investors receive MegaPool certificates representing undivided interests in the consolidated pool.



There is no special allocation of the cash flows from the mortgage loans underlying standard MBS, Fannie Majors, and MegaPools, because in each case there is a single class of certificates with each investor receiving a portion of the payments of principal and interest on the underlying mortgage loans equal to his undivided interest in the pool. In contrast, Stripped Mortgage-Backed Securities ("SMBS"), which the Corporation introduced in 1986, are issued in series, with two or more classes that are entitled to different cash flows from the underlying mortgage loans or MBS. Each class of SMBS receives a different proportion of the principal and interest payments on the underlying mortgages; a class may represent (a) an undivided interest solely in the principal payments, (b) an undivided interest solely in the interest payments, or (c) different percentage interests in principal and interest payments, to be made on a pool of mortgage loans or MBS.

Real estate mortgage investment conduit ("REMIC") securities represent beneficial interests in a trust having multiple classes of securities. Cash flows from the underlying mortgage loans or MBS (which may be standard MBS, Fannie Majors, MegaPools, or SMBS) are allocated to the different classes. Some REMIC trusts are structured so the investors in any regular class of the REMIC are paid interest currently on their pro rata share of the remaining principal, but principal payments are made to the regular classes sequentially so that investors in a regular class receive principal payments only when all regular classes with a shorter maturity have been retired. REMICs with different structures have been offered, including REMICs with (i) one or more accrual or "Z" classes that accrue interest but receive neither interest nor principal payments until certain other classes have been retired, (ii) classes bearing interest at floating rates rather than fixed rates, or (iii) planned or targeted amortization classes having a schedule of principal payments that will be met under certain prepayment conditions but that is not guaranteed to be met. All REMICs include a residual class, although the exact nature of the residual class depends upon the structure of the REMIC. REMICs were authorized by the Tax Reform Act of 1986, and the Corporation first issued these securities in 1987.

The following tables show the Corporation's activity in MBS for the years 1984 through 1988. MBS issued may be exchanged subsequently for MegaPools, SMBS, or REMICs. The table below includes MBS issued and outstanding that underlie MegaPools, SMBS, and REMICs, but does not include the resulting MegaPools, SMBS, or REMICs. Those resulting securities are shown in the table entitled "Summary of MegaPool, SMBS, and REMIC Activity."

**MBS Issued and Outstanding**

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
Issued during period . . . . .	\$ 54,878	\$ 63,229	\$60,566	\$23,649	\$13,546
Outstanding at period end(1) . . . . .	178,250	139,960	97,174	54,987	36,215

(1) Included in MBS outstanding are \$8.1 billion, \$4.2 billion, \$1.6 billion, \$0.4 billion, and \$0.4 billion of MBS in portfolio at December 31, 1988, 1987, 1986, 1985, and 1984, respectively.

The following table summarizes MegaPool, SMBS, and REMIC activity in 1988, 1987, and 1986.

### Summary Of MegaPool, SMBS, And REMIC Activity

(Dollars in millions)

	Year Ended December 31,		
	1988	1987	1986
<b>Issued during period:</b>			
MegaPools(1).....	\$ 9,928	\$ —	\$ —
SMBS(2).....	5,556	9,001	2,400
REMICs.....	11,199	916	—
<b>Outstanding at period end(3):</b>			
MegaPools(1).....	9,774	—	—
SMBS(2).....	15,013	10,462	2,283
REMICs.....	11,647	897	—

(1) MegaPools can back SMBS or REMICs.

(2) SMBS can back REMICs.

(3) Includes \$1.4 billion and \$0.1 billion at December 31, 1988 and 1987, respectively, held in the Corporation's mortgage portfolio.

The Corporation issues MBS backed by single-family or multifamily first mortgage loans with fixed or adjustable rates. The mortgage loans may be either conventional or FHA/VA mortgage loans. The conventional mortgage loans are subject to the maximum principal balance limits applicable to the Corporation's purchases as described under "Mortgage Loan Portfolio—Mortgage Loans Purchased—Principal Balance Limits." The mortgage loans also are subject to the same underwriting guidelines as those for mortgage loans purchased for portfolio as described under "Mortgage Loan Portfolio—Underwriting Guidelines," except to the extent compliance with those guidelines is waived by the Corporation. The majority of the Corporation's MBS outstanding represents beneficial interests in conventional fixed-rate mortgage loans on single-family dwellings.

Most standard MBS and Fannie Majors are issued in "swap" transactions in which lenders exchange pools of mortgage loans for MBS. In addition to swap transactions, the Corporation pools mortgage loans from its own portfolio or purchases mortgage loans from lenders in exchange for cash, assembles the mortgage loans in a pool, and sells the related certificates.

The Corporation issues its MBS pursuant to commitments by which it agrees in advance to issue these securities in exchange for a specified dollar amount of loans or MBS. Such commitments may be standard product commitments or negotiated commitments. Standard product commitments provide for optional delivery, while negotiated product commitments provide for either mandatory or optional delivery. Under optional delivery commitments, lenders have 180 days to deliver the mortgage loans, although the delivery period can be extended by the Corporation for another 180 days. Under mandatory delivery commitments, lenders must deliver the mortgage loans within specified time periods. SMBS and REMICs are issued only pursuant to mandatory delivery commitments. At December 31, 1988, the Corporation had outstanding \$7.2 billion of mandatory delivery MBS commitments and \$14.5 billion of optional delivery MBS commitments.

MBS carry the Corporation's guaranty of timely payment of principal and interest on the underlying pooled mortgage loans, whether or not such payments are received from the mortgagor. In addition, pursuant to its guaranty of REMICs, the Corporation is obligated to make timely distribution of required installments of principal and interest and to distribute the principal balance in full by a specified date, whether or not sufficient funds are available in the related REMIC trust. Because of the Corporation's guarantees, it assumes the ultimate credit risk of borrowers' defaults on all mortgage loans underlying MBS, as it does for portfolio mortgage loans. The Corporation's risk may be offset somewhat to the extent sellers of pools of mortgage loans elect to remain at risk on the loans sold to the Corporation. Lenders are provided an option to assume the credit risk in exchange for paying a lower guaranty fee. At December 31, 1988, \$81.8 billion of the conventional mortgage loans that are part of MBS pools had been acquired with recourse to the sellers in the event of default by the borrowers on the underlying mortgage loans. For further information regarding the primary foreclosure risk category of mortgage loans underlying MBS outstanding at December 31, 1988, 1987 and 1986, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Mortgage-Backed Securities." If the loss rate on conventional mortgage loans in pools should appreciably increase, the Corporation's losses could, to the extent not offset by recourse to sellers, become significant. For information on the Corporation's loss and delinquency experience on mortgage loans underlying MBS, see "Portfolio and MBS Loan Losses."

The Corporation receives guaranty fees for its standard MBS and Fannie Majors. Such fees are paid monthly until the underlying mortgage loans have been repaid or foreclosed. For the years ended December 31, 1988 and December 31, 1987, MBS guaranty fees totaled \$328 million and \$263 million, respectively. The Corporation also generally receives fees for swapping SMBS and REMICs for standard MBS.

The aggregate amount of guaranty fees received by the Corporation depends upon the amount of MBS outstanding and on the guaranty fee rate. The amount of MBS outstanding is influenced by the repayment rates on the underlying mortgage loans and by the rate at which the Corporation issues new MBS.

In most instances, the lenders that originated the loans in an MBS pool created from the Corporation's portfolio or the lenders that exchanged the loans for the MBS (in the case of a "swap" transaction) initially service the loans. The Corporation, however, reserves the right to remove the servicing responsibility from a lender at any time if it considers such removal to be in the best interest of MBS certificateholders. In such event, the Corporation finds a replacement lender that will service the loans. The lender also may subcontract servicing to another lender approved by the Corporation as well as transfer servicing with the Corporation's prior approval. The Corporation ultimately is responsible for the administration and servicing of mortgage loans underlying MBS, including the supervision of the servicing activities of lenders, if appropriate, the collection and receipt of payments from lenders, and the remittance of distributions and certain reports to holders of MBS certificates.

## Portfolio and MBS Loan Losses

### *Allowance and Provision for Loan Losses*

Primarily in response to an increase in actual and anticipated charge-offs since 1984, the Corporation has increased the provision for loan losses. The allowance for losses is established by charges to expense (the provision for losses) and is reduced through charge-offs (net of recoveries) of foreclosure losses. See also "Summary of Significant Accounting Policies—Allowance for Losses" in the notes to financial statements. The provision for losses for loans in the portfolio and loans in MBS pools and the allowance for losses thereon are summarized in the following table:

### Portfolio and MBS Allowances and Provisions for Loan Losses

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
<b>Provision during period</b>					
Portfolio:					
Government insured or guaranteed .. . . .	\$ 6	\$ 14	\$ 11	\$ 16	\$ 13
Conventional.....	279	266	249	161	68
MBS.....	80	80	46	29	5
<b>Total .. . . .</b>	<u>\$365</u>	<u>\$360</u>	<u>\$306</u>	<u>\$206</u>	<u>\$ 86</u>
<b>Allowance at end of period</b>					
Portfolio:					
Government insured or guaranteed .. . . .	\$ 18	\$ 24	\$ 23	\$ 26	\$ 18
Conventional .. . . .	228	191	169	107	92
MBS.....	150	131	79	33	20
<b>Total.....</b>	<u>\$396</u>	<u>\$346</u>	<u>\$271</u>	<u>\$166</u>	<u>\$130</u>

### Charge-offs

In 1984 through 1987, the Corporation experienced a substantial increase in losses charged off on portfolio and MBS mortgage loans. This increase resulted both from an increase in the number of loans foreclosed and from a higher average loss per foreclosure. In 1988, total charge-offs (exclusive of \$45 million for estimated losses related to TMIC and EPIC) decreased as compared with 1987, primarily due to a decrease in the number of loans foreclosed. The losses charged off on the conventional loan portfolio and MBS are summarized in the following two tables:

#### Portfolio Loan Charge-off Experience

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
<b>Conventional Loans:</b>					
Net losses charged off during period (1)	\$ 216(3)	\$ 229	\$ 177	\$ 143	\$ 87
Average principal balance during period	83,824	75,948	69,997	60,972	48,101
Net loss charge-off ratio (annualized)	.2577%	.3015%	.2529%	.2345%	.1809%
<b>Single-Family Conventional Loans(2):</b>					
Number of foreclosures during period	6,733	7,870	6,580	6,220	4,664
Average number of loans during period	747,236	634,287	559,264	550,873	539,426
Percent foreclosed (annualized)	.9011%	1.2408%	1.1765%	1.1291%	.8646%

- (1) Estimated losses on acquired properties are charged to the allowance for losses when properties are acquired.
- (2) The number of foreclosures, number of loans and percentages shown are exclusive of loans purchased as participation interests and loans reported in summary format.
- (3) Includes \$28 million that represents the estimated loss relating to mortgage insurance claims pending with TMIC Insurance Company, Inc. and a \$17 million writedown to net realizable value on EPIC properties. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Other Expenses."

#### MBS Loan Charge-off Experience

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
Net losses charged off during period (1)	\$ 87	\$ 43	\$ 9	\$ 19	\$ 2
Average principal balance during period (1)	72,537	53,179	26,048	10,219	6,680
Net loss charge-off ratio (annualized)	.1199%	.0809%	.0346%	.1859%	.0299%

- (1) Excludes conventional MBS with recourse to lenders and conventional MBS under which the Corporation bears the primary loss risk but where lenders have pledged collateral to cover at least a portion of any losses. Such excluded MBS had a principal balance at December 31 of \$81.8 billion, \$60.1 billion, \$46.4 billion, \$36.6 billion, and \$25.2 billion in 1988, 1987, 1986, 1985, and 1984, respectively.

### *Delinquencies*

Delinquencies experienced on conventional mortgage loans in the Corporation's loan portfolio and underlying MBS are summarized in the following tables:

#### Portfolio Conventional Loan Delinquency Experience

(Percent of portfolio by number of loans)

<u>Period of Delinquency</u>	<u>December 31,</u>				
	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984(2)</u>
One month.....	3.1%	3.2%	3.4%	3.9%	3.6%
Two months.....	.6	.6	.7	.9	.8
Three or more months.....	.6	.6	.8	.8	.6
Total(1).....	<u>4.3%</u>	<u>4.4%</u>	<u>4.9%</u>	<u>5.6%</u>	<u>5.0%</u>
Under special lender forbearance.....	.3%	.4%	.3%	.3%	.4%
In foreclosure.....	.4	.6	.6	.5	.7

- (1) Delinquency percentages exclude loans under special lender forbearance or in foreclosure.
- (2) Delinquency information is not available for portfolio loans reported under the MBS reporting system before December 31, 1985.

#### MBS Conventional Loan Delinquency Experience

	<u>December 31,(2)</u>			
	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>
One month.....	2.4%	2.0%	2.5%	3.4%
Two months.....	.4	.3	.4	.5
Three or more months.....	.2	.2	.4	.4
Total(1).....	<u>3.0%</u>	<u>2.5%</u>	<u>3.3%</u>	<u>4.3%</u>
In foreclosure.....	.2%	.2%	.2%	.2%

- (1) Delinquency percentages exclude loans in foreclosure.
- (2) Delinquency information is not available for MBS before December 31, 1985.

### *REO*

The number of properties owned by the Corporation as a result of foreclosures ("REO") increased significantly in 1985, 1986, and 1987. The incidence of foreclosures increased sharply in economically distressed areas that have been dependent upon the oil exploration and services industry. The average loss per foreclosure also increased in these areas as property values declined. In addition, the number of foreclosures increased somewhat due to significant growth in the number of portfolio and MBS loans. In 1988, however, there was a slowdown in foreclosures, and the number of REO declined as dispositions of REO exceeded acquisitions.

Information as to the number of single-family REO properties owned by the Corporation and the carrying value of the properties is contained in the following table:

**Single-Family REO Experience**

(Dollars in thousands)

	December 31,				
	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>
Number of REO (1)	7,458(3)	9,434	8,104	7,701	5,400
Aggregate carrying value (2)	\$250,000	\$312,000	\$294,000	\$298,000	\$247,000
Average carrying value (2)	\$ 34	\$ 33	\$ 36	\$ 39	\$ 46

- (1) The number of REO for 1986 and prior years excludes properties acquired upon foreclosure of loans where the Corporation had a participation interest. In 1987, the Corporation began acquiring and managing such properties. As of December 31, 1988, the Corporation held 506 properties in which it had a participation interest. The Corporation believes that the addition of such properties in 1986 and prior years would not have increased the inventory by more than 15 percent.
- (2) The carrying value of a property is the lower of the Corporation's net investment (after deducting any mortgage insurance proceeds) or current estimated net realizable value.
- (3) REO inventory at December 31, 1988 includes 999 EPIC properties, 467 of which were in Fannie Mae's active inventory and being marketed for sale. The remaining 532 properties were included in the EPIC reorganization plan, which envisions their sale over a period of several years.

*TMIC-Insured Mortgage Loans*

In April 1988, the Superior Court in Los Angeles ordered the liquidation of TMIC Insurance Company, Inc. ("TMIC"), formerly Ticor Mortgage Insurance Company, which insured conventional mortgage loans in the Corporation's portfolio and underlying outstanding MBS issued by the Corporation. As to the approximately \$2.5 billion of non-delinquent mortgage loans that were insured by TMIC as of April 1988, Fannie Mae has arranged to obtain mortgage insurance coverage through the Policyholders Benefit Corporation ("PBC"). PBC mortgage insurance coverage will vary from the usual mortgage insurance coverage to the extent that Fannie Mae's compensation for claims will be limited to the premiums collected, less the cost of administration.

The Corporation currently has claims pending in the TMIC liquidation. The Corporation charged off \$28 million in the fourth quarter of 1988 for the estimated loss, as of December 31, 1988, relating to claims in such liquidation with respect to foreclosures that occurred between late 1985 and April 1988 and loans in foreclosure or seriously delinquent as of April 1988. No special addition to the allowance for losses was required because of these charge-offs, and management does not expect that losses related to any claims made in the TMIC liquidation will require any special additions to the allowance for losses.

**Competition**

The Corporation competes, within the limits prescribed by its Charter Act, in the purchase of mortgage loans for portfolio and the issuance of mortgage-backed securities in the secondary mortgage market. The Corporation competes primarily with savings and loan associations, savings banks, commercial banks, mortgage bankers, government-sponsored corporations, and companies that pool mortgage loans ("conduits") for sale to investors as whole loans or mortgage-backed securities. The number and types of institutions that compete with the Corporation have increased significantly in recent years, with the substantial increase in the amount of mortgage loans sold in the secondary mortgage market and the growth of mortgage-backed securities.

The Corporation's market share of loans purchased for portfolio is affected by the volume of mortgage loans offered for sale in the secondary market by loan originators and other market participants, the amount purchased by other market participants that compete with the Corporation, and the adequacy of funds to meet the demands of the housing industry. In its purchase of mortgage loans for portfolio, the Corporation competes primarily on the basis of yield, fees, and products and services offered. Competition has been particularly intense for ARMs because many savings and loan associations and other market participants have purchased or retained such loans to better match the terms of their assets and liabilities.

In issuing MBS, the Corporation competes primarily with other companies that issue mortgage-backed securities, including conduits, savings and loan associations, and commercial banks. The Corporation's primary competitor for MBS is the Federal Home Loan Mortgage Corporation, whose primary business consists of the issuance of mortgage-backed securities. The Corporation and the Federal Home Loan Mortgage Corporation compete primarily on the basis of the amount of the guaranty fee charged, the products offered, and differences in such matters as mortgage eligibility standards and delivery requirements.

### Corporate Indebtedness

Although the Corporation is stockholder-owned and its obligations are not backed by the United States or any agency or instrumentality thereof other than the Corporation, the Corporation's debt has traditionally been treated as "Federal Agency" debt in the U.S. marketplace. The Corporation, as a result, has historically enjoyed ready access to funds in the U.S. credit markets at rates that are slightly higher than the yields on U.S. Treasury obligations of comparable maturities.

The following table sets forth at December 31, 1988 the maturity profile of the Corporation's debt obligations that were originally issued with a maturity of one year or longer.

<u>Maturing Within</u>	<u>Book Value</u>	<u>Average Cost(1)</u>
	(Dollars in millions)	
One year.....	\$12,876	10.88%
One to two years.....	11,006	9.52
Two to three years.....	13,882	8.47
Three to four years.....	9,490	9.30
Four to five years.....	7,021	8.89
Over five years.....	25,220	9.36

(1) Includes the amortization of issuance costs and hedging results, and the effect of currency and interest rate swaps.

The outstanding indebtedness of the Corporation consists of general unsecured obligations issued under section 304(b) of the Charter Act, subordinated capital debentures (including convertible capital debentures), which are unsecured subordinated general obligations issued under section 304(e) of the Charter Act, and mortgage-backed bonds issued and securities sold under agreements to repurchase under section 304(d) of the Charter Act.

Section 304(b) of the Charter Act provides that the aggregate amount of obligations outstanding under such subsection shall not exceed, at any one time, fifteen times the sum of the capital (including, for this purpose, capital debentures), capital surplus, general surplus, reserves, and undistributed earnings of the Corporation unless a greater ratio is fixed by the Secretary of HUD. In 1982, the Secretary of HUD increased this ratio to 30:1, but in April 1987 the Secretary advised the Corporation that he would immediately lower the debt-to-capital ratio to 25:1, with



the intention of further lowering this ratio to 20:1 by December 31, 1988. Regulations adopted by HUD provide that this ratio is, in the event of a reduction in the Corporation's capital, automatically increased to such ratio as shall be necessary to include all obligations outstanding pursuant to section 304(b). At December 31, 1988, this debt-to-capital ratio was 19.1:1, compared with 22.2:1 at December 31, 1987. At December 31, 1988, the Corporation could have issued approximately \$4.6 billion of obligations under section 304(b) of the Charter Act in addition to its then outstanding obligations under that section.

The Corporation is obligated to holders of certain outstanding issues of subordinated capital debentures to maintain the total principal amount of obligations issued under section 304(e) of the Charter Act at any one time outstanding at a level not more than two times the sum of (i) the capital of the Corporation represented by its outstanding common stock and (ii) its surplus and undistributed earnings at such time until such outstanding debentures mature or are redeemed. At December 31, 1988 and 1987, the Corporation's subordinated debt-to-equity ratio was 1.2:1. At December 31, 1988, the Corporation could have issued approximately \$1.9 billion of additional subordinated obligations and still have been in compliance with the 2:1 subordinated debt-to-equity ratio. The latest maturity date of a series of subordinated debentures containing the subordinated debt-to-equity restriction is September 30, 2002, although that series is callable at the Corporation's option. Other noncallable subordinated obligations containing the subordinated debt-to-equity restriction are scheduled to be outstanding until May 1989. Regulations adopted by HUD provide that, at the maturity or other event requiring the payment or redemption of obligations issued under section 304(e) of the Charter Act, the permitted debt-to-capital ratio is automatically increased as necessary to permit the issuance of obligations under section 304(b) of the Charter Act in an amount sufficient to provide the proceeds required to pay the principal of and interest on the outstanding subordinated obligations required to be paid at such time.

Issuances of indebtedness pursuant to section 304(b) of the Charter Act are also subject to the condition that, at the time of any such issuance, the aggregate amount of such indebtedness then outstanding under such section 304(b), after giving effect to the indebtedness being issued, is not greater than the Corporation's ownership, free from any liens or encumbrances, of cash, mortgages or other security holdings and obligations, participations or other investments. Unlike the debt-to-capital ratio limitation described above, this section 304(b) limitation is statutory and may not be waived or varied by the Secretary of HUD. For purposes of each of the foregoing calculations, the Corporation accounts for debt obligations issued at a discount at their book value (face amount less unamortized discount).

Section 304(d) of the Charter Act, pursuant to which MBS and mortgage-backed bonds are outstanding, imposes a requirement with respect to securities issued thereunder that the mortgages pledged or set aside must be sufficient at all times to make timely debt service payments on the securities. There is no other limitation on the amount of MBS and mortgage-backed bonds that may be outstanding.

Section 304(c) of the Charter Act authorizes the Secretary of the Treasury, in his discretion, as a public debt transaction, to purchase obligations of the Corporation up to a maximum of \$2.25 billion outstanding at any one time. This authority has not been used since the Corporation's transition from government ownership. Although the Secretary of the Treasury is authorized to purchase the obligations of the Corporation, the Secretary is under no requirement to do so. Any such obligations purchased by the Secretary of the Treasury must be issued pursuant to section 304(b) of the Charter Act and, accordingly, would be subject to the applicable limitations and restrictions described above.

The following table sets forth the Corporation's borrowing activity and outstanding borrowings, the respective costs of borrowings, and average maturities. The amounts given are book value (face amount net of unamortized premium and discount) except for short-term notes, which, because they have a maturity of less than one year, are reported at their face amount.

### Debt

(Dollars in millions)

	Year Ended December 31,				
	1988	1987	1986	1985	1984
<b>Short-Term Notes, Master Notes, Securities Sold under Agreements to Repurchase, Residential Financing Securities, and Short-Term Investment Agreements</b>					
Issued during period:					
Amount	\$ 50,180	\$26,950	\$22,066	\$23,617	\$26,231
Average cost	7.58%	6.84%	6.89%	8.47%	10.92%
Average maturity—days(1)	169	156	217	240	222
Outstanding at end of period:					
Amount	\$ 24,492	\$15,986	\$13,971	\$17,427	\$16,097
Average cost	8.88%	7.56%	6.40%	8.26%	11.06%
Average maturity—days(1)	137	149	161	121	127
<b>Debentures, Medium-Term Notes, Bonds, and Long-Term Investment Agreements</b>					
Issued during period:					
Amount	\$ 14,188	\$18,776	\$17,857	\$24,569	\$21,740
Average cost	8.76%	8.89%	7.95%	10.47%	11.99%
Average maturity—months	68	75	85	67	51
Outstanding at end of period:					
Amount	\$ 81,871	\$81,841	\$79,745	\$76,768	\$67,992
Average cost	9.82%	9.70%	10.41%	11.17%	11.63%
Average maturity—months	53	54	49	42	36
<b>Total Debt</b>					
Issued during period:					
Amount	\$ 64,368	\$45,726	\$39,923	\$48,186	\$47,971
Average cost(2)	7.84%	7.49%	7.10%	9.62%	11.47%
Average maturity—months(1)(2)	20	36	47	46	29
Outstanding at end of period:					
Amount	\$105,863	\$97,827	\$98,716	\$94,195	\$84,089
Average cost(2)	9.20%	9.46%	10.01%	10.79%	11.56%
Average maturity—months(1)(2)	43	48	46	40	31

(1) This is calculated exclusive of certain investment agreements for which the average maturity is indeterminate because the balances associated with such investment agreements fluctuate over the life of the agreement.

(2) Average cost and maturity of total debt issued and outstanding include the amortization of issuance costs, hedging results, and the effect of currency and interest rate swaps.

## RECENT LEGISLATIVE AND REGULATORY DEVELOPMENTS

The Bush Administration's recommendations for the 1990 fiscal year budget, as released on February 9, 1989, contain no specific recommendation to require the Corporation and other government-sponsored enterprises to pay user fees to the United States Treasury, but they do include in revenue estimates revenue from the same housing user fees that appeared in the final Reagan Administration budget. The Reagan Administration's proposed 1990 fiscal year budget package included a proposal to impose on the Corporation's debt issued after September 30, 1989 a 10 basis point fee in the government's fiscal year 1990, which begins October 1, 1989; a 20 basis point fee in fiscal year 1991; and a 30 basis point fee in fiscal year 1992 and beyond. In addition, the proposal would impose on MBS issued after September 30, 1989 a 5 basis point fee in fiscal year 1990, a 10 basis point fee in fiscal year 1991, and a 15 basis point fee in fiscal year 1992 and beyond. Imposition of such user fees would require legislation. The Reagan Administration's prior 1986 and 1987 fiscal year budget packages also included recommendations, which were not enacted, to require the Corporation and other government-sponsored enterprises to pay user fees. In addition, the Housing and Community Development Act of 1987, signed by the President on February 5, 1988, prohibits the imposition of user fees on the Corporation. The Senate and the House of Representatives have both approved a fiscal year 1990 budget resolution. The reports of the Budget Committees and the conference report indicate that user fees on the federal secondary mortgage market entities are specifically not included in the resolution.

The Bush Administration has not yet taken a public position on "privatization" of the Corporation and the Federal Home Loan Mortgage Corporation ("FHLMC"). The Reagan Administration's budget plan for the 1990 fiscal year once again stated that the Reagan Administration was studying ways of "privatizing" the Corporation and the FHLMC. "Privatization" of the Corporation and the FHLMC also was recommended in the report of the President's Commission on Privatization, which was released on March 18, 1988. Under the Reagan Administration, HUD also studied possible privatization of the Corporation, but no study has been published and no legislative proposals have been made. Alteration of the relationship of the Corporation to the federal government created by the Charter Act would require legislation. A similar recommendation was included in the Reagan Administration's 1989 fiscal year budget proposal; however, no legislation was introduced. Any change of the Corporation's current relationship with the federal government could require the Corporation to change the manner in which it conducts business and could have a material adverse effect on its results of operations.

In 1988, the Federal Reserve Board, the Comptroller of the Currency, and the Federal Deposit Insurance Corporation published risk-based capital guidelines applicable to banks and bank holding companies. The guidelines, for purposes of capital requirements, place obligations of issuers, including those of the Corporation, in four risk categories ranging from zero to 100 percent. It places debt issued and guaranteed by the Corporation and other federal government-sponsored entities in the same risk category (20 percent). However, SMBS and certain residual classes of REMICs of the Corporation are assigned to the 100 percent risk category. On December 23, 1988, the Federal Home Loan Bank Board ("FHLBB") published proposed regulations establishing capital requirements for institutions whose accounts are insured by the Federal Savings and Loan Insurance Corporation ("FSLIC"). The proposal is modeled on earlier proposed regulations of the three federal banking regulators, which were substantially similar to their final guidelines. The FHLBB proposal, however, contains a number of variations and addresses additional issues affecting capital and an institution's risk to the FSLIC, including interest-rate risk and collateralized borrowing. The FHLBB proposal establishes six risk categories ranging from zero to 300 percent. Fannie Mae debt, Fannie Mae MBS, and issues guaranteed or collateralized by Fannie Mae MBS would be in the 20 percent category, while certain residual classes of MBS (issued by Fannie Mae and others) would be in the 100 percent category. Fannie Mae stock would be in the 100 percent category. The FHLBB solicited comments on whether residual classes of MBS and equity securities should be moved to the 300 percent category.

On February 22, 1989, the Bush Administration's reform plan for the savings and loan industry was introduced in the Senate (S. 413). Under this bill, the FHLBB would be renamed the Federal Home Loan Bank System ("FHLBS") and its board would be replaced by a single chairman, who would be under the regulatory supervision of the Secretary of the Treasury. The FHLBS chairman would be required to establish capital standards for savings and loan institutions that are no less stringent than those applicable to national banks. In addition, all savings and loans would be required to meet these capital requirements by June 1, 1991. A companion bill (H.R. 1278) was introduced in the House of Representatives on March 6, 1989.

On April 19, 1989, the Senate passed S. 774, a revised version of the Bush Administration's bill (S. 413) to address the insolvency of the FSLIC and reform regulation of thrifts. In addition, the Senate version would eliminate current overcollateralization and term restrictions on Corporation loans made on the security of mortgages. On May 2, the House Banking Committee approved a version of the Bush Administration's proposal (H.R. 1278) that would also remove such restrictions on Corporation loans made on the security of mortgages. The House Banking Committee's version also includes provisions that would make the Corporation's financial transactions subject to audit by the General Accounting Office ("GAO") and would require GAO to undertake a study of whether the Corporation and other government-sponsored enterprises should be required to comply with some form of risk-based capital standards. On May 18, the House Ways and Means Committee marked up the House Banking Committee's version; its changes included an additional provision that would require the Secretary of the Treasury to conduct a study annually assessing the financial safety and soundness of government-sponsored enterprises and the impact of their operations on federal borrowing.

The Federal Financial Institutions Examination Council has issued a supervisory policy statement applicable to commercial banks, state chartered thrift institutions insured by the Federal Deposit Insurance Corporation, federally regulated credit unions, and the regulators of such institutions with regard to investment in various types of zero coupon and stripped obligations and asset-backed securities residuals. The policy statement (or some variation thereof) has been adopted by the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation and the National Credit Union Administration ("NCUA") with respect to the depository institutions that they regulate. The NCUA also has issued other guidelines regarding investment in such securities by Federal credit unions. The FHLBB has issued a supervisory bulletin establishing guidelines and limitations on investment in such securities by institutions insured by the FSLIC, and the Federal Home Loan Bank of Chicago also has issued a supervisory bulletin regarding the purchase of such securities. Furthermore, at least three state regulators have adopted regulations designed to prohibit regulated institutions subject to their jurisdiction from holding interest-only stripped mortgage-backed securities, including interest-only securities previously purchased.

As discussed in "Income Taxes" in the notes to financial statements, the Corporation filed suit in the United States Tax Court as a result of a formal deficiency notice filed by the Internal Revenue Service, based on their examination of tax years 1979 through 1982. The Corporation has paid all amounts assessed and the associated accrued interest on the remaining deficiencies; the suit was filed to recover disputed income taxes. In March 1988, the U.S. Tax Court ruled in the Corporation's favor on the issue relating to concurrent mortgage sales and for the IRS on the issue relating to resale/refinance transactions. In November 1988, the IRS filed a notice of appeal from the Tax Court's adverse decision on the issue relating to concurrent mortgage sales, and the Corporation filed its notice of appeal from the Tax Court's adverse decision on the issue relating to resale/refinance transactions. The appeals will be heard by the United States Court of Appeals for the District of Columbia. The Corporation will not record any income until the result is more certain.

## MANAGEMENT

### Directors

The age and background, as of May 20, 1989, of each of the members of the Board of Directors of the Corporation are as follows:

<u>Name and Age(1)</u>	<u>Principal Occupation, Business Experience, and Residence</u>	<u>First Became Director</u>	<u>Other Directorships(2)</u>
James A. Aliber, 64	Chairman of the Board and Chief Executive Officer, First Federal of Michigan, a savings and loan association, 1978 to present; Birmingham, Michigan	1985	
Felix M. Beck, 63	Chairman of the Board and Chief Executive Officer, Margaretten & Co., Inc., a mortgage banking company, 1969 to present; Livingston, New Jersey	1985	
Roger E. Birk, 58	President and Chief Operating Officer of the Corporation, November 1987 to present; Chairman of the Board, 1981 to April 1985, Chief Executive Officer, 1981 to 1984, and President, 1976 to 1982, Merrill Lynch & Co., Inc., a financial services company; Chairman of the Board, International Securities Clearing Corporation, November 1986 to October 1987; Rumson, New Jersey and Chevy Chase, Maryland	1985	New Jersey Resources Corporation; Penske Transportation
Eli Broad, 55	Chairman of the Board and Chief Executive Officer, Broad Inc. (formerly Kaufman and Broad, Inc.), a financial services corporation, March 1989 to present; Chairman of the Board, 1957 to 1989, and Chief Executive Officer, 1976 to 1989, Kaufman and Broad, Inc.; Chairman, Kaufman and Broad Home Corporation, 1986 to present; Chairman and Chief Executive Officer, Sun America Corporation (formerly Sun Life U.S.A., Inc. and Sun Life Group of America, Inc.), 1983 to present; President and Chief Executive Officer, Sun Life Insurance Company of America, Inc., 1983 to present; Los Angeles, California	1984	
Joseph P. Hayden, 59	Chairman of the Board and Chief Executive Officer, 1980 to present, The Midland Company and its subsidiaries, businesses engaged primarily in financing, insurance and river transportation; Cincinnati, Ohio	1969	First National Cincinnati Corporation; Star Bank, N.A.
David O. Maxwell, 59	Chairman of the Board of Directors and Chief Executive Officer of the Corporation, 1981 to present; President and Chief Operating Officer of the Corporation, 1981; Washington, D.C.	1981	Broad Inc.; Hechinger Company; Kaufman and Broad Home Corporation

<u>Name and Age(1)</u>	<u>Principal Occupation, Business Experience, and Residence</u>	<u>First Became Director</u>	<u>Other Directorships(2)</u>
John M. O'Mara, 61	Chairman of the Board and Chief Executive Officer, Global Natural Resources, Inc., an independent oil and gas exploration and production company, August 1988 to present; Managing Director, Chase Manhattan Bank, a banking and investment banking corporation, September 1985 to August 1988; Senior Vice President, Wertheim & Co., investment bankers, 1981 to September 1985; Greenwich, Connecticut	1970	Baldwin & Lyons, Inc.; The Midland Company
Richard D. Parsons, 41	President, Chief Operating Officer and Director, The Dime Savings Bank of New York, FSB, a financial institution, July 1988 to present; Partner, Patterson, Belknap, Webb & Tyler, a law firm practicing in New York, 1977 to June 1988; Pocantico Hills, New York	1989	M.S.B. Fund, Inc.
Samuel J. Simmons, 62	President, The National Caucus and Center on Black Aged, Inc., a non-profit organization, 1982 to present; housing consultant, 1981 to present; Washington, D.C.	1978	
Christopher J. Sumner, 48	President and Director, CrossLand Mortgage Corp., a mortgage banking corporation, May 1988 to present; President and Director, CrossLand Savings FSB, (Utah) (formerly Western Savings and Loan Company), a financial institution, March 1987 to present; President and Chief Executive Officer, Western Savings and Loan Company, a financial institution, 1980 to March 1987; Salt Lake City, Utah	1985	
Richard C. Van Dusen, 68	Chairman, March 1986 to present, and Executive Partner, 1977 to February 1986, Dickinson, Wright, Moon, Van Dusen & Freeman, a law firm practicing in Michigan and the District of Columbia, 1977 to present; Birmingham, Michigan	1981	CRI Insured Mortgage Investments II Inc.; Pennwalt Corporation; MCN Corporation
Mallory Walker, 50	President, Chief Executive Officer and Director, Walker & Dunlop, Inc., a mortgage banking and real estate company, 1976 to present; Washington, D.C.	1981	
Karen Hastie Williams, 44	Partner, Crowell & Moring, a law firm practicing in the District of Columbia, 1982 to present; Washington, D.C.	1988	Crestar Financial Corporation

(1) The President of the United States has authority to appoint five directors. The President currently has appointed no directors.

(2) Companies with a class of securities registered pursuant to Section 12 of the Securities Exchange Act of 1934 or subject to the requirements of Section 15(d) of that Act or any company registered as an investment company under the Investment Company Act of 1940. Certain directorships of other companies are also noted in the occupation column.

## **Executive Officers**

The age and business experience, as of May 20, 1989, of each of the executive officers of the Corporation, are as follows:

David O. Maxwell, 59, has been Chairman of the Board of Directors and Chief Executive Officer since 1981. He also served briefly as the Corporation's President and Chief Operating Officer in 1981 until his election to his present position.

Roger E. Birk, 58, has been President and Chief Operating Officer of the Corporation since November 1987 and a director of the Corporation since 1985. Mr. Birk was Chairman of the Board of International Securities Clearing Corporation from November 1986 to October 1987. He is Chairman Emeritus of Merrill Lynch & Co., Inc. and served from 1981 to 1985 as Chairman of the Board of Merrill Lynch. Mr. Birk also served as Chief Executive Officer from 1981 to 1984 and President from 1976 to 1982 of Merrill Lynch.

Samuel A. Alward, 58, has been Executive Vice President—Operations and Systems since January 1988. Mr. Alward was Executive Vice President—Technology from May 1987 to December 1987 and President and Chief Executive Officer of the National Mortgage Exchange (Interim) Corporation from November 1986 to May 1987. Prior to his association with the Corporation, Mr. Alward was Executive Vice President of Finance and Administration with the New York Stock Exchange.

Caryl S. Bernstein, 55, has been Executive Vice President since 1982 and General Counsel and Secretary since 1981. Mrs. Bernstein was Senior Vice President from 1981 until her election as Executive Vice President.

J. Timothy Howard, 40, has been Executive Vice President—Asset Management since December 1987. Mr. Howard was Executive Vice President—Economics, Strategic Planning, and Financial Analysis from September 1987 to December 1987, Senior Vice President—Economics and Corporate Planning from November 1985 to September 1987, Senior Vice President and Chief Economist from October 1983 to November 1985, and Vice President and Chief Economist from March 1982 to October 1983.

Bruce C. McMillen, 45, has been Executive Vice President and Chief Financial Officer since September 1985. Prior to his employment with the Corporation, Mr. McMillen was Executive Vice President and Chief Financial Officer of BarclaysAmericanCorporation, a diversified financial services company.

Dale P. Riordan, 40, has been Executive Vice President—Marketing and Customer Services since March 1989. Mr. Riordan was Executive Vice President—Policy and Public Affairs from October 1988 to March 1989, Executive Vice President—Administration and Corporate Relations from February 1986 to October 1988, Senior Vice President—Government Relations from October 1983 to February 1986, Vice President of Government Relations from January 1983 to October 1983, Vice President and Assistant to the Chairman of the Board from April 1982 to January 1983 and Vice President for Strategic Planning from July 1981 to April 1982.

Michael A. Smilow, 51, has been Executive Vice President—Chief Credit Officer since March 1989. Mr. Smilow was Executive Vice President—Marketing and Customer Services from January 1988 to March 1989 and Executive Vice President—Mortgage Operations from July 1984 to December 1987. Prior to his employment with the Corporation, Mr. Smilow was Executive Vice President of Mortgage Guaranty Insurance Corporation, a mortgage insurance company. He was also an officer and director of MGIC Investment Corporation and related companies.

Glenn T. Austin, Jr., 41, has been Senior Vice President—Southeastern Regional Office since May 1985. Mr. Austin was Regional Vice President from April 1982 until his election as Senior Vice President.

Douglas M. Bibby, 42, has been Senior Vice President—Administration since October 1988. Mr. Bibby was Senior Vice President and Assistant to the Chairman of the Board from March 1987 until October 1988, and Senior Vice President—Corporate Affairs from October 1983 to March 1987.

Dennis G. Campbell, 40, has been Senior Vice President—National Accounts since May 1989. Mr. Campbell was Senior Vice President—Marketing and Product Management from April 1987 to May 1989, Vice President—Marketing from May 1985 to April 1987, and Senior Assistant Regional Vice President—Northeastern Regional Office—Marketing from February 1983 to May 1985.

Larry H. Dale, 43, has been Senior Vice President—Multifamily Activities since June 1987. Prior to his employment with the Corporation, Mr. Dale was Vice President of Newman and Associates from 1984 to June 1987. From 1983 to 1984, he was the managing general partner of Octogon Financial Services.

Judith Dedmon, 38, has been Senior Vice President—Southwestern Regional Office since July 1987. Ms. Dedmon was Senior Vice President—Quality Standards from April 1987 to July 1987, Vice President for Quality Standards from July 1985 to April 1987, and Assistant Regional Vice President—Counsel in the Southeastern Regional Office from September 1982 to July 1985.

Hugh E. Flaherty, 57, has been Senior Vice President—Editorial Services since June 1988. Mr. Flaherty was Senior Vice President—Corporate Affairs from April 1987 to June 1988 and Vice President—Public Relations from August 1984 to April 1987.

John H. Fulford, III, 39, has been Senior Vice President—Western Regional Office since November 1985. Mr. Fulford was Regional Vice President—Western Regional Office from May 1985 to November 1985 and Senior Assistant Regional Vice President—Marketing from February 1983 to May 1985.

Charles W. Harvey, Jr., 57, has been Senior Vice President—Northeastern Regional Office since May 1985. Mr. Harvey was Regional Vice President—Northeastern Regional Office from 1973 to May 1985.

John R. Hayes, 50, has been Senior Vice President—Midwestern Regional Office since November 1985. Mr. Hayes was Regional Vice President—Midwestern Regional Office from 1972 to November 1985.

G. William Knight, 49, has been Senior Vice President of the Corporation since July 1987 and President and General Manager—Fannie Mae Software Systems since June 1987. Prior to his employment with the Corporation, Mr. Knight was with IBM Corporation in a number of positions. His most recent position was Branch Manager, National Distribution Division.

Robert J. Levin, 33, has been Senior Vice President—Marketing since May 1989. Mr. Levin was Senior Vice President—Mortgage-Backed Securities and Portfolio Acquisition from February 1988 to May 1989, Senior Vice President—Mortgage-Backed Securities from February 1987 to February 1988, Senior Vice President and Assistant to the Chairman of the Board from May 1986 to February 1987, Senior Vice President—Corporate Finance from November 1985 to May 1986, Vice President for Corporate Finance from July 1984 to November 1985, Director of Corporate Finance from November 1983 to July 1984, and Senior Financial Analyst from March 1982 to November 1983.

Robert J. Mahn, 61, has been Senior Vice President and Controller since June 1985. Mr. Mahn was Senior Vice President—Mortgage Operations from February 1982 to June 1985, and Vice President—Mortgage Operations from June 1981 to February 1982.

William R. Maloni, 44, has been Senior Vice President—Policy and Public Affairs since March 1989. Mr. Maloni was Senior Vice President—Government Relations from April 1987 to March 1989, Vice President for Government Relations from February 1986 to April 1987, Vice President



for Congressional Relations from March 1984 to February 1986, and Director for Congressional Relations from August 1983 to March 1984.

Anthony F. Marra, 47, has been Senior Vice President and Deputy General Counsel since April 1987. Mr. Marra held the position of Vice President and Deputy General Counsel from November 1985 to April 1987. Prior to his employment with the Corporation, Mr. Marra was Deputy General Counsel with the Overseas Private Investment Corporation.

James P. McMann, 50, has been Senior Vice President and Deputy General Counsel since April 1987 and was Vice President and Deputy General Counsel from November 1982 to April 1987.

Patrick F. O'Neill, 48, has been Senior Vice President—Real Estate Owned since November 1987. Mr. O'Neill was Vice President—Real Estate Sales from November 1986 to November 1987; Director, Real Estate Sales from December 1985 to November 1986; Director of Property Management from March 1984 to December 1985; Director of Auditing from March 1983 to March 1984; and Associate Director of Auditing from December 1979 to March 1983.

Gary L. Perlin, 38, has been Senior Vice President—Finance and Treasurer since November 1985. Mr. Perlin was Vice President for Risk Management from October 1983 to November 1985, and Director of Hedge Management from February 1982 to October 1983.

David E. Roberts, 47, has been Senior Vice President—Corporate Information Services since November 1985. Prior to his employment with the Corporation, Mr. Roberts was Vice President, Information Management Systems, at Acacia Mutual Life Insurance Company from January 1983 to September 1985.

Frank L. Stoler, 38, has been Senior Vice President—Mortgage Operations since February 1988. Prior to his employment with the Corporation, Mr. Stoler was with E.F. Hutton (now Shearson Lehman Hutton, Inc.) in several positions from April 1987 to February 1988. His most recent position was as First Vice President of the Operations/Systems Division. Mr. Stoler was Chief Financial Officer of L.F. Rothschild, Unterberg, Towbin, Inc. from June 1986 to April 1987. From June 1981 to June 1986, he was Director of Corporate Reporting, Controller of the Consumer Markets Group, and Director of Financial Systems for Merrill Lynch & Co., Inc.

#### **Employees**

At March 31, 1989 the Corporation employed approximately 2,500 full-time personnel.

## INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders  
Federal National Mortgage Association:

We have audited the accompanying balance sheets of Federal National Mortgage Association as of December 31, 1988 and 1987, and the related statements of income and cash flows for each of the years in the three-year period ended December 31, 1988. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. 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 Federal National Mortgage Association at December 31, 1988 and 1987, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1988, in conformity with generally accepted accounting principles.

PEAT MARWICK MAIN & Co.

Washington, DC  
January 20, 1989

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**STATEMENTS OF INCOME**

	Year Ended December 31,		
	1988	1987	1986
	(Dollars in millions, except per share amounts)		
Interest income:			
Mortgage portfolio, net of servicing fees . . . . .	\$ 9,629	\$9,586	\$ 9,991
Investments and cash equivalents... ..	597	257	116
Total interest income . . . . .	10,226	9,843	10,107
Interest expense . . . . .	9,389	8,953	9,723
Net interest income . . . . .	837	890	384
Other income:			
Guaranty fees.. ..	328	263	175
Gain (loss) on sales of mortgages.. ..	12	(81)	31
Miscellaneous, net . . . . .	69	53	83
Total other income . . . . .	409	235	289
Other expenses:			
Provision for losses . . . . .	365	360	306
Administrative.. ..	218	197	175
Total other expenses. . . . .	583	557	481
Income before federal income taxes . . . . .	663	568	192
Provision for federal income taxes:			
Current . . . . .	285	203	228
Deferred . . . . .	(129)	(11)	(141)
Total provision for federal income taxes.. ..	156	192	87
Net income . . . . .	\$ 507	\$ 376	\$ 105
Per Share:			
Earnings:			
Primary . . . . .	\$6.43	\$4.66	\$1.44
Fully diluted . . . . .	6.32	4.63	1.42
Cash dividends . . . . .	.72	.36	.20

See Notes to Financial Statements

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**BALANCE SHEETS**

**Assets**

	December 31,	
	1988	1987
	(Dollars in millions)	
Mortgage portfolio, net .....	\$ 99,867	\$ 93,470
Cash and cash equivalents .....	2,859	2,457
Investments .....	5,289	3,468
Accrued interest receivable .....	939	811
Receivable from currency swaps .....	1,717	1,573
Acquired property and foreclosure claims, net .....	418	416
Other assets .....	1,169	1,264
<b>Total assets .....</b>	<b><u>112,258</u></b>	<b><u>103,459</u></b>

**Liabilities and Stockholders' Equity**

**Liabilities:**

Bonds, notes, and debentures, net:

Due within one year .....	\$ 36,599	\$ 29,718
Due after one year .....	68,860	67,339
	105,459	97,057
Accrued interest payable .....	2,173	2,145
Payable from currency swaps .....	1,150	958
Mortgagors' escrow deposits .....	353	352
Deferred federal income taxes .....	157	298
Other liabilities .....	706	838
<b>Total liabilities .....</b>	<b><u>109,998</u></b>	<b><u>101,648</u></b>

**Stockholders' Equity:**

Common stock, \$6.25 stated value, no maximum author- ization—82,051,744 shares issued in 1988 (81,924,206 shares in 1987) .....	513	512
Additional paid-in capital .....	781	777
Retained earnings .....	1,067	617
	2,361	1,906
Less treasury stock, at cost—3,389,591 shares in 1988 (3,198,478 shares in 1987) .....	101	95
<b>Total stockholders' equity .....</b>	<b><u>2,260</u></b>	<b><u>1,811</u></b>
<b>Total liabilities and stockholders' equity .....</b>	<b><u>112,258</u></b>	<b><u>103,459</u></b>

See Notes to Financial Statements

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**STATEMENTS OF CASH FLOWS**

	Year Ended December 31,		
	1988	1987	1986
	(Dollars in millions)		
<b>Cash flows from operating activities:</b>			
Net income .....	\$ 507	\$ 376	\$ 105
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for deferred federal income taxes .....	(129)	(11)	(141)
Provision for losses .....	365	360	306
Net cash (noncash) portion of amortization of purchase discount and loan fees .....	140	(116)	151
(Decrease) increase in accrued interest payable .....	(2)	(179)	13
(Increase) decrease in accrued interest receivable .....	(128)	93	45
(Gain) loss on sale of mortgages .....	(12)	81	(31)
Net increase (decrease) in other receivables and payables .....	20	(8)	(120)
Net cash provided by operating activities .....	761	596	328
<b>Cash flows from investing activities:</b>			
Purchases of mortgages .....	(22,795)	(20,170)	(30,481)
Proceeds from sales of mortgages .....	5,012	5,020	10,868
Mortgage principal repayments, net of discount .....	10,031	14,580	18,999
Proceeds from disposition of foreclosed properties .....	812	830	869
Net increase in investments .....	(1,821)	(3,255)	(200)
Net cash (used) provided by investing activities .....	(8,761)	(2,995)	55
<b>Cash flows from financing activities:</b>			
Cash proceeds from issuance of debentures .....	14,285	17,641	17,812
Cash payments to redeem debentures .....	(14,002)	(17,563)	(14,972)
Cash proceeds from issuance of short-term debt .....	48,914	27,421	21,637
Cash payments to redeem short-term debt, net of discount .....	(40,732)	(24,542)	(25,180)
Cash proceeds from issuance of common stock and detachable warrants .....	1	378	68
Cash payments for repurchase of common stock .....	(7)	(99)	—
Dividends paid .....	(57)	(29)	(15)
Net cash provided (used) by financing activities .....	8,402	3,207	(650)
Net increase (decrease) in cash and cash equivalents .....	402	808	(267)
Cash and cash equivalents at beginning of year .....	2,457	1,649	1,916
Cash and cash equivalents at end of year .....	\$ 2,859	\$ 2,457	\$ 1,649

See Notes to Financial Statements

# FEDERAL NATIONAL MORTGAGE ASSOCIATION

## NOTES TO FINANCIAL STATEMENTS

### Summary of Significant Accounting Policies

Fannie Mae is a federally chartered and stockholder-owned corporation operating in the residential mortgage finance industry. Certain amounts in prior years' financial statements have been reclassified to conform with the current presentation.

### *Mortgage Portfolio*

Mortgages acquired for investment are carried at their unpaid principal balances less unamortized purchase discount and deferred loan fees. Discount and deferred loan fees are recognized as income using the interest method over the estimated life of the related mortgages. The accrual of interest on conventional mortgages, which are not federally insured or guaranteed, is discontinued when the mortgages become 90 days delinquent. Interest income on such mortgages is recognized only to the extent that cash payments are received. Any accrued but uncollected interest on mortgages that are 90 days delinquent is reversed against current period interest income.

### *Commitment Fees and Mortgage Prepayments*

In the fourth quarter of 1987, the Corporation implemented Financial Accounting Standard No. 91 ("FAS 91"), which requires that most commitment fees be treated as an adjustment to interest income and amortized over the life of the related mortgages. The Corporation elected to apply the provisions of FAS 91 retroactively and restated results for all years prior to 1987. Accordingly, the majority of commitment fees recorded in those prior periods were retroactively deferred and amortized. The Corporation also revised its estimate of mortgage prepayments in 1987. The effect of these changes on net interest income and net income in 1987 and 1986 was as follows:

	Increase (Decrease)	
	1987	1986
	(Dollars in millions, except per share amounts)	
Effect on:		
Net interest income .....	\$ 570	\$ 80
Net income.....	290	(78)
Earnings per share (fully diluted) .....	3.57	(1.04)

The Corporation uses actual principal prepayment experience and estimates of future principal prepayments in the calculation of the constant effective yield necessary to apply the interest method in the amortization of loan fees and discount. In evaluating prepayments, loans are aggregated by similar characteristics (e.g., loan type, coupon, period of origination, and maturity). Factors used in determining estimates of future prepayments include historical prepayment data, existing and forecasted interest rates and economic conditions, and expected prepayment performance in varying interest rate scenarios.

### *Guaranteed Mortgage-Backed Securities*

The Corporation guarantees the timely payment of principal and interest on Mortgage-Backed Securities ("MBS"). These securities represent interests in pools of mortgages held in trust by the Corporation. The mortgages are not assets of the Corporation, except when acquired for investment purposes, nor are the outstanding securities liabilities of the Corporation; accordingly, neither is reflected in the accompanying balance sheets.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**NOTES TO FINANCIAL STATEMENTS—(Continued)**

*Allowance for Losses*

The allowance for losses on the conventional mortgage portfolio is maintained at a level that, in management's judgment, is adequate to provide for estimated losses. This judgment is based on such factors as economic conditions, geographic concentrations, mortgage characteristics, and actual loan loss experience. The allowance is increased by provisions charged to expense and decreased by charge-offs, net of recoveries.

The Corporation establishes an allowance for losses on U.S. government insured or guaranteed loans when foreclosure appears probable. At that time, an allowance is recorded to provide for estimated unreimbursable foreclosure losses.

A liability for estimated losses is maintained for MBS because the Corporation has assumed the ultimate foreclosure loss risk on the underlying mortgages. Provisions for losses are recorded to maintain the liability at a level that, in management's judgment, is adequate to provide for estimated losses. When mortgages are securitized and sold from portfolio into MBS, the related allowance is transferred.

*Acquired Property*

Real estate acquired as a result of foreclosure and held for sale is carried at the lower of the investment in the property or its estimated net realizable value.

*Gain (Loss) on Sales of Mortgages*

The Corporation sells mortgages by placing them in MBS pools and selling the MBS. A gain or loss on sales of mortgages or MBS is recognized at the time of sale to the extent the sales proceeds differ from the book value of the assets sold. An adjustment to the gain or loss is recognized in an amount measured by the present value of the effective loan interest rate to the Corporation less the investor pass-through rate and a normal guaranty fee.

*Risk Management*

The Corporation takes positions in financial markets to hedge against fluctuations in interest rates that may affect the cost of certain planned borrowings or the yield on certain mortgage purchases. Results of hedging activities are deferred and amortized against interest expense or interest income over the lives of the related borrowings or assets. The Corporation also hedges sales of certain MBS. The gain or loss resulting from such sales is adjusted to reflect the hedge results.

*Securities Sold Under Agreements to Repurchase*

The Corporation enters into sales of securities under agreements to repurchase. Such transactions are treated as financings, and the obligations to repurchase securities sold are reflected as liabilities on the balance sheet. The mortgage securities underlying the agreements remain in the asset accounts.

*Foreign Currency Translation*

Foreign currency borrowings and the related receivables from currency swaps are translated at the market rates of exchange as of the end of the period.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**NOTES TO FINANCIAL STATEMENTS—(Continued)**

*Cash and Cash Equivalents*

The Corporation considers overnight federal funds and all highly liquid debt instruments with an original maturity of three months or less to be cash equivalents.

*Income Taxes*

Deferred income taxes are provided for timing differences between financial and taxable income. Investment and other tax credits are deferred and amortized over the lives of the related assets.

*Earnings Per Share*

Earnings per share are computed using the weighted-average number of common shares outstanding, including dilutive common stock equivalents. Fully diluted earnings per share are computed on the assumption that all outstanding subordinated convertible capital debentures were converted at the beginning of the year, after increasing earnings for the related interest expense, net of federal income taxes. The weighted-average shares outstanding used to compute fully diluted earnings per share were 80.3 million, 81.2 million, and 74.5 million for the years ended December 31, 1988, 1987, and 1986, respectively.

**Mortgage Portfolio, Net**

The mortgage portfolio consisted of the following investments at December 31:

	<u>1988</u>	<u>1987</u>
	(Dollars in millions)	
<b>Single-family mortgages:</b>		
<b>First mortgages:</b>		
Government insured or guaranteed .....	\$12,235	\$13,306
Conventional fixed-rate .....	60,997	61,314
Conventional adjustable-rate .....	21,040	13,722
Second mortgages .....	<u>1,561</u>	<u>1,421</u>
	<u>95,833</u>	<u>89,763</u>
<b>Multifamily mortgages:</b>		
Government insured .....	4,397	4,482
Conventional .....	<u>2,783</u>	<u>2,501</u>
	<u>7,180</u>	<u>6,983</u>
<b>Total unpaid principal balance (1) ..</b>	<b>103,013</b>	<b>96,746</b>
<b>Less:</b>		
Unamortized discount and loan fees .....	2,914	3,081
Allowance for losses .....	<u>232</u>	<u>195</u>
	<u>\$99,867</u>	<u>\$93,470</u>

(1) Includes \$8.1 billion and \$4.2 billion of Fannie Mae MBS held in portfolio at December 31, 1988 and 1987, respectively.

The total unpaid principal balance of loans in nonperforming status (those 90 days or more delinquent) was \$0.9 billion at December 31, 1988 and \$1.3 billion at December 31, 1987.



**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**NOTES TO FINANCIAL STATEMENTS—(Continued)**

**Commitments and Contingencies**

*Portfolio*

The Corporation had mandatory delivery commitments outstanding to purchase \$1.1 billion of mortgages at an average net yield of 10.04 percent at December 31, 1988, compared with \$1.6 billion at an average net yield of 9.19 percent at December 31, 1987.

The Corporation also issues standby commitments, which must be converted to mandatory delivery commitments in order for the seller to deliver mortgages. The yield is set at the date of conversion or at the date of commitment. The Corporation had \$1.0 billion of such commitments outstanding at December 31, 1988, compared with \$3.3 billion at December 31, 1987.

At December 31, 1988, the Corporation had commitments outstanding to sell from portfolio \$1.0 billion of MBS with an average net yield of 10.23 percent. There were no such commitments outstanding at December 31, 1987.

*Mortgage-Backed Securities*

As issuer and guarantor of MBS, the Corporation is obligated to disburse scheduled monthly installments of principal and interest (at the certificate rate) and the full principal balance of any foreclosed mortgage, whether or not any such amounts have been received. The Corporation also is obligated to disburse unscheduled principal payments. Either the Corporation or the participating lender from whom the mortgages were acquired can assume the primary foreclosure loss risk on the mortgages in a pool. The Corporation, however, assumes the ultimate risk of loss on all MBS.

The total outstanding principal balance of MBS guaranteed by the Corporation was \$178.3 billion at December 31, 1988, compared with \$140.0 billion at December 31, 1987. These amounts include \$94.1 billion at December 31, 1988 and \$77.6 billion at December 31, 1987 of securities (of which \$11.2 billion and \$12.2 billion, respectively, are backed by government insured or guaranteed mortgages) for which the Corporation has assumed the primary foreclosure loss risk.

At December 31, 1988, the Corporation also had outstanding \$7.2 billion of mandatory delivery commitments to issue and guarantee MBS, compared with \$11.6 billion at December 31, 1987. At December 31, 1988, the Corporation had commitments outstanding to issue and guarantee \$14.5 billion of MBS, upon delivery of the related mortgages by participating lenders at their option, compared with \$9.5 billion at December 31, 1987.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

**Allowance for Foreclosure Losses**

The total allowance for foreclosure losses consists of an allowance for portfolio loan losses, an allowance for non-reimbursable foreclosure costs on government claims, and a liability for estimated foreclosure losses on MBS. Changes in the allowance for the years 1986-1988 are summarized below:

	<u>Mortgage Portfolio</u>			<u>Total</u>
	<u>Conventional</u>	<u>Government Insured or Guaranteed</u>	<u>MBS</u>	
	(Dollars in millions)			
Balance, January 1, 1986.....	\$ 107	\$ 26	\$ 33	\$ 166
Provision .....	249	11	46	306
Net foreclosure losses charged-off .....	(178)	(14)	(9)	(201)
Transfers .....	(9)	—	9	—
Balance, December 31, 1986.....	169	23	79	271
Provision .....	266	14	80	360
Net foreclosure losses charged-off .....	(229)	(13)	(43)	(285)
Transfers .....	(15)	—	15	—
Balance, December 31, 1987.....	191	24	131	346
Provision .....	279	6	80	365
Net foreclosure losses charged-off .....	(216)	(12)	(87)	(315)
Transfers .....	(26)	—	26	—
Balance, December 31, 1988.....	<u>\$ 228</u>	<u>\$ 18</u>	<u>\$150</u>	<u>\$ 396</u>

The total allowance for foreclosure losses at December 31 is included in the following balance sheet accounts:

	<u>1988</u>	<u>1987</u>
	(Dollars in millions)	
Mortgage portfolio, net.....	\$232	\$195
Foreclosure claims, net.....	14	20
Other liabilities.....	150	131
	<u>\$396</u>	<u>\$346</u>

**Bonds, Notes, and Debentures, Net**

The average cost of all debt outstanding at December 31, 1988 and 1987 (including the amortization of issuance costs and hedging results, and the effect of interest rate and currency swaps) was 9.20 percent and 9.46 percent, respectively. The average effective maturity of all debt outstanding (including the effect of interest rate swaps but excluding \$1.4 billion and \$2.0 billion of investment agreements at December 31, 1988 and 1987, respectively, for which the average maturity is indeterminate) was 43 months at December 31, 1988 and 48 months at December 31, 1987. Interest paid during 1988, 1987, and 1986 was \$9.3 billion, \$9.1 billion, and \$9.5 billion, respectively.

## FEDERAL NATIONAL MORTGAGE ASSOCIATION

### NOTES TO FINANCIAL STATEMENTS—(Continued)

Pursuant to the Corporation's Charter Act and related regulations, no debt obligations may be issued without the approval of the Secretary of the Treasury. The Secretary of Housing and Urban Development ("HUD") has announced his intention to require that the maximum amount of the Corporation's general obligations outstanding at any time, excluding those that are subordinated or secured, may not exceed 20 times the sum of stockholders' equity, subordinated capital debentures, and reserves (the "debt-to-capital ratio"). At December 31, 1988, this ratio was 19.1:1.

In addition to debt restrictions under the Charter Act, the Corporation is subject to a restriction set forth in certain subordinated capital debenture agreements, which limits the amount of subordinated capital debentures outstanding to not more than two times the sum of the Corporation's common stock, additional paid-in capital, and retained earnings. At December 31, 1988, the ratio was 1.2:1.

#### *Borrowings Due Within One Year*

Borrowings due within one year at December 31 are summarized below:

	1988				1987						
	Outstanding at December 31		Average During Year		Maximum Outstanding During Year		Outstanding at December 31		Average During Year		Maximum Outstanding During Year
	Amount	Cost	Amount	Cost	Amount	Cost	Amount	Cost	Amount	Cost	
(Dollars in millions)											
Securities sold under agreements to repurchase(1) . . .	\$ 1,456	8.28%	\$ 372	5.78%	\$ 1,456	\$ 11	6.14%	\$ 181	8.25%	\$ 502	
Short-term notes(2) . . . . .	14,340	8.30	13,742	7.56	16,275	10,048	7.60	6,332	6.56	10,048	
Master notes . . . . .	186	8.70	144	7.19	267	214	6.08	1,226	6.05	1,711	
Residential financing securities . . . . .	5,115	8.46	4,031	7.76	5,115	2,457	7.69	1,210	6.86	2,457	
Other short-term debt . . . . .	1,053	8.33	278	7.80	1,053	—	—	—	—	—	
Current portion of borrowings due after one year(3):											
Investment agreements . . . . .	1,939	8.16				2,991	7.42				
Mortgage-backed bonds . . . . .	11	9.02				12	9.01				
Medium-term notes(4) . . . . .	599	8.68				37	7.82				
Debentures(5) . . . . .	11,282	10.80				13,953	11.03				
Subordinated capital debentures . . . . .	635	12.99				—	—				
Zero coupon securities . . . . .	3	7.82				—	—				
<b>Total due within one year . . . . .</b>	<b>\$36,599</b>	<b>9.03%</b>				<b>\$29,718</b>	<b>9.20%</b>				

- (1) Mortgage-backed securities underlying repurchase agreements had a carrying value of \$1,485 million and \$12 million at December 31, 1988 and 1987, respectively, and a market value of \$1,434 million and \$12 million at December 31, 1988 and 1987, respectively.
- (2) Net of \$404 million and \$270 million of unamortized discount at December 31, 1988 and 1987, respectively.
- (3) Information on average amount and cost of debt outstanding during the year and maximum amount outstanding during the year is not applicable. See "Borrowings Due After One Year" for additional information.
- (4) Includes \$22 million of unamortized premium at December 31, 1988.
- (5) Includes \$47 million of unamortized premium at December 31, 1988.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

The Corporation has long-term interest rate swap agreements with various parties to extend the effective maturity of its short-term debt obligations. Under these agreements, the Corporation makes periodic payments, based on longer term fixed or variable rates applied to a notional principal amount, and in exchange receives payments based on short-term variable or fixed rates. At December 31, 1988, the Corporation had long-term interest rate swap agreements outstanding with an average remaining term of 5 years on notional amounts totaling \$2.4 billion, compared with an average remaining term of 6 years on notional amounts totaling \$2.4 billion for swap agreements outstanding at December 31, 1987. The weighted-average interest rate being received under these swaps was 8.44 percent and the weighted-average interest rate being paid was 10.71 percent at December 31, 1988, as compared with 7.58 percent and 10.61 percent, respectively, at December 31, 1987. During 1987, long-term swap agreements on an aggregate notional amount of \$800 million were terminated.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

*Borrowings Due After One Year*

Borrowings due after one year consist of the following at December 31:

<u>Maturity</u>	<u>1988</u>		<u>1987</u>		
	<u>Amount Outstanding</u>	<u>Average Cost</u>	<u>Amount Outstanding</u>	<u>Average Cost</u>	
		(Dollars in millions)			
Mortgage-backed bonds, 1989-2002 .....	\$ 56	9.71%	\$ 68	9.60%	
Investment agreements, 1989-2012 .....	<u>1,687</u>	<u>7.81</u>	<u>1,775</u>	<u>7.92</u>	
Debentures, net of \$95 million of discount for 1988 (\$108 million for 1987):					
1989 .....	—	—	10,330	10.44	
1990 .....	10,116	9.57	9,651	9.60	
1991 .....	13,211	8.32	11,165	8.36	
1992 .....	9,228	9.30	6,555	9.48	
1993 .....	6,806	8.90	4,435	9.07	
1994 .....	3,189	9.01	2,950	8.99	
1995-2005 .....	18,734	9.34	15,635	9.39	
2006-2018 .....	<u>1,363</u>	<u>10.12</u>	<u>1,063</u>	<u>10.41</u>	
	<u>62,647</u>	<u>9.11</u>	<u>61,784</u>	<u>9.40</u>	
Medium-term notes, includes \$25 million of premium for 1988, 1989-2017 .....	<u>935</u>	<u>8.76</u>	<u>159</u>	<u>9.40</u>	
Exchangeable debentures, 1991 .....	<u>450</u>	<u>12.66</u>	<u>450</u>	<u>12.66</u>	
Zero coupon securities, net of \$5,723 million of discount for 1988 (\$5,690 million for 1987), 1989-2014 .....	<u>540</u>	<u>10.45</u>	<u>310</u>	<u>11.50</u>	
Zero coupon subordinated capital debentures, net of \$6,435 million of discount for 1988 (\$6,465 million for 1987), 2019 .....	<u>315</u>	<u>10.22</u>	<u>285</u>	<u>10.22</u>	
Subordinated capital debentures, net of \$15 million of discount for 1988 (\$16 million for 1987):					
1989 .....	—	—	635	12.99	
1990 .....	400	9.15	400	9.15	
1992 .....	250	9.05	250	9.05	
1997 .....	250	7.44	250	7.44	
1998 .....	500	9.46	—	—	
2002 .....	<u>265</u>	<u>9.21</u>	<u>265</u>	<u>9.21</u>	
	<u>1,665</u>	<u>8.98</u>	<u>1,800</u>	<u>10.25</u>	
Subordinated convertible capital debentures, 1996 .....	<u>11</u>	<u>4.43</u>	<u>12</u>	<u>4.43</u>	
	<u>68,306</u>	<u>9.11%</u>	<u>66,643</u>	<u>9.42%</u>	
Adjustment for foreign currency translation and other non-interest-bearing debt .....	<u>554</u>		<u>696</u>		
	<u>\$68,860</u>		<u>\$67,339</u>		

## FEDERAL NATIONAL MORTGAGE ASSOCIATION

### NOTES TO FINANCIAL STATEMENTS—(Continued)

The average cost includes the amortization of discounts, issuance costs, and hedging results. At December 31, 1988, annual maturities of all debt for the years 1990-1994 were \$11.8, \$13.9, \$9.5, \$7.4, and \$3.3 billion, respectively.

The Corporation has issued debt securities in which principal, interest, or both are payable in a foreign currency. Concurrently, the Corporation has entered into currency swaps that convert the proceeds of the borrowings into dollars and provide for scheduled future exchanges of the two currencies. At December 31, 1988 and 1987, the U.S. dollar equivalent face amount of these foreign currency borrowings, translated at then-current exchange rates, was \$1.6 and \$1.5 billion, respectively.

The following debentures are redeemable at par at the option of the Corporation: \$154 million due in 1997; \$200 million, due in 1997, redeemable beginning in 1992; \$184 million due in 2013, redeemable beginning in 1993; and \$229 million due in 2014, redeemable beginning in 1994.

In 1988, the Corporation issued \$1.7 billion of Indexed Sinking Fund Debentures (ISFDs) at an average cost of 9.30 percent. Such debentures are subject to mandatory sinking fund redemptions after an initial nonredemption period. The redemption amounts are tied to certain Treasury rates. As Treasury rates decrease, the percentage of the outstanding principal amount of an ISFD to be redeemed generally will increase; conversely, as such Treasury rates increase, such percentage generally will decrease.

In February 1986, the Corporation issued 500,000 units aggregating \$500 million principal amount of debentures due in 1996 with detachable warrants to purchase 11.5 million common shares. Each warrant entitles the holder to purchase one share of common stock at \$44.25, from February 1986 to February 1991. A portion of the proceeds from the issuance (\$67.6 million) was allocated to the warrants and recorded as additional paid-in capital. As of December 31, 1988, no warrants had been exercised.

The Corporation issued \$1.3 billion and \$0.2 billion in medium-term notes in 1988 and 1987, respectively, at an average cost of 8.65 percent and 9.10 percent, respectively. Medium-term notes may be fixed-rate or floating-rate with maturities ranging from one to thirty years. Interest and principal may be payable in U.S. dollars or a foreign currency.

The Corporation may call for the conversion of the exchangeable debentures at any time on or prior to March 15, 1991, in which case the debenture holders have two options. They may accept the conversion and receive 10 shares of adjustable-rate preferred stock, series A, for each \$1,000 principal amount of exchangeable debentures. Alternatively, they may reject the call for conversion by extending the maturity date of those debentures to March 15, 1994. The Corporation may call for the conversion only once and only on the entire issue.

The subordinated capital debentures due in 1997 and 2002 are redeemable at par, in whole or in part, at the option of the Corporation, on any interest payment date.

The subordinated convertible capital debentures are convertible into 0.6 million shares of common stock at a price of \$19.63 per share, subject to adjustment in certain events. These debentures are redeemable at par, at the option of the Corporation. During 1988, 1987, and 1986, \$1.4 million, \$1.1 million, and \$13.5 million, respectively, of debentures were converted into common stock.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**NOTES TO FINANCIAL STATEMENTS—(Continued)**

**Stockholders' Equity**

Transactions in common stock, additional paid-in capital, retained earnings, and treasury stock for the years 1986, 1987, and 1988 are summarized as follows:

	<u>Common Stock</u>	<u>Additional Paid-in Capital</u>	<u>Retained Earnings(1)</u>	<u>Treasury Stock</u>	<u>Total Stockholders' Equity</u>
(Dollars in thousands)					
Balance, January 1, 1986 .. . . .	\$456,743	\$375,168	\$ 178,699	\$ (1,631)	\$1,008,979
Issuance of detachable warrants ..	—	67,565	—	—	67,565
Conversions of convertible debentures .. . . .	4,283	9,187	—	—	13,470
Treasury stock issued for stock options and benefit plans .. . . .	—	(746)	—	1,610	864
Accrual for stock appreciation rights .. . . .	—	477	—	—	477
Net income .. . . .	—	—	105,396	—	105,396
Dividends .. . . .	—	—	(14,663)	—	(14,663)
<b>Balance, December 31, 1986 .. . . .</b>	<b>461,026</b>	<b>451,651</b>	<b>269,432</b>	<b>(21)</b>	<b>1,182,088</b>
New shares issued .. . . .	50,000	324,400	—	—	374,400
Shares repurchased .. . . .	—	—	—	(98,752)	(98,752)
Conversions of convertible debentures .. . . .	342	737	—	—	1,079
Treasury stock issued for stock options and benefit plans .. . . .	658	31	—	3,589	4,278
Accrual for stock appreciation rights .. . . .	—	187	—	—	187
Net income .. . . .	—	—	375,924	—	375,924
Dividends .. . . .	—	—	(28,689)	—	(28,689)
<b>Balance, December 31, 1987 .. . . .</b>	<b>512,026</b>	<b>777,006</b>	<b>616,667</b>	<b>(95,184)</b>	<b>1,810,515</b>
Shares repurchased .. . . .	—	—	—	(6,913)	(6,913)
Conversions of convertible debentures .. . . .	446	966	—	—	1,412
Treasury stock issued for stock options and benefit plans .. . . .	351	2,374	—	1,060	3,785
Accrual for stock appreciation rights .. . . .	—	1,315	—	—	1,315
Net income .. . . .	—	—	506,708	—	506,708
Dividends .. . . .	—	—	(56,517)	—	(56,517)
<b>Balance, December 31, 1988 .. . . .</b>	<b>\$512,823</b>	<b>\$781,661</b>	<b>\$1,066,858</b>	<b>\$(101,037)</b>	<b>\$2,260,305</b>

(1) The balance of retained earnings as of January 1, 1986 and December 31, 1986 were restated by reductions of \$333 million and \$411 million, respectively, to reflect the retroactive implementation of FAS 91.

The Corporation repurchased approximately 200,000 shares of common stock at an average price per share of \$29.85 in 1988 and 3.2 million shares at an average price of \$29.73 in 1987. These repurchased shares are carried at cost as treasury stock on the balance sheet. The Corporation issued eight million shares of common stock in February 1987 at \$48.25 per share.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

Pursuant to the Corporation's Charter Act and related regulations, approval of HUD is required prior to the issuance of any stock of the Corporation or securities convertible into stock. The Corporation is authorized to issue a maximum of 4,500,000 shares of adjustable-rate preferred stock, series A, \$100 stated value. These shares may be issued only in exchange for the 12.50 percent exchangeable debentures due 1991. No such shares have been issued.

The Federal National Mortgage Association Stock Compensation Plan was adopted for key employees in 1987 and superceded previously existing plans of a similar nature. Under this plan, performance awards may be granted within an award period, which can range from three to five years. The performance awards become actual awards only if the Corporation attains the financial goals set for the award period. At the end of such time, the awards generally will be payable one-half in common stock and one-half in cash. The contingent grants made with respect to the 1989-1991 award period were 104,900 performance shares and for the 1988-1990 award period were 151,450 performance shares. Stock options also may be granted under this plan. The options do not become exercisable until at least one year after the grant date and generally expire ten years from the grant date. The purchase price of the common stock covered by each option is equal to the fair market value of the stock on the date the option is granted.

The summary of stock option activity that follows includes options granted under the Stock Compensation Plan and the previous stock option plan.

	<u>Number of Shares</u>	<u>Option Price</u>
Balance, January 1, 1986 .. .. .	329,600	\$14.81-\$23.94
Granted in 1986 .. .. .	344,300	\$30.25-\$36.06
Less: Exercised in 1986 .. .. .	(67,305)	\$16.13-\$23.94
Terminated in 1986 .. .. .	<u>(15,610)</u>	\$16.13-\$23.94
Balance, December 31, 1986 .. .. .	590,985	\$14.81-\$36.06
Granted in 1987 .. .. .	121,650	\$28.31-\$43.19
Less: Exercised in 1987 .. .. .	(97,547)	\$14.81-\$23.94
Terminated in 1987 .. .. .	<u>(79,845)</u>	\$14.81-\$34.06
Balance, December 31, 1987 .. .. .	535,243	\$16.13-\$43.19
Granted in 1988 .. .. .	147,700	\$35.94-\$47.25
Less: Exercised in 1988 .. .. .	(71,071)	\$16.13-\$40.63
Terminated in 1988 .. .. .	<u>(17,311)</u>	\$23.94-\$36.06
Balance, December 31, 1988 .. .. .	<u>594,561</u>	\$16.13-\$47.25

At December 31, 1988 and 1987, stock options on 205,337 shares and 184,259 shares, respectively, were exercisable.

In prior years, stock appreciation rights ("SARs") were granted to holders of certain options under the stock option plans. In 1988, participants voluntarily relinquished all outstanding SARs; all rights under the SARs have been extinguished.

In 1988, 4,000 shares of restricted stock (22,166 in 1987) were awarded and issued under the Stock Compensation Plan and the Restricted Stock Plan for Directors, 4,666 shares were recovered upon termination of nonvested participants, and 26,324 shares were released as vesting of participants occurred. Compensation expense is being recorded over the vesting period of the stock as services are performed.



**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

The Corporation has an employee stock purchase plan that allows the Corporation to issue up to 1,000,000 shares of common stock to qualified employees at a price equal to 85 percent of the fair market value of the stock on the first day of the period in which employees can elect to purchase the stock. In 1988, the Corporation granted each employee, excluding certain officers, the right to purchase up to 300 shares of stock. Under the 1988 offering, 318,650 shares were purchased. No shares were purchased under the plan's 1987 offering and 93,580 shares were purchased in 1986. The Board of Directors has approved a similar offering in 1989 for Fannie Mae employees.

In 1987, the Corporation adopted an Employee Stock Ownership Plan ("ESOP") for qualified nonofficer employees. The Corporation may contribute to the ESOP an amount based on defined earnings goals, not to exceed 4 percent of the aggregate base salary for all participants. The contribution is made in the subsequent year either in shares of Fannie Mae common stock or cash that is used to purchase such stock. In 1988, the Corporation contributed \$0.7 million to the 1987 ESOP and has accrued \$1.1 million that will be contributed in 1989.

**Investments**

Investments are recorded at cost, which approximates market. A summary of investments held at December 31 follows:

	<u>1988</u>	<u>1987</u>
	<u>(Dollars in millions)</u>	
Federal funds (over 90 days).....	\$4,125	\$2,559
Municipal bonds.....	469	761
Asset-backed securities.....	481	25
Other.....	<u>214</u>	<u>123</u>
Total.....	<u>\$5,289</u>	<u>\$3,468</u>

**Income Taxes**

Deferred federal income tax expense relating to timing differences consists of the following:

	<u>1988</u>	<u>1987</u>	<u>1986</u>
	<u>(Dollars in millions)</u>		
Deferred commitment fees.....	\$ 28	\$ 76	\$ (66)
Amortization of purchase discount.....	(72)	10	(116)
Losses on dispositions of mortgages.....	(10)	(26)	(93)
Provision for losses.....	(65)	(89)	7
Risk management activities.....	(24)	10	48
Tax benefit of loss carryforward.....	—	—	62
Accrued interest expense deductible when paid.....	(3)	(2)	18
Benefits from tax-advantaged investments.....	13	14	9
Systems development costs.....	—	(8)	(1)
Other items, net.....	<u>4</u>	<u>4</u>	<u>(9)</u>
Total provision for deferred federal income taxes.....	<u>\$ (129)</u>	<u>\$ (11)</u>	<u>\$ (141)</u>

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**NOTES TO FINANCIAL STATEMENTS—(Continued)**

The effective tax rates differ from the statutory rates as follows:

	<u>1988</u>	<u>1987</u>	<u>1986</u>
Statutory corporate rate . . . . .	34%	40%	46%
Tax exempt interest and dividends received deductions . .	<u>(10)</u>	<u>(6)</u>	<u>(1)</u>
Effective rate . . . . .	<u>24%</u>	<u>34%</u>	<u>45%</u>

The Corporation is exempt from state and local taxes, with the exception of real estate taxes. The Corporation paid federal income taxes of \$257 million, \$429 million, and \$126 million in 1988, 1987, and 1986, respectively.

In December 1987, the Financial Accounting Standards Board issued Financial Accounting Standard No. 96 ("FAS 96"), which requires an asset and liability approach, as opposed to the income statement approach, to financial accounting and reporting for income taxes. FAS 96 supercedes APB Opinion No. 11 and is effective for fiscal years beginning in 1990. Based on current corporate tax rates, management expects that implementation of FAS 96 will have a positive impact on earnings.

The Internal Revenue Service has completed its examinations of the Corporation's federal income tax returns through the year 1985. All issues raised in years prior to 1979 have been settled. Based on their examination of tax years 1979 through 1982, the Internal Revenue Service issued a formal deficiency notice. A disputed issue relating to amounts added to the allowance for loan losses was settled in 1987. The Corporation filed suit in the United States Tax Court in response to the remaining items covered by the deficiency notice. The two outstanding issues in dispute relate to losses on exchanges of mortgages. The Corporation has paid all amounts assessed and the associated accrued interest on the remaining deficiencies.

In March 1988, the U.S. Tax Court ruled in the Corporation's favor on an issue relating to concurrent mortgage sales and for the IRS on an issue relating to resale/refinance transactions. Both sides in the suit have appealed the decision. Even if the Corporation should lose both issues on appeal, which management does not expect, there would be no material adverse impact on financial condition or results of operations.

The IRS has proposed certain adjustments for the years 1983 through 1985. In the opinion of management, the proposed adjustments will not have a material adverse impact on financial condition or results of operations.

**Retirement Plans**

All regular, full-time employees of the Corporation are covered by the Corporation's non-contributory retirement plan or by the contributory Civil Service Retirement Law. Benefits payable under the corporate plan are based on years of service and employee compensation using the average of the highest pay during three consecutive years of employment. The Corporation's funding policy is to fund the pension expense accrued each year, up to the contribution that would be tax deductible for the year. Contributions to the plan reflect benefits attributed to employees' service to date as well as services expected to be earned in the future. Plan assets consist primarily of listed stocks, fixed-income securities, cash, and other liquid assets.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**

**NOTES TO FINANCIAL STATEMENTS—(Continued)**

The following table sets forth the corporate retirement plan's funded status and amounts recognized in the Corporation's financial statements at December 31, 1988:

	<u>1988</u>
	(Dollars in millions)
<b>Actuarial present value of benefit obligations:</b>	
Accumulated benefit obligation, including vested benefits of \$19.8 million . . . .	<u>\$(24.2)</u>
Projected benefit obligation for services rendered to date . . . . .	<u>\$(49.2)</u>
Plan assets at fair value . . . . .	<u>65.5</u>
Excess of plan assets over the projected benefit obligation . . . . .	16.3
Unrecognized net gain from past experience different from that assumed and effects of changes in assumptions . . . . .	(3.3)
Unrecognized prior service costs . . . . .	1.7
Unrecognized net transition asset recognized over 18.25 years . . . . .	<u>(18.8)</u>
Pension liability included in other liabilities . . . . .	<u>\$ (3.6)</u>
<b>Net pension cost for 1988 included the following components:</b>	
Service cost-benefits earned during the period . . . . .	\$ 4.7
Interest cost on projected benefit obligation . . . . .	3.5
Actual return on plan assets . . . . .	(11.4)
Net amortization and deferral . . . . .	<u>4.8</u>
Net periodic pension cost . . . . .	<u>\$ 1.6</u>

The weighted-average discount rate and rate of increase in future compensation levels used in determining the actuarial present value of the projected benefit obligation were 7.5 percent and 7.0 percent, respectively. The expected long-term rate of return on assets was 10 percent. The Corporation uses the straight-line method of amortization for prior service costs and unrecognized gains and losses.

All regular, full-time employees of the Corporation are eligible to participate in the Corporation's Thrift and Savings Plan, which includes a 401(k) option. Employees may contribute up to 12 percent of their base salary, with the Corporation matching such contributions up to 3 percent. The Corporation contributed \$2.1 million in 1988, compared with \$1.7 million in 1987 and \$2.4 million in 1986.

The Corporation also has an Executive Pension Plan, which supplements for key senior officers the benefits payable under the Corporation's retirement plan. Estimated benefits under the supplementary plan are recorded as an expense over the period of employment. Such expenses are not significant. Accrued benefits are funded through a trust.

The Corporation provides certain health care and life insurance benefits for retired employees. Although employees do not acquire a vested right in these benefits, those who retire from the Corporation are eligible for these benefits. The cost of retiree health care and life insurance benefits is recognized as an expense as premiums are paid. These costs totaled \$0.7 million in 1988 and \$0.6 million in 1987 and 1986.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION**  
**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.

	1988 Quarter Ended			
	December	September	June	March
	(Dollars in millions, except per share amounts)			
Net interest income . . . . .	\$ 240	\$217	\$209	\$171
Guaranty fees . . . . .	89	84	80	75
Gain on sales of mortgages . . . . .	1	—	2	9
Miscellaneous income, net . . . . .	19	17	16	17
Provision for losses . . . . .	(85)	(90)	(95)	(95)
Administrative expenses . . . . .	(60)	(55)	(54)	(49)
Income before federal income taxes . . . . .	204	173	158	128
Provision for federal income taxes . . . . .	(51)	(41)	(37)	(27)
Net income . . . . .	<u>\$ 153</u>	<u>\$132</u>	<u>\$121</u>	<u>\$101</u>
Per share:				
Earnings (fully diluted) . . . . .	\$1.88	\$1.65	\$1.52	\$1.27
Cash dividends . . . . .	.24	.18	.18	.12
	1987 Quarter Ended			
	December	September	June	March
	(Dollars in millions, except per share amounts)			
Net interest income (1) . . . . .	\$ 558	\$118	\$111	\$103
Guaranty fees . . . . .	75	69	61	58
(Loss) gain on sales of mortgages (2) . . . . .	(125)	9	8	27
Miscellaneous (expense) income, net (3) . . . . .	(25)	13	35	30
Provision for losses (4) . . . . .	(120)	(80)	(80)	(80)
Administrative expenses (5) . . . . .	(65)	(45)	(45)	(42)
Income before federal income taxes . . . . .	298	84	90	96
Provision for federal income taxes . . . . .	(103)	(23)	(29)	(37)
Net income . . . . .	<u>\$ 195</u>	<u>\$ 61</u>	<u>\$ 61</u>	<u>\$ 59</u>
Per share:				
Earnings (fully diluted) . . . . .	\$2.40	\$.74	\$.74	\$.75
Cash dividends . . . . .	.12	.08	.08	.08

- (1) Includes in December 1987 a cumulative adjustment of \$478 million of additional income when FAS 91 was implemented and a reduction of \$55 million due principally to a revision in the manner of estimating uncollectible interest on nonperforming loans.
- (2) Includes a loss of \$128 million in the fourth quarter from the sale of low-yielding assets.
- (3) Includes a cumulative adjustment to deferred discount from loan sales of \$17 million when FAS 91 was implemented in December 1987 and a loss of \$11 million on the repurchase of high-cost debt at a premium in the fourth quarter.
- (4) Includes a supplemental provision of \$25 million in the fourth quarter due to the uncertain economic outlook resulting from the October 1987 stock market decline.
- (5) Includes an adjustment in the fourth quarter of \$16 million to write off previously capitalized software costs.