

Prospectus

Federal National Mortgage Association



Guaranteed Mortgage Pass-Through Certificates

(Residential Mortgage Loans)

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

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.

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 either first lien or (if the related Prospectus Supplement so provides) second lien residential mortgage loans or participation interests therein ("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 and/or fixed-rate graduated payment Mortgage Loans having deferred interest features that have expired prior to the issuance of the Certificates, (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 that have not expired for some or all of such Mortgage Loans prior to the issuance of the Certificates, (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 the related Prospectus Supplement at the time of the identification of the Pool.

Unless the related Prospectus Supplement provides otherwise, Certificates 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 November 1, 1990

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.

The Certificates have not been approved or disapproved by the Securities and Exchange Commission or any state securities commission nor has the Commission or any state securities commission passed upon the accuracy or adequacy of this Prospectus. Any representation to the contrary is a criminal offense.

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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 either first lien or second lien residential mortgage loans or participation interests therein ("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 book-entry form will initially represent at least \$1,000 unpaid principal amount of Mortgage Loans. Unless the related Prospectus Supplement provides otherwise, Certificates 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, 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 Pools containing graduated payment Mortgage Loans with deferred interest features that have not expired, 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 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 and/or fixed-rate graduated payment Mortgage Loans having deferred interest features that have expired prior to the issuance of the Certificates, (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 that have not expired for some or all of the Mortgage Loans prior to the issuance of the Certificates, (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 Prospectus Supplement provides otherwise, the Mortgage Loans in each Pool will have unpaid principal balances aggregating not less than \$1,000,000. Each Mortgage Loan will meet the applicable standards set forth under "Purchase Program" and, unless the related Prospectus Supplement provides otherwise, will be secured by a first lien on a residential property. 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 Department of Veterans Affairs), the aggregate principal balance of the Mortgage Loans as of the Issue Date, the Pass-Through Rate for Certificates evidencing interests in fixed-rate Mortgage Loans (other than fixed-rate graduated payment Mortgage Loans with deferred interest features that have not expired for some or all of the Mortgage Loans prior to the issuance of the Certificates), the Pool Accrual Rate for Certificates evidencing interests in pools of graduated payment Mortgage Loans with deferred interest features that have not expired for some or all of the Mortgage Loans prior to the issuance of the Certificates, 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 adjust-

ments are based, the frequency of interest rate and payment adjustments and any maximum or minimum limitations thereon, the Corporation's fixed or weighted average servicing and guaranty 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 \$807 million in 1989, compared with \$507 million in 1988 and \$376 million in 1987. Net income for the first nine months of 1990 was \$866 million, compared with \$570 million in the first nine months of 1989.

The primary reasons for the growth in net income in the first nine months of 1990 from the corresponding period in 1989 were increases in net interest income, guaranty fee income and miscellaneous income. The increase in net interest income was primarily due to growth in both the average investment balance and the net interest margin (i.e., net yield on interest-earning assets). Increased guaranty fee income was a result of growth in MBS outstanding. The higher miscellaneous income was primarily due to an increase in fees earned for issuing real estate investment conduit (REMIC) securities.

The growth in net income in 1989 resulted primarily from a continued increase in the spread between the yield on the Corporation's mortgage and other investments and its cost of debt and from growth in the size of the average investment balance. Other factors that contributed to the higher net income in 1989 include increased guaranty fee income and a reduction in the provision for losses. Net income in 1988 surpassed 1987 net income mainly because of increased interest spread and a larger earning asset base, increased guaranty fee income, a gain on sale of mortgages, and a lower effective tax rate.

The Corporation's net mortgage portfolio totaled \$110.9 billion at September 30, 1990, compared with \$104.0 billion at September 31, 1989. Mortgage-backed securities outstanding at September 30, 1990 totaled \$281.8 billion, compared with \$208.9 billion at September 30, 1989.

THE MORTGAGE POOLS

The Federal National Mortgage Association (the "Corporation" or "Fannie Mae") has implemented a program for (a) the setting aside of residential mortgage loans or participation interests therein (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"). If so specified in the related Prospectus Supplement, each Pool will consist of participation interests representing a specified undivided percentage interest in residential mortgage loans, rather than whole residential mortgage loans. 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 (or second, if the related Prospectus Supplement so provides), 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") and/or GPMs (as defined below) with deferred interest features that have expired prior to the issuance of the Certificates ("Fully Graduated GPMs"), (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") that have not expired for some or all of the Mortgage Loans prior to the issuance of the Certificates ("Graduating 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 Department of Veterans Affairs ("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 Prospectus Supplement 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 Level Payment Mortgage Loans, Fully Graduated GPMs, GEMs or fixed-rate Multifamily Mortgage Loans (collectively, the "Fixed-Rate Mortgage Loans"), 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 Graduating 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 Pools containing Graduating 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 as to each ARM or VRM Pool. 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 GPM Pools 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

Each Fixed-Rate Pool will consist of Mortgage Loans that bear interest at annual rates ("Mortgage Interest Rates") that are fixed (and may include Fully Graduated GPMs). 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 payable with respect to each Mortgage Loan in a Pool will be the same, 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 Graduating GPM at the Mortgage Interest Rate borne thereby. The amount of each such interest insufficiency will be added to the principal balance of the Graduating 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 Graduating 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 Graduating 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 Graduating GPMs increase.

The Corporation's guaranty of Certificates evidencing interests in GPM Pools will cover the principal amount of each underlying Graduating 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 Graduating GPMs. During the Deferred Interest Period, the Corporation's guaranty will cover, as to each underlying Graduating 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 bearing interest at rates that will vary in response to a cost of funds index published by the Federal Home Loan Bank of San Francisco as described in the Prospectus Supplement. 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 certain intervals specified in the related Prospectus Supplement. The actual Mortgage

Interest Rate at any time borne by an ARM after any initial fixed-rate period of the ARM will, subject to any applicable adjustment caps, be equal to the sum, rounded to the extent specified in the related Prospectus Supplement, of a specified percentage, or "Mortgage Margin," and the index value 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 substantial balloon payments at maturity or 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.

For ARMs with provisions limiting the amount by which rates may be adjusted, the Mortgage Interest Rate for each ARM, when adjusted on 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 adjustment 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. Whenever an ARM is limited by a maximum interest rate cap, the Mortgage Interest Rate shall be less than the sum of the applicable index value and the Mortgage Margin; whenever an ARM is limited by a minimum interest rate cap, the Mortgage Interest Rate shall be greater than the sum of the applicable index value and the Mortgage Margin.

If an ARM provides for limitations on the amount by which monthly payments may be increased or if changes to the Mortgage Interest Rate of the ARM are made more frequently than payment changes, it is possible that interest due on scheduled payment dates at an increased 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.

Certain ARMs may be converted to fixed-rate mortgage loans at the option of their borrowers at the times and in accordance with the procedures specified in the Mortgage Loan documents. These "convertible" ARMs will not be included in the same Pool with "non-convertible" ARMs. If a Pool consists of "convertible" ARMs (a "Convertible ARM Pool"), the times at which converted ARMs may begin to accrue interest at a fixed rate will be specified in the related Prospectus Supplement. The method of calculating the new fixed rate of interest borne by the converted ARM will be specified in the Mortgage Note and generally will be based on a spread ranging from .375% to 1.25% above either the Corporation's or the Federal Home Loan Mortgage Corporation's required net yield for the purchase of 30-year (15-year if the original term of the ARM was 15 years or less) fixed-rate mortgage loans covered by short-term mandatory delivery commitments generally contemporaneous with the conversion date. During the month prior to the month in which a converted ARM begins to accrue interest at the new fixed rate, the Corporation will repurchase the converted ARM from the Pool at a price equal to its unpaid principal amount, together with one month's interest at its then-current Accrual Rate (as defined below). As a result, the weighted average life of the Certificates evidencing interests in a Convertible ARM Pool may be significantly shorter than for similar Pools where no such option to convert and obligation to repurchase exist.

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 also will 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 rate that accrues to Certificateholders on the Mortgage Loan 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.

Pool Accrual Rate

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 rate (the "Accrual Rate") that is always equal to the corresponding Mortgage Interest Rate at which interest accrued on such ARM during such period net of the Corporation's percentage servicing and guaranty fee. This percentage servicing and guaranty fee may either (i) vary among the ARMs in a Pool for which the Mortgage Margins vary in order to produce a uniform margin (the "MBS Margin") specified in the related Prospectus Supplement that will be used to determine the rate over the applicable index value at which interest accrues to Certificateholders (a "Uniform MBS Margin Pool") or (ii) be uniform as to all ARMs in a Pool (a "Uniform Fee Pool"), resulting, if the Mortgage Margins vary, in varying MBS Margins among the ARMs in that Pool. For example, if the MBS Margin is fixed at a uniform 1.75% among the ARMs in a Uniform MBS Margin Pool, 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 be assigned a servicing and guaranty fee of 100 basis points. Conversely, if the servicing and guaranty fee is fixed at 1.25% for all ARMs in a Uniform Fee Pool, an ARM in that Pool that has a Mortgage Margin of 300 basis points would be assigned an MBS Margin of 1.75%, and another ARM in that Pool having a Mortgage Margin of 275 basis points would have an MBS Margin of 1.50%. To the extent no interest rate cap is applicable and the Mortgage Interest Rate of an ARM is freely floating, the Accrual Rate of that ARM will always be equal, before giving effect to any rounding, to the sum of the applicable Index value and the ARM's MBS Margin.

At any time, interest for any month will accrue to Certificateholders at a rate that equals the weighted average of the individual Accrual Rates of the ARMs (the "Pool Accrual Rate"). If the Mortgage Interest Rates for all ARMs in a Pool are freely floating and not affected by an interest rate cap, the Pool Accrual Rate will at any such time be equal, before giving effect to any rounding, to the sum of the then applicable index value (or the weighted average of the applicable index values if the ARMs in the Pool have different interest rate change dates as described under *Maturity, Interest Rate Change Dates* below) and, in the case of a Uniform MBS Margin Pool, the uniform MBS Margin or, in the case of a Uniform Fee Pool, the weighted average of the individual MBS Margins. The Pool Accrual Rate for a Pool cannot, however, be determined solely on the basis of applicable index values and MBS Margins if the Mortgage Interest Rate of any ARM in that Pool is in its initial fixed-rate period or is restricted by a periodic or lifetime adjustment cap. In any case, the Pool Accrual Rate for a Pool will always be equal to the weighted average of the Mortgage Interest Rates of the ARMs in the Pool net of, in the case of a Uniform Fee Pool, the uniform fixed servicing and guaranty fee or, in the case of a Uniform MBS Margin Pool, net of the weighted average of the individual fixed servicing and guaranty fees.

The range of Mortgage Margins for the ARMs in a Pool will be set forth in the related Prospectus Supplement. The Prospectus Supplement for a Uniform MBS Margin Pool will also set forth the fixed MBS Margin for that Pool. For Uniform Fee Pools, the initial weighted average MBS Margin at the Issue Date will be specified in the Prospectus Supplement. Because differences in the amortization or prepayment of ARMs with differing Mortgage Margins will cause any such initial weighted average MBS Margin to change, Fannie Mae will publish each month for each Uniform Fee Pool an updated

weighted average MBS Margin in the Fannie Mae *Monthly ARMs Report* supplement to the Fannie Mae *Monthly Factor Report* published by The Bond Buyer (the "*Monthly ARMs Report*") that will be applicable to the distribution to be made in the month of the publication of such *Monthly ARMs Report* (which distribution reflects the Accrual Rates of the ARMs in the month preceding the month of publication), subject to any deferral of interest. Although changes in the weighted average of the Mortgage Margins of ARMs in a Uniform MBS Margin Pool will affect the weighted average of the fixed servicing and guaranty fees applicable to the ARMs included therein (with a corresponding effect on the Pool Accrual Rate during any initial fixed rate period or whenever Mortgage Interest Rate caps may be applicable), no such updated information will be published for Pools of this type.

Information as to the approximate maximum and minimum (if applicable) Pool Accrual Rates of a Pool (*i.e.*, the weighted averages of the maximum and minimum Accrual Rates of the ARMs in the Pool) will be included in the Prospectus Supplement. These rates will be computed using the maximum and minimum Accrual Rates of the ARMs in a Pool weighted on the basis of their Issue Date Principal Balances. Differences in the amortization, prepayment, or maturity dates of ARMs with differing maximum and minimum Mortgage Interest Rates, and, in the case of Uniform MBS Margin Pools, fixed servicing and guaranty fees, are likely to cause the initial maximum and minimum Pool Accrual Rates for a Pool to change over the life of that Pool. In addition, if a Prospectus Supplement discloses that any assumption of an ARM in the related Pool by a new mortgagor may result in a change in the maximum and/or minimum Mortgage Interest Rates applicable thereto, any such assumption may also affect the maximum and minimum Pool Accrual Rates

Maturity, Interest Rate Change Dates

The weighted average remaining term to maturity of the ARMs in a Pool will be set forth in the related Prospectus Supplement. The Prospectus Supplement also will specify whether or not the ARMs in a Pool all have the same interest rate change dates on and after the Issue Date. If the interest rate change dates for ARMs in a Pool are uniform, the Accrual Rates for all ARMs in a Pool will, subsequent to the first interest rate change date on or after the Issue Date of the Pool, be based on Mortgage Interest Rates that have been calculated using the same index value. If the Prospectus Supplement indicates that the ARMs in a Pool have varying interest rate change dates, the Pool Accrual Rate for any month will be calculated based on Mortgage Interest Rates that, after the initial fixed-rate period of each of the ARMs, have been determined based on varying index values. For instance, with respect to a Pool that contains ARMs with both March 1 and August 1 annual interest rate change dates and a 45-day "look-back" period, interest will accrue to Certificateholders during the month of August with respect to the March 1 interest rate change date ARMs on the basis of the index value most recently available 45 days prior to March 1, and with respect to the August 1 interest rate change date ARMs on the basis of the index value most recently available 45 days prior to August 1. This results in the likelihood of a Pool Accrual Rate that, even in the case of a Uniform MBS Margin Pool, represents a weighted average of the different Accrual Rates of the ARMs included therein. The uniform or varying interest rate change dates of the ARMs in a Pool will be specified in the related Prospectus Supplement. In addition, the Prospectus Supplement will specify a "Weighted Average Months to Roll" that represents the weighted average amount of time from the Issue Date of the related Pool to the next interest rate change dates of all ARMs in the 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 related 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 four major components of funds of Eleventh District member institutions: (i) savings deposits, (ii) time deposits, (iii) FHLB of San Francisco advances, and (iv) 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 that 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 December 1989 and monthly from January 1990 to September 1990. 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, as published the month thereafter

<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-June	8.800	8.710	8.923
-December	7.730	7.760	8.476
1990-January	7.800	7.900	8.369
-February	8.090	8.380	8.403
-March	8.140	8.440	8.258
-April	8.340	8.630	8.211
-May	8.560	9.010	8.171
-June	8.180	8.500	8.086
-July	8.130	8.420	8.109
-August	7.670	8.010	8.075
-September	7.850	8.330	8.091

Unless otherwise specified in the Prospectus Supplement, the index value for each ARM's 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 (which will be a weighted average value if the ARMs in a Pool have varying interest rate change dates) that was used to determine the interest rates 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 or related Issue Supplement requires the Corporation to exercise its right to accelerate the maturity of a Conventional Mortgage Loan other than a VRM or ARM 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 that repayments (including foreclosures) during 1989 compared with 1988 decreased only slightly, whereas repayments during 1988 were 29 percent less than in 1987. The decrease in 1988 and the slight decrease in 1989 is primarily due to greater stability of interest rates. In 1987, 1988 and 1989, there were \$15.4 billion, \$10.7 billion and \$11.0 billion, respectively, in mortgage repayments (exclusive of foreclosures) that the Corporation received, which included approximately \$13.3 billion, \$8.4 billion and \$8.5 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. The latest maturity date and weighted average remaining term set forth in the Prospectus Supplement for a Fixed-Rate Pool containing GEMs are calculated without regard to the original term used for purposes of calculating the initial monthly payment amount, but are based on the term required to amortize the Issue Date Principal Balance of each GEM, based on its interest rate and current monthly installment assuming only scheduled increases in monthly payments and no prepayments of principal. 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.

Second Lien Mortgage Loans

The original maturities of second lien Mortgage Loans are expected to be between 8 and 15 years. All of the Mortgage Loans may be prepaid in whole or in part at any time without penalty. The Corporation is not aware of any reliable studies or statistics on the rate of prepayment of second lien Mortgage Loans. Generally, second lien Mortgage Loans are not viewed by mortgagors as permanent financing because in most instances the term is shorter and the interest rate is higher than on first lien

Mortgage Loans placed under similar circumstances. Accordingly, they may prepay at a higher rate than traditional fixed-rate first lien Mortgage Loans with substantially similar coupons. In addition, any future limitation on the right of borrowers to deduct interest payments on second lien Mortgage Loans for federal income tax purposes also may contribute to a higher rate of prepayments of such Mortgage Loans. Prepayment experience may also be affected by a wide variety of additional factors, including general economic conditions, interest rates, the availability of alternative financing and homeowner mobility. The Corporation will enforce the "due-on-sale" provisions of such Mortgage Loans (other than an ARM) or, in the alternative, will repurchase such Mortgage Loans subject to the same conditions as its general obligation with respect to fixed-rate first lien Conventional Mortgage Loans described above.

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 Fixed-Rate Pools the Pass-Through Rate, for GPM 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 a fund administered by the Federal Deposit Insurance Corporation ("FDIC") or the National Credit Union Administration 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 Guide or the MBS Selling and Servicing Guide, as applicable, 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 and 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 Selling Guide, first lien 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 lien Mortgage Loan 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 were 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). In 1990, the maximum dollar purchase limitations for Conventional Mortgage Loans were reduced to the following levels: \$187,450 for mortgages secured by one-family residences (\$281,175 in Alaska and Hawaii), \$239,750 for mortgages secured by two-family residences (\$359,625 in Alaska and Hawaii); \$289,750 for mortgages secured by three-family residences (\$434,625 in Alaska and Hawaii), and \$360,150 for mortgages secured by four-family residences (\$540,225 in Alaska and Hawaii). Conventional Mortgage Loans at the higher 1989 maximum dollar purchase limitations may be included in Pools, provided that such Conventional Mortgage Loans have been received by Fannie Mae no later than May 1, 1990 pursuant to an agreement entered into by Fannie Mae prior to January 1, 1990. The maximum mortgage amount for a second lien Mortgage Loan is 50 percent of the Corporation's conventional first mortgage limit for a single-family dwelling. Additionally, the Corporation will acquire the second lien Mortgage Loan only if the combined original balance of both the first lien Mortgage Loan and the second lien Mortgage Loan do not exceed \$187,450 (\$281,175 in Alaska and Hawaii).

First lien 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. Second lien Conventional Mortgage Loans (other than Multifamily Mortgage Loans) where the combined loan-to-value ratio of the first lien and the second lien exceeds 70 percent must be insured by a policy of primary mortgage guaranty insurance in an amount equal to 25 percent of the unpaid principal balance of such second lien Conventional Mortgage Loan. 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 such Conventional Mortgage Loans, Lenders may contract with the Corporation to repurchase such Conventional Mortgage Loans for such period and under such circumstances as the Corporation may require in the event the Conventional Mortgage Loans are in default.

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 one-family property (other than second homes) that does not secure any subordinate financing is 95 percent (90 percent in the case of ARMs or fixed-rate Mortgages with balloon payments). Where such a property also secures subordinate financing, the maximum loan-to-value ratio of the sum of the Conventional Mortgage Loan and the subordinate financing is 90 percent. In the case of a Conventional Mortgage Loan secured by a first Mortgage on an owner-occupied one-family second home that does not secure any subordinate financing, the maximum loan-to-value ratio is 80 percent. In addition, if such a property also secures subordinate financing, the maximum loan-to-value ratio of the sum of the Conventional Mortgage Loan and the subordinate financing is 90 percent.

The maximum loan-to-value ratio (including the unpaid principal balance of all subordinate financing) at the time of purchase for a Conventional Mortgage Loan secured by an owner-occupied

two-family property is generally 90 percent. The maximum loan-to-value ratio (including the unpaid principal balance of all subordinate financing) at the time of purchase for a Conventional Mortgage Loan secured by an owner-occupied three- to four-family property is 80 percent. In the case of a first lien Conventional Mortgage Loan secured by an investment property, the maximum loan-to-value ratio (including the unpaid principal balance of all subordinate financing) at the time of purchase is 70 percent. The maximum combined loan-to-value ratio of a second lien Conventional Mortgage Loan and the first lien financing is 80 percent.

Pursuant to the requirements of the Selling 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. As provided above, exceptions to these underwriting criteria (including the maximum loan-to-value ratio limitations) may be granted by the Corporation from time-to-time. 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 Selling 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 \$184,000. 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.

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 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 Selling Guide, the Servicing Guide or the MBS Selling and Servicing Guide as applicable (collectively, the "Guides"), which is incorporated therein by reference. Copies of the Trust Indenture 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 Pasadena.

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 entered on the books of a Federal Reserve Bank divided by the aggregate Stated Principal Balance⁽¹⁾ 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 Prospectus Supplement provides otherwise, Certificates 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 (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 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 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.

(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.

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 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 to the person entitled thereto as it appears on the Certificate not later than the 25th day of each month.

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, in the case of whole Mortgage Loans, the Corporation, as Trustee of the Mortgage Loans, will hold 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 a fund administered by the FDIC 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 Guide to perform diligently all services and duties customary to the servicing of mortgages, as well as those specifically prescribed by the applicable 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 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 and Graduating GPMs, 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, because of the Corporation's election to repurchase such Mortgage Loan under the circumstances described under "Collection and Other Servicing Procedures" below, or, as provided in the related Issue Supplement, because of the Corporation's repurchase of converted ARMs under the circumstances described under "ARM Pools—*General Characteristics*" above), (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, one month's interest at the Pass-Through Rate 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 Graduating 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 Graduating 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.

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 or a VRM or interest thereon at the Accrual Rate in the case of a Graduating 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 Graduating 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 or second lien (as the case may be) 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 Graduating 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 paragraphs 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. (However, certain modifications are prohibited by the Trust Indenture, *e.g.*, reducing the Mortgage Interest Rate, except as may be required by the terms of the Mortgage Note.) 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 Graduating 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 to 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 Graduating 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. (TI Section 10.01)

CERTAIN FEDERAL INCOME TAX CONSEQUENCES

This is a discussion of certain federal income tax consequences to persons purchasing Certificates. For purposes of this discussion, in applying a federal income tax rule that depends upon the origination date of a mortgage note or the characteristics of a mortgage note at its origination, the term "Mortgage Loan," in the case of a participation interest, shall mean the underlying mortgage note and not the participation interest therein.

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 compensation. Although Revenue Ruling 84-10 does not specifically address participation interests in mortgage notes, other IRS pronouncements clearly indicate that the holdings of Revenue Ruling 84-10 are equally applicable to a Certificate backed by a Pool consisting (in whole or in part) of participation interests.

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 compensation 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 compensation is limited under section 67 of the Code in the case of (1) 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 non-publicly offered regulated investment companies but do not include estates, nongrantor trusts, cooperatives, real estate investment trusts and publicly offered regulated investment companies. 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.

Revenue Ruling 84-10 does not contemplate the mandatory repurchase of ARMs from Pools pursuant to the borrower's exercise of an option to convert the ARM to a fixed-rate mortgage loan. However, Dewey Ballantine, special tax counsel to the Corporation, has rendered its opinion to the Corporation that the conclusions of Revenue Ruling 84-10 will be applicable, notwithstanding the mandatory repurchase from the Pool of ARMs with respect to which the borrowers exercise their options to convert the ARMs to fixed-rate mortgage loans.

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 (the "IRS") 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 Loan 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 Loan 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 Loan 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.

In certain cases, a Mortgage Loan may be secured by additional collateral consisting of an escrow account held with a financial institution (an "Escrow Mortgage Loan"). The escrow account consists of an interest rate buydown account that meets the requirements of the Corporation's Selling Guide, an achievement escrow that meets the requirements of the Corporation's Multifamily Guide, or any other escrow account described in the related Prospectus Supplement. Although the rulings described in the preceding paragraphs do not specifically refer to Escrow Mortgage Loans, the conclusions reflected in paragraphs 1 and 2 should be generally applicable to an Owner's investment in an Escrow Mortgage Loan if the escrow account does not represent an account with the Owner. 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 an Escrow 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 Escrow Mortgage Loan equals or exceeds the principal amount of such Escrow 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 Escrow Mortgage Loans, Owners should consult with their tax advisors concerning such tax treatment.

Lenders may provide the monies for the interest rate buydown accounts that secure certain Escrow Mortgage Loans ("Lender Buydown Loans"). Under the Corporation's Selling Guide, the borrower is liable for the entire payment on a Lender Buydown Loan, without offset by any payments due from the buydown account. Accordingly, the Corporation plans to treat Lender Buydown Loans entirely as the obligation of the borrower.

It is possible, however, that the IRS will take the position that a Lender Buydown Loan should be treated as if the borrower were obligated only to the extent of the net payment after application of the interest rate buydown account. If the IRS were able to maintain this position successfully, an Owner of a Lender Buydown Loan would be treated as holding two debt instruments: one issued by the Lender (to the extent of payments from the buydown account), and the other issued by the borrower (to the extent of the net payment by the borrower). Such treatment would require a reallocation of a portion of the interest to the period when the buydown account is in existence from the remaining term of the Certificate. Moreover, during the buydown period and to the extent of the buydown account, the three rulings described above would be inapplicable. Owners are advised to consult with their tax advisors concerning the tax treatment of Lender Buydown Loans.

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 IRS 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 compensation applicable to a particular Pool were considered by the IRS to exceed reasonable compensation for the services performed and the "excess" portion of such compensation 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 compensation 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 servicing compensation. For example, it is possible that the IRS 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 compensation 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 IRS 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 originated 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 originated 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 origination 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 IRS 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 IRS. "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 \$110.9 billion of mortgage loans as of September 30, 1990. 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 September 30, 1990 totaled \$281.8 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, Senior Vice President—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 September 30, 1990.

	<u>Average Maturity</u>	<u>Average Cost (3)</u>	<u>Outstanding</u> (Dollars in millions)
Debtures, notes, and bonds(1)			
Due within one year			
Short-term notes	3 mos.	8.11%	\$ 12,322
Debentures	6 mos	8.41	14,422
Subordinated capital debentures	2 mos.	9.15	400
Other(2)	—	8.20	<u>8,284</u>
Total due within one year			<u>35,428</u>
Due after one year			
Debentures	5 yrs. 6 mos	9.11	76,498
Subordinated capital debentures	14 yrs. 5 mos.	9.24	1,893
Other	6 yrs. 1 mo	8.46	<u>5,007</u>
Total due after one year			<u>83,398</u>
Total debtures, notes, and bonds			<u>\$118,826</u>
Stockholders' equity			<u>\$ 3,727</u>

- (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 debentures, notes, and bonds outstanding on any date subsequent to September 30, 1990 may differ from that shown in the table above.

SELECTED FINANCIAL DATA

The following selected financial data for the years 1985 through 1989 (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 nine months ended September 30, 1990 and 1989 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 nine months ended September 30, 1990 are not necessarily indicative of the results expected for the entire year. All per share information reflects the three-for-one stock split that occurred in October 1989. These data should be read in conjunction with the audited financial statements and notes to financial statements and the unaudited interim financial statements and related notes that are presented elsewhere herein.

(Dollars in millions, except per share amounts)	Nine Months Ended September 30,		Year Ended December 31,				
	1990	1989	1989	1988	1987	1986	1985
Income Statement Data:							
Net interest income	\$ 1,178	\$ 839	\$ 1,191	\$ 837	\$ 890	\$ 384	\$ 139
Guaranty fees	388	297	408	328	263	175	112
Net income (loss)	866	570	807	507	376	105	(7)
<i>Per Share</i>							
Earnings (loss) (fully diluted)	3.31	2.17	3.10	2.11	1.54	.47	(.03)
Cash dividends	50	29	43	24	.12	07	05
Balance Sheet Data (as of end of period):							
Mortgage portfolio, net	110,939	104,017	107,756	99,867	93,470	93,949	94,497
Total assets	128,355	119,533	124,315	112,258	103,459	99,621	99,076
Total borrowings	118,826	111,507	116,064	105,459	97,057	93,563	93,985
Stockholders' equity	3,727	2,749	2,991	2,260	1,811	1,182	1,009
Other Data:							
Net interest margin	1.39%	1.12%	1.16%	0.89%	1.00%	0.40%	0.15%
Ratio of earnings to fixed charges (1)	1.15:1	1.10:1	1.11:1	1.07:1	1.06:1	1.02:1	1.00:1
Mortgage purchases	\$ 17,394	\$ 14,893	\$ 22,518	\$ 23,110	\$ 20,531	\$ 30,826	\$ 21,510
MBS issued	72,408	44,294	69,764	54,878	63,229	60,566	23,649
MBS outstanding at period end (2)	281,806	208,894	228,232	178,250	139,960	97,174	54,987

(1) For the purpose of calculating the ratio of earnings to fixed charges, "earnings" consists of income (loss) before federal income taxes and fixed charges. "Fixed charges" consists of interest expense and interest capitalized on real estate owned.

(2) Included are Fannie Mae MBS held in the mortgage portfolio totaling \$11.5 billion and \$10.7 billion at September 30, 1990 and 1989, respectively, and \$11.7, \$8.1, \$4.2, \$1.6, and \$0.4 billion at December 31, 1989, 1988, 1987, 1986, and 1985, respectively.

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

Annual Periods

Results of Operations

In 1989, Fannie Mae had the most profitable year in its history. The Corporation earned net income of \$807 million in 1989, compared with \$507 million in 1988, and \$376 million in 1987. The growth in net income in 1989 resulted primarily from a continued increase in the spread between the yield on the Corporation's mortgage and other investments and its cost of debt and from growth in the size of the average investment balance. Other factors that contributed to the higher net income in 1989 include increased guaranty fee income resulting from the growth in Mortgage-Backed Securities ("MBS") outstanding and a reduction in the provision for losses as the Corporation experienced a decline in foreclosures and related losses.

Net income in 1988 surpassed 1987 net income mainly because of increased interest spread and a larger earning asset base. Other reasons for the higher net income in 1988 include increased guaranty fee income, a gain on sales of mortgages, and a lower effective federal income tax rate. In 1987, a cumulative adjustment to reflect revised mortgage yields, described under "Financial Accounting Standard No. 91," net of certain actions taken by management, added \$423 million to net interest income and \$134 million to net income.

A summary of selected financial information for the years 1987-1989 follows.

Selected Financial Information: 1987-1989
(Dollars in millions, except per share amounts)

	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>Change</u>	
				<u>1989 Over 1988</u>	<u>1988 Over 1987</u>
Operating Results for the Year					
Ended December 31,					
Net interest income	\$ 1,191	\$ 837	\$ 890 (1)	\$ 354	\$(53)
Guaranty fees	408	328	263	80	65
Gain (loss) on sales of mortgages	9	12	(81)	(3)	93
Miscellaneous income, net	60	69	53	(9)	16
Provision for losses	(310)	(365)	(360)	55	(5)
Administrative expenses	(254)	(218)	(197)	(36)	(21)
Income before federal income taxes	1,104	663	568	441	95
Provision for federal income taxes	(297)	(156)	(192)	(141)	36
Net income	<u>\$ 807</u>	<u>\$ 507</u>	<u>\$ 376 (1)</u>	<u>\$ 300</u>	<u>\$131</u>
Per share:(2)					
Earnings:					
Primary	\$ 3.14	\$ 2.14	\$ 1.55	\$ 1.00	\$.59
Fully diluted	3.10	2.11	1.54	.99	.57
Cash dividends . . . . .	.43	.24	.12	.19	.12
				% Change	
				<u>1989 Over 1988</u>	<u>1988 Over 1987</u>
Financial Condition at December 31,					
Mortgage portfolio, net	\$107,756	\$ 99,867	\$ 93,470	8%	7%
Total assets	124,315	112,258	103,459	11	9
Borrowings:					
Due within one year	36,346	36,599	29,718	(1)	23
Due after one year	79,718	68,860	67,339	16	2
Total liabilities	121,324	109,998	101,648	10	8
Stockholders' equity	2,991	2,260	1,811	32	25
MBS outstanding(3)	228,232	178,250	139,960	28	27

- (1) The 1987 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 (\$.99 per share fully diluted).
- (2) All per share information reflects a three-for-one stock split effective in October 1989.
- (3) Included in MBS outstanding are \$11.7 billion, \$8.1 billion, and \$4.2 billion of Fannie Mae MBS held in the mortgage portfolio at December 31, 1989, 1988, and 1987, respectively.

Net Interest Income

A major source of earnings is net interest income, which represents the income from the mortgage portfolio and other investments, minus the interest paid on borrowings and related costs. Net interest income was \$1,191 million in 1989 compared with \$837 million in 1988 and \$890 million in 1987 (\$467 million before the adjustments mentioned above).

The following table presents selected average balances, effective interest rates earned and paid, and interest income and expense for 1989, 1988, and 1987.

Net Interest Income and Average Balances

(Dollars in millions)

	1989			1988			1987		
	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)
Interest-earning assets									
Mortgage portfolio, net(2)	\$101,714	\$10,103	10.01%	\$ 98,012	\$ 9,629	9.90%	\$91,514	\$9,586(3)	10.51%
Investments and cash equivalents	10,732	977	9.51	7,585	597	8.35	3,681	257	7.63
Total interest-earning assets	<u>\$112,446</u>	<u>\$11,080</u>	<u>9.96%</u>	<u>\$105,597</u>	<u>\$10,226</u>	<u>9.78%</u>	<u>\$95,195</u>	<u>\$9,843</u>	<u>10.40%(4)</u>
Interest-bearing liabilities									
Borrowings due within 1 year	\$ 22,800	\$ 1,975	8.66%	\$ 20,532	\$ 1,726	8.41%	\$11,196	\$ 973	8.69%
Borrowings due after 1 year	85,002	7,914	9.31	81,228	7,663	9.43	80,524	7,980	9.91
Total interest-bearing liabilities	<u>\$107,802</u>	<u>\$ 9,889</u>	<u>9.17%</u>	<u>\$101,760</u>	<u>\$ 9,389</u>	<u>9.23%</u>	<u>\$91,720</u>	<u>\$8,953</u>	<u>9.76%</u>
Net interest income		<u>\$ 1,191</u>			<u>\$ 937</u>			<u>\$ 890</u>	
Interest spread			<u>79%</u>			<u>55%</u>			<u>64%(4)</u>
Net yield on interest-earning assets(5)			<u>1.16%</u>			<u>.89%</u>			<u>1.00%(4)</u>

(1) Tax equivalent basis using the respective statutory federal tax rate. Also includes the amortization of issuance costs, hedging results, and the effect of currency and interest rate swaps.

(2) Includes average balance of nonperforming loans of \$0.8 billion, \$1.1 billion, and \$1.5 billion in 1989, 1988, and 1987, 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 method of estimating uncollectible interest.

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

(5) 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.

Net interest income was higher in 1989 than in 1988 because of an increase in the interest spread and a larger earning asset base. The increase in the interest spread for 1989 primarily was attributable to a rise in the average portfolio yield and, to a lesser extent, a decline in the cost of debt outstanding.

The increase in net interest income in 1988 compared with 1987, excluding the \$423 million adjustment related to Financial Accounting Standard No. 91 ("FAS 91") and certain management actions, for the most part was due to the reduction in the cost of debt outstanding. 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 yield than fixed-rate mortgages. Net

interest income also increased in 1988 compared with 1987 due to growth in the size of the investment portfolio.

Net interest income does not include accrued interest on nonperforming loans. A loan is classified as nonperforming and accrued interest is reversed out of income when a payment is 90 days or more past due. If nonperforming assets had been fully performing, they would have contributed an additional \$48 million to interest income in 1989, \$89 million in 1988, and \$200 million (including \$55 million principally due to a change in the method of estimating uncollectible interest) in 1987. The amounts of nonperforming loans outstanding at December 31, 1989, 1988, and 1987 were \$0.7 billion, \$0.9 billion, and \$1.3 billion, respectively.

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, 1989, 1988, and 1987.

Rate/Volume Analysis

(Dollars in millions)

	Increase (Decrease)	Attributable to Changes in (1)	
		Volume	Rate
1989 vs. 1988			
Interest income	\$ 854	\$ 672	\$ 182
Interest expense	500	554	(54)
Net interest income	<u>\$ 354</u>	<u>\$ 118</u>	<u>\$ 236</u>
1988 vs. 1987			
Interest income	\$ 806	\$1,011	\$(205)
Interest expense	436	944	(508)
	370	67	303
Effect of accounting changes(2)	(423)	—	(423)
Net interest income	<u>\$(53)</u>	<u>\$ 67</u>	<u>\$(120)</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.

Financial Accounting Standard No. 91

In 1987, management 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 commitment was issued.

During 1987, management determined that actual and projected mortgage prepayments substantially exceeded the rates assumed previously in calculating the effective yield on mortgage loans. Accordingly, the Corporation recorded additional interest income of \$478 million in the fourth quarter of 1987 to reflect actual 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.

Other Income

Guaranty fee income increased in 1989 compared with 1988 and 1987 due to the growth in the amount of MBS outstanding. These fees are earned for guaranteeing the timely payment of principal and interest to investors in MBS.

The following table shows guaranty fee income as a percentage of the average balance of MBS outstanding in 1989, 1988, and 1987.

	Dollars in millions		
	1989	1988	1987
Guaranty fee income	\$ 408	\$ 328	\$ 263
Average balance of MBS outstanding (1)	\$191,037	\$152,107	\$119,184
Effective guaranty fee rate	.21%	.22%	.22%

(1) Excludes \$9.8 billion, \$6.4 billion, and \$2.2 billion in 1989, 1988, and 1987, respectively, of average balance of Fannie Mae MBS held in the mortgage portfolio.

A major reason for the decrease in miscellaneous income in 1989 was a \$13 million loss incurred on the repurchase of \$94 million of high-cost debt at a premium over the issue price. There was also a net decrease of \$17 million attributable to a decline in fees from unexercised commitments and from other sources of miscellaneous income. A \$21 million increase in fees earned for issuing real estate mortgage investment conduit ("REMIC") securities partially offset these decreases. The Corporation issued \$37.6 billion of REMICs in 1989 compared with \$11.2 billion in 1988, and the related fees were \$37 million and \$16 million, respectively.

The increase in miscellaneous income in 1988 compared with 1987 was due partially to unfavorable adjustments of \$28 million in 1987 resulting from the adoption of FAS 91 and the repurchase of high-cost debt. In addition, no REMIC fees were earned in 1987.

Credit Risk Management

Management evaluates the risk of loss on the mortgage loan portfolio and MBS outstanding based on recent experience, current economic conditions and estimates of future losses on seriously delinquent and foreclosed loans. During 1989 the Corporation experienced a decline in the number of foreclosed properties acquired. The following table shows for 1989, 1988, and 1987 the number of single-family foreclosed properties acquired during the year and in inventory at year end.

Number of Properties (1)	1989	1988	1987
Acquired	10,948	14,334	16,676
In inventory at year-end	4,975	7,458	9,434

(1) Includes properties acquired from foreclosures of single-family loans in portfolio or backing MBS.

Fewer acquisitions led to a decline in total charge-offs to \$243 million in 1989 compared with \$315 million in 1988 and \$285 million in 1987. Management responded to this moderation in the level of foreclosures by reducing the provision for losses to \$310 million in 1989 from \$365 million and \$360 million in 1988 and 1987, respectively. Because the provision exceeded charge-offs in these years, the allowance for losses increased to \$463 million at the end of 1989, compared with \$396 million and \$346 million at the end of 1988 and 1987, respectively. Management maintains the allowance for losses at a level it believes is adequate, considering current and anticipated charge-offs and the higher amount of portfolio and MBS outstanding.

Included in 1989 and 1988 charge-offs were \$13 million and \$28 million, respectively, relating to pending mortgage insurance claims with Tigor 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. Charge-offs in 1988 also included \$17 million to write down to net realizable value foreclosed properties related to loans purchased from Equity Programs Investment Corp. ("EPIC")

In late 1985, the Corporation revised its underwriting guidelines and credit requirements. Management believes these revisions contributed to improved loan loss experience. As of December 31, 1989, 85 percent of the Corporation's conventional single-family mortgage portfolio and MBS outstanding consisted of loans purchased since January 1, 1986. The revised guidelines resulted in lower loan-to-value ratios on many loans purchased for portfolio or backing MBS. At December 31, 1989, 74 percent of the conventional single-family loans in the Corporation's portfolio or backing MBS had an original loan-to-value ratio not higher than 80 percent (32 percent not higher than 70 percent).

A comparison of the delinquency trends of conventional single-family loans purchased in 1985 with the trends for conventional single-family loans purchased in 1986 and 1987 revealed that approximately two years after origination, the 1987 and 1986 loans had a serious delinquency rate of 0.30 percent and 0.38 percent, respectively, compared with 2.31 percent for the 1985 loans. (Serious delinquency includes loans 90 or more days delinquent, in foreclosure, or in relief.) Management attributes this downward delinquency trend primarily to the change in underwriting guidelines, improved economic conditions in certain geographic regions, and a favorable loan-to-value distribution in 1986 and 1987 that resulted partly from increased refinancing activity in those years.

Seriously delinquent conventional loans in the portfolio or backing MBS for which Fannie Mae bears the primary default risk have steadily decreased from 1.48 percent at December 31, 1985 to 0.69 percent at December 31, 1989.

Administrative Expenses

Increased salaries and compensation-related expenses were the primary reasons for the higher administrative costs in 1989 compared with 1988. In 1988, administrative expenses included the costs of consolidating corporate headquarters into two adjacent buildings. The ratio of total administrative expenses to average mortgage portfolio plus average MBS outstanding was 0.08 percent in 1989 and 0.09 percent in 1988.

Income Taxes

The effective federal income tax rate in 1989 was 27 percent compared with 24 percent in 1988 and 34 percent in 1987. The effective tax rate increased in 1989 compared with 1988 primarily due to growth in taxable income without a proportionate increase in tax-advantaged investments. The decrease in 1988 compared with 1987 was due to a reduction in the federal corporate income tax rate from 40 percent in 1987 to 34 percent in 1988 and to increased income from tax-advantaged investments.

As discussed in the Notes to Financial Statements, "Income Taxes," the Corporation and the Internal Revenue Service appealed a March 1988 Tax Court decision. The appeal was heard in January 1990 and the decision, when announced, 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 a change in the method of providing for income taxes. Subsequent amendments have postponed the required change at least until the beginning of 1992. Because of unresolved tax issues, it is not possible at this time to determine whether FAS 96, when adopted, will have a material effect on Fannie Mae.

Mortgage Portfolio

The net mortgage portfolio totaled \$107.8 billion at December 31, 1989, compared with \$99.9 billion at December 31, 1988 and \$93.5 billion at December 31, 1987. The yield on the net mortgage

portfolio at December 31, 1989 was 10.03 percent, compared with 9.84 percent at December 31, 1988 and 9.98 percent at December 31, 1987. The increase in yield in 1989 compared with 1988 primarily was due to the upward adjustment of ARMs in portfolio and to a decrease in purchases of ARMs, which have a lower initial yield than fixed-rate mortgages. Similarly, the decrease in yield in 1988 compared with 1987 was attributable, in large part, to the increase in ARM purchases in 1988 and to the high level of prepayments in 1987 of high-yielding mortgages.

As indicated in the following table, mortgage purchases in 1989 were \$22.5 billion compared with \$23.1 billion and \$20.5 billion in 1988 and 1987, respectively. ARMs represented a lower percentage of the Corporation's mortgage purchases in 1989 compared with 1988. Declining spreads between interest rates on fixed-rate mortgages and initial rates on ARMs led to an increase in originations of fixed-rate mortgages and fewer ARM originations in 1989. Multifamily loan purchases rose significantly in 1989, in large part reflecting increased use of Fannie Mae's delegated underwriting and servicing ("DUS") program, which was first adopted in 1988. Under DUS, selected lenders are permitted to sell to the Corporation multifamily loans that meet published guidelines without the Corporation's prior approval of the underwriting, provided that the lenders agree to share in a portion of any subsequent losses on such loans.

The primary reason for the increase in purchases in 1988 compared with 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

(Dollars in millions)

	1989		1988		1987		% Change	
							1989 Over 1988	1988 Over 1987
Mortgage type:								
Single-family								
FHA/VA	\$ 940	4.2%	\$ 503	2.2%	\$ 1,784	8.7%	87%	(72)%
Conventional:								
30-year fixed-rate	11,813	52.5	8,957	38.7	9,223	44.9	32	(3)
Intermediate-term fixed-rate	3,306	14.7	2,933	12.7	6,552	31.9	13	(55)
ARMs	4,492	19.9	9,862	42.7	2,512	12.2	(54)	293
Second mortgages	406	1.8	433	1.9	139	7	(6)	212
Total single-family	20,957	93.1	22,688	98.2	20,210	98.4	(8)	12
Multifamily	1,561	6.9	422	1.8	321	1.6	270	31
Total	\$22,518	100.0%	\$23,110	100.0%	\$20,531	100.0%	(3)	13
Average net purchase yield	9.88%		9.40%		9.63%		5	(2)

Mortgage repayments, which include prepayments and normal principal amortization, totaled \$11.0 billion in 1989, compared with \$10.7 billion in 1988 and \$15.4 billion in 1987. The high level of repayments in 1987 compared with 1989 and 1988 was the result of the large number of refinancings that occurred through the first half of 1987 in response to declining mortgage interest rates. In general, when interest rates decline significantly, the rate of prepayment increases, although the rate of principal prepayments also is influenced by a variety of economic, geographic, and other factors.

When the Corporation sells from portfolio it generally does so to support structured transactions, such as REMICs, or to improve the portfolio's expected performance. Sales from portfolio totaled \$3.0 billion in 1989 compared with \$5.0 billion in 1988 and \$5.2 billion in 1987. Sales were lower in 1989, in part, because dollar rolls supported more structured transactions. Dollar rolls involve the sale and repurchase of substantially the same securities and are accounted for as collateralized borrowings.

The sale of \$1.6 billion of low-yielding loans in 1987, which was made to improve future interest spreads on the portfolio, resulted in a before-tax loss on the sale of mortgages of \$128 million that year.

Mortgage-Backed Securities

During 1989, MBS outstanding surpassed the \$200 billion mark. At December 31, 1989, there were \$228.2 billion of MBS outstanding. MBS are backed by loans from one of three sources: a single lender, multiple lenders, or the Corporation's portfolio. Single-lender MBS generally are issued through lender swap transactions in which a lender exchanges pools of mortgage loans for MBS. Multiple-lender MBS allow several lenders together to pool mortgage loans and, in return, receive MBS representing a proportionate share of a larger pool. MBS may back other securities, including Megas, Stripped MBS ("SMBS"), and REMICs.

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 assuming any 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 credit risk to Fannie Mae for a higher guaranty fee. The Corporation, however, assumes the ultimate risk of loss on all MBS.

The following table summarizes MBS activity for the years ended December 31, 1989, 1988, and 1987.

Summary of MBS Activity

(Dollars in millions)

	1989		1988		1987		% Change	
							1989 Over 1988	1988 Over 1987
MBS Issued:								
Lender originated . .	\$ 64,396	92%	\$ 48,942	89%	\$ 57,078	90%	32%	(14)%
Fannie Mae originated . .	5,368	8	5,936	11	6,151	10	(10)	(3)
Total	<u>\$ 69,764</u>	<u>100%</u>	<u>\$ 54,878</u>	<u>100%</u>	<u>\$ 63,229</u>	<u>100%</u>	27	(13)
MBS Outstanding(1):								
Lender risk(2)	\$ 94,343	41%	\$ 84,143	47%	\$ 62,402	45%	12	35
Fannie Mae risk(3)	133,889	59	94,107	53	77,558	55	42	21
Total(4)	<u>\$228,232</u>	<u>100%</u>	<u>\$178,250</u>	<u>100%</u>	<u>\$139,960</u>	<u>100%</u>	28	27

(1) This table classifies MBS outstanding based on primary default risk category; however, Fannie Mae bears the ultimate risk of default. MBS outstanding includes MBS that have been pooled to back Megas, SMBS, or REMICs.

(2) Included in lender risk are \$30.6 billion, \$23.8 billion, and \$10.2 billion at December 31, 1989, 1988, and 1987, respectively, on which the seller agreed to bear default risk limited to a certain percentage of the loans delivered and, in some cases, pledged collateral to secure that obligation.

(3) Included are \$11.1 billion, \$11.2 billion, and \$12.2 billion at December 31, 1989, 1988, and 1987, respectively, which are backed by government insured or guaranteed mortgages.

- (4) Included are \$11.7 billion, \$8.1 billion, and \$4.2 billion at December 31, 1989, 1988, and 1987, respectively, of Fannie Mae MBS in portfolio.

Fannie Mae issued more MBS in 1989 than in 1988, primarily due to an increase in the volume of fixed-rate mortgages available in the secondary market to form MBS. In addition, in 1989 a higher proportion of fixed-rate originations were securitized than in 1988, partly in response to new capital standards for financial institutions. See "FIRREA and Risk-Based Capital." Fewer MBS were issued in 1988 than in 1987, mainly because in 1988 the availability of fixed-rate mortgage loans decreased as the popularity of ARMs rose. In general, the number of qualifying ARMs available for securitization has been more limited than the number of qualifying fixed-rate mortgage loans.

During 1989, international investors, who are becoming familiar with the mortgage-backed securities market, invested in MBS directly as well as through private mutual funds, structured and managed by third parties.

Liquidity and Capital Resources

The role of liquidity management at Fannie Mae is to ensure that funds are available to meet the Corporation's regular business obligations and to take advantage of market opportunities. Fannie Mae's primary sources of cash are issuances of debt obligations, mortgage loan repayments, interest income, fees, and proceeds from the sale of mortgages. In addition, Fannie Mae has a portfolio of cash equivalents and short-term investments totaling more than \$10 billion. Primary uses of cash include the purchase of mortgages, repayment of debt, and payment of interest expense.

Fannie Mae's statutory mission requires that it buy mortgage assets from lending institutions on an ongoing basis. The Corporation, therefore, must fund itself continually to support this mortgage purchase activity. The U.S. marketplace traditionally has treated the Corporation's obligations as "federal agency" debt. As a result, even though its debt is not guaranteed by the U.S. government, the Corporation has had ready access to funds.

Most long-term funding has been obtained through a regular monthly debenture sale. The Corporation raises short-term funds primarily through short-term discount notes and residential financing securities. Residential financing securities are six-month, one-year, or two-year unsecured general obligations bearing interest at fixed rates. The Corporation has sought to diversify further its funding sources. Nearly one-quarter of the debentures issued in 1989, or approximately \$5 billion, were sold to overseas investors.

Although Fannie Mae has a high debt-to-capital ratio, it continues to add to its capital account, primarily through retained earnings. In addition, the possible conversion of 34.5 million common stock warrants in 1990 and 1991 could contribute up to \$509 million to stockholders' equity. Management believes the Corporation's capital base, including the allowance for losses, is appropriate relative to the financial risks assumed in its operations.

At December 31, 1989, the Corporation had outstanding mandatory delivery commitments and standby commitments to purchase \$2.3 billion and \$3.7 billion of mortgage loans, respectively, compared with \$1.1 billion and \$1.0 billion, respectively, of such commitments at December 31, 1988. As in the past, the Corporation expects to fund mortgage purchases pursuant to such commitments through the sources of cash noted above.

Management of Interest Rate Exposure

Recent financing strategies employed by the Corporation to respond to changing interest rates include the issuance of Indexed Sinking Fund Debentures ("ISFDs") and callable debt. During 1989, Fannie Mae issued \$4.0 billion of callable debt and issuances of ISFDs grew to \$2.0 billion from \$1.7 billion in 1988. The issuance of these types of obligations reflects management's belief that the early redemption features of callable debt and ISFDs make them desirable tools for managing the interest rate risk associated with mortgage loan prepayments on the Corporation's mortgage portfolio.

In addition to issuing debt that closely matches asset maturities, management controls exposure to interest rate risk by acquiring shorter term assets, such as adjustable-rate and intermediate-term mortgages, and by increasing the amount of MBS outstanding. MBS creates an income source without the debt refinancing risk associated with portfolio investing activities.

The sensitivity of earnings to changes in interest rates can be measured by the duration gap, or the difference between the estimated durations of the mortgage assets and those of the liabilities that fund the mortgages. Duration represents the estimated weighted-average maturity of the present values of future cash flows. The Corporation has reduced its duration gap from 18 months at the end of 1985 to an estimated 6 months at the end of 1989, compared with 29 months at the end of 1984.

Another measure of the Corporation's exposure to interest rate risk 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. From the end of 1985 to the end of 1989, the one-year maturity gap moved from a negative 2 percent to a positive 4 percent, compared with a negative 16 percent at the end of 1984.

Financing Activities

Debt Issued and Outstanding

The average cost of debt outstanding at December 31, 1989 decreased compared with December 31, 1988 and 1987. This decrease was the result of higher cost debt maturing and being replaced with lower cost debt. Lower interest rates in recent years have allowed the Corporation to reduce the average cost of debt outstanding while maintaining the desired average maturity.

The average maturity of debt outstanding at December 31, 1989, compared with December 31, 1988, increased as the Corporation acquired longer term assets and issued debt that closely matched the expected maturities of the assets being financed. The average maturity of debt outstanding at December 31, 1988, compared with December 31, 1987, decreased as the Corporation acquired more shorter term assets and funded them with debt of comparable maturities.

The following table sets forth the amount, average cost, and average maturity of debt issued and redeemed during the last three years, and of debt outstanding at the end of each of those years.

	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>% Change</u>	
				<u>1989 Over 1988</u>	<u>1988 Over 1987</u>
(Dollars in millions)					
Debt Issued During Year					
Amount	\$ 78,568	\$ 64,260	\$45,726	22%	41%
Average cost(1)	8.60%	7.84%	7.49%	10	5
Average maturity (months)	28	20	36	40	(44)
Debt Redeemed During Year					
Amount	\$ 68,043	\$ 55,766	\$42,519	22	31
Average cost(1)	8.77%	8.18%	8.42%	7	(3)
Debt Outstanding at Year-end					
Amount, net	\$116,064	\$105,459	\$97,057	10	9
Average cost(1)	9.04%	9.20%	9.46%	(2)	(3)
Average maturity (months)	47	43	48	9	(10)

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

The Secretary of Housing and Urban Development requires that the Corporation's debt-to-capital ratio not exceed 20:1 (25:1 in 1988 and 1987). Capital, for this purpose, also includes subordinated

capital debentures, convertible capital debentures, and mortgage portfolio and MBS loss allowances. The Corporation also is 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.

Presented in the following table are the aforementioned capital ratios at December 31, 1989, 1988, and 1987.

	<u>1989</u>	<u>1988</u>	<u>1987</u>
Debt-to-capital	19.7:1	19.1:1	22.2:1
Subordinated debt-to-equity	0.8:1	1.2:1	1.2:1

The increase in the debt-to-capital ratio at December 31, 1989 compared with December 31, 1988, was due largely to a net decrease of \$361 million in outstanding subordinated capital debentures.

Common Stock

In September 1989, the Board of Directors authorized a three-for-one split of the Corporation's common stock and common stock warrants, effective in October 1989. The primary purpose of the stock split was to broaden distribution and improve marketability of the shares by reducing the per share market price. On the same date, the Board also voted to increase the quarterly cash dividend for the sixth time in three years from ten and 2/3 cents to fourteen cents per share on a post-split basis.

FIRREA and Risk-Based Capital

In 1989, Congress enacted the Financial Institutions Reform, Recovery and Enforcement Act ("FIRREA"). FIRREA requires the newly created Office of Thrift Supervision ("OTS") to set new capital standards for savings and loan associations that are at least as stringent as those applicable to national banks, and the OTS issued regulations that became effective in December 1989. Federal bank regulators in 1989 promulgated stricter capital guidelines for banks and bank holding companies, which will be phased in over a two-year period. Under both regulatory schemes, in addition to maintaining minimum levels of core and tangible capital, financial institutions are required to maintain capital levels based on a percentage of risk-adjusted assets. In general, the risk-based capital requirement for MBS is lower than for mortgage loans. Management expects that some savings and loan associations and commercial banks will sell or securitize a portion of their residential mortgage assets in the secondary market over the next several years in an effort to meet the new capital requirements. In addition, the assets of financial institutions in receivership are expected to be sold by federal regulators, and a substantial portion of such assets are mortgage loans and mortgage-backed securities that could be sold into the secondary market.

The new capital requirements may result in increased concentration in the financial services industry through closures or mergers and may cause substantial changes in the operation of that industry. Because of capital requirements applicable to asset sales or swaps with recourse, savings and loan associations may be less able or willing to enter into these transactions with the Corporation in the future. At this time, it is unclear what the overall impact, if any, of FIRREA and the new capital requirements will be on the Corporation's business volumes, growth, and profitability.

FIRREA also requires studies by the General Accounting Office ("GAO") and the U.S. Treasury of a variety of government-sponsored enterprises ("GSEs"), including Fannie Mae. These studies will examine and evaluate the financial soundness of GSEs, their impact, if any, on federal borrowing, the risks associated with their operations, the capitalization of each GSE, and, in the case of the GAO study, the appropriateness of applying a risk-based capital standard to each GSE. See "Recent Legislative and Regulatory Developments."

Proposed Accounting Guidance

The Accounting Standards Executive Committee ("AcSEC") of the American Institute of CPAs initiated a project during 1989 to draft uniform guidance on accounting for debt securities held as assets by financial institutions. Under current accounting practice, debt securities held for investment are recorded at their historical cost, adjusted for the amortization of any purchase discount or

premium. Draft guidance produced to date by AcSEC restricts the situations in which debt securities can be sold from an investment portfolio without calling into question the cost method of accounting for all such securities remaining in the portfolio. Under certain circumstances, the remaining securities may have to be recorded at either market or the lower of cost or market. Based on AcSEC drafts reviewed to date, management does not expect that any change in accounting guidance in this area, if it occurs, will have a significant impact on either the financial condition of the Corporation or its operations.

Interim Periods

Results of Operations

Fannie Mae's net income for the first nine months of 1990 was \$866 million compared with \$570 million for the first nine months of 1989. Net income increased primarily as a result of increases in net interest income, guaranty fees, and miscellaneous income.

Net interest income for the first nine months of 1990 was \$339 million higher than for the comparable period in 1989. The increase in net interest income was primarily due to growth in both the average investment balance and the net interest margin (*i.e.*, the net yield on interest-earning assets).

Income on the average investment balance of mortgage and other investments increased primarily due to an increase in the size of the average mortgage portfolio. 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 nine months ended September 30, 1990 and 1989.

Net Interest Income and Average Balances

(Dollars in millions)

	Nine Months Ended September 30,					
	1990			1989		
	Average Balance	Interest	Effective Interest Rate (1)	Average Balance	Interest	Effective Interest Rate (1)
Interest-earning assets						
Mortgage portfolio, net(2)	\$109,787	\$8,184	10.02%	\$100,344	\$7,467	9.99%
Investments	12,783	811	8.72	10,075	696	9.65
Total interest-earning assets	<u>\$122,570</u>	<u>\$8,995</u>	<u>9.89%</u>	<u>\$110,419</u>	<u>\$8,163</u>	<u>9.96%</u>
Interest-bearing liabilities						
Borrowings due within 1 year	\$ 22,029	\$1,359	8.23%	\$ 22,747	\$1,485	8.70%
Borrowings due after 1 year	94,676	6,458	9.09	83,224	5,840	9.35
Total interest-bearing liabilities	<u>\$116,705</u>	<u>\$7,817</u>	<u>8.93%</u>	<u>\$105,971</u>	<u>\$7,325</u>	<u>9.21%</u>
Net interest income		<u>\$1,178</u>			<u>\$ 838</u>	
Interest spread			<u>.96%</u>			<u>.75%</u>
Net yield on interest-earning assets(3)			<u>1.39%</u>			<u>1.12%</u>

- (1) Tax equivalent basis. Also includes the amortization of issuance costs, hedging results, and the effect of currency and interest rate swaps.
- (2) Includes the average balance of nonperforming loans of \$0.7 billion and \$0.8 billion for the nine months ended September 30, 1990 and 1989, respectively.
- (3) 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.

The rate/volume analysis below shows the relative contributions of asset growth and interest rate changes to changes in net interest income for the nine months ended September 30, 1990 and 1989.

Rate/Volume Analysis

(Dollars in millions)

Nine months ended 1990 vs. 1989	Increase (Decrease)	Attributable to Changes in (1)	
		Volume	Rate
Interest income	\$831	\$891	\$ (60)
Interest expense	492	724	(232)
Net interest income	<u>\$339</u>	<u>\$167</u>	<u>\$ 172</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.

Guaranty fee income increased to \$388 million in the first nine months of 1990 from \$297 million for the same period in 1989. The increase in guaranty fee income was primarily due to the increase in the amount of MBS outstanding.

Gain on sales of mortgages for the first nine months of 1990 and 1989 was \$5 million and \$6 million, respectively. Sales from portfolio totaled \$5.0 billion for the first nine months of 1990 compared with \$2.3 billion for the first nine months of 1989. The increase in sales reflects the Corporation's heightened use of MBS buy-sell activities in 1990 due to narrow spreads between Treasury and MBS yields.

Miscellaneous income increased to \$83 million for the first nine months of 1990 compared with \$50 million for the first nine months of 1989. The increase primarily was due to a \$33 million increase in REMIC and SMBS fees.

Despite an increase of \$5 million in the provision for losses for the third quarter of 1990 from the previous quarter, due to growth in business volumes, the Corporation reduced the provision to \$230 million in the first nine months of 1990, down from \$235 million in the first nine months of 1989. This decrease was due to moderation in the level of foreclosure activity. The number of properties acquired through foreclosure was 6,890 in the first nine months of 1990, down from 8,454 in the first nine months of 1989. Total foreclosure losses charged off for portfolio and MBS were \$177 million in the first nine months of 1990 compared with \$187 million in the first nine months of 1989.

Administrative expenses were 16 percent higher in the first nine months of 1990 compared with the first nine months of 1989, primarily due to business expansion.

The effective federal income tax rates for the first nine months of 1990 and 1989 were 29 percent and 27 percent, respectively. The effective federal income tax rate increased in the first nine months of 1990 primarily due to an increase in taxable income without a proportionate increase in tax-advantaged investments.

Mortgage Portfolio

The Corporation purchased \$17.4 billion of mortgages at an average yield of 9.87 percent in the first nine months of 1990, compared with \$14.9 billion of mortgages at an average yield of 9.98 percent in the first nine months of 1989. The increase in mortgage purchases was primarily due to an increase in the number of mortgages offered for sale in the secondary market.

ARMs represented 11 percent of the Corporation's mortgage purchases in the first nine months of 1990, compared with 25 percent in the first nine months of 1989. The decrease in the percentage of ARMs purchased was primarily the result of narrower spreads between interest rates on fixed-rate mortgages and initial interest rates on ARMs, which led to an increase in the percentage of originations of fixed-rate mortgages and a lower percentage of ARM originations.

Multifamily loans accounted for approximately 10 percent of the Corporation's mortgage purchases in the first nine months of 1990 compared with 6 percent in the first nine months of 1989. The increase in multifamily loan purchases reflects, in large part, increased use of the Corporation's DUS program.

Mortgage repayments during the first nine months of 1990 totaled \$9.4 billion compared with \$8.5 billion in the first nine months of 1989.

At September 30, 1990 and 1989, the net mortgage portfolio (mortgage loans less the allowance for losses and less unamortized discount and fees) was \$110.9 billion with a yield of 9.97 percent and \$104.0 billion with a yield of 10.01 percent, respectively.

Mortgage-Backed Securities

The Corporation issued \$72.4 billion of MBS during the first nine months of 1990, compared with \$44.3 billion in the first nine months of 1989. The increase in issuance was primarily due to an increase in the volume of fixed-rate mortgages available in the secondary market to back MBS and an increase in the Corporation's market share.

The following table summarizes MBS activity for the nine months ended September 30, 1990 and 1989:

Summary of MBS Activity

(Dollars in millions)

	September 30, 1990		September 30, 1989		% Change 1990 Over 1989
MBS Issued:					
Lender originated	\$ 67,754	94%	\$ 40,543	92%	67%
Fannie Mae originated	4,654	6	3,751	8	24
Total	<u>\$ 72,408</u>	<u>100%</u>	<u>\$ 44,294</u>	<u>100%</u>	63
MBS Outstanding(1):					
Lender risk(2)	\$ 97,157	34%	\$ 94,215	45%	3
Fannie Mae risk(3)	184,649	66	114,679	55	61
Total(4)	<u>\$281,806</u>	<u>100%</u>	<u>\$208,894</u>	<u>100%</u>	35

(1) This table classifies MBS outstanding based on primary default risk category; however, Fannie Mae bears the ultimate risk of default. MBS outstanding includes MBS that have been pooled to back Megas, SMBS, or REMICs, but does not include the resulting Megas, SMBS, and REMICs.

(2) Included in lender risk are \$33.2 billion and \$30.3 billion at September 30, 1990 and 1989, respectively, on which the seller agreed to bear default risk limited to a certain percentage of the loans delivered and, in some cases, pledged collateral to secure that obligation.

(3) Included are \$10.2 billion and \$11.1 billion at September 30, 1990 and 1989, respectively, which are backed by government insured or guaranteed mortgages.

(4) Included are \$11.5 billion and \$10.7 billion at September 30, 1990 and 1989, respectively, of Fannie Mae MBS in portfolio.

The increase in MBS outstanding where Fannie Mae has primary default risk is primarily due to lender reaction to new capital rules that require more capital for MBS where the lender bears default risk.

Megas, SMBS, and REMICs issued during the first nine months of 1990 aggregated \$12.2 billion, \$6.2 billion, and \$48.8 billion, respectively. The increase in REMIC volume was primarily due to heightened investor demand for such securities.

At September 30, 1990, the Corporation had outstanding \$6.1 billion of mandatory delivery commitments to issue and guarantee MBS compared with \$8.9 billion at September 30, 1989. At September 30, 1990, the Corporation had optional delivery commitments outstanding to issue and guarantee \$65.1 billion of MBS compared with \$31.4 billion at September 30, 1989.

Liquidity and Capital Resources

The Corporation's shareholders' equity was \$3.7 billion at the end of the first nine months of 1990, compared with \$3.0 billion at December 31, 1989. This increase in equity was primarily due to the increase in retained earnings generated by net income. In addition, the Corporation's allowance for losses was \$516 million at September 30, 1990, compared with \$463 million at December 31, 1989.

Total commitments outstanding to purchase mortgages were \$10.1 billion and \$5.9 billion at September 30, 1990 and 1989, respectively.

In May 1990, representatives of the Treasury and the GAO testified before Congressional subcommittees on the first of their two annual studies of GSEs (including the Corporation) pursuant to FIRREA, and the Treasury and the GAO released the first of their two studies in May and August 1990, respectively. A new budget law also requires the Congressional Budget Office to study the financial risk of the GSEs and directs the appropriate congressional committees to report possible legislation regarding GSEs by September 15, 1991. See "Recent Legislative and Regulatory Developments."

Financing and Other Activities

In the first nine months of 1990, the Corporation issued \$70.9 billion of debt at an average cost of 8.20 percent, and redeemed \$68.6 billion at an average cost of 8.44 percent. In the first nine months of 1989, debt issues totaled \$53.6 billion at an average cost of 8.83 percent, and debt redemptions were \$47.7 billion at an average cost of 8.77 percent. The average cost of debt issued was lower in the first nine months of 1990 as compared with the same period in 1989 because more short-term debt was issued and interest rates were lower in the 1990 period. The average cost of debt outstanding at September 30, 1990 and 1989 was 8.90 percent and 9.20 percent, respectively.

The Corporation's statutory debt-to-capital ratio at September 30, 1990 was 17.6:1, compared with 18.6:1 at September 30, 1989. The Secretary of Housing and Urban Development requires that this ratio not exceed 20:1. At September 30, 1990, the Corporation's subordinated debt-to-equity ratio was 0.6:1, compared with 0.9:1 at September 30, 1989.

On April 17, 1990, the Board of Directors voted to increase the dividend on the Corporation's common stock to 18 cents per share for the quarter ended March 31, 1990 from 14 cents. The dividend was payable on May 25, 1990 to shareholders of record on April 30, 1990. The Board also approved an increase in the quarterly dividend to 22 cents per share for the quarter ended September 30, 1990. The dividend will be payable on November 25, 1990 to shareholders of record on October 31, 1990.

On August 23, 1990, the corporation announced its intention to repurchase its common stock and warrants, in an amount up to the expected proceeds from the exercise of its warrants, approximately \$500 million. During the quarter ended September 30, 1990, a total of 2.2 million shares of common

stock were repurchased of which 1.7 million shares settled before September 30, 1990. As of September 30, 1990, there were outstanding 240 million shares of common stock and 34 million common stock warrants.

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 (1) provide stability in the secondary market for home mortgages, (2) respond appropriately to the private capital market by developing new finance and mortgage products, and (3) provide ongoing assistance to the secondary market for home mortgages (including mortgages securing housing for low- and moderate-income families involving a reasonable economic return to the Corporation) by increasing the liquidity of mortgage investments and 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, which was succeeded by 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 MBS, 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. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 authorizes the General Accounting Office to audit the Corporation's mortgage transactions.

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.

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.

For the Month (Dollars in millions)	<u>Interest-earning Assets</u>		<u>Interest-bearing Liabilities</u>		
	<u>Amount</u>	<u>Effective Interest Rate (1)</u>	<u>Amount</u>	<u>Effective Interest Rate (1)</u>	<u>Interest Spread</u>
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	.38(2)
December 1988	108,879	9.77	104,424	9.16	.61
<u>1989</u>					
March	108,092	9.88	103,685	9.20	.68
June	109,588	9.98	104,760	9.27	.71
September	115,880	9.95	111,084	9.16	.79
December	120,994	9.92	115,945	9.01	.91

(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—Annual Periods—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 \$11.5 billion of debt obligations, net of discounts and premiums, with an original term of one year or longer (having a weighted-average cost of 9.50 percent at December 31, 1989) will mature during the 12 months following December 31, 1989. 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"), mortgage loans guaranteed by the Veterans Administration ("VA"), multifamily mortgage loans and second mortgage loans. The Corporation's purchases 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 1989, approximately 39 percent were from mortgage banking companies, 28 percent were from savings and loan associations, 15 percent were from commercial and mutual savings banks, and 18 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 conventional mortgage loans on one-family dwellings if the loan's original principal balance exceeds \$187,450, except for loans secured by properties in Alaska and Hawaii. Higher principal balance limits apply to loans secured by properties in those states or secured by two or more family dwelling units. The maximum principal balance limits applicable to such conventional mortgage loans secured by one- to four-family dwellings can be adjusted annually based on the national average price of a one-family dwelling as surveyed by the Office of Thrift Supervision. On January 1, 1990, the limitation for one-family dwellings was lowered from \$187,600 to the current level.

Under the Charter Act, maximum principal balance limits also apply to the Corporation's purchases of conventional multifamily mortgage loans. Such limits are affected by the location of the unit and other factors.

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 specifies 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 1989, 96 percent of the total amount of the loans purchased by the Corporation were conventional mortgage loans. The remaining 4 percent were insured by the FHA or guaranteed by the VA.

Fixed-Rate/Adjustable-Rate The interest rate on fixed-rate mortgage loans is fixed for the term of the loan. 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 1989), 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 generally applies initially to interest and then later to the original principal balance, resulting in faster amortization. To the extent scheduled payments are less than the interest accruing on the mortgage loan initially, the difference is paid from a subsidy account established at the time the mortgage loan is originated. With a graduated-payment mortgage loan, payments during the early years do not cover the full amount of interest on the loan at the fixed interest rate, and the increases in the payments apply solely to interest and additions previously made to the original principal balance; therefore, the payment increases do not result in faster amortization.

The Corporation also purchases fixed-rate balloon mortgage loans with balloon payments due after 7 or 10 years, but with monthly payments based on 30-year amortization schedules. Some of the 7-year balloon mortgage loans permit the borrower to refinance the balloon payment at maturity with a 23-year fixed-rate mortgage loan. During 1989, the Corporation's purchases of balloon mortgage loans represented 3 percent 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 1989, biweekly fixed-rate loans constituted 3 percent of the Corporation's purchases.

The interest rates on ARMs are determined by formulas providing for automatic adjustment, up or down, at regular intervals in accordance with changes in a specified index. 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. The Corporation purchases 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 lower interest rate environment and the narrower interest rate spread between fixed interest rates and initial interest rates on ARMs, the Corporation's purchases of ARMs in 1989 constituted 20 percent of the total amount of loans purchased, compared with 43 percent in 1988. ARM purchases were 12 percent and 4 percent of the total amount of loans purchased 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 with payment of a small fee.

In March 1990, the Corporation began purchasing conventional mortgage loans that have one interest rate for the first 7 years and then adjust automatically to another interest rate for the next 23 years. The loans, called Two-Step MortgagesSM, have initial interest rates lower than those on traditional 30-year fixed-rate mortgage loans.

Payments 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 mortgage loans secured by second liens ("second mortgage loans"). The Corporation also has purchased some conventional ARM second mortgage loans in negotiated transactions. Second mortgage loans generally bear higher interest rates and have shorter maturities than first mortgage loans. During 1989, the Corporation's purchases of second mortgage loans constituted 2 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 participation 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 primarily 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 1989, the Corporation's purchases of multifamily loans constituted 7 percent of the amount of loans it purchased, compared with 2 percent in 1988. The increase in multifamily loan purchases in 1989 largely reflects increased use of the Corporation's delegated underwriting and servicing program, which was adopted in 1988. See "Mortgage Loan Portfolio—Underwriting Guidelines."

Maturity. The Corporation currently purchases conventional, single-family fixed- and adjustable-rate mortgage loans 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 mortgage 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, first mortgage loans and the conventional, fixed-rate mortgage loans with 7- and 10-year balloon payments described above. During 1989 and 1988, the Corporation's purchases of intermediate-term, fixed-rate, first mortgage loans constituted 15 percent and 13 percent, respectively, of its 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 multifamily loans that had an original maturity of 40 years.

Portfolio Composition and Purchases The following table shows 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 mortgage loan purchases. The table includes mortgage loans that back MBS held in the Corporation's mortgage loan portfolio. At December 31, 1989, 1988, and 1987, \$11.7 billion, \$8.1 billion, and \$4.2 billion, respectively, of MBS were held in portfolio.

Mortgage Loan Portfolio Composition and Purchases

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Unpaid Principal Balances at End of Period					
Single-Family: Government insured or guaranteed	\$ 11,857	\$ 12,235	\$13,306	\$15,968	\$27,414
Conventional: Fixed-rate	66,804	60,997	61,314	58,176	45,065
Adjustable-rate	22,020	21,040	13,722	14,343	16,955
Second mortgage	1,614	1,561	1,421	2,169	2,899
Multifamily: Government insured	4,361	4,397	4,482	4,852	4,951
Conventional	4,065	2,783	2,501	2,325	1,365
Total unpaid balance	<u>\$110,721</u>	<u>-\$103,013</u>	<u>\$96,746</u>	<u>\$97,833</u>	<u>\$98,649</u>
Average net yield	<u>10.03%</u>	<u>9.84%</u>	<u>9.98%</u>	<u>10.17%</u>	<u>10.92%</u>
Purchases During Period					
Single-Family: Government insured or guaranteed	\$ 940	\$ 503	\$ 1,784	\$ 438	\$ 482
Conventional: Fixed-rate	15,119	11,890	15,775	27,454	12,398
Adjustable-rate	4,492	9,862	2,512	1,108	7,066
Second mortgage	406	433	139	498	871
Multifamily: Government insured	117	23	—	—	—
Conventional	1,444	399	321	1,328	693
Total mortgage loans purchased	<u>\$ 22,518</u>	<u>\$ 23,110</u>	<u>\$20,531</u>	<u>\$30,826</u>	<u>\$21,510</u>
Average net yield	<u>9.88%</u>	<u>9.40%</u>	<u>9.63%</u>	<u>9.68%</u>	<u>11.71%</u>

At December 31, 1989, the weighted-average life of the mortgage loans in the Corporation's mortgage loan portfolio was approximately 20 years, assuming normal scheduled amortization and no prepayments.

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, which the Corporation changes from time to time.

In 1988, the Corporation introduced the delegated underwriting and servicing ("DUS") program for multifamily loans. Under DUS, selected lenders are permitted to sell to the Corporation multifamily loans that meet published guidelines without the Corporation's prior approval of the underwriting, provided that the lenders agree to share in a portion of any subsequent loss on such loans and establish and maintain a reserve with a designated custodian to secure their loss-sharing obligation. Previously, the Corporation required its approval of the underwriting of all multifamily loans before it would purchase such loans. It continues to require such prior approval for multifamily loans that it purchases from non-DUS lenders.

The Corporation generally 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 or the seller agrees to repurchase the loan in the event of default. The Corporation, however, is requiring mortgage insurance in cases where the lender retains a participation interest of 10 percent or more, 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, in which case the Corporation generally requires the lender to pledge 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. The Corporation bears the risk that in some cases mortgage insurers or lenders may be unable to satisfy fully their obligations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—Results of Operations—Credit Risk Management."

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

Commitments

The Corporation issues commitments to purchase, at a later date, a specified dollar amount of mortgage loans. The Corporation purchases mortgage loans through standard product commitments with posted yields and through negotiated commitments. The Corporation's standard single-family mortgage loan products currently include 10-, 15-, 20-, and 30-year fixed-rate mortgage loans, 7-year fixed-rate balloon mortgage loans with 30-year amortization periods, FHA-insured and VA-guaranteed fixed-rate mortgage loans, many types of ARMs, and second mortgage loans. A negotiated commitment is used when the mortgage loans or proposed commitment terms differ in some manner from 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. Mandatory delivery commitments are available for standard product and negotiated transactions. If a lender is not able to deliver the mortgage loans required under a mandatory delivery commitment, the lender may buy back the commitment at any time during the commitment term for a fee.

The Corporation also issues to lenders standard and negotiated standby commitments that commit the Corporation to purchase a designated dollar amount of single-family mortgage loans from the lenders if they convert their standby commitments to mandatory delivery commitments. Standby

commitments do not obligate the lenders to sell the loans to the Corporation; they are obligated to do so only after such commitments are converted to mandatory delivery commitments. 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.

Prior to October 1, 1987, lenders often paid fees for either of these commitments, but as of that date the Corporation eliminated its requirement of "upfront" commitment fees on all mandatory delivery transactions for its standard mortgage products. The Corporation does offer lenders obtaining mandatory commitments the choice of obtaining such a commitment without fees at competitive yields or at lower yields with fees. The Corporation subsequently eliminated such upfront fees for standard product standby commitments and most negotiated standby commitments. Lenders obtaining negotiated rate-lock standby commitments still are required to pay a nonrefundable fee at the time of commitment, with the amount of the fee depending on market conditions, the type of mortgage loan, and the length and characteristics of the commitment. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—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.

Commitments outstanding at December 31, 1989 and 1988 were \$6.0 billion and \$2.1 billion, respectively, including standby commitments of \$3.7 billion at December 31, 1989 and \$1.0 billion at December 31, 1988.

Servicing

The Corporation does not service mortgage loans held in the portfolio, except for government-insured multifamily loans, most conventional multifamily mortgage loans that are in default, and loans that have been foreclosed. Fannie Mae mortgage loans can be serviced only by a servicer approved by the Corporation. Lenders who sell single-family mortgage loans and conventional multifamily loans to the Corporation often retain the responsibility for servicing the mortgage loans sold, subject to the Corporation's guidelines. With the Corporation's approval, sellers or servicers may transfer responsibility for servicing 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.

Repayments, Assumptions, and Sales

Mortgage repayments include mortgage loan prepayments, loans paid-in-full, normal amortization, and foreclosures. As shown by the table below, repayments during 1989 compared with 1988 decreased only slightly, whereas repayments during 1988 were 29 percent less than in 1987. The decrease in 1988 and the slight decrease in 1989 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, and other factors.

Mortgage Loan Portfolio Repayments

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Single-Family:					
Government insured or guaranteed	\$ 1,342	\$ 1,425	\$ 2,011	\$ 2,876	\$2,090
Conventional: Fixed-rate	6,509	7,310	10,206	12,396	4,796
Adjustable-rate	3,262	2,548	3,143	3,756	1,963
Second mortgage	354	293	887	1,228	788
Multifamily	320	229	270	481	154
Total mortgage loan repayments(1)	<u>\$11,787</u>	<u>\$11,805</u>	<u>\$16,517</u>	<u>\$20,737</u>	<u>\$9,791</u>
Repayments as a percentage of total unpaid principal balance	10.2%	11.7%	17.3%	21.1%	10.4%

(1) Repayments include \$786 million, \$1,115 million, \$1,123 million, \$1,142 million, and \$835 million in 1989, 1988, 1987, 1986, and 1985, 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—Annual Periods—Results of Operations—Credit Risk Management").

The following table shows the unpaid principal balances of mortgage loans sold from portfolio for the years 1985 through 1989. The Corporation sold \$1.6 billion of low-yielding loans in 1987 to improve future interest spreads on the portfolio. The sales in 1986 included a special \$10 billion sale of mortgage loans that were primarily assumable FHA/VA mortgage loans.

Mortgage Loan Sales from Portfolio

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Single-Family:					
Government insured or guaranteed	\$ —	\$ 150	\$2,436	\$ 9,011	\$ —
Conventional: Fixed-rate	3,036	4,897	2,528	1,946	1,319
Multifamily	—	—	250	—	—
Total sales	<u>\$3,036</u>	<u>\$5,047</u>	<u>\$5,214</u>	<u>\$10,957</u>	<u>\$1,319</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 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 Majors issues totaled \$14.0 billion in 1989 and \$7.9 billion in 1988.

In 1988, the Corporation introduced Fannie Megas[®] ("Megas," initially called 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 Megas). In return for their MBS, investors receive Mega 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 Megas, 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 its undivided interest in the pool. In contrast, Stripped Mortgage-Backed Securities ("SMBS"), which the Corporation introduced in 1986, are issued in series, with two classes that are entitled to different cash flows from the underlying mortgage loans, MBS or certificates guaranteed by the Government National Mortgage Association ("GNMA"). 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, MBS or certificates guaranteed by GNMA.

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, certificates guaranteed by GNMA or MBS (which may be standard MBS, Fannie Majors, Megas, 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 the 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 1985 through 1989. MBS issued may be exchanged subsequently for Megas, SMBS, or REMICs. The table below includes MBS issued and outstanding that underlie Megas, SMBS, and REMICs, but does not include the resulting Megas, SMBS, or REMICs. Those resulting securities are shown in the table entitled "Summary of Mega, SMBS, and REMIC Activity."

MBS Issued and Outstanding

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Issued during period	\$ 69,764	\$ 54,878	\$ 63,229	\$60,566	\$23,649
Outstanding at period end(1)	228,232	178,250	139,960	97,174	54,987

(1) Included in MBS outstanding are \$11.7 billion, \$8.1 billion, \$4.2 billion, \$1.6 billion, and \$0.4 billion of MBS in portfolio at December 31, 1989, 1988, 1987, 1986, and 1985, respectively.

The following table summarizes Mega, SMBS, and REMIC activity in 1989, 1988, 1987, and 1986.

Summary of Mega, SMBS, and REMIC Activity

(Dollars in millions)

	Year Ended December 31,			
	1989	1988	1987	1986
Issued during period:				
Megas(1)	\$23,282	\$ 9,928	\$ —	\$ —
SMBS(2)	4,132	5,556	9,001	2,400
REMICs	37,583	11,199	916	—
Outstanding at period end(3):				
Megas(1)	29,401	9,774	—	—
SMBS(2)	17,266	15,013	10,462	2,283
REMICs	47,560	11,647	897	—

(1) Megas can back SMBS or REMICs.

(2) SMBS can back REMICs.

(3) Includes \$3.2 billion, \$1.6 billion, and \$0.1 billion at December 31, 1989, 1988, and 1987, respectively, held in the Corporation's mortgage portfolio.

The Corporation issues MBS backed by single-family first or second mortgage loans, 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 (other than Fannie Majors and Megas) 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 commitments provide for either mandatory or optional delivery. Under optional delivery commitments, lenders generally 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, 1989, the Corporation had outstanding \$8.4 billion of mandatory delivery MBS commitments and \$34.2 billion of optional delivery MBS commitments, compared with \$7.2 billion of mandatory delivery commitments and \$14.5 billion of optional delivery commitments at December 31, 1988.

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 guaranties, 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, 1989, \$92.1 billion of conventional MBS pools had underlying mortgage loans where the Corporation has recourse to the sellers, third party credit enhancement providers (through a letter of credit or pool insurance coverage), or other credit enhancement structures in the event of default by the borrowers. For further information regarding the primary foreclosure risk category of mortgage loans underlying MBS outstanding at December 31, 1989, 1988 and 1987, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—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 or others, 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, 1989 and December 31, 1988, MBS guaranty fees totaled \$408 million and \$328 million, respectively. The Corporation also receives fees for swapping SMBS, REMICs and Megas for standard MBS, except that no fee is charged for Megas swapped for standard MBS issued during the same month as the Mega.

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 general, when the level of interest rates declines significantly below the interest rates on loans underlying MBS, the rate of prepayment is likely to increase, although the rate of principal payments is influenced by a variety of economic, geographic and other factors.

Insurance companies, money managers, and commercial banks have been substantial buyers of MBS. At times, thrift institutions also have been major purchasers of MBS, although they were less significant purchasers in 1989. During 1989, international investors invested in MBS directly, as well as through private mutual funds structured and managed by third parties.

In 1989, risk-based capital standards were adopted by federal banking regulators, who assigned the Corporation's MBS to the 20 percent risk category, except that SMBS and certain residual classes of REMICs of the Corporation are assigned to the 100 percent category. It is unclear what the overall impact, if any, of the risk-based capital standards will be on the MBS market.

A supervisory policy statement issued by the Federal Financial Institutions Examination Council with regard to investments in various types of zero coupon and stripped obligations and asset-backed

securities residuals (or some variation thereof) has been adopted by federal banking regulators and the National Credit Union Administration with respect to the depository institutions that they regulate. The Office of Thrift Supervision also has guidelines and limitations on investment in such securities by federal- and state-chartered savings institutions under its supervision. 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. It is unclear what overall impact, if any, such guidelines and regulations have had or will have on the MBS market.

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, 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

The Corporation reduced the provision for loan losses in 1989 after increasing the provision yearly since 1984. The increases prior to 1989 were primarily in response to an increase in actual and anticipated charge-offs, whereas in 1989 there was a decrease in charge-offs. 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 Provisions and Allowances for Loan Losses

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Provision during period					
Portfolio:					
Government insured or guaranteed	\$ 5	\$ 6	\$ 14	\$ 11	\$ 16
Conventional	161	279	266	249	161
MBS	144	80	80	46	29
Total	<u>\$310</u>	<u>\$365</u>	<u>\$360</u>	<u>\$306</u>	<u>\$206</u>
Allowance at end of period					
Portfolio:					
Government insured or guaranteed	\$ 13	\$ 18	\$ 24	\$ 23	\$ 26
Conventional	220	228	191	169	107
MBS	230	150	131	79	33
Total	<u>\$463</u>	<u>\$396</u>	<u>\$346</u>	<u>\$271</u>	<u>\$166</u>

Charge-offs

As mortgage loans are foreclosed, the Corporation reduces the allowance for loan losses by the amount of the estimated loss. The estimated losses are adjusted to actual losses when the underlying properties are sold. In 1989 and 1988, total charge-offs (exclusive of \$45 million in 1988 for estimated losses related to TMIC Insurance Company, Inc. ("TMIC") and EPIC) decreased as compared with 1988 and 1987, respectively, primarily due to a decrease in the number of loans foreclosed. 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. The losses charged off on the conventional loan portfolio and MBS backed by conventional mortgage loans are summarized in the following two tables:

Portfolio Conventional Loan Charge-off Experience

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Single-Family Conventional Loans:					
Net losses charged off during period(1)	\$ 129(2)	\$ 195(2)	\$ 208	\$ 173	\$ 143
Average principal balance during period	\$ 85,201	\$ 81,249	\$ 73,479	\$ 68,065	\$ 59,965
Net loss charge-off ratio .....	.1514%	.2400%	.2831%	.2542%	.2385%
Multifamily Conventional Loans:					
Net losses charged off during period(1)	\$ 18	\$ 21	\$ 21	\$ 5	—
Average principal balance during period	\$ 3,258	\$ 2,575	\$ 2,469	\$ 1,932	\$ 1,007
Net loss charge-off ratio .....	.5525%	.8155%	.8505%	.2588%	—

- (1) Estimated losses on acquired properties generally are charged to the allowance for losses when properties are acquired.
- (2) Includes \$13 million and \$28 million for 1989 and 1988, respectively, that represents the estimated loss relating to mortgage insurance claims pending with TMIC, and also includes a \$17 million writedown to net realizable value on EPIC properties in 1988. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—Results of Operations—Credit Risk Management."

MBS Conventional Loan Charge-off Experience

(Dollars in millions)

	Year Ended December 31,				
	1989	1988	1987	1986	1985
Single-Family Conventional Loans:					
Net losses charged off during period(1)	\$ 62	\$ 77	\$ 41	\$ 9	\$ 19
Average principal balance during period(1) ...	\$ 95,955	\$ 71,627	\$ 52,456	\$ 25,680	\$ 10,155
Net loss charge-off ratio .....	.0646%	.1075%	.0782%	.0350%	.1871%
Multifamily Conventional Loans:					
Net losses charged off during period(1)(2) ...	\$ 20	\$ 9	\$ 2	—	—
Average principal balance during period(1) ...	\$ 970	\$ 910	\$ 723	\$ 368	\$ 64
Net loss charge-off ratio	2.0619%	.9890%	.2766%	—	—

- (1) Excludes MBS backed by conventional mortgage loans where lenders have agreed to retain the primary default risk or where lenders have agreed to bear default risk limited to a certain percentage of the loans delivered. The average principal balance during the period on such single-family MBS was \$82.5, \$67.7, \$52.4, \$40.7, and \$30.1 billion in 1989, 1988, 1987, 1986, and 1985, respectively. On such multifamily MBS, the average principal balance during the period was \$6.1, \$2.8, \$0.7, \$0.7, and \$0.6 billion in 1989, 1988, 1987, 1986, and 1985, respectively.
- (2) Multifamily losses relate to a credit enhancement product line that was discontinued in 1987.

Delinquencies

Delinquencies of three months or more experienced on single-family conventional mortgage loans in the Corporation's loan portfolio and underlying MBS, for which the Corporation has the primary risk of loss, are summarized in the following table:

Portfolio and MBS Single-family Conventional Loan Delinquency Experience

(Percent of portfolio by number of loans and percent of MBS by number of underlying loans)

	December 31,				
	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>
Portfolio:					
Three or more months delinquent.....	.42%	.50%	.59%	.80%	.75%
In relief .....	.33	.35	.46	.30	.28
In foreclosure .....	.35	.45	.62	.63	.54
Total	<u>1.10%</u>	<u>1.30%</u>	<u>1.67%</u>	<u>1.73%</u>	<u>1.57%</u>
MBS (1):					
Three or more months delinquent.....	.17%	.20%	.20%	.33%	.42%
In relief(2) .....	.08	.08	.03	.04	.11
In foreclosure .....	.11	.18	.23	.24	.42
Total	<u>.36%</u>	<u>.46%</u>	<u>.46%</u>	<u>.61%</u>	<u>.95%</u>
Total Portfolio and MBS (1):					
Three or more months delinquent.....	.28%	.35%	.42%	.65%	.70%
In relief(2) .....	.19	.22	.26	.22	.26
In foreclosure .....	.22	.31	.44	.51	.52
Total(2)	<u>.69%</u>	<u>.88%</u>	<u>1.12%</u>	<u>1.38%</u>	<u>1.48%</u>

(1) Only includes MBS where Fannie Mae has primary default risk.

(2) MBS data for years prior to 1988 for loans in relief only includes loans pooled from portfolio, as such data for loans pooled from MBS lenders is not available. For 1989 and 1988, MBS loans in relief represented .04 percent of combined total loans.

REO

When a mortgage loan is liquidated by foreclosure, the Corporation acquires the underlying property ("REO") and holds it for sale. The number of 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. The number of REO declined significantly in 1989 and to a lesser extent in 1988 as a result of a slowdown in foreclosures and as dispositions of REO exceeded acquisitions.

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

REO Experience

(Dollars in thousands)

	December 31.				
	1989	1988	1987	1986	1985
Single-Family					
Number of REO (1)	4,975 (3)	7,458	9,434	8,104	7,701
Aggregate carrying value (2)	\$172,000	\$250,000	\$312,000	\$294,000	\$298,000
Average carrying value (2)	\$ 35	\$ 34	\$ 33	\$ 36	\$ 39
Multifamily					
Number of REO	33	41	16	1	—
Aggregate carrying value (2)	\$ 84,000	\$ 89,000	\$ 30,000	\$ 2,000	—
Average carrying value (2)	\$ 2,500	\$ 2,200	\$ 1,900	\$ 2,000	—

- (1) The number of REO for 1986 and 1985 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, 1989, the Corporation held 339 properties in which it had a participation interest. The Corporation believes that the addition of such properties in 1986 and 1985 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) Includes 321 EPIC properties, 80 of which were in Fannie Mae's active inventory and being marketed for sale. The remaining 241 properties were included in the EPIC reorganization plan, which envisions their sale over a period of several years

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 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 mortgage-backed securities is the Federal Home Loan Mortgage Corporation ("Freddie Mac"), whose primary business consists of the issuance of mortgage-backed securities. The Corporation and Freddie Mac compete primarily on the basis of the amount of the guaranty fee charged, the products offered, and differences in such matters as mortgage loan eligibility standards and delivery requirements.

The Financial Institutions Reform, Recovery and Enforcement Act of 1989 gave HUD general regulatory power over Freddie Mac and replaced its three-member Board of Directors (consisting of the members of the former Federal Home Loan Bank Board) with eighteen members (consisting of thirteen members elected by Freddie Mac's common stockholders and five members appointed by the President). Also, during 1989, Freddie Mac's outstanding common stock became voting stock and broadly available for purchase. It is unclear what impact, if any, these changes will have on competition between the Corporation and Freddie Mac.

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, 1989 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> (Dollars in millions)	<u>Average Cost (1)</u>
One year	\$11,457	9.50%
One to two years	15,351	8.49
Two to three years	12,083	9.14
Three to four years	8,751	8.98
Four to five years	7,350	9.11
Over five years	34,620	9.20

(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, mortgage-backed bonds issued under section 304(d) of the Charter Act, and securities sold under agreements to repurchase.

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. From 1968 to 1982 this ratio was set by the Secretary of HUD at 25:1. 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, 1989, this debt-to-capital ratio was 19.7:1, compared with 19.1:1 at December 31, 1988. At December 31, 1989, the Corporation could have issued approximately \$1.9 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 undistri-

buted earnings at such time until such outstanding debentures mature or are redeemed. At December 31, 1989 and 1988, the Corporation's subordinated debt-to-equity ratio was 0.8:1 and 1.2:1, respectively. At December 31, 1989, the Corporation could have issued approximately \$3.7 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. No noncallable subordinated obligations containing the subordinated debt-to-equity restriction remain outstanding. 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 or premium at their book value (face amount adjusted for unamortized discount or premium).

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,				
	1989	1988	1987	1986	1985
Short-Term Notes, Master Notes, Securities					
Sold under Agreements to Repurchase, Residential Financing Securities, and Short-Term Investment Agreements					
Issued during period:					
Amount	\$ 55,037	\$ 50,180	\$26,950	\$22,066	\$23,617
Average cost	8.46%	7.58%	6.84%	6.39%	8.47%
Average maturity—days (1)	126	169	156	217	240
Outstanding at end of period:					
Amount	\$ 24,753	\$ 24,492	\$15,986	\$13,971	\$17,427
Average cost	8.62%	8.33%	7.56%	6.40%	8.26%
Average maturity—days (1)	87	137	149	161	121
Debentures, Medium-Term Notes, Bonds, and Long-Term Investment Agreements					
Issued during period:					
Amount	\$ 23,595	\$ 14,183	\$18,776	\$17,857	\$24,569
Average cost	8.90%	8.76%	8.39%	7.95%	10.47%
Average maturity—months	84	68	75	85	67
Outstanding at end of period:					
Amount	\$ 91,574	\$ 81,371	\$81,341	\$79,745	\$76,768
Average cost	9.06%	9.32%	9.70%	10.41%	11.17%
Average maturity—months	57	53	54	49	42
Total Debt					
Issued during period:					
Amount	\$ 78,632	\$ 64,363	\$45,726	\$39,923	\$48,186
Average cost (2)	8.60%	7.84%	7.49%	7.10%	9.62%
Average maturity—months (1) (2)	28	20	36	47	46
Outstanding at end of period:					
Amount	\$116,327	\$105,863	\$97,327	\$93,716	\$94,195
Average cost (2)	9.04%	9.20%	9.46%	10.01%	10.79%
Average maturity—months (1) (2)	47	43	48	46	40

(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.

Facilities

The principal office of the Corporation is located at 3900 Wisconsin Avenue, NW, Washington, DC 20016 (telephone: 202/752-7000), in a building that the Corporation owns. The Corporation also leases 368,680 square feet of office space at 4000 Wisconsin Avenue, NW, which is adjacent to the Corporation's principal office. The present lease, with annual rental expense in 1990 of approximately \$10.2 million, expires in 2001, but the Corporation has options to extend the lease for up to 15 additional years, in 5-year increments.

The Corporation also maintains regional offices in leased premises (with the approximate square footage and year of lease expiration indicated) in Pasadena, California (69,000 square feet, 1999),

Atlanta, Georgia (59,000 square feet, 1997); Chicago, Illinois (38,000 square feet, 1994); Philadelphia, Pennsylvania (56,000 square feet, 1996); and Dallas, Texas (57,000 square feet, 2000) The regional offices negotiate mortgage loan and MBS business with lenders in their regions, assist in supervising the servicing of the Corporation's mortgage loan portfolio by lenders, assist in supervising or managing the handling and disposition of REO, and provide training to the staff of lenders in their region. The Corporation has options to extend the leases in Atlanta, Dallas, and Philadelphia for 5 years and the leases in Chicago and Pasadena for up to 10 years (in 5-year increments). The annual rental cost in 1990 of each of the leases for the regional offices is between \$1.1 and \$1.5 million. The annual rental cost for space leased by Fannie Mae in Washington, DC and its regional offices generally is subject to increase each year based, in part, upon increased costs related to the space leased, including operating costs, taxes, and insurance

Fannie Mae also leases much smaller amounts of office space in Anchorage, Alaska, Miami, Florida, and Houston, Texas, for employees providing support services to the regional offices.

Employees

At September 30, 1990 the Corporation employed approximately 2,500 full-time personnel.

RECENT LEGISLATIVE AND REGULATORY DEVELOPMENTS

Representatives of Congress and the Administration met earlier this year in a "budget summit" seeking to reach agreement on the 1991 fiscal year budget. The Treasury and the Office of Management and Budget submitted draft proposals to the budget summit that include requiring government-sponsored enterprises ("GSEs") to obtain a triple-A rating (absent any implicit or explicit government guarantee and other federal benefits) from two nationally recognized private credit rating agencies and giving Treasury strong safety and soundness oversight powers. The reconciliation bill (H.R. 5835) finally passed by the Congress and signed by the President (Public Law No. 101-508) does not include any reforms to the charters of Fannie Mae or other GSEs, nor does it endorse any particular reform proposals discussed to date, such as the Treasury proposal described above. Rather, it apparently requires the second Treasury report due next year on the financial soundness of GSEs to be submitted two weeks earlier than previously required, it calls for a new Congressional Budget Office ("CBO") report, and it directs the appropriate congressional committees to "report legislation ensuring GSEs' financial soundness" by September 15, 1991. The CBO report will consider the financial exposure of the government from GSEs, the effects of GSE activities on Treasury borrowing, types of financial risks each GSE assumes and how Congress may increase understanding of such risks, supervision of GSEs' risk management, and alternative models of GSE regulation. The new law also requires that the President's annual budget include an analysis of the financial condition of the GSEs and the financial exposure of the government, if any, because of the GSEs.

On May 14 and 15, representatives of the Treasury and the General Accounting Office ("GAO") testified before Congressional subcommittees to report on the first of two annual studies of GSEs, such as Fannie Mae, that Treasury and GAO were mandated to prepare pursuant to the Financial Institutions Reform, Recovery, and Enforcement Act of 1989. The GAO testified that a better system of oversight, some reasonable risk-based capital rules, and appropriate enforcement authorities are needed for GSEs. Treasury's recommendations included a proposal that each GSE obtain a rating equivalent to triple-A, absent any implicit government guarantee, from at least two of the nationally recognized credit rating agencies. If a GSE failed to meet the triple-A rating requirement, it would be required to adhere to a business plan designed to achieve a triple-A rating within five years from the date of the legislative enactment imposing this standard, or lose its ties to the federal government. Treasury also proposed that there be an independent regulator of financial safety and soundness for each GSE. In May 1990, the Treasury submitted to Congress the first of its two studies of the GSEs, which included these proposals. In August 1990, the GAO submitted to Congress its first report, which included the general proposals noted in its testimony. The GAO report also indicated that it would be preferable that the safety and soundness regulation of the GSEs be handled by a regulator other than that responsible for regulating GSE programs based upon public policy considerations. The GAO intends to continue its analysis and make specific recommendations regarding oversight and capital in its 1991 report. The Treasury and GAO proposals would require legislation.

In June 1990, HUD submitted its 1988-89 report on Fannie Mae to Congress. The report notes that HUD as regulator of Fannie Mae and Freddie Mac will request both to submit mark-to-market estimates of their book of business and that HUD will require additional reports so it can monitor more closely any changes in their practices likely to affect their interest risk and credit risk. HUD also indicates in the report that it has created a regulatory board within HUD to oversee Fannie Mae and Freddie Mac, that it will create an analytical and policy support unit to support that board, and that it will develop financial models, including stress models, for measuring GSE risk and the adequacy of GSE capital.

The Bush Administration's recommendations for the 1991 fiscal year budget, as released on January 29, 1990, contained a recommendation to require Fannie Mae and other GSEs to pay user fees to the United States Treasury. The Bush Administration's proposed 1991 fiscal year budget package included a proposal to impose on Fannie Mae's debt issued after September 30, 1990 a 10 basis point fee in the government's fiscal year 1991, which begins October 1, 1990; a 20 basis point fee

in fiscal year 1992; and a 30 basis point fee in fiscal year 1993 and beyond. In addition, the proposal would impose on MBS issued after September 30, 1990 a 5 basis point fee in fiscal year 1991, a 10 basis point fee in fiscal year 1992, and a 15 basis point fee in fiscal year 1993 and beyond. Imposition of such user fees would require legislation. H.R. 5835 does not contain any housing user fees like those in the President's budget. The Reagan Administration's 1986, 1987 and 1989 fiscal year budget packages also included recommendations, which were not enacted, to require Fannie Mae and other GSEs to pay user fees. The Housing and Community Development Act of 1987, signed by President Reagan on February 5, 1988, prohibits the imposition of user fees on Fannie Mae.

As discussed in "Income Taxes" in the notes to financial statements, Fannie Mae 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. Fannie Mae 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 Fannie Mae's favor on the issue relating to concurrent mortgage sales and for the IRS on the issue relating to resale/refinance transactions. In February 1990, the United States Court of Appeals for the District of Columbia Circuit (the "D.C. Circuit") issued its decision affirming the U.S. Tax Court's decision. This decision became final in April 1990. In June 1990, the IRS petitioned the United States Supreme Court for a writ of certiorari on the final D.C. Circuit opinion. The Supreme Court has taken no action on that petition, but on October 1, 1990, the Court agreed to hear the cases of two other taxpayers involving the same tax issue as that involving Fannie Mae. It is not clear how the decisions in those cases will affect Fannie Mae's tax case. Because the matter is still subject to further legal proceedings, Fannie Mae will not record any income relating to this matter until the result is more certain.

MANAGEMENT

Directors

The age and background, as of November 1, 1990, of each of the members of the Board of Directors of the Corporation are as follows:

<u>Name and Age</u>	<u>Principal Occupation, Business Experience, and Residence</u>	<u>First Became Director</u>	<u>Other Directorships (1)</u>
Felix M. Beck, 64	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, 60	President and Chief Operating Officer of the Corporation, November 1987 to present, Chairman of the Board, International Securities Clearing Corporation, November 1986 to October 1987, Chairman of the Board, January 1981 to April 1985, Chief Executive Officer, January 1981 to July 1984, and President, July 1976 to January 1982, Merrill Lynch & Co, Inc, a financial services company, Rumson, New Jersey and Chevy Chase, Maryland	1985	New Jersey Resources Corporation, Penske Transportation
Eli Broad, 57	Chairman of the Board, 1961 to present, and Chief Executive Officer, 1976 to present, Broad Inc (formerly Kaufman and Broad, Inc), a financial services corporation, Chairman, Kaufman and Broad Home Corporation, June 1986 to present, Chairman, 1987 to present, and Chief Executive Officer, 1983 to present, SunAmerica Corporation, Chairman, 1987 to present and President and Chief Executive Officer 1983 to 1985, Sun Life Insurance Company of America, Inc, Los Angeles, California	1984	The Advest Group, Inc
Alberto R Cardenas(2), 42	Senior Partner, Greenberg, Traurig, Hoffman, Lipoff Rosen & Quentel, P A, a law firm practicing in Florida, July 1987 to present, Partner, Broad and Cassel, a law firm practicing in Florida and Georgia, 1983 to July 1987, Miami, Florida	1985	
Henry C Cashen, II(2), 51	Partner, Dickstein, Shapiro & Morin, a law firm practicing in the District of Columbia, New York, and Virginia, 1973 to present, Washington, D.C	1985	
George L Clark, Jr (2), 49	President, September 1987 to present, and Vice President, 1962 to September 1987, George L. Clark, Inc., a real estate company; Brooklyn, New York	1989(3)	
J. Brian Gaffney (2), 57	Partner, Gaffney, Pease & DiFabio, a law firm practicing in Connecticut, January 1989 to present, Partner, Gaffney & DiFabio, a law firm practicing in Connecticut, 1975 to December 1988, New Britain, Connecticut	1989	
Joseph P Havden, 61	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	Star Banc Corporation, Star Bank, N A

<u>Name and Age</u>	<u>Principal Occupation, Business Experience, and Residence</u>	<u>First Became Director</u>	<u>Other Directorships (1)</u>
James A. Johnson(4), 46	Vice Chairman of the Corporation, January 1990 to present; Managing Director, Shearson Lehman Hutton, Inc., an investment banking firm, April 1985 to December 1989, President, Public Strategies, a Washington, D.C -based consulting firm, 1981 to April 1985, Washington, D.C.	1990	
David O Maxwell(4), 60	Chairman of the Board of Directors and Chief Executive Officer of the Corporation, May 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
John M O'Mara, 63	Chairman of the Executive Committee, Quality Care Systems, Inc., a health care cost containment corporation, May 1990 to present, President, Chemvest International, Inc., an international merchant banking corporation, January 1990 to present; Chairman of the Board and Chief Executive Officer, Global Natural Resources, Inc., an independent oil and gas exploration and production company, August 1988 to December 1989; Managing Director, Chase Manhattan Bank, a banking and investment banking corporation, September 1985 to August 1988, Greenwich, Connecticut	1970	Baldwin & Lyons, Inc., The Midland Company
Richard D Parsons, 42	President and Director, July 1988 to present, Chief Executive Officer, July 1990 to present, and Chief Operating Officer, July 1988 to June 1990, The Dime Savings Bank of New York, FSB, a financial institution, Partner, Patterson, Belknap, Webb & Tyler, a law firm practicing in New York, May 1979 to June 1988, Pocantico Hills, New York	1989	American Television and Communications Co., College Retirement Equity Fund, M.S B Fund, Inc.
Christine D Reed(2), 38	Executive Director, Building Industry Association of Southern California, Orange County Region, a building association, July 1989 to present, Director, January 1987 to June 1989, and Acting Director, May 1986 to January 1987, California Department of Housing and Community Development, a state housing department, Deputy Secretary of Housing, California Business, Transportation and Housing Agency, a business, transportation, and housing agency, 1984 to May 1986, Santa Ana, California	1989	
Samuel J Simmons, 63	President and Chief Executive Officer, 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, 44	Vice Chairman and Director, April 1990 to present, and President and Director, March 1987 to April 1990, CrossLand Savings, FSB (Utah) (formerly Western Savings and Loan Company), a financial institution; President and Director, CrossLand Mortgage Corp., a mortgage banking corporation, May 1988 to present, President and Chief Executive Officer, Western Savings and Loan Company, a financial institution, 1980 to March 1987, Salt Lake City, Utah	1985	

<u>Name and Age</u>	<u>Principal Occupation, Business Experience, and Residence</u>	<u>First Became Director</u>	<u>Other Directorships (1)</u>
Richard C. Van Dusen, 65	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 Birmingham, Michigan	1981	CRI Insured Mortgage Association, Inc., CRI Liquidating REIT Inc., MCN Corporation
Mallory Walker, 51	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, 46	Partner, Crowell & Moring, a law firm practicing in the District of Columbia, December 1982 to present, Washington, D C	1988	Crestar Financial Corporation

- (1) 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.
- (2) Appointed by the President of the United States, who has authority to appoint five directors.
- (3) From 1986 to 1987, Mr. Clark also served as a director of the Corporation appointed by the President of the United States.
- (4) In September 1990, David Maxwell announced that he will retire as Chairman of the Board of Directors and Chief Executive Officer of the Corporation when his current contract expires on January 31, 1991. The Board of Directors on September 18, 1990 elected James A Johnson to succeed Mr. Maxwell as Chairman of the Board of Directors and Chief Executive Officer, effective February 1, 1991

Executive Officers

The age and business experience, as of November 1, 1990, of each of the executive officers of the Corporation, are as follows:

David O. Maxwell, 60, has been Chairman of the Board of Directors and Chief Executive Officer since 1981. (In September 1990, Mr. Maxwell announced that he will retire as Chairman of the Board of Directors and Chief Executive Officer when his current contract expires on January 31, 1991)

Roger E. Birk, 60, 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 was Chairman of Merrill Lynch & Co., Inc. from 1981 to April 1985

James A. Johnson, 46, has been Vice Chairman of the Corporation since January 1990. Mr. Johnson was a Managing Director in Corporate Finance at Shearson Lehman Hutton, Inc. from April 1985 to December 1989 and was President of Public Strategies from January 1981 to April 1985. (On September 18, 1990, the Board of Directors elected Mr. Johnson to succeed Mr. Maxwell as Chairman of the Board of Directors and Chief Executive Officer, effective February 1, 1991.)

Caryl S. Bernstein, 56, has been Executive Vice President since February 1982, General Counsel since May 1981 and Secretary since July 1981.

J. Timothy Howard, 42, has been Executive Vice President and Chief Financial Officer since February 1990. Mr. Howard was Executive Vice President—Asset Management from December 1987 to February 1990, 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, and Senior Vice President and Chief Economist from October 1983 to November 1985.

Robert J. Levin, 35, has been Executive Vice President—Marketing since June 1990. Mr. Levin was Senior Vice President—Marketing and MBS from June 1989 to June 1990, Senior Vice President—Mortgage-Backed Securities and Portfolio Acquisition from February 1988 to June 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, and Vice President for Corporate Finance from July 1984 to November 1985.

Dale P. Riordan, 42, has been Executive Vice President—Operations and Systems since June 1990. Mr. Riordan was Executive Vice President—Marketing from March 1989 to June 1990, Executive Vice President—Policy and Public Affairs from October 1988 to March 1989, and Executive Vice President—Administration and Corporate Relations from February 1986 to October 1988.

Michael A. Smilow, 53, has been Executive Vice President and 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 through December 1987.

Glenn T. Austin, Jr., 42, 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, 44, 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, 41, 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—Marketing in the Northeastern Regional Office from February 1983 to May 1985.

Larry H. Dale, 44, has been Senior Vice President—Marketing and MBS since June 1990. He was Senior Vice President—Multifamily Finance and Housing Initiatives from May 1989 to June 1990 and Senior Vice President—Multifamily Activities from June 1987 to May 1989. Prior to his employment with the Corporation, Mr. Dale was Vice President of Newman and Associates from 1984 to June 1987.

Judith Dedmon, 39, 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, and Vice President for Quality Standards from July 1985 to April 1987.

Robert J. Engelstad, 38, has been Senior Vice President—Mortgage and Lender Standards since November 1989. Mr. Engelstad was Vice President—Mortgage Standards from November 1987 to November 1989, Director of Single-Family Standards from June 1986 to November 1987, Assistant Director of Real Estate Sales from November 1985 to June 1986, Manager of Property Disposition and Sales from July 1985 to November 1985, and Manager of Appraisal Standards from January 1985 to July 1985.

Hugh E. Flaherty, 59, 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, 41, 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.

John R. Hayes, 51, 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.

William E. Kelvie, 43, has been Senior Vice President and Chief Information Officer since November 1990. Prior to his employment with the Corporation, Mr. Kelvie was a managing principal with Nolan, Norton & Co. from March 1987 to November 1990, a branch manager of that firm's New York office from March 1986 to March 1987, and a principal of that firm as of March 1985.

Thomas A. Lawler, 37, has been Senior Vice President—Portfolio Management since November 1989. Mr. Lawler was Vice President for Portfolio Management from January 1989 to November 1989, Vice President and Senior Economist from February 1986 to December 1988, and Director of Financial Economics from January 1984 to February 1986.

Ann D. Logan, 36, has been Senior Vice President—Northeastern Regional Office since June 1989. Ms. Logan was Vice President for Regional Activities from May 1989 to June 1989, Vice President for Mortgage Operations from November 1987 to May 1989, Executive Assistant to the Executive Vice President—Mortgage Operations from January 1986 to November 1987 and Senior Financial Analyst from January 1985 to January 1986.

Robert J. Mahn, 62, has been Senior Vice President and Controller since June 1985. Mr. Mahn was Senior Vice President—Mortgage Operations from February 1982 to June 1985.

William R. Maloni, 45, 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, and Vice President for Congressional Relations from March 1984 to February 1986.

Anthony F. Marra, 49, 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, 52, 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, 49, has been Senior Vice President—Real Estate Sales 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, and Director of Property Management from March 1984 to December 1985.

Paul P. Paquin, 47, has been Senior Vice President—Investor Relations since November 1989. Mr. Paquin was Vice President for Investor Relations from October 1985 to November 1989, and Director of Investor Relations from March 1980 to October 1985.

Gary L. Perlin, 39, 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.

David E. Roberts, 49, 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.

FEDERAL NATIONAL MORTGAGE ASSOCIATION

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INDEPENDENT AUDITORS' REPORT

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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, 1989 and 1988, and the related statements of income and cash flows for each of the years in the three-year period ended December 31, 1989. 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, 1989 and 1988, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1989, in conformity with generally accepted accounting principles.

KPMG PEAT MARWICK

Washington, DC
January 19, 1990

FEDERAL NATIONAL MORTGAGE ASSOCIATION

STATEMENTS OF INCOME

	Year Ended December 31,		
	1989	1988	1987
	(Dollars in millions, except per share amounts)		
Interest income:			
Mortgage portfolio, net of servicing fees	\$10,103	\$ 9,629	\$9,586
Investments and cash equivalents	977	597	257
Total interest income	11,080	10,226	9,843
Interest expense	9,889	9,389	8,953
Net interest income	1,191	837	890
Other income:			
Guaranty fees	408	328	263
Gain (loss) on sales of mortgages	9	12	(81)
Miscellaneous, net	60	69	53
Total other income	477	409	235
Other expenses:			
Provision for losses	310	365	360
Administrative	254	218	197
Total other expenses	564	583	557
Income before federal income taxes	1,104	663	568
Provision for federal income taxes:			
Current	358	285	203
Deferred	(61)	(129)	(11)
Total provision for federal income taxes	297	156	192
Net income	\$ 807	\$ 507	\$ 376
Per share: (1)			
Earnings:			
Primary	\$3.14	\$2.14	\$1.55
Fully diluted	3.10	2.11	1.54
Cash dividends . . . . .	.43	.24	.12

(1) Per share amounts reflect a three-for-one stock split effective in October 1989.

See Notes to Financial Statements

FEDERAL NATIONAL MORTGAGE ASSOCIATION

BALANCE SHEETS

Assets

	December 31	
	1989	1988
	(Dollars in millions)	
Mortgage portfolio, net	\$107,756	\$ 99,867
Investments	6,656	5,289
Cash and cash equivalents	5,214	2,859
Accrued interest receivable	1,064	939
Receivable from currency swaps	1,796	1,717
Acquired property and foreclosure claims, net	448	418
Other assets	1,381	1,169
Total assets	\$124,315	\$112,258

Liabilities and Stockholders' Equity

Liabilities:		
Debentures, notes, and bonds, net:		
Due within one year	\$ 36,346	\$ 36,599
Due after one year	79,718	68,860
	116,064	105,459
Accrued interest payable	2,424	2,173
Payable from currency swaps	1,355	1,150
Mortgagors' escrow deposits	346	353
Deferred federal income taxes	153	157
Other liabilities	982	706
Total liabilities	121,324	109,998
Stockholders' Equity (1):		
Common stock, \$2.10 stated value, no maximum authorization, issued—247,646,455 shares (1989) and 246,155,232 shares (1988)	520	517
Additional paid-in capital	787	777
Retained earnings	1,771	1,067
	3,078	2,361
Less treasury stock, at cost, 8,756,473 shares (1989) and 10,168,733 shares (1988)	87	101
Total stockholders' equity	2,991	2,260
Total liabilities and stockholders' equity	\$124,315	\$112,258

(1) Amounts and number of shares reflect a three-for-one stock split effective in October 1989

See Notes to Financial Statements

FEDERAL NATIONAL MORTGAGE ASSOCIATION

STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	1989	1988	1987
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	\$ 807	\$ 507	\$ 376
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for deferred federal income taxes	(61)	(129)	(11)
Provision for losses	310	365	360
Net cash (noncash) portion of amortization of purchase discount and loan fees	93	140	(116)
(Decrease) increase in accrued interest payable	233	(2)	(179)
(Increase) decrease in accrued interest receivable	(125)	(128)	93
(Gain) loss on sales of mortgages	(9)	(12)	81
Other increases (decreases), net	98	20	(8)
Net cash provided by operating activities	1,346	761	596
Cash flows from investing activities:			
Purchases of mortgages	(22,293)	(22,795)	(20,170)
Proceeds from sales of mortgages	2,992	5,012	5,020
Mortgage principal repayments, net of discount	10,544	10,031	14,580
Proceeds from disposition of foreclosed properties	519	812	830
Net increase in investments	(1,366)	(1,821)	(3,255)
Net cash used in investing activities	(9,604)	(8,761)	(2,995)
Cash flows from financing activities:			
Cash proceeds from issuance of debentures	23,567	14,285	17,641
Cash payments to redeem debentures	(12,698)	(14,002)	(17,563)
Cash proceeds from issuance of short-term debt	54,084	48,914	27,421
Cash payments to redeem short-term debt, net of discount	(54,241)	(40,732)	(24,542)
Cash proceeds from issuance of common stock	4	1	378
Cash payments for repurchase of common stock	—	(7)	(99)
Dividends paid	(103)	(57)	(29)
Net cash provided by financing activities	10,613	8,402	3,207
Net increase in cash and cash equivalents	2,355	402	808
Cash and cash equivalents at beginning of year	2,859	2,457	1,649
Cash and cash equivalents at end of year	\$ 5,214	\$ 2,859	\$ 2,457

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. All references to the number of common shares and per share amounts in the Notes to Financial Statements have been restated, unless otherwise noted, to reflect the three-for-one split of the Corporation's common stock and common stock warrants effective in October 1989.

Mortgage Portfolio

Mortgages and mortgage-backed securities ("MBS") 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 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 over the life of the related mortgages. The effect of adopting FAS 91 on net interest income and net income in 1987 was as follows:

	<u>1987</u>
	(Dollars in millions, except per share amount)
Increase in:	
Net interest income	\$ 570
Net income	290
Earnings per share (fully diluted)	1.19

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, interest rate, period of origination, and maturity). Factors used in determining estimates of future prepayments include historical prepayment data and expected prepayment performance under varying interest rate scenarios.

Guaranteed Mortgage-Backed Securities

The Corporation guarantees the timely payment of principal and interest on MBS. These securities represent beneficial interests in pools of mortgages or other MBS held in trust by the Corporation. The pools of mortgages or MBS are not assets of the Corporation, except when acquired for investment purposes, nor are the related outstanding securities liabilities of the Corporation; accordingly, neither is reflected in the accompanying balance sheets. The Corporation receives monthly guaranty fees for each MBS pool based on a percentage of the pool's outstanding balance.

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 chargeoffs, 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 and held for sale as a result of foreclosure is carried at the lower of the investment in the property or its estimated net realizable value. Interest carrying costs are deducted in calculating the 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 the sale of mortgages is recognized at the time of sale of the MBS to the extent the sale 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 mortgage interest rate received by the Corporation less the sum of the pass-through rate paid to the investor 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.

Securities Sold Under Agreements to Repurchase

The Corporation enters into sales of securities under agreements to repurchase substantially similar securities at a later date. Such transactions are treated as financings. The obligations to repurchase securities sold are reflected as liabilities on the balance sheets and the mortgage securities underlying the agreements remain in the asset accounts. The counterparty to the repurchase agreement acquires legal ownership of the securities transferred

Foreign Currency Translation

Foreign currency borrowings and the related receivables from currency swaps are translated at the market rates of exchange as of the balance sheet date.

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.

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

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 260.3 million, 240.8 million, and 243.7 million for the years ended December 31, 1989, 1988, and 1987, respectively.

Mortgage Portfolio, Net

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

	<u>1989</u>	<u>1988</u>
	(Dollars in millions)	
Single-family mortgages:		
First mortgages:		
Government insured or guaranteed	\$ 11,857	\$ 12,235
Conventional fixed-rate	66,804	60,997
Conventional adjustable-rate	22,020	21,040
Second mortgages	<u>1,614</u>	<u>1,561</u>
	<u>102,295</u>	<u>95,833</u>
Multifamily mortgages:		
Government insured	4,361	4,397
Conventional	<u>4,065</u>	<u>2,783</u>
	<u>8,426</u>	<u>7,180</u>
Total unpaid principal balance (1)	110,721	103,013
Less:		
Unamortized discount and loan fees	2,740	2,914
Allowance for losses	<u>225</u>	<u>232</u>
	<u>\$107,756</u>	<u>\$ 99,867</u>

(1) Includes \$11.7 billion and \$8.1 billion of Fannie Mae MBS held in portfolio at December 31, 1989 and December 31, 1988, respectively.

The total unpaid principal balance of loans in nonperforming status (those 90 days or more delinquent) was \$0.7 billion at December 31, 1989 and \$0.9 billion at December 31, 1988.

Commitments and Contingencies

Portfolio

The Corporation had mandatory delivery commitments outstanding to purchase \$2.3 billion of mortgages at an average net yield of 9.53 percent at December 31, 1989, compared with \$1.1 billion at an average net yield of 10.04 percent at December 31, 1988.

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

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. The Corporation had \$3.7 billion of such commitments outstanding at December 31, 1989, compared with \$1.0 billion at December 31, 1988.

At December 31, 1989, the Corporation had commitments outstanding to sell from portfolio \$0.5 billion of MBS with an average net yield of 9.60 percent, compared with \$1.0 billion of MBS with an average net yield of 10.23 percent at December 31, 1988.

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 to MBS investors, 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 \$228.2 billion at December 31, 1989, compared with \$178.3 billion at December 31, 1988. These amounts include \$133.9 billion at December 31, 1989 and \$94.1 billion at December 31, 1988 of securities (of which \$11.1 billion and \$11.2 billion, respectively, are backed by government insured or guaranteed mortgages) for which the Corporation has assumed the primary foreclosure loss risk.

At December 31, 1989, the Corporation had outstanding \$8.4 billion of mandatory delivery commitments to issue and guarantee MBS, compared with \$7.2 billion at December 31, 1988. At December 31, 1989, the Corporation also had commitments outstanding to issue and guarantee \$34.2 billion of MBS, upon delivery of the related mortgages by participating lenders at their option, compared with \$14.5 billion at December 31, 1988.

Master Commitments

The Corporation had \$16.6 billion of master commitments outstanding at December 31, 1989 to purchase loans for portfolio or issue MBS. There were no outstanding master commitments at December 31, 1988. Under a master commitment, a lender must convert to either a mandatory delivery MBS or portfolio commitment with the yield established at the time of conversion.

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 1987-1989 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, 1987	\$ 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	228	18	150	396
Provision	161	5	144	310
Net foreclosure losses charged-off	(147)	(10)	(86)	(243)
Transfers	(22)	—	22	—
Balance, December 31, 1989	<u>\$ 220</u>	<u>\$ 13</u>	<u>\$230</u>	<u>\$ 463</u>

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

	<u>1989</u>	<u>1988</u>
	(Dollars in millions)	
Mortgage portfolio, net	\$225	\$232
Foreclosure claims, net	8	14
Other liabilities	<u>230</u>	<u>150</u>
	<u>\$463</u>	<u>\$396</u>

Debentures, Notes, and Bonds, Net

The average cost of all debt outstanding at December 31, 1989 and 1988 (including the amortization of issuance costs and hedging results, and the effect of interest rate and currency swaps) was 9.04 percent and 9.20 percent, respectively. The average effective maturity of all debt outstanding was 47 months at December 31, 1989 and 43 months at December 31, 1988. This includes the effect of interest rate swaps but excludes \$1.0 billion and \$1.4 billion of investment agreements at December 31, 1989 and December 31, 1988, respectively. Investment agreements are general unsecured obligations that allow the investor to demand payment of all or part of the funds under agreed-upon circumstances. Because of this call feature, the average maturity of investment agreements is indeterminate. Interest paid during 1989, 1988, and 1987 was \$9.4 billion, \$9.3 billion, and \$9.1 billion, respectively.

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") currently requires that the maximum amount of the Corporation's general

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

obligations outstanding at any time, excluding those that are subordinated or secured, not exceed 20 times the sum of stockholders' equity, subordinated capital debentures, and reserves. At December 31, 1989, this ratio was 19.7:1.

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, 1989, the ratio was 0.8:1.

Borrowings Due Within One Year

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

	1989					1988				
	Outstanding at December 31		Average Outstanding During Year		Maximum Outstanding At Any Month End	Outstanding at December 31		Average Outstanding During Year		Maximum Outstanding At Any Month End
	Amount	Cost(1)	Amount	Cost(1)	Amount	Amount	Cost(1)	Amount	Cost(1)	Amount
(Dollars in millions)										
Securities sold under agree- ments to repurchase(2) ...	\$ 725	7.09%	\$ 1,178	7.77%	\$ 3,177	\$ 1,456	8.28%	\$ 372	5.78%	\$ 1,456
Short-term notes(3)	14,760	8.56	12,884	8.67	14,760	14,340	8.30	13,742	7.56	16,275
Master notes	132	8.20	171	8.62	345	186	8.70	144	7.19	267
Residential financing securities	6,141	9.00	6,214	9.14	6,648	5,115	8.46	4,031	7.76	5,115
Other short-term debt	407	8.90	1,086	8.68	1,250	1,053	8.33	278	7.80	1,053
Current portion of borrow- ings due after one year(4):										
Mortgage-backed bonds ...	9	9.02				11	9.02			
Investment agreements ...	2,325	8.44				1,939	8.16			
Long term—other	5	10.20				—	—			
Debentures(5)	10,401	9.56				11,262	10.30			
Medium-term notes(6)	1,006	8.60				599	8.68			
Zero coupon securities(7)	35	8.49				3	7.82			
Subordinated capital debentures	400	9.15				635	12.99			
Total due within one year ...	<u>\$36,346</u>	<u>8.90%</u>				<u>\$36,599</u>	<u>9.03%</u>			

- (1) Cost includes the amortization of discounts, premiums, issuance costs, hedging results and the effects of currency and debt swaps.
- (2) MBS underlying repurchase agreements had a carrying value of \$711 million and \$1,468 million at December 31, 1989 and 1988, respectively, and a market value of \$723 million and \$1,434 million at December 31, 1989 and 1988, respectively.
- (3) Net of \$263 million and \$404 million of unamortized discount at December 31, 1989 and 1988, respectively.
- (4) 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.
- (5) Includes unamortized premium of \$5 million and \$47 million at December 31, 1989 and 1988, respectively.
- (6) Includes unamortized premium of \$15 million and \$22 million at December 31, 1989 and 1988, respectively.
- (7) Net of unamortized discount of \$1 million and \$0.2 million at December 31, 1989 and 1988, respectively.

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, 1989, the Corporation had long-term interest rate swap agreements outstanding with an average remaining term of four years on notional amounts totaling \$2.1 billion, compared with an average remaining term of five years on notional amounts totaling \$2.4 billion for swap agreements outstanding at December 31, 1988. The weighted-average interest rate being received under these swaps was 8.20 percent and the weighted-average interest rate being paid was 10.26 percent at December 31, 1989, compared with 8.44 percent and 10.71 percent, respectively, at December 31, 1988.

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>1989</u>		<u>1988</u>	
	<u>Amount outstanding</u>	<u>Average cost</u>	<u>Amount outstanding</u>	<u>Average cost</u>
	(Dollars in millions)			
Mortgage-backed bonds, 1990-2002	\$ 46	9.72%	\$ 56	9.71%
Investment agreements, 1990-2012	1,127	7.39	1,687	7.81
Residential financing securities	821	8.96	—	—
Long-term—other, net of \$70 million of discount for 1989	376	9.84	—	—
Debentures, net of \$23 million of discount and premium for 1989 (\$95 million for 1988):				
1990	—	—	10,116	9.57
1991	13,734	8.32	13,211	8.32
1992	11,594	9.14	9,228	9.30
1993	8,469	8.99	6,806	8.90
1994	7,227	9.12	3,189	9.01
1995	7,182	10.44	6,889	10.49
1996-2006	23,123	8.72	11,845	8.67
2007-2019	1,635	9.78	1,363	10.12
	<u>72,964</u>	<u>8.98</u>	<u>62,647</u>	<u>9.11</u>
Medium-term notes, includes \$39 million of premium for 1989 (\$25 million for 1988), 1990-2019	1,014	8.85	935	8.76
Exchangeable debentures, 1991	450	12.66	450	12.66
Zero coupon securities, net of \$5,680 million of discount for 1989 (\$5,723 million for 1988), 1990-2014	621	10.41	540	10.45
Zero coupon subordinated capital debentures, net of \$6,403 million of discount for 1989 (\$6,435 million for 1988), 2019	347	10.22	315	10.22
Subordinated capital debentures, net of \$14 million of discount for 1989 (\$15 million for 1988):				
1990	—	—	400	9.15
1992	250	9.05	250	9.05
1997	250	7.44	250	7.44
1998	500	9.46	500	9.46
2002	266	9.21	265	9.21
2019	250	9.34	—	—
	<u>1,516</u>	<u>9.00</u>	<u>1,665</u>	<u>8.98</u>
Subordinated convertible capital debentures, 1996	1	4.43	11	4.43
	79,283	<u>9.00%</u>	68,306	<u>9.11%</u>
Adjustment for foreign currency translation	435		554	
	<u>\$79,718</u>		<u>\$68,860</u>	

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

The average cost includes the amortization of discounts, premiums, issuance costs, hedging results and the effect of currency and debt swaps. At December 31, 1989, principal amounts of debt maturing in the years 1991-1995 were \$15.4, \$12.2, \$9.2, \$7.4, and \$7.4 billion, respectively.

The Corporation has swap agreements that are linked to a specific debt issue (debt swaps). These swaps achieve a desired financing objective at a desired cost usually by converting floating-rate debt into fixed-rate debt. The cost and term of the specific debt issues include the effects of the swaps. At December 31, 1989, the notional amount of debt swaps outstanding totaled \$0.9 billion compared with \$1.2 billion at December 31, 1988.

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, 1989 and 1988, the U.S. dollar equivalent face amounts of these foreign currency obligations, translated at the then-current exchange rates, were \$1.8 billion and \$1.6 billion, respectively.

The following summarizes debentures that are redeemable at par at the option of the Corporation: \$0.2 billion, redeemable currently; \$1.3 billion, redeemable beginning in 1992; \$1.0 billion, redeemable beginning in 1993; and \$2.1 billion, redeemable beginning in 1994.

At December 31, 1989, the Corporation had outstanding \$3.7 billion of Indexed Sinking Fund Debentures ("ISFDs") at an average cost of 9.54 percent, compared with \$1.7 billion at an average cost of 9.30 percent at December 31, 1988. Such debentures are subject to mandatory redemptions after an initial non-redemption 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, the percentage to be redeemed 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 34.5 million common shares. Each warrant entitles the holder to purchase one share of common stock at \$14.75 until 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, 1989, 9,835 shares had been issued upon exercise of the warrants.

The Corporation issued \$1.2 billion and \$1.3 billion of medium-term notes in 1989 and 1988, respectively, at an average cost of 8.70 percent and 8.65 percent, respectively. Medium-term notes may be fixed rate, floating rate or zero coupon with maturities ranging from one day to thirty years. Interest and principal may be payable in U.S. dollars or a foreign currency. Medium-term notes totaling \$0.1 billion are redeemable at par at the option of the Corporation beginning in 1994.

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 ten 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 0.2 million shares of common stock at a price of \$6.54 per share, subject to adjustment in certain events. These debentures are redeemable at par, at the option of the Corporation. During 1989, 1988, and 1987, \$9.7 million, \$1.4 million, and \$1.1 million of debentures were converted into common stock.

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

Stockholders' Equity

On September 19, 1989, the Board of Directors authorized a three-for-one split of the Corporation's common stock and common stock warrants effective in October 1989. All the Corporation's employee stock-related plans were adjusted to reflect the split.

Transactions in common stock, additional paid-in capital, retained earnings, and treasury stock for the years 1987, 1988, and 1989 are summarized as follows:

	<u>Number of Shares Outstanding (1)</u>	<u>Common Stock</u>	<u>Additional Paid-in Capital</u>	<u>Retained Earnings (2)</u>	<u>Treasury Stock</u>	<u>Total Stockholders' Equity</u>
	(Dollars in thousands)					
Balance, January 1, 1987	73,761,885	\$461,026	\$451,651	\$ 269,432	\$ (21)	\$1,182,088
New shares issued	8,000,000	50,000	324,400	—	—	374,400
Shares repurchased	(3,271,200)	—	—	—	(98,752)	(98,752)
Conversions of convertible debentures	54,655	342	737	—	—	1,079
Treasury stock issued for stock options and benefit plans	180,388	658	31	—	3,589	4,278
Accrual for stock appreciation rights	—	—	187	—	—	187
Net income	—	—	—	375,924	—	375,924
Dividends	—	—	—	(28,689)	—	(28,689)
Balance, December 31, 1987	78,725,728	512,026	777,006	616,667	(95,184)	1,810,515
Shares repurchased	(231,600)	—	—	—	(6,913)	(6,913)
Conversions of convertible debentures	71,405	446	966	—	—	1,412
Treasury stock issued for stock options and benefit plans	96,620	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)
Balance, December 31, 1988	78,662,153	512,823	781,661	1,066,858	(101,037)	2,260,305
Three-for-one stock split ...	157,324,306	4,123	(4,123)	—	—	—
Conversions of convertible debentures	1,481,388	3,090	6,660	—	—	9,750
Treasury stock issued for stock options and benefit plans	1,412,300	—	674	—	13,661	14,335
Stock warrants exercised ...	9,835	21	125	—	—	146
Tax benefit for 1988 Employee Stock Purchase Plan	—	—	2,437	—	—	2,437
Net income	—	—	—	807,344	—	807,344
Dividends	—	—	—	(103,110)	—	(103,110)
Balance, December 31, 1989	<u>238,889,982</u>	<u>\$520,057</u>	<u>\$787,434</u>	<u>\$1,771,092</u>	<u>\$ (87,376)</u>	<u>\$2,991,207</u>

(1) Number of shares at December 31, 1987 and 1988 reflect a pre-split basis.

(2) The balance of retained earnings as of January 1, 1987 was restated by a reduction of \$411 million to reflect the retroactive implementation of FAS 91.

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 superseded 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 are payable one-half in common stock and one-half in cash. The contingent grants made for the 1990-1992, 1989-1991, and 1988-1990 award periods were 122,600, 313,751, and 430,500 performance shares, respectively. 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, 1987	1,772,955	\$ 4.94-\$12.02
Granted in 1987	364,950	\$ 9.44-\$14.40
Less: Exercised in 1987	(292,641)	\$ 4.94-\$ 7.98
Terminated in 1987	<u>(239,535)</u>	\$ 4.94-\$11.35
Balance, December 31, 1987	1,605,729	\$ 5.38-\$14.40
Granted in 1988	443,100	\$11.98-\$15.75
Less: Exercised in 1988	(213,213)	\$ 5.38-\$13.54
Terminated in 1988	<u>(51,933)</u>	\$ 7.98-\$12.02
Balance, December 31, 1988	1,783,683	\$ 5.38-\$15.75
Granted in 1989	218,550	\$40.56
Less: Exercised in 1989	(422,482)	\$ 5.38-\$15.75
Terminated in 1989	<u>(57,720)</u>	\$ 9.44-\$15.75
Balance, December 31, 1989	<u>1,522,031</u>	\$ 5.38-\$40.56

At December 31, 1989 and 1988, stock options on 482,639 shares and 616,011 shares, respectively, were exercisable.

In 1989, 4,173 shares of restricted stock (12,000 in 1988) were awarded, issued, and placed in escrow under the Stock Compensation Plan and the Restricted Stock Plan for Directors, 16,404 shares were recovered upon termination of nonvested participants, and 59,037 shares were released as vesting of participants occurred. Compensation expense is being recorded over the vesting period of the stock as services are performed.

The Corporation has an Employee Stock Purchase Plan that allows the Corporation to issue up to 9,000,000 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 1989, the Corporation granted each employee, excluding certain officers, the right to purchase in January 1990 up to 900 shares of stock. Under the 1989 offering, 1,514,490 shares were purchased at \$14.27 per share compared with 955,950 shares purchased in 1989 at \$9.08 per share under the plan's

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

1988 offering. The Board of Directors has approved a similar offering in 1990 for Fannie Mae employees that limits the number of shares to 300 per eligible employee at a price of \$25.71 per share.

In 1987, the Corporation adopted an Employee Stock Ownership Plan ("ESOP") for qualified non-officer 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 1989, the Corporation contributed \$1.2 million to the ESOP and accrued \$1.8 million that will be contributed in 1990.

Investments

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

	<u>1989</u>	<u>1988</u>
	(Dollars in millions)	
Federal funds (over 90 days)	\$5,158	\$4,125
Asset-backed securities	1,107	481
Municipal bonds	109	469
Other	<u>282</u>	<u>214</u>
Total	<u>\$6,656</u>	<u>\$5,289</u>

Income Taxes

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

	<u>1989</u>	<u>1988</u>	<u>1987</u>
	(Dollars in millions)		
Deferred commitment fees	\$ 22	\$ 28	\$ 76
Amortization of purchase discount	(59)	(72)	10
Losses (gains) on dispositions of mortgages	10	(3)	(16)
Provision for losses	(58)	(65)	(89)
Risk management activities	17	(24)	10
Benefits from tax-advantaged investments	13	13	14
Systems development costs	—	—	(8)
Other items, net	<u>(6)</u>	<u>(6)</u>	<u>(8)</u>
Total provision for deferred federal income taxes	<u>\$(61)</u>	<u>\$(129)</u>	<u>\$(11)</u>

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

	<u>1989</u>	<u>1988</u>	<u>1987</u>
Statutory corporate rate	34%	34%	40%
Tax exempt interest and dividends received deductions	<u>(7)</u>	<u>(10)</u>	<u>(6)</u>
Effective rate	<u>27%</u>	<u>24%</u>	<u>34%</u>

The Corporation is exempt from state and local taxes, with the exception of real estate taxes. The Corporation made federal income tax payments of \$222 million, \$257 million, and \$429 million in 1989, 1988, and 1987, respectively.

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

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 supersedes APB Opinion No. 11 and is effective for fiscal years beginning in 1992. Because of unresolved tax issues, it is not possible at this time to determine if FAS 96, when adopted, will have a material effect on Fannie Mae.

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.

With respect to the years 1979 through 1982, the U.S. Tax Court ruled in March 1988 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, with oral arguments held in January 1990. 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 Corporation has paid all amounts assessed and the associated accrued interest on both deficiencies.

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. The years 1986 through 1989 are subject to IRS audit.

Retirement Plans

All regular, full-time employees of the Corporation are covered by the Corporation's noncontributory retirement plan or by the contributory Civil Service Retirement Law. Benefits payable under the corporate plan are based on years of service and compensation using the average pay during three consecutive highest paid years of employment. The Corporation's 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.

The following table sets forth the corporate retirement plan's funded status and amounts recognized in the Corporation's financial statements at December 31, 1989 and 1988:

	<u>1989</u>	<u>1988</u>
	(Dollars in millions)	
Actuarial present value of benefit obligations:		
Accumulated benefit obligation, including vested benefits of \$23.9 million (\$19.8 million in 1988)	\$(29.4)	\$(24.2)
Projected benefit obligation for services rendered to date	\$(60.7)	\$(49.2)
Plan assets at fair value	74.5	65.5
Excess of plan assets over the projected benefit obligation	13.8	16.3
Unrecognized net gain from past experience different from that assumed and effects of changes in assumptions	(4.3)	(3.3)
Unrecognized prior service costs	2.1	1.7
Unrecognized net transition asset recognized over 18.25 years	(17.1)	(18.3)
Pension liability included in other liabilities	<u>\$ (5.5)</u>	<u>\$ (3.6)</u>
Net pension cost included the following components:		
Service cost-benefits earned during the period	\$ 5.2	\$ 4.7
Interest cost on projected benefit obligation	4.3	3.5
Actual return on plan assets	(9.7)	(11.0)
Net amortization and deferral	2.1	4.4
Net periodic pension cost	<u>\$ 1.9</u>	<u>\$ 1.6</u>

FEDERAL NATIONAL MORTGAGE ASSOCIATION

NOTES TO FINANCIAL STATEMENTS— (Continued)

The weighted-average discount rate and rate of increase in future compensation levels used for determining the actuarial present value of the projected benefit obligation were 7.5 percent and 7.0 percent, respectively, in both 1989 and 1988. The expected long-term rate of return on assets was 10 percent in both years. 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 the lesser of 12 percent of their base salary or the current annual dollar cap established and revised annually by the IRS, with the Corporation matching such contributions up to 3 percent. The Corporation contributed \$2.2 million in 1989, compared with \$2.1 million in 1988 and \$1.7 million in 1987.

The Corporation also has an Executive Pension Plan, which supplements for key senior officers the benefits payable under the retirement plan. Estimated benefits under the supplementary plan are accrued as an expense over the period of employment. Accrued benefits are funded through a trust.

In February 1989, the Financial Accounting Standards Board issued an Exposure Draft on "Employers' Accounting for Postretirement Benefits Other Than Pensions." The draft standard requires that the cost of retiree medical and other benefits be accrued over employees' working lives. Most firms, including Fannie Mae, currently record the cost of non-pension retiree benefits as they are paid. For Fannie Mae, these costs totaled less than \$1 million for each of the years 1987 through 1989. The draft standard requires a phased-in implementation beginning in 1992 and ending in 1997. Because of the relatively small size of the Corporation's workforce in relation to its assets and income, management does not expect that future implementation of the final standard will have a material adverse effect on earnings.

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.

	<u>1989 Quarter Ended</u>			
	<u>December</u>	<u>September</u>	<u>June</u>	<u>March</u>
	(Dollars in millions, except per share amounts)			
Net interest income	\$ 352	\$ 302	\$ 284	\$ 253
Guaranty fees	111	104	99	94
Gain on sales of mortgages	3	3	—	3
Miscellaneous income, net	10	22	20	8
Provision for losses	(75)	(75)	(80)	(80)
Administrative expenses	(74)	(63)	(61)	(56)
Income before federal income taxes	327	293	262	222
Provision for federal income taxes	(90)	(81)	(69)	(57)
Net income	<u>\$ 237</u>	<u>\$ 212</u>	<u>\$ 193</u>	<u>\$ 165</u>
Per share: (1)				
Earnings (fully diluted) (2)	\$0.90	\$0.80	\$0.75	\$0.66
Cash dividends	.14	.11	.10	.08
	<u>1988 Quarter Ended</u>			
	<u>December</u>	<u>September</u>	<u>June</u>	<u>March</u>
	(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: (1)				
Earnings (fully diluted)	\$0.63	\$0.55	\$0.51	\$0.42
Cash dividends	.08	.06	.06	.04

(1) Per share amounts reflect a three-for-one stock split that occurred in October 1989.

(2) The total of the four quarters does not equal the amount for the year because the amount for each period is calculated independently based on the weighted-average number of shares outstanding during that period.

FEDERAL NATIONAL MORTGAGE ASSOCIATION

INTERIM FINANCIAL STATEMENTS

(Unaudited)

CONDENSED STATEMENTS OF INCOME

	Nine Months Ended September 30,	
	<u>1990</u>	<u>1989</u>
	(Dollars in millions, except per share amounts)	
Interest income	\$8,995	\$8,164
Interest expense	<u>7,817</u>	<u>7,325</u>
Net interest income	1,178	839
Guaranty fees	388	297
Gain on sales of mortgages	5	6
Miscellaneous income, net	83	50
Provision for losses	(230)	(235)
Administrative expenses	<u>(209)</u>	<u>(180)</u>
Income before federal income taxes	1,215	777
Provision for federal income taxes	<u>(349)</u>	<u>(207)</u>
Net income	<u>\$ 866</u>	<u>\$ 570</u>
Earnings per share:		
Primary	\$ 3.31	\$ 2.24
Fully diluted	3.31	2.17
Cash dividends per share	.50	.29

CONDENSED BALANCE SHEET

	September 30, <u>1990</u>
	(Dollars in millions)
Assets	\$110,939
Mortgage portfolio, net	<u>17,416</u>
Other assets	<u>\$128,355</u>
Total assets	
Liabilities	
Debentures, notes, and bonds, net:	\$ 35,428
Due within one year	83,398
Due after one year	<u>5,802</u>
Other liabilities	124,628
Total liabilities	<u>3,727</u>
Stockholders' equity	<u>\$128,355</u>
Total liabilities and stockholders' equity	

FEDERAL NATIONAL MORTGAGE ASSOCIATION

CONDENSED STATEMENTS OF CASH FLOWS

	<u>Nine Months Ended September 30,</u>	
	<u>1990</u>	<u>1989</u>
	(Dollars in millions)	
Net cash provided by operating activities:	\$ 1,323	\$ 1,120
Cash flows from investing activities:		
Purchases of mortgages	(17,258)	(14,708)
Sales of mortgages	4,975	2,303
Mortgage principal repayments, net of discount	9,011	7,910
Net increase in other investments	(711)	(649)
Net cash used by investing activities	(3,983)	(5,144)
Cash flows from financing activities:		
Cash proceeds from issuance of debt	70,263	52,953
Cash payments to retire debt	(67,726)	(46,823)
Other	(133)	(66)
Net cash provided by financing activities	2,404	6,064
Net increase (decrease) in cash and cash equivalents	(256)	2,040
Cash and cash equivalents at beginning of period	5,214	2,859
Cash and cash equivalents at end of period	<u>\$ 4,958</u>	<u>\$ 4,899</u>

**NOTES TO INTERIM FINANCIAL STATEMENTS
(Unaudited)**

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the nine months ended September 30, 1990 are not necessarily indicative of the results that may be expected for the year ending December 31, 1990. For further information, refer to the audited financial statements and notes to financial statements that are presented elsewhere herein.

Commitments and Contingencies

The Corporation had outstanding commitments to purchase mortgages and to issue MBS as shown below:

	<u>September 30, 1990</u>
	(Dollars in billions)
Commitments to purchase mortgages:	
Mandatory delivery	\$ 2.1
Lender option	8.0
Commitments to issue MBS:	
Mandatory delivery	6.1
Lender option	65.1
Master commitments (1)	39.1

(1) Under a master commitment, a lender must convert to either a mandatory delivery MBS or portfolio commitment with the yield established at the time of conversion.

The Corporation also guarantees timely payment of principal and interest on outstanding MBS as summarized below:

	September 30, 1990
	(Dollars in billions)
Total outstanding	\$281.8
Amount for which the Corporation has primary foreclosure loss risk (1)	
Conventional	174.5
Government-insured or guaranteed	10.2

(1) The Corporation, however, assumes the ultimate risk of loss on all MBS.

Earnings Per Share

The weighted-average number of common shares outstanding used to compute fully diluted earnings per share were 261.9 million and 263.4 million for the nine months ended September 30, 1990 and 1989, respectively.