

Handbook: Thrift Activities
Subject: Secondary Marketing

Section: 470
TB 60

June 23, 1993

The Valuation of Purchased Mortgage Servicing Rights

RESCINDED

Summary: This Thrift Bulletin provides guidance on the fair market valuation of purchased mortgage servicing rights (PMSR) for regulatory capital purposes. The quarterly fair market valuation of PMSR is mandated by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), and by the regulatory capital requirements of the Office of Thrift Supervision (OTS). This Bulletin also provides guidance on the OTS requirements for annual independent fair market valuations of PMSR.

For Further Information Contact: Clarke Sanders, Project Manager, Policy Division 202-906-5654, Office of Thrift Supervision, 1700 G Street, NW, Washington, DC 20552 or your Regional Office.

Thrift Bulletin 60

Introduction

Mortgage servicing rights are the contractual rights to collect mortgage payments, maintain escrow accounts for the payment of taxes and insurance, and provide other services on behalf of the owner of the mortgages (investor) in exchange for a servicing fee and related float and ancillary income. PMSR are mortgage servicing rights that have been purchased or acquired by "table-funding" mortgages at closing or in a purchase business transaction. (Guidance for excess or retained mortgage servicing assets is contained in Thrift Bulletin 43.)

FIRREA, FDICIA, and the OTS' implementing regulations limit the amount of PMSR that savings associations may include in regulatory capital to the lower of: (1) 90% of current fair market value determined at least quarterly; (2) 90% of original cost; or (3) 100% of the remaining unamortized book value. The first of these three tests is man-

dated by FIRREA and FDICIA. The other two were imposed by the OTS.¹

In addition to the foregoing restrictions, PMSR equal to no more than 50% of an association's core capital may be included in calculating core and tangible capital. PMSR purchased, or under contract to be purchased, on or before February 9, 1990, however, are not subject to these concentration limitations and are thus "grandfathered." All PMSR, regardless of purchase date, are subject to the three part test described in the preceding paragraph and, thus, are subject to the valuation guidelines of this Bulletin.

This Bulletin provides the following guidance regarding fair market value determinations for PMSR:

1. **Independent Fair Market Valuation.** An independent (i.e. third party) fair market valuation should be obtained at least annually if the unamortized book value of PMSR exceeds 25% of an association's core capital. The OTS may also require independent PMSR valuations for troubled associations,

¹ The OTS plans to publish a final rule on "Regulatory Capital: Intangible Assets" later in 1993. We anticipate that the final rule will delete one of the three PMSR limits (i.e. the 90% of original cost limitation), and will also provide guidance on calculating unamortized book value.

even if the level of PMSR is less than 25% of core capital.

2. **Valuation and Appraisal Guidelines.** This Bulletin provides guidelines that institutions should follow for both quarterly and annual PMSR market valuations. Departures from these guidelines may result in the exclusion of PMSR from an association's regulatory capital.
3. **Definition of an Independent PMSR Appraiser.** Appraisers that have a past, current, or a planned future interest in the PMSR being appraised, or its financing or sale, as principal, agent, or broker will generally not be considered independent.

Valuation Guidelines

A "fair market" valuation of PMSR is required at least quarterly by FIRREA and FDICIA. The estimated fair market value of PMSR should be based on the prices currently paid for servicing rights that are similar to those being valued. Other values of PMSR, such as the economic value to the savings association owning the rights (where it differs from fair market value), are impermissible values for PMSR that are included in regulatory capital.

The estimated fair market value of a portfolio of PMSR is defined as

Thrift Bulletin

TB 60

the single net price that the portfolio would reasonably be expected to sell for in the current market between an informed buyer and a willing seller. The estimated fair market value of PMSR should be based on the assumption that the PMSR would be marketed in portfolios of a size and compositional structure that will bring the highest price, with the seller providing the customary representations and warranties.

Since no two PMSR portfolios are exactly the same, perfectly comparable PMSR trade data are not available. Moreover, PMSR sales data are not generally available to the public. Therefore, estimates of the fair market value of PMSR should be determined through a present value, or discounted cash flow analysis that is similar to current industry practice. Under this methodology, fair market value is determined by estimating the amount and timing of future cash flows associated with the servicing rights and discounting those cash flows using market discount rates.

The fair market value of PMSR is the present value of the expected income from the portfolio less the present value of the projected expenses. The income stream includes servicing fees, float income from payments and escrow accounts, and ancillary income. The expenses include general servicing costs, foreclosure costs, and interest expenses for funds advanced.

The following guidelines should be followed in estimating the fair market value of PMSR. Where there is a range between the high and low points for each guideline below, the average or mid-range should be used rather than the high or low end of the range unless significant support exists in the individual case to use another value.

1. Servicing Costs. General servicing costs include expenses for data processing, personnel, occupancy, foreclosure and REO servicing, escrow expenses for the payment of taxes and insurance, and any interest expenses. The costs of amortizing the purchase price of the PMSR are excluded from servicing costs to calculate market value.

Long-term servicing cost projections used in valuations should be comparable to those currently used by most market participants to value similar types of PMSR. Neither the servicing costs of the savings association owning the PMSR nor marginal cost estimates are appropriate for determining the market values required under FIRREA and FDICIA unless those costs are consistent with the marketplace. The costs of servicing for FHA and VA mortgages in GNMA pools should be shown separately in the valuation report since these costs are generally higher than for conventional mortgages.

2. Prepayment Estimates. The prepayment assumptions used to estimate market value should be based on long-term consensus or average prepayment estimates for mortgages with characteristics similar to those being serviced. In general, the prepayment estimates should represent the average prepayment estimates for pools of geographically dispersed mortgages made by the major mortgage market dealers (i.e. "national prepayment estimates"). National prepayment estimates for 15- and 30-year, FNMA/FHLMC and GNMA, fixed-rate mortgages can be obtained from various reporting services.

Historical rates of prepayment may be used as a basis to modify national prepayment estimates or as the basis to estimate future prepayments instead of the national prepayment estimates: (1) if national prepayment estimates are not available for a particular type of mortgage, (2) if the portfolio being valued is highly concentrated in certain geographical areas, or (3) if the appraiser can demonstrate that historical rates better indicate future prepayments for that portfolio than national prepayment estimates. Such historical data should come from recognized mortgage dealers, the federal secondary market agencies, the FHA Mortality Tables, generally accepted private reporting services, or the association's own documented long-term experience.

Historical prepayment experience used to base estimates of future prepayments should be for similar types of mortgages, should at a minimum cover twelve months (preferably thirty-six months), and should be documented or clearly referenced. Merely projecting that future prepayments will be the same as in the past is generally not acceptable without consideration of whether those prepayment rates are likely to continue. In all cases, the association will be responsible for justifying any prepayment estimates that deviate from the national prepayment estimates.

Prepayment rates should be expressed in terms of a "CPR" (constant percentage rate) or "PSA," a standard prepayment measure developed by the Public Securities Association. The use of the average life method or any measure other than CPR

or PSA is not acceptable. Exceptions to this rule may be made for non-standard mortgages such as multifamily and balloon-payment mortgages. All prepayment estimates used in valuations should be supported with documentation.

Computer models that use static or fixed estimates of future prepayments are normally preferred because they are the predominant method currently used in the PMSR secondary market. Models that use option adjusted spread (OAS) or vector prepayment projection methodology are generally acceptable to the OTS provided that those models produce values that are consistent with the PMSR secondary market.

3. **Discount Rates.** The discount rates used to value each segment of a portfolio should correspond to the rates currently demanded by investors for similar types of PMSR. In selecting discount rates for PMSR valuations, consideration should be given to such factors as mortgage type, agency program, expected life, market demand, geographic location, interest on escrow requirements, delinquency and foreclosure rates, tax services, and other market factors. The discount rates used by the association when the PMSR were purchased, the interest rate of the underlying mortgages, and the yield on interest-only strips should not be used to estimate current fair market value unless they correspond to the PMSR marketplace.
4. **Projected Interest Rates.** The interest rates used to project interest income from escrow, principal and interest (P&I), and prepayment float and to project

expenses for escrow and investor advances should be realistic, shown in the valuation, based on the average duration of each type of float or advance, and consistent with the Treasury yield curve.

5. **Escrow and Other Float.** The assumptions made as to the average yearly balance of escrow accounts per mortgage, the number of days of P&I float, and the number of days of prepayment float should all be shown separately in the valuation report. They should be based on the past experience of the portfolio of PMSR being valued and the remittance requirements of the investors.
6. **Delinquency and Foreclosure Rates.** Projected delinquency and foreclosure rates should be based on the actual experience of the portfolio of PMSR. When mortgages are less than 12 months old, the valuation should be based on the national or state averages of delinquency and foreclosure rates published by the Mortgage Bankers Association (MBA) for similar mortgages.
7. **Foreclosure Costs.** Foreclosure costs should be shown separately in the valuation report. They should be the anticipated costs and should reflect the differences in costs among types of mortgages (FHA, VA, or conventional) and, if material, their location, since states have different foreclosure laws.
8. **Growth of Escrows/Servicing Costs.** The rates used to estimate the growth of escrow accounts and servicing costs should be based on realistic long-term projections and not short-term experience. The rates of growth should be shown in

the valuation and supported by market practice and historical trends.

9. **Portfolio Segregation/Stratification.** Portfolios of PMSR should usually be segregated by mortgage type (fixed-rate or ARM, and conventional, FHA/VA, etc.), mortgage term (15 and 30 years), investor (FNMA, GNMA, FHLMC, private, etc.), recourse and non-recourse, and coupon interest-rate ranges. The stratification of pools by interest-rate ranges should generally encompass no more than a 50-basis-point range except for small percentages of the portfolio or for very small portfolios.
10. **Ancillary Income.** Ancillary income is generated by such items as late charges, insurance premiums, and assumption and pay-off fees. The yearly ancillary income per mortgage should be shown separately in the valuation report and should be based on the actual performance of the portfolio without an allowance for inflation and less any anticipated run-off as a result of sale. For PMSR portfolios less than 12 months old, industry averages of ancillary income as reported by the MBA may be used.
11. **Transfer Costs.** Transfer costs are the buyers' expenses of conducting due diligence on servicing portfolios prior to purchase and of transferring that servicing to the new servicer. These costs are included in the market bids of buyers and, therefore, must be included in the determination of fair market value even if no sale of the PMSR is ever intended. The costs used should reflect the current market estimates as reported by PMSR brokers. Sales expenses, including brokers' commissions, should not be included in trans-

Thrift Bulletin

TB 60

fer costs or in the PMSR valuation because they are not included in marketplace prices.

Other Valuation Guidelines

12. **Debt Leveraging.** Borrowing to finance the purchase of PMSR, or debt leveraging, increases the internal rate of return for PMSR buyers by lowering the investment needed to produce the same PMSR earnings. Debt leveraging, however, is not relevant to the calculation of the market value of PMSR.
13. **ARMs, GPARMs, Recourse, etc.** Relative to fixed-rate 1- to 4-family residential mortgages, the servicing and foreclosure costs as well as discount rates and prepayment estimates are generally higher for ARMs, Graduated-Payment ARMs (GPARMs), negative amortization mortgages, second mortgages, multifamily mortgages, mortgages not conforming to agency guidelines, wrap-around mortgages, and recourse servicing. Some types of PMSR, such as non-conforming GPARMs, are not readily marketable and, therefore, may have little fair market value. Each type of PMSR should be valued based on its unique costs, discount rates, prepayment estimates, and other factors.
14. **Book Value Limits.** Pools or packages of PMSR are sometimes obtained at below-market prices or for other reasons have minimal or no accounting cost basis. These pools may, nevertheless, be included in valuations in excess of their individual book value, however, the total amount of PMSR included in regulatory capital may not exceed 100% of the total remaining unamortized book value. (The value of retained or

excess servicing assets and mortgage servicing rights on the association's originated portfolio are not includable with PMSR for regulatory capital purposes.)

15. **Market Value of Hedging.** The value of any financial instruments that are used to hedge PMSR should not be included in the market value of PMSR. They have their own separate market values and are traded separately.
16. **Market Value of Insurance.** FNMA and FHLMC recourse servicing that includes recourse loss insurance or prepayment insurance for PMSR may be included in the determination of market value. The OTS permits the value of such policies (i.e. conversion of recourse PMSR to non-recourse) to be included in the value of PMSR, provided the cost of the insurance policy is deducted from servicing income or added to the per mortgage servicing cost of the PMSR portfolio. The OTS reserves the right to disregard this type of insurance if concerns exist about the insurance firm's ability to meet its financial obligations.
17. **Split PMSR.** PMSR whose ownership is shared by two or more parties in violation of servicing contracts should not be included in the appraised value or regulatory capital of either the buyer or the seller. (FNMA and FHLMC servicing contracts contain prohibitions against splitting the ownership of servicing.) If allowed under the servicing contract, split ownership servicing must always leave the servicer a minimum spread of no less than the generally accepted accounting principles (GAAP) "normal servicing fee" for the OTS to allow its inclusion in

regulatory capital. Servicing owned by two or more affiliated companies should have formal servicing agreements in place that specifically allow the split ownership of servicing and that provide for at least a normal servicing fee in order to be counted in regulatory capital.

18. **PMSR Not Included in Capital.** PMSR that is not included in regulatory capital does not have to be valued either annually or quarterly. However, all PMSR that is included in regulatory capital should be valued each quarter to comply with FIRREA and FDICIA.
19. **OTS NPV Model.** The servicing values from the OTS Net Portfolio Value (NPV) model should not be used as the fair market value of PMSR. The NPV model estimates the value of all mortgage servicing, including off-balance-sheet retained servicing, which is not allowed to be treated as regulatory or GAAP capital. Also, the value of the escrow and principal and interest float are included with deposits in the NPV model and not with servicing values.

Appraisal Guidelines

20. **Contents of PMSR Valuation Reports.** Valuation reports should be self-contained products that identify the portfolio being valued and provide all the data used in the calculation of each segment's fair market value. Valuations should explain the methodology used and state that its purpose is to estimate the current fair market value in compliance with these guidelines. Valuations should be supported with adequate documentation and should be

Thrift Bulletin

TB 60

- signed and dated by the appraiser. Independent valuations should also contain a statement of conformance with the Principles of Appraisal Practice and Code of Ethics by the American Society of Appraisers (ASA).
21. **Appraiser Due Diligence.** Appraisers are not required to perform on-site verifications of the association's PMSR computer tapes that are sent for valuation. Appraisers should, however, investigate any significant discrepancies or inconsistencies where there is a reasonable basis to doubt the accuracy of the information supplied by the association.
22. **Appraiser Qualifications.** PMSR appraisers should be experienced experts in valuing mortgage servicing rights. The qualifications and experience of the appraiser should be described in each valuation report.
23. **Independence of Appraisers.** In addition to the independence definition already given in item number three of the INTRODUCTION, independent PMSR appraisers should comply with the *ASA Principles of Appraisal Practice and Code of Ethics*. Among other things, these principles preclude appraisers from basing their appraisal fees on the amount of the appraisal value or related business, such as brokerage services performed for the association. Free appraisals or substantially reduced-price appraisals offered by firms

because they provide other services for the association are also not acceptable.

Separate valuation divisions or affiliated corporations of PMSR brokers or financiers currently used or who were used in the past to buy, sell, or finance parts of the PMSR portfolio being appraised generally will be considered independent appraisers if there is a clear separation and independence from the PMSR brokerage area. Consultants who are not brokers and brokers acting only as consultants or appraisers generally will be considered independent appraisers as long as they did not advise or assist the association on the purchase of more than 25% of the current dollar amount of PMSR being appraised.



—John F. Robinson
Acting Deputy Director
for Washington Operations