**Office of Federal Housing Enterprise Oversight (OFHEO)**

**NEWS RELEASE**

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**For Immediate Release**
September 22, 2004

## STATEMENT OF OFHEO DIRECTOR ARMANDO FALCON, JR. REGARDING FANNIE MAE ACCOUNTING REVIEW

"OFHEO has met with the Board of Directors of Fannie Mae and presented them with the findings to date of our accounting review.

"Now that the Board has had an opportunity to review these findings, I am today releasing the report to the public. We are working with the Board to resolve the issues raised in the examination."

**Report of Findings to Date Special Examination of Fannie Mae is attached.**

###

*OFHEO's mission is to promote housing and a strong national housing finance system by ensuring the safety and soundness of Fannie Mae and Freddie Mac.*

# Report of Findings to Date
# Special Examination of Fannie Mae




*Office of Compliance*
*Office of Federal Housing Enterprise Oversight*

September 17, 2004

***OFFICE OF FEDERAL HOUSING ENTERPRISE OVERSIGHT***
*1700 G STREET, NW, WASHINGTON, DC 20552 (202) 414-3800*
*Office of Compliance*

**MEMORANDUM**

**TO:** Armando Falcon, Jr., Director

**FROM:** Christopher H. Dickerson, Chief Compliance Examiner

**SUBJECT:** **Fannie Mae Special Examination**

**DATE:** September 17, 2004

Attached are the findings to-date of the special examination of Fannie Mae. The matters detailed in this report are significant and warrant your immediate attention.

This report is the result of a collective effort by the Office of Compliance, the Office of the Chief Accountant, and other OFHEO staff, as well as technical support provided by accountants from Deloitte & Touche, LLP. During our examination, we have reviewed more than 200,000 documents and e-mails, and have interviewed and taken sworn testimony from numerous current and former Fannie Mae employees.

Our examination is continuing and we will keep you apprised of our findings.

# Report of Findings to Date
# Special Examination of Fannie Mae




*Office of Compliance*
*Office of Federal Housing Enterprise Oversight*

September 17, 2004

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## INTRODUCTION AND EXECUTIVE SUMMARY

We are currently conducting a Special Examination of Fannie Mae's accounting policies, internal controls, and financial reporting processes. Although the examination is still in process, our findings to-date are serious and warrant a report at this juncture. This report details the Special Examination's concerns on the framework and conditions of Fannie Mae's accounting policies and internal controls, with a particular focus on two critical accounting areas: deferred price adjustments, and derivatives and hedging activities.

We have determined that Fannie Mae, in developing policies and practices in these critical areas, has misapplied Generally Accepted Accounting Procedures ("GAAP"), specifically *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases* ("SFAS 91") and *Accounting for Derivative Instruments and Hedging Activities* ("SFAS 133"). The misapplications of GAAP are not limited occurrences, but are pervasive and are reinforced by management. **The matters detailed in this report are serious and raise concerns regarding the validity of previously reported financial results, the adequacy of regulatory capital, the quality of management supervision, and the overall safety and soundness of the Enterprise.**

The problems relating to these accounting areas differ in their specifics, but they have emerged from a culture and environment that made these problems possible. Characteristics of this culture include:

- management's desire to portray Fannie Mae as a consistent generator of stable and growing earnings;
- a dysfunctional and ineffective process for developing accounting policies;
- an operating environment that tolerated weak or non-existent internal controls;
- key person dependencies and poor segregation of duties;
- incomplete and ineffective reviews by the Office of Auditing;
- an inordinate concentration of responsibility vested with the Chief Financial Officer; and
- an executive compensation structure that rewarded management for meeting goals tied to earnings-per-share, a metric subject to manipulation by management.

The tenor of earnings management is deeply ingrained at Fannie Mae and has given rise to accounting policies and practices that emphasize effects on earnings volatility, rather than faithfulness to GAAP. A key message by Fannie Mae to the investor community is management's ability to generate stable and growing earnings. This is evidenced by Fannie Mae's annual financial reports, with their recurring graphs of steadily increasing earnings against a backdrop of volatile interest rates. Less well known, but detailed in this report, is the fact that the desire by management to minimize earnings volatility was a central organizing principle in the development of key accounting policies.

Management also emphasized the stable earnings imperative in its communications to the Fannie Mae Board of Directors. In July 2003, even as the accounting problems of Freddie Mac were publicly emerging, Fannie Mae's Chief Financial Officer, Tim Howard, made a presentation to the Board that emphasized a "stable pattern of earnings" as a requirement for Fannie Mae if it were to be perceived as a low-risk Enterprise. Mr. Howard included in this presentation a

graph showing that the earnings of Fannie Mae were smoother than those of Freddie Mac and almost all other companies in the S&P 500.

Sound risk management practices can reduce the economic effects of volatile cash flows. However, management should not reduce earnings volatility through accounting policies and practices that do not comport with GAAP.

The key findings of our examination relating to SFAS 91, SFAS 133, accounting policy development, and internal controls are summarized below.

**Accounting for Purchase Discount and Premium and Other Deferred Price Adjustments (SFAS 91)**

**OFHEO has concluded that the accounting used by Fannie Mae for amortizing purchase premiums and discounts on securities and loans as well as amortizing other deferred charges is not in accordance with GAAP.** This is particularly significant, in that management, in the MD&A section of their Form 10-K, details their underlying application of amortization as it relates to SFAS 91, and also explains that the accounting estimates associated with deferred price adjustments are "critical accounting estimates."

However, despite the importance of premium and discount amortization to the financial statements of Fannie Mae, and despite the requirement of SFAS 91 to formulate best estimates in good faith, management intentionally developed accounting policies and selected and applied accounting methods to inappropriately reduce earnings volatility and to provide themselves with inordinate flexibility in determining the amount of income and expense recognized in any accounting period. In this regard, the amortization policies that management developed and the methods they applied created a "cookie jar" reserve. In addition, OFHEO found that management:

- deliberately developed and adopted accounting policies to spread estimated income or expense that exceeded predetermined thresholds over multiple reporting periods;
- established a materiality threshold for estimated income and expense, within which management could avoid making adjustments that would otherwise be required under SFAS 91;
- made discretionary adjustments to the financial statements, for the sole purpose of minimizing volatility and achieving desired financial results;
- forecasted and managed the future unrecognized income associated with misapplied GAAP;
- capitalized reconciliation differences as 'phantom' assets or liabilities and amortized them at the same speeds as 30-year fixed-rate mortgages;
- developed estimation methods that were inconsistently applied to retrospective and prospective amortization required by SFAS 91 for current and future periods;
- developed and implemented processes to generate multiple estimates of amortization with varying assumptions in order to select estimates that provided optimal accounting results;
- failed to properly investigate an employee's concerns regarding illogical or anomalous amortization results, along with that employee's further allegation of an intent to misstate reported income;

- tolerated significant weaknesses in internal controls surrounding the amortization process; and
- inappropriately deferred $200 million of estimated amortization expense in 1998, which had significant effects on executive compensation.

This report provides details on the thresholds established by management for recognizing – or not recognizing – amortization income or expense. Although management often refers to the amounts within these thresholds as "the functional equivalent of zero", our report details why, in fact, the ranges of these thresholds are quite large relative to the amounts of amortization normally recognized, how the ranges greatly facilitate the smoothing of income, and why these thresholds fail the test of GAAP compliance.

This report chronicles the events that led to the development of Fannie Mae's current amortization policies and practices. It describes how management, after experiencing unexpected increases in amortization expense in 1998, developed policies and practices to cushion the income statement against future surprises. In various memoranda, management openly expressed as an objective of its amortization policies and practices a desire to minimize earnings volatility. For example, a March 1999 memorandum from an employee in the Controller's Department described the benefits of a particular brand of software for modeling amortization, noting that the software allowed a user to "manipulate factors to produce an array of recognition streams", which "strengthens the earnings management that is necessary when dealing with a volatile book of business."

This statement is a clear acknowledgement that a balance sheet comprised of fixed-rate mortgages produces volatility. However, in testimony that is highlighted in this report, management sought to portray their amortization policies and practices as attempts to dampen "artificial volatility" that arises from the estimation process. Chief Financial Officer Tim Howard, who was the chief architect of Fannie Mae's amortization policy, attempted to justify the use of a discretionary threshold for recording amortization by asserting that a single point-estimate resulted in "spurious precision." In fact, said Controller Leanne Spencer, management's freedom to book a number within this range was useful to investors, because doing so helped eliminate "jerky moves."

Management asserts that the "artificial volatility" they seek to dampen arises from assumption risk. Because key assumptions, such as mortgage prepayment speeds, can change dramatically from period to period, estimates of amortization can likewise change dramatically. However, changes in prepayment assumptions are driven by actual changes in the economic environment, particularly changes in interest rates, which gives rise to volatility. **GAAP requires this volatility to be recognized and reported.**

In arguing against the use of a single point-estimate for amortization, management has also asserted that estimates of prepayments may vary widely at any particular point in time. For example, one can survey Wall Street dealers and observe a wide range of prepayment estimates, any of which could be justified for estimating amortization. In fact, management sometimes obtains many prepayment estimates from market sources and, for particular asset categories, selects a speed within the range of estimates to develop amortization factors. Management asserts that any prepayment estimate within the range can be justified, but in fact the flexibility to select any prepayment speed within a range simply enhances the ability of



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management to hit an earnings number. Because these estimates of amortization are also used in management's analysis of net interest income sensitivity, this practice has unfavorable safety and soundness implications that go beyond financial reporting.

The Special Examination also found that the process for estimating amortization was characterized by significant control weaknesses. Many of these control weaknesses are centered on the amortization system and the process for modeling amortization factors. **These control weaknesses undermine the process of amortization to such an extent that the accuracy of premium and discount amortization is questionable.** These control weaknesses include:

- inadequate segregation of duties and key person dependencies;
- modeling multiple runs to produce desired results;
- underlying data issues, including illogical or anomalous amortization factors; and
- a lack of written procedures, supporting documentation, and poor or non-existent audit trails.

This report also details an investigation performed by the Office of Auditing into allegations of amortization accounting irregularities raised by Roger Barnes, a former employee in the Controller's Department who left Fannie Mae in November 2003, and whose cooperation was important to our examination. The Special Examination found that Mr. Barnes's allegations were substantive, and that the Office of Auditing failed to adequately investigate the problems surrounding the amortization process that he raised.

**The consequences of the misapplications of GAAP and control breakdowns surrounding accounting for amortization are potentially large.** The management of Fannie Mae, by recording incorrect and incomplete amounts of premium and discount amortization, has misstated interest income over many reporting periods, as well as balance sheet accounts for unamortized premiums and discounts. Also, because amortization estimates ultimately flow to individual securities, gains or losses recorded on the sale or transfer of securities in previous periods are also questionable. Fannie Mae will need to devote considerable resources to determine the full magnitude of these errors.

**Accounting for Derivative Instruments and Hedging Activities (SFAS 133)**

Fannie Mae adopted SFAS 133, *Accounting for Derivative Instruments and Hedging Activities,* on January 1, 2001. The standard requires that all freestanding and certain embedded derivatives be carried on the balance sheet at fair value. Changes in the fair value of a derivative are included in earnings, which gives rise to earnings volatility. However, the hedge accounting provisions of SFAS 133 provide methods for offsetting the earnings effect of a derivative with a designated hedge transaction, if the combination meets specific criteria. **Hedge accounting is optional**. To qualify, entities must maintain extensive documentation and, in many instances, perform rigorous calculations. These stringent criteria presented significant challenges to Fannie Mae, which has a large and dynamic hedging program.

Fannie Mae had a strong desire to retain the *status quo* of accrual/synthetic instrument accounting in effect before SFAS 133, because synthetic instrument accounting provided smoother accounting earnings and greater predictability of reported financial results. To this

end, **Fannie Mae implemented SFAS 133 in a manner that placed minimizing earnings volatility and maintaining simplicity of operations above compliance with GAAP.** These goals, to an inordinate degree, influenced the development of Fannie Mae's approach to hedge accounting.

Indeed, in a March 2003 memorandum that took a retrospective look at Fannie Mae's SFAS 133 implementation, Jonathan Boyles, Senior Vice President for Financial Standards, wrote that the implementation of this standard was driven by management's desire to minimize earnings volatility, leverage off existing systems, and make the non-GAAP measure of "operating earnings" simple and easy to understand. Mr. Boyles wrote that these goals "were intertwined in many of the decisions we made during the implementation process." He went on to write that these decisions "were often the joint decisions of management including the CFO." He further noted that "in hindsight these decisions may not have been the best decisions given what we know now."

These drivers did, in fact, result in major problems for Fannie Mae's accounting for derivatives. In fact, **OFHEO has found that in many cases Fannie Mae does not assess and record hedge ineffectiveness as required by SFAS 133, and applies hedge accounting to hedging relationships that do not qualify.**

Fannie Mae's hedge accounting regime assumes that the vast majority of its hedging relationships are "perfectly effective"; this greatly simplifies operations, because SFAS 133 requires no effectiveness assessment or measurement of ineffectiveness for such relationships. However, SFAS 133 prescribes specific rules for assuming perfect effectiveness; hedges that do not meet these criteria require an assessment of effectiveness to qualify for hedge accounting and a measurement of ineffectiveness for qualifying hedge relationships. **OFHEO's analysis indicates that Fannie Mae has many hedging relationships that do not qualify as perfectly effective, yet have been treated as such.** Because Fannie Mae has not performed a proper assessment of hedge effectiveness for such hedges, these hedge relationships do not qualify for hedge accounting treatment. Thus, **the fair value changes for derivatives in these relationships should be recorded in earnings.**

Even if a hedge relationship qualifies for hedge accounting, "ineffectiveness" may exist. Ineffectiveness represents the extent to which changes in the fair value of a derivative are not perfectly matched with the changes in fair value or cash flows of the hedged item. The ineffective portion of changes in the derivative's fair value must be recorded in earnings. OFHEO has identified numerous instances in which **Fannie Mae has improperly ignored this ineffectiveness in hedge relationships or has failed to perform assessment tests.** For example, Fannie Mae often re-designates derivatives to different hedged items during the life of the derivative. OFHEO found that Fannie Mae incorrectly assumes that such derivatives are perfectly effective upon re-designation, even though the derivatives do not have a fair value of zero at the time of re-designation. This is required in order to assume perfect effectiveness or to receive matched terms accounting.

Further, **Fannie Mae has applied the "short-cut" method, or the "matched terms" method, for a broad range of hedge relationships where these methods are inappropriate.** The Enterprise has also applied its own definitions of "matched terms" in certain instances. Examples detailed in this report include:



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- receive-fixed swaptions hedging the fair value of non-callable debt;
- callable swaps hedging discount notes, which are incorrectly treated as perfectly effective without regard to the option value existing in the derivative but not the hedged item;
- swaps arising from the exercise of a swaption, which are treated as perfectly effective despite their non-zero fair value at inception;
- the modification of the requirement for matching of reset dates (in order to assume perfect effectiveness) between the hedged item and the swap in cash flow hedges to permit up to a seven day reset date mismatch;
- the modification of the requirement for matching of maturity dates (in order to assume perfect effectiveness) between the hedged item and the swap in fair value hedges to permit up to a 90 day mismatch; and
- the use of a "duration method" to assume perfect effectiveness in hedges of anticipated debt issuances. (In March 2004, Fannie Mae discontinued the use of duration matching as a method to assess the effectiveness of hedging anticipated debt issuances. The Enterprise admits that this methodology was a known departure from GAAP.)

When seeking to effectively terminate interest rate swaps, management often entered into offsetting swaps instead of buying back the existing swaps. However, the accounting for offsetting derivatives was inappropriate through the end of 2003, because **Fannie Mae incorrectly treated the original swap and the offsetting swap as perfect cash flow hedges and recorded changes in their fair value in accumulated other comprehensive income (AOCI), instead of earnings.** In the first quarter of 2004, Fannie Mae modified its accounting for these offsetting swaps prospectively. However, OFHEO believes that these offsetting swaps were not valid hedging relationships under SFAS 133 in past periods and should not have received hedge accounting after the execution of the second swap.

**OFHEO identified a number of problems with Fannie Mae's hedge documentation.** In several examples OFHEO reviewed, the documentation was ambiguous as to the nature of the hedging relationship or did not clearly identify the hedged risk, hedged item, or its probability of occurrence. In addition, OFHEO found instances where there was no contemporaneous hedge documentation, as well as instances where staff created hedge designations retroactively. Under SFAS 133, the lack of contemporaneous hedge designation documentation precludes a company from qualifying for hedge accounting. **This lack of documentation and the ability to create such documentation retroactively is not only a SFAS 133 violation, but is evidence of a poor control framework and is a significant safety and soundness problem.**

This report also provides details on an error made by Fannie Mae in accounting for changes in the time value and the intrinsic value components of purchased interest rate caps. The Enterprise discovered the error, corrected its methodology, and applied the new methodology only prospectively to new interest rate caps. The analysis and discussion in this report show that **Fannie Mae has incorrectly accounted for and reported this error in its financial statements.** Further analysis is necessary to make a precise determination of the complete financial statement impact on all periods affected.

For derivatives not qualifying for hedge accounting, fair value changes should be reflected in earnings in the period in which the value change occurred. As of December 31, 2003, the balance in "Accumulated Other Comprehensive Income" (AOCI) included approximately $12.2 billion in deferred losses relating to cash flow hedges. Furthermore, carrying value adjustments of liabilities relating to fair value hedges amounted to $7.2 billion as of that date. Fannie Mae's improper application of hedge accounting leads us to question the validity of the amount reflected in AOCI, as well as amounts reflected as carrying value adjustments, at any point in time after the adoption of SFAS 133. **The possible reclassification of such amounts into retained earnings could have a significant effect on Fannie Mae's regulatory capital.**

**Accounting Oversight**

As part of the Special Examination, we assessed various controls and processes surrounding Fannie Mae's accounting and financial reporting. These include processes for developing, approving, maintaining, and implementing accounting policies, as well as the segregation of duties and key person dependencies. In particular, we concentrated examination efforts on evaluating the roles and responsibilities of the Chief Financial Officer, executives in the Controller's Department, and controls that support the integrity of the financial reporting process.

**The failure by management to properly implement critical accounting policies is due in part to the lack of a sound framework for developing these policies.** Fannie Mae often relies on a few individuals to make key decisions on critical accounting policies and practices. This report documents how management failed to establish an internal control system to ensure that accounting policies are appropriately developed and reviewed.

A prime example of this failure is the process for developing the key document relating to SFAS 91 accounting. OFHEO found that Fannie Mae's *Purchase Premium and Discount Amortization Policy* was developed without input from the Financial Standards, which is the group in the Controller's Department normally responsible for setting accounting policy. Indeed, the head of that group, Jonathan Boyles, testified that key provisions of that document do not comply with GAAP.

Our report documents that Fannie Mae's external auditor, KPMG, is often viewed within the Enterprise as the final arbiter of compliance with GAAP. However, it is ultimately the responsibility of management to determine sound accounting policies for the Enterprise – the burden of management can not be shifted to the external auditor. OFHEO views this reliance on the external auditor to determine the propriety of accounting policy as an indication of inadequate technical expertise within the Controller's Department. OFHEO found that the accounting policy review process does not provide reasonable assurance that the accounting policies adopted by the Enterprise are in compliance with GAAP.

**The control weaknesses that we identified in Fannie Mae's accounting policy development process have contributed to accounting policies that do not comply with GAAP.** Additionally, the Special Examination found that a lack of formal procedures for accounting policy development has resulted in incomplete disclosure of critical accounting policies by the Chief Financial Officer to the Audit Committee of the Board of Directors.

A cornerstone of sound corporate oversight is the control structure itself. It is management's responsibility to ensure that Fannie Mae operates in a safe and sound manner and has proper segregation of duties, an adequate level of controls to support its key business processes, and clear and appropriate accounting policies. In addition, it is the responsibility of management to ensure that personnel in key control functions are competent and qualified to execute their responsibilities. In this regard, OFHEO found that a combination of heavy workloads, weak technical skills, and a weak review environment contributed to the development of key person dependencies and inadequate segregation of duties.

**The Special Examination found that the Chief Financial Officer, Tim Howard, failed to provide adequate oversight to key control and reporting functions within Fannie Mae.** Mr. Howard oversees the Controller's Department, which does not possess the skills required to ensure that Fannie Mae has appropriate accounting policies, the resources to appropriately implement such policies, nor an effective system of internal controls. In addition, the Chief Financial Officer significantly influences the evaluation of the head of the Office of Auditing, and makes compensation recommendations for him. This decreases the independence and effectiveness of the internal audit function and is inappropriate.

With respect to key person dependencies, we found that the Chief Financial Officer also serves as the Chief Risk Officer of Fannie Mae, and is directly responsible for overseeing the Enterprise's Treasury and Portfolio Management functions, in addition to the Controller's Department. **The combination of these responsibilities does not provide the independence necessary for an effective Chief Risk Officer function.** We further found that Mr. Howard was instrumental in setting financial targets as Vice Chairman, and had the authority to meet these targets as Chief Financial Officer.

Additionally, we found inherent conflicts in the roles assigned to key managers and executives. For example, Janet Pennewell, Senior Vice President for Financial Reporting and Planning, has the ability to affect the amounts of reported net income in order to achieve results that her group forecasted. In the critical area of purchase premium and discount amortization, the Special Examination found that one director, Jeff Juliane, has responsibility for modeling, reporting, and accounting.

Fannie Mae's dysfunctional accounting policy development, key person dependencies, and poor segregation of duties were major contributors to the accounting failures and the safety and soundness problems detailed in this report.

**ACCOUNTING FOR PURCHASE DISCOUNT AND PREMIUM AND OTHER DEFERRED PRICE ADJUSTMENTS UNDER SFAS 91**

OFHEO has concluded that Fannie Mae's accounting for the amortization of purchase premiums and discounts on securities and loans as well as the amortization of other deferred charges was not in accordance with Generally Accepted Accounting Principles ("GAAP").

Specifically, the Enterprise's method of recording adjustments for the difference between the cumulative life-to-date amortization (which was based upon the previous estimated lives) and what that amortization should be (based upon current estimated lives of the underlying mortgage assets) does not comply with the requirements of Statement of Financial Accounting Standards Number 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases* (SFAS 91). The Enterprise's determination of prospective amortization also does not comply with GAAP.

SFAS 91 is highlighted as a critical accounting policy in the Enterprise's 2003 Form 10K filed with the Securities and Exchange Commission. The MD&A section of the Form 10K details Fannie Mae's underlying application of amortization as it relates to SFAS 91, and also explains that the accounting estimates associated with amortization of deferred price adjustments are "critical accounting estimates."

Despite its importance to the Enterprise's financial statements and despite the requirement to formulate best estimates in good faith, Fannie Mae intentionally developed accounting policies, and selected and applied accounting methods, to inappropriately reduce earnings volatility and provide management with the flexibility to determine the amount of income and expense recognized in any accounting period. In this regard, Fannie Mae developed policies and methods to create a "cookie jar" reserve. More specifically, management of the Enterprise:

- Failed to apply the accounting treatment required by SFAS 91 to REMIC[1] securities held in its portfolio until 1998, even though SFAS 91 became effective in 1988.

- Inappropriately deferred $200 million of estimated expense in 1998, and established and executed a plan to record this expense in subsequent fiscal years. Furthermore, the deferral of such amount enabled management of the Enterprise to receive 100% of their annual bonus compensation. Without such deferral, no bonus would have been paid out.

- Undertook a concerted effort to develop and adopt accounting policies that would enable the Enterprise to spread income or expense over multiple reporting periods.

- Applied a materiality threshold to estimated income and expense, within which the Enterprise could avoid making adjustments that would otherwise be required under SFAS 91.

[1] Real Estate Mortgage Investment Conduit, as defined by Barron's Dictionary of Finance and Investment Terms 2003, is a pass through vehicle created under the Tax Reform Act of 1986 to issue multi-class mortgage backed securities.

- Made discretionary adjustments to the financial statements, for the sole purpose of minimizing volatility and achieving desired financial results.

- Forecasted and managed unrecognized income and expense to measure and maintain a "cookie jar" reserve.

- Recorded reconciliation differences and other errors as 'phantom assets and liabilities'. These phantom assets and liabilities were then amortized in accordance with a 30-year conventional mortgage proxy life.

- Developed estimation methods that were inconsistently applied to retrospective and prospective amortization.

- Applied discretion to the selection of market rate assumptions in order to achieve desired accounting results.

- Developed and effected capabilities to iteratively generate and evaluate estimates under varying assumptions, in order to obtain desired outcomes.

- Incorrectly and inconsistently applied adjustments to the estimate of amortization.

- Failed to properly investigate an employee's concerns regarding illogical or anomalous amortization results, and allegations of an intent to misstate reported income.

- Tolerated significant weaknesses in internal controls that undermined control objectives, maintained inadequate segregation of duties, and impeded the review and oversight of accounting processes and results.

### ***Requirements of SFAS 91***

SFAS 91[2] was issued to establish consistent accounting for nonrefundable fees and costs associated with lending activities. The scope of SFAS 91 includes premiums, discounts, and other deferred purchase and guarantee fee price adjustments (collectively "deferred price adjustments"), and requires that they be recognized as an adjustment to income using the effective yield method. This method requires that a company estimate a constant effective yield for (e.g., loans and mortgage-backed securities (MBS)) each time a company reports its financial results.

The accounting standard requires that purchases of loans and MBS be recorded at the net purchase price, taking into account premiums, discounts and other deferred purchase and

[2] Statement of Financial Accounting Standards No. 91 Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases, effective December 1988.

guarantee fee price adjustments.[3] These price adjustments are recognized as an adjustment of yield over the life of the loan or security. In determining an estimate of the appropriate adjustment of yield, a company would need to consider the anticipated rate of prepayment for the associated loans and securities to the extent they are subject to prepayment.[4]

In addition, if a difference arises between the prepayments anticipated and the actual prepayments experienced, the effective yield must also reflect the actual payments to date, and a new estimate of anticipated future payments needs to be made. The difference between the revised estimate of amortization and the actual recorded amortization is required to be booked as an adjustment to interest income immediately. SFAS 91 also requires disclosure of anticipated prepayments and significant assumptions underlying the prepayment estimates.

The key phrase in the guidance for SFAS 91 is the term "constant effective yield." This means, for instance, assuming no changes in the estimated life of an instrument, that the effective yield on an investment would be the same for each reporting period in the life of the instrument. The guidance on this process is also provided by SFAS 91 as follows:

> Except as stated in the following sentence, the calculation of the constant effective yield necessary to apply the interest method shall use the payment terms required by the loan contract, and prepayments of principal shall not be anticipated to shorten the loan term. If the enterprise[5] holds a large number of similar loans for which prepayments are probable and the timing and amount of prepayments can be reasonably estimated, the enterprise may[6] consider estimates of future principal prepayments in the calculation of the constant effective yield necessary to apply the interest method. If the enterprise anticipates prepayments in applying the interest method[7] and a difference arises between the prepayments anticipated and actual prepayments received, the enterprise shall recalculate the effective yield to reflect actual payments to date and anticipated future payments. **The net investment in the loans shall be adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the loans. The investment in the loans shall be adjusted to the new balance with a corresponding charge or credit to interest income.** [Emphasis added] Enterprises that

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[3] Guarantee fee price adjustments include "buy-ups" – negotiated up-front cash disbursements from the Enterprise to lenders in return for a higher Enterprise guarantee fee, and "buy-downs" – up-front cash receipts from lenders in return for a lower Enterprise guarantee fee.

[4] A mortgage is typically subject to prepayment. Most of the loans and securities held by Fannie Mae are mortgage related and therefore are subject to prepayment.

[5] In this context enterprise is used generically and does not refer specifically to Fannie Mae.

[6] Alternatively, if an enterprise chooses *not* to use estimates of prepayments, the amortization period could be the contract period (e.g., loan term). However, if the contract period is used, large spikes in amortization could occur if the amortization period is shortened due to prepayment. For instance, if a loan prepaid early, all of the unamortized amounts would have to be immediately recognized in the income statement.

Because mortgages and mortgage-backed securities generally can be prepaid at any time, using the contract period could lead to significant fluctuations in amortization (for instance if rates fall precipitously and prepayments speed up due to refinancing) which makes this an unpopular option.

[7] "Interest Method" is terminology that also refers to the method for determining a constant effective yield.



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> anticipate prepayments shall disclose that policy and the significant assumptions underlying the prepayment estimates.[8]

Thus, as time passes, new estimates of the estimated life of an instrument can be developed, and the amount of amortization needs to be changed both *retrospectively* (that is what is meant by the guidance above which states in part, "adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the loans") and *prospectively* (by changing the rate of amortization going forward).

The accounting guidance on how to estimate prepayments for purposes of calculating interest amortization is provided in question 52 in the Q&A on SFAS 91[9]:

> Q--If a lender meets the requirements of paragraph 19 for considering principal prepayments in calculating constant effective yield, what factors should be considered in estimating those principal prepayments?
>
> A--The lender should consider historical prepayment data in making its estimate of future prepayments. Also, the lender should consider external information, including existing and forecasted interest rates and economic conditions and published mortality and prepayment tables for similar loans. If periodic changes in estimates occur or actual prepayments are different from estimated prepayments, an adjustment will be necessary.

In a large mortgage portfolio, the accounting for amortization could lead to significant volatility for two reasons:

- SFAS 91 requires that adjustments should be recorded into income when the estimated amortization period changes. This is significant because the amount of such adjustment is a *cumulative life-to-date* amount.
- The estimated life of a mortgage loan or mortgage-backed security fluctuates constantly due to changes in interest rates, changes in forecasts of prepayments and other factors.

**In subsequent sections of this report we will demonstrate how Fannie Mae established an amortization policy that would allow the Enterprise to avoid current period volatility, and would further provide management with the latitude to shift income and minimize the potential for prospective volatility.**

A hypothetical example of the application of SFAS 91 was provided to the Audit Committee of the Board of Fannie Mae on November 17, 2003 by Ms. Leanne Spencer, SVP Controller.[10] The

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[8] SFAS 91, Application of the Interest Method and Other Amortization Matters, paragraph 19.

[9] "A Guide to Implementation of Statement 91 on Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases: Questions and Answers", published by the FASB

[10] Fannie Mae Audit Committee Update, Critical Accounting Policy, Deferred Price Adjustments, by Leanne Spencer, November 17, 2003, FMSE 015610-015623
It should be noted that, pursuant to SFAS 91, prepayment can only be forecasted for a pool of loans. A single security has been used for this illustration as an example only.

example is based upon a $100,000 loan that is purchased at a 2% discount. The discount of $2,000 would be recorded as additional interest income over the estimated life of the loan with an offsetting increase to the recorded amount of the loan.

Table 1 of the example below shows how the constant effective yield method of amortization would translate into amortization of the discount over the originally estimated life of the loan.

Table 2 of the example is based on an assumption that at the end of the fifth year the estimated life of the instrument is shortened from 10 years to 7 years. This table shows what the amortization would have been if the estimated life of the instrument had *originally* been estimated to be 7 years. The difference between the two "Inception to-date" amounts of amortization at the end of the fifth year is the amount of income to be recognized ($1,587-$1,400 = $187). In addition, the future amortization periods in table 2 show that there are only two more years of amortization to be recorded, and that the amounts to be recorded (in years 6 and 7) have been adjusted accordingly.

**Table 1**

| Original Est. Life | Discount Amortization | Inception to-date | Effective Yield |
|---|---|---|---|
| 1 | $333 | | 6.4618% |
| 2 | $308 | | 6.4618% |
| 3 | $282 | | 6.4618% |
| 4 | $254 | | 6.4618% |
| 5 | $224 | $ 1,400 | 6.4618% |
| 6 | $192 | | 6.4618% |
| 7 | $158 | | 6.4618% |
| 8 | $122 | | 6.4618% |
| 9 | $84 | | 6.4618% |
| 10 | $43 | | 6.4618% |

**Table 2**

| Adjusted Est. Life | Adjusted Discount | Inception to-date | Effective Yield | Inception to-date adjustment |
|---|---|---|---|---|
| 1 | $373 | | 6.5030% | |
| 2 | $347 | | 6.5030% | |
| 3 | $319 | | 6.5030% | |
| 4 | $290 | | 6.5030% | |
| 5 | $258 | $1,587 | 6.5030% | $187 |
| 6 | $225 | | 6.5030% | |
| 7 | $189 | | 6.5030% | |

*Presentation to Fannie Mae Audit Committee: Critical Accounting Policy, Deferred Price Adjustments, by Leanne Spencer dated November 17, 2003, FMSE 015610-015623*

The $187 in this example is calculated as the difference between the cumulative life-to-date amount of interest amortization of $1,400 (what was already recorded based upon a previous estimated life of 10 years) and what the amortization should be: $1,587 (based upon the new estimated life of 7 years).

As mentioned previously, SFAS 91 requires that the amount of amortization income or expense for prior periods caused by a change in the set of assumptions be recorded into income *immediately* (in this example $187 needs to be recorded at the end of year 5).

We have used the information in the tables above to chart the effect that this would have on the discount amortization:



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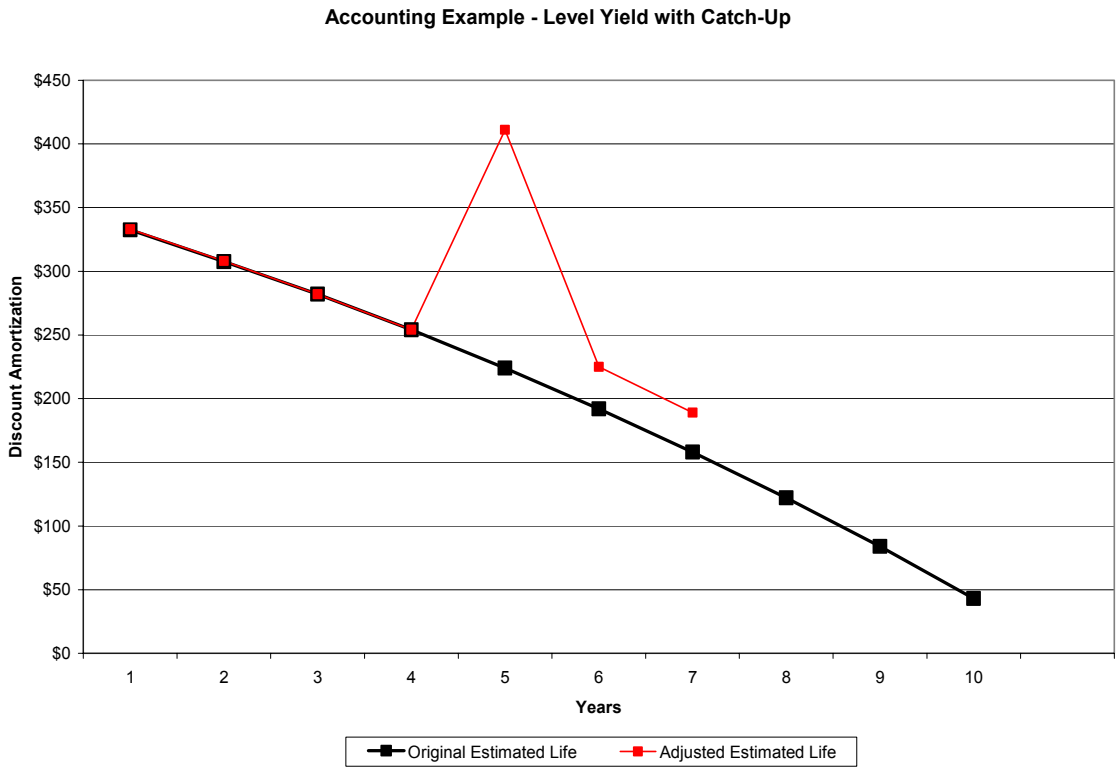


As the graph above shows, the recording of the $187 of retrospective amortization in the year that the estimated life is shortened from 10 years to 7 (in this case year 5) significantly increases the volatility of the amount of amortization. OFHEO has concluded that this is exactly the type of volatility that Fannie Mae was trying to avoid in designing their amortization policy.[11]

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[11] OFHEO Interview, Ms. Janet Pennewell, VP Financial Reporting & Planning, June 15, 2004, pp. 16-18
Q: What is arbitrary volatility in earnings?
A: Arbitrary volatility, in our view, was introduced when--I can give you an example of what would cause, in our view, arbitrary volatility. If your constant effective yield was dramatically different between one quarter and the next quarter because of an arbitrary decision you had or view--changing your view of long-term interest rates that caused a dramatic change in the constant effective yield that you were reporting, you could therefore be in a position where you might be booking 300 million of income in one quarter and 200 million of expense in the next quarter, introduced merely by what your assumption about future interest rates was. And to us that was arbitrary volatility because it really just literally because of your view, your expectation of interest rates and the way that you were modeling your premium and discount constant effective yield, you would introduce something into your financial statements that, again, wasn't very reflective of how you really expect that mortgage to perform over its entire expected life, and was not very representative of the fundamental financial performance of the company.
OFHEO Interview, Mr. Tim Howard, EVP Chief Financial Officer, August 5, 2004, pp. 120-121
Q: Do you have a specific understanding of the individual that approved this policy for the company?
A: Well, again, it would have been Jonathan Boyles who would have been our subject matter expert. Leanne technically approved it as the Controller, and I concurred. KPMG also reviewed this and opined that it was GAAP.
Q: So, specifically, this policy was recommended by Jonathan Boyles?
A: I'm not sure who recommended it. I was involved in the development of the policy. There was a lengthy process where we looked at many different ways to deal with the fact that estimating the life of a



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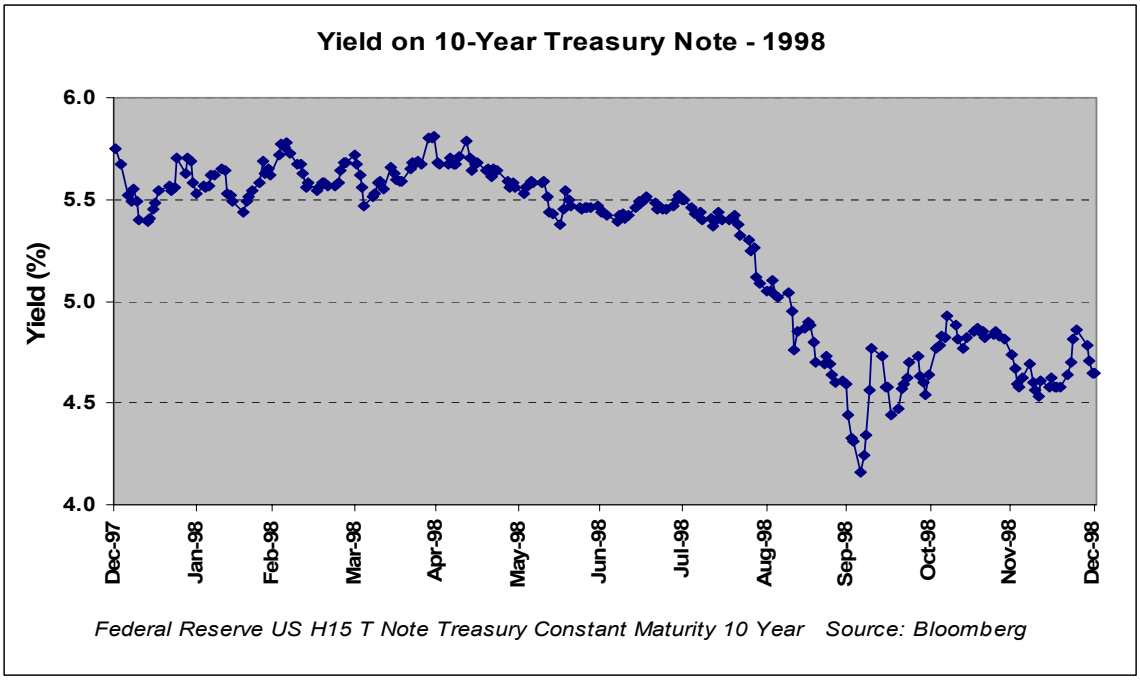
***Policy and Infrastructure Development***

## Events of 1998 and 1999

*Fourth Quarter of 1998*

The genesis for many of Fannie Mae's philosophies, policies and methods began at a time of financial stress for the American economy. In the third quarter of 1998, the Russian Financial Crisis (among other things) caused dramatically lower interest rates. The resulting interest rate environment increased the propensity of consumers to prepay their existing home mortgages and refinance them at more favorable rates.

The following chart illustrates the dramatic shift in rates during 1998:




The manifestation of faster prepayments adversely impacted the Enterprise. The impact of changing rates of prepayments on deferred price adjustments is a function of cumulative life to date amortization itself, and whether prepayment rates are increasing or decreasing, and whether aggregate premiums are greater or lesser than aggregate discounts with respect to the associated loans and securities.[12] Since prepayments were increasings, Fannie Mae's amortization models showed that an estimated expense of approximately $400 million had been incurred. This estimated expense was the adjustment necessary to recognize the impact of

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mortgage has inherent uncertainties, and we wanted to come up with a policy that was consistent with GAAP, that minimized the potential for introducing unnecessary volatility based on what, to me, would have been arbitrary assumptions that would change substantially over time and therefore not be reflective of the economic substance of the transactions being accounted for.

[12] Faster prepayments generally result in losses for a portfolio where aggregate premiums exceed aggregate discounts, and gains where aggregate discounts exceed aggregate premiums. Slower prepayments have the opposite affect.

changing prepayments on deferred price adjustments, consistent with the constant effective yield calculation required under GAAP. **Rather than recognizing the full amount of this estimated adjustment to income, Enterprise management decided to defer recognizing approximately one half (or $200 million) of the estimated expense.**[13] The $200 million was known within the Enterprise as the "*catch-up*". In both previous and subsequent reporting periods, differences between amounts estimated versus the amount previously recorded, were consistently referred to within the Enterprise as the catch-up. OFHEO has further concluded that Fannie Mae's methods for determining the catch-up were also inconsistent with the requirements of SFAS 91.

As described throughout this report, OFHEO has concluded that there a variety of reasons why the "catch-up" calculation ***would not*** produce results similar to those required by the retrospective adjustment required by SFAS 91. However, the term "catch-up" is used throughout this report in order to provided context and factual information related to the preliminary results of our examination.

In their testimony, management explained that the deferral of this expense was necessitated by limitations in models and insufficient infrastructure that caused the estimate of expense to be overstated. However, the Enterprise has not provided OFHEO with any credible analysis[14] which supports the recording of only half of the calculated catch-up amount. In fact, information received during the examination directly contradicts the explanations which management provided. Both Ms. Leanne Spencer, Controller, and Mr. Tim Howard, Chief Financial Officer indicated that one of the reasons for not recording the additional $200 million of amortization expense related to the fact that not all REMIC securities could be modeled individually.[15] In contrast, records provided to OFHEO indicate that, upon increasing the

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[13] OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, pp. 34-36
Q: What was the potential impact of the 200 million difference on earnings?
A: I would like to give you some background on 1998 –
Q: Sure.
A: […] By the end of the year--by the end of the year, as we moved to the end of the year, we took an adjustment of over $200 million into our financial--into our financial statements. We had a remaining balance of approximately 200 million which our auditors were very comfortable with. We were very comfortable with. […]

[14] Memorandum from Mr. Jeff Juliane to Ms. Leanne Spencer, Subject: Income Risks from Amortization Issues, dated July 14, 1999, FMSE-SP 003103.

[15] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 211-212
Q: You mentioned the inadequacy in the system or your ability to deal with the REMIC at the time. What's the relevance of that to the determination of the catch-up adjustment in '98?
A: We believed that the REMIC book – that the expense that needed to be booked to reflect expected amortization in the REMIC book was overstated based on the inadequacies of the system. We were in the process of undertaking a project to do loan level detail, or at least security class level detail of the REMIC book. And as we completed that, our basic instinct on the nature of that book turned out to be correct. And once we reflected that in actuals later on – don't know if it was '99; I think it was – that also proved out to be true. So that part was factually verified. The rest was situational.
OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, pp. 34-37
Q: What was the potential impact of the 200 million difference on earnings?
A: I would like to give you some background on 1998 –
Q: Sure.
A: In 1998, particularly as relates to the second half of the year, interest rates were extremely volatile. You had global economic meltdown occurring, Russian financial crisis, so you had a very precipitous drop

percentage of REMIC securities which could be modeled, the amount of the catch-up expense amount actually *increased*.[16]

Lastly, in performing their audit of the Enterprise's 1998 financial statements, Fannie Mae's independent auditor, KPMG, identified the $200 million deferred expense (the unrecorded amount) as an audit difference.[17]

**Despite their insistence that the estimate of loss was overstated, Fannie Mae management nevertheless developed a strategy to record planned monthly on-top adjustments[18] to the financial statements to recognize the estimated $200 million deferred expense in the subsequent fiscal years 1999 and 2000.[19]**

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in interest rates that occurred with a significant – significant effect on business was that you had a significant amount of prepayment occurring. So, this is what you had going on in the world. We found ourselves in a company at that point in time where our balances on our balance sheet as it relates to the portfolio, rates have been fairly stable. You moved into a big period of rate move, and we had a model at that point in time that had been developed, predated my involvement in the Controller's Department, but it was an early generation model that had been built to implement FAS 91, and it had limitations now for this period of time in terms of how the business had grown, how – how the business had grown, volatility in rates, the limitations that would even allow you to put good robust assumptions into it. So, it's the kind of second piece that we were dealing. And then there is a third piece relevant to this that we were dealing with as a company, in that we had some asset classes that had been had been allowed to be purchased for the portfolio, gone through all the pertinent reviews in terms of allowing the portfolio to begin to purchase REMIC to hold as an investment – as an investment class. We had good controls on the front end in terms of who could evaluate them and price them appropriately. We didn't have sufficient – we didn't have a sufficient infrastructure on the back end and in the model to be able to do a pristine FAS 91-type level yield calculation on this asset class, although it was something that we were working toward. So, there was a set of factors that were occurring in 1998. […]

[16] Fannie Mae PDA Catch-Up, FMSE-SP 000471. Note 2 to the analysis indicates that the amount of the catch-up expense on REMICS increased in June of 1999 by approximately $60 million from the prior month. Note 2 reads "Increased percent of REMIC book modeled." Such increase in the percent of the REMIC book modeled was corroborated by the testimony of Jeff Juliane on August, 31, 2004.
OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 245-246
Q: Now there's a Footnote 2 that relates to June of 1999 for the REMIC portfolio that indicates increased percent of REMIC book modeled. What does that refer to?
A: With [sic. What] that means is that prior to that, there were issues with getting cash flows passed back from Intex to the model, so that we were only modeling about 74 percent of all REMIC securities. And then when we – I think we increased it to approximately 90 percent at that point in time.
Q: And this increased the amount of negative catch-up?
A: Correct.

[17] OFHEO Interview, Ms. Leanne Spencer, SVP Controller, June 22, 2004, pp. 33-34
Q: Do you recall the nature of the premium discount amortization audit difference identified by KPMG?
A: Yes.
Q: Do you recall the amount?
A: Yes.
Q: And what was the amount?
A: Approximately 200 million.

[18] "On-top adjustments" represent adjustments made directly to the general ledger during the financial statements close process.

[19] OFHEO Interview, Ms. Janet Pennewell, VP Financial Reporting & Planning, June 15, 2004, pp 149-150

Beyond the $200 million deferred estimated expense itself, the explanations provided by management, as well as documents provided to OFHEO, raise other issues. First, if one accepted the Enterprise's rationale of estimation inaccuracy that existed at the end of the fourth quarter of 1998, then what about previous quarters? Information obtained by OFHEO shows that catch-up amounts were calculated as far back as 1995.[20] Furthermore, the catch-up exceeded $100 million as early as December 1996, and further exceeded $150 million for each of the three quarters prior to the fourth quarter in 1998.[21] Consistent with managements explanation, the incremental effect to the catch-up does indeed appear to arise in the fourth quarter 1998; however, it seems to arise because that time period is the first time period in which *any* calculation of catch-up for REMIC's was performed.[22] **This information as well as other documentation[23] seems to indicate that the calculation of constant effective yield for REMIC securities had not previously been performed at all, even though SFAS 91 became effective in 1988.**

The second issue raised is one concerning the nature of the catch-up itself. This issue will be further examined in subsequent sections of this report.

*Bonuses Awarded in 1998*

Fannie Mae compensation for executive officers involves several key components: 1) basic compensation, which includes base salary and other annual compensation; 2) Annual Incentive Plan (AIP) awards ("bonuses"), which link the size of the bonus pool to meeting annual earnings per share (EPS) goals; and 3) long-term incentive awards, which typically award substantial amounts of "performance shares" to executives if EPS and certain non-financial goals are met over a three-year period.

The Fannie Mae proxy statement for 1998 disclosed salary and annual bonuses to certain senior executives as follows:

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Q: […] you had testified that in December of 1998 that you had experienced losses due to the changes in the interest amortization, but at that point there was an approximately 200 million catch-up that was a negative catch-up, correct?
A: That's my recollection, yes.
Q: A negative catch-up would be a deferred expense, correct?
A: Correct.
Q: Now, you indicated that there had been discussions with KPMG and there was an objective to try to cut that in half. And was the objective to try to cut that in half in one year or over a two-year horizon, or do you recall any time—
A: My recollection is over one year.
Q: Okay. Now, was that achieved through systematic, planned on-tops, or was it offset against other changes in the catch-up?
A: It was primarily--it was primarily achieved through a systematic, planned on-tops, but then in addition to those planned on-tops, we re-evaluated our catch-up position each quarter to see if either the composition of the book premium discount or changes in interest rates would have altered our position.

[20] Analysis document titled "Fannie Mae PDA Catch-up", dated October 6, 2000, FMSE-SP 002434.

[21] *Id*.

[22] *Id*.

[23] Memorandum from Mr. Jeff Juliane to Ms. Leanne Spencer, Subject: Income Risks from Amortization Issues, dated July 14, 1999, FMSE-SP 003103.



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1998 Salary and Bonus of Senior Fannie Mae Executives

| Officer | Title | Salary | AIP Award/Bonus |
|---|---|---|---|
| **James A. Johnson** | Chairman and CEO | $966,000 | $1,932,000 |
| **Franklin D. Raines** | Chairman and CEO Designate | $526,154 | $1,109,589 |
| **Lawrence M. Small** | President and COO | $783,839 | $1,108,259 |
| **Jamie Gorelick** | Vice-Chairman | $567,000 | $779,625 |
| **J. Timothy Howard** | EVP and CFO | $395,000 | $493,750 |
| **Robert J. Levin** | EVP, Housing and Comm. Develop. | $395,000 | $493,750 |

Source: Fannie Mae Notice of Annual Meeting of Stockholders, May 20, 1999

*1998 Earnings Per Share Targets*

Fannie Mae adopted EPS thresholds for annual bonuses in 1995 partly to bring that short-term, performance-based compensation measure into conformity with their long-term compensation plan, which was already EPS-based.[24]

For the year-ended 1998, the size of the annual bonus payout pool was linked to specific EPS targets, as follows: [25]

**Earnings Per Share (EPS) Range for 1998 AIP Corporate Goals**

$3.13 Minimum Payout
$3.18 Target Payout
$3.23 Maximum Payout

For Fannie Mae to pay out the *maximum* amount in AIP awards in 1998 (approximately $27.1 million), the Earnings Per Share would have to be $3.23. If EPS was below the $3.13 minimum payout threshold, no AIP payout would occur. Remarkably, the 1998 EPS number turned out to be $3.2309, a result that meant that Fannie Mae met the EPS maximum payout goal right down to the penny.

*Impact of 1998 Catch-up on Compensation*

The annual EPS number is determined by dividing the net annual earnings by the average number of shares of common stock outstanding for the year. Accordingly, the 1998 $3.23 EPS was derived by dividing the net income available to common shareholders ($3.352 billion) by the weighted average number of common shares outstanding (1,037 million).[26]

Notably, had net income available to common shareholders been reduced by $125 million, the EPS for 1998 would have fallen to $3.11[27]--below the minimum payout threshold. As a result,

[24] FMSE 017772.
[25] *Id.*
[26] These figures include dilutive potential common shares. Fannie Mae 1998 Annual Report, Financial and Statistical Summary, p. 51.
[27] $3.227 billion of earnings ÷ 1,037 million shares



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no bonuses would have been awarded. Alternatively, had net income been reduced even a relatively modest $50 million, the EPS would have been approximately $3.18.[28] In that instance, the overall bonus pool would have been reduced by approximately $9 million to $18 million. This would have resulted in a corresponding reduction in bonuses awarded to individual executive officers.

As it turns out, the unrecognized estimated $200 million negative catch-up was a pre-tax effect on net income. Adjusted for taxes at the 35% statutory federal corporate income tax rate,[29] the after tax impact on net income – upon which calculations of EPS are made - was approximately $130 million. **The tax affected amount of deferred expense therefore, only slightly exceeded the $125 million difference between no bonus being awarded and the maximum amount being awarded.**

*Recognition of 1998 "Catch-up" in 1999*

In 1999, the Enterprise began to record the scheduled on-top adjustments to recognize the $200 million negative catch-up.[30] The objective of the plan was to recognize amounts sufficient to ensure that the catch-up did not exceed negative $100 million at the end of fiscal year 1999.[31] Accordingly, the Enterprise determined to record monthly on-top adjustments to recognize estimated losses of $5 million and $2.9 million to Net Interest Income ("NII") and deferred price adjustments (in internal documents Fannie Mae refers to these adjustments collectively as "GFee", and this report adopts that convention) respectively.[32] In addition to these planned on-tops however, the Enterprise also decided, during the course of the year, to write-off an additional $95 million "against NII as a reserve against future interest rate changes."[33] This additional $95 million write-off was also scheduled monthly, such that the planned aggregate monthly adjustment to NII and GFee ultimately grew to $16.5 million.[34]

Such amounts are described in a July 1999 analysis. The analysis shows the actual adjustments recorded to amortization as of June 1999 and the amount of forecasted adjustments through the remainder of the year. The analysis clearly shows that the Enterprise had developed a plan to systematically record the $16.5 million of adjustments per month. It should be noted that $16.5 million per month for twelve months totals to planned adjustments of $198 million. This amount of planned adjustments is almost identical to the amount of catch-up not recorded as of the end of 1998.

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[28] $3.302 billion of earnings ÷ 1,037 million shares

[29] Fannie Mae 1998 Annual Report, pp. 50-51, Notes to the Financial Statements, Note 6: Income Taxes. Further pursuant to this footnote, Fannie Mae is exempt from state and local income taxes.

[30] OFHEO Interview, Ms. Leanne Spencer, SVP Controller, June 22, 2004, pp. 55-56
Q: Now, in 1999, did you make scheduled adjustments as a result of the 200 million that was determined at the end of 1998?
A: Yes.

[31] Fannie Mae Controller, Leanne Spencer, acknowledged the reason for this objective. OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, p. 56.
Q: Now, it is our understanding that, in fact, KPMG was desirous of reducing that 200 million to a hundred million at least by the end of '99; is that consistent with your recollection?
A: It's consistent with my recollection.

[32] Monthly Summary of Amortization Adjustments, July 14, 1999, FMSE-SP 003102

[33] *Id.*

[34] *Id.*



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In addition, in the notes to the aforementioned analysis, the following explanation is provided for the planned on-tops:

> Note- Per plan, a write-off of $95 million was to be taken to reduce our catchup [sic] in a systematic approach of $5 million a month for NII and $2.9 million a month for Gfee. Subsequent to plan, an additional $95 million was to be written-off [sic] against NII as a reserve against future interest rate changes.[35]

As the note above shows, not only was the $200 million amount of catch-up that was deferred being recorded into the income statement in a systematic manner, but a portion of it was specifically referred to as a "reserve against future interest rate changes." This note is the earliest indication that the Enterprise specifically intended to manage the catch-up position as a buffer to sudden changes in interest rates and the resultant volatility of amortization amounts. **The lesson the Enterprise learned in 1998 was clear: avoid having to record large amounts of unexpected catch-up expenses by actively managing the process of calculating amortization.**

But subsequent increases in interest rates overtook Fannie Mae's plans. At the same time that the Enterprise was recording the monthly on-top adjustments, a rise in interest rates was having a favorable economic impact on Fannie Mae's catch-up position. OFHEO was not able to determine the exact amount of planned NII and GFee on-top adjustments that were actually recorded during the year 1999.[36] However, through the combination of on-top adjustments that were recorded and the changing economic environment, the amount of unrecognized catch-up had actually become a positive (deferred credit) amount of $84 million[37] by the end of 1999.

## Formulation and Adoption of Accounting Policy

*Formulation of Accounting Policy*

During 1999 Fannie Mae management also began a prolonged and concerted effort to formulate a policy to manage the amortization of deferred price adjustments. **Many of the policies considered, as well as those subsequently adopted, were inconsistent with GAAP, and were designed to provide earnings flexibility and minimize earnings volatility.**

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[35] *Id.*

[36] An analysis of the catch-up position prepared by the Enterprise would seem to indicate that the amount of recorded adjustments was $158.0 million ($136.3 million through on-top adjustments, and $21.7 million applied as amortization factor change adjustments). Fannie Mae PDA Catch-up, April 10, 2000, FMSE-SP 000505.

[37] OFHEO Interview, Ms. Leanne Spencer, SVP Controller, June 22, 2004, p. 53

Q: And then you indicated at the end of 1999 they identified another audit difference that I believe was really the reversal of the $200 million effect, or was it something different?

A: No, I would describe that as different. I will kind of go back to time doesn't stand still, and as you do 365 or how many business days you have during your start, you're starting with a balance, you're rolling forward, rates are changing, prepayments are changing, new business coming on--is coming on in a different mix. So, there is a variety of factors that affects your recalibration and your reestimation process. But by the end of the year, it was $84 million positive.

The effort was directed and overseen by Chief Financial Officer Mr. Tim Howard. Policy analysis was performed for the most part by personnel within the controllers group, including active involvement by the Controller, Ms. Leanne Spencer. Mr. Tom Lawler, Senior Vice President Portfolio Management,[38] was also part of the policy analysis team. Beginning in the first quarter of 1999 and continuing throughout 2000 numerous memoranda regarding SFAS 91 policy recommendations were developed. Many of these memoranda expressed – as an objective of policy formulation - the need to minimize the volatility of reported earnings. Certain of these memoranda acknowledged the flexibility provided by the policies and methods proposed.[39]

**The specific recommended policy provisions within these memoranda varied as to their precise nature, and the empirical thresholds that would be applied. However, certain themes were consistently reflected within them, including policy recommendations that permitted the Enterprise:**

a. **to not recognize estimated income or expense up to certain thresholds, and**

b. **to defer the recognition of income or expense that exceeded recommended thresholds over a several year planning horizon**

**Such accounting methods are neither supported by SFAS 91 nor Generally Accepted Accounting Principles more broadly. However, provisions of this nature were ultimately adopted as policy by the Enterprise in December of 2000.[40]**

One memorandum, dated September 23, 1999, proposed that estimated income be treated differently than estimated expense.[41] In the case of estimated income, no adjustment to

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[38] Mr. Tom Lawler was Senior Vice President of Portfolio Management at the time the policy analysis team was functioning. In 2002, Mr. Tom Lawler was designated Senior Vice President of Corporate Financial Strategy. OFHEO Interview Mr. Tom Lawler, June 24, 2004, pp. 7-9.

[39] Memorandum from Ms. Janet Pennewell, Vice President Financial Reporting, and Mr. Jeff Juliane, to Mr. Tim Howard, December 16, 1999, Subject: Catch-up Policy. FMSE 217559 -217561.
One of several reasons provided for recommending a method of modeling the catch-up reads: "3) Due to system enhancements and increased analytics, we will be better positioned to forecast future catch-up behavior. This should provide the flexibility to adhere to a much more stringent standard while minimizing material catch-up swings recently experienced. This policy acknowledges such changes and additionally maintains a cushion for income statement flexibility."
Attachment to email from Mr. Tim Howard, CFO, to Ms. Janet Pennewell, SVP Financial Reporting and Planning, November 25, 2000, Subject; Amortization. Pennewell 08182004
A paragraph describing the proposed amortization strategy reads: "Today's configuration would give us a fair amount of leeway under the policy I envision. We start out under our plus or minus $75 million range, so technically we wouldn't have to do anything for at least the first year. However, if we wanted to 'get a leg up' on getting under the $75 million threshold three years out we could certainly justify getting started today. Our policy would allow us to do $40 or $50 million this year-or even more. (I wouldn't recommend it, but we would have the flexibility to do so)."

[40] Purchase Premium and Discount Amortization Policy, December 2000, FMSE 074523-074524

[41] Memorandum from Ms. Janet Pennewell, VP Financial Reporting & Planning, to Mr. Tim Howard, CFO, September 23, 1999, Subject: Policy on Purchase Premium/Discount Management, FMSE-SP 000106-000107.

income would be taken if current interest rates were more than one standard deviation above the 5 year historical average. Other memoranda dated May 4, 2000[42] and May 8, 2000[43] proposed that adjustments be determined by comparing the estimated catch-up to the calculated annual on-top adjustment. Both memoranda recommended that the estimate of quarterly catch-up be given different treatment depending on whether the calculated estimate was positive or negative.[44] There is also no basis in SFAS 91, or in any promulgated accounting standard, that would support any of these accounting treatments recommended by management.

*Policy Adopted to Recognize Expense or Income Over Multiple Reporting Periods*

The first memorandum[45] that proposed a recommended accounting policy on the catch-up position was dated March 2, 1999, and was from the Controller to the Chief Financial Officer. This memorandum recommended that adjustments only be required in the current year, if the catch-up position exceeded +/-3.5% of projected annual revenue. Otherwise, management would implement a plan to bring the balance down to 2% of annual revenue by the end of the *following* year. Coincidentally, this threshold approximated the $200 million amount of estimated expense not recognized just two months prior.[46] The previously referred to memorandum[47], dated September 23, 1999, alternatively recommended applying a similar $200 million threshold, but characterized it instead as 1% of *three* year cumulative revenue.[48]

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[42] Memorandum from Mr. Jeff Juliane, Director Financial Accounting, to Distribution, May 4, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217540.

[43] Draft Memorandum from Mr. Jeff Juliane to Distribution, May 8, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217527. This draft memorandum was subsequently distributed as an attachment to a memorandum dated September 15, 2000 from Ms. Janet Pennewell to Mr. Tim Howard, Subject: Amortization Policy. In this distribution, the label "Draft" had been removed from the memorandum.

[44] Memorandum from Mr. Jeff Juliane to Distribution, May 4, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217540-217544, states that "In any interim year, if the mean catch-up is less than the calculated annual on-top, the amount of on-top applied in that year will equal the mean catch-up. If the mean catch-up is the opposite sign as compared to the calculated on-top, no adjustment will be made.

Draft Memorandum from Mr. Jeff Juliane to Distribution, May 8, 2000 (with a handwritten note saying "draft for meeting with Tim on May"), FMSE 217527-217528, describes under "Catch-up Recognition" how the Enterprise plans to reach their "targeted catch-up": "A. If the spot estimate exceeded 2.5% of pre-tax income, we would accelerate the on-tops to ensure that we were less than the 2.5% target within 1 year. B. If the spot estimate exceeded 5% of pre-tax income, an immediate on-top adjustment would be taken to bring us within the 5% limit. C. If the spot estimate for any interim year is less than the calculated annual on-top, the amount of on-top applied in that year will equal the spot estimate. D. If the spot estimate is the opposite sign as compared to the calculated on-top, no adjustment will be made." OFHEO received this document in a final version labeled FMSE-SP 000019-000020.

[45] Memorandum from Ms. Leanne Spencer and Ms. Janet Pennewell to Mr. Tim Howard, Subject: Policy on Purchase Premium/Discount Management, March 2, 1999, FMSE-SP 000110-000111.

[46] *Id.,* The actual recommendation stated; "If the Catch-up exceeds 3.5% of projected annual revenue (currently about $200 million) we will take a write-off during the current calendar year to bring it below that level, and will implement a plan to bring the balance down to 2% of projected revenue by the end of the following year."

[47] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, September 23, 1999, Subject: Policy on Purchase Premium/Discount Management, FMSE-SP 000106-000109

[48] *Id.*

Subsequent memoranda proposed even higher thresholds before an immediate adjustment to earnings would be required. The previously referred to memoranda[49] dated May 4, 2000, May 8, 2000, and September 15, 2000, recommended that immediate adjustments not be required until 5% of annual pre-tax income had been exceeded. 5% of annual pre-tax income was, at the time, approximately $300 million. This is an extremely large threshold considering that during the three years for which OFHEO has data, the quarterly *combined* deferred price amortization never exceeded $142 million (FMSE 184911, 184994, 185079, 184923, 185006, and 185092).[50]

Furthermore, in theory, if such a 5% threshold had been applied, quarterly changes in catch-up of up to $600 million income statement impact (+/- $300 million) could go unrecorded in any given quarter. This too is also extremely large considering that the quarterly change in purchased premium/discount and guarantee fee amortization reported by the Enterprise in its financial statements never exceeded $135.8 million[51] and $127.4 million[52] respectively, in any of the quarterly periods for which OFHEO has such information.[53]

The subsequent memorandum that sought to recommend these higher thresholds also recommended that adjustments be made over a one year horizon of time to reduce the catch-up to below a +/- 2.5% (approximately +/- $150 million) threshold.

Ultimately, in December 2000, the Enterprise established a policy[54] that had two provisions addressing the recognition of larger variances in catch-up over multiple reporting periods. These provisions are:

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[49] Memorandum from Mr. Jeff Juliane to Distribution, May 4, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217540, and Draft Memorandum from Mr. Jeff Juliane to Distribution, May 8, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217527. This draft memorandum was subsequently distributed as an attachment to a memorandum dated September 15, 2000 from Ms. Janet Pennewell to Mr. Tim Howard, Subject: Amortization Policy. In this distribution the label "Draft" had been removed from the memorandum.

[50] Memoranda recommending accounting policy for deferred price amortization in 1999 and 2000 did not distinguish between purchased premium and discount amortization (which is recorded as a component of *Net interest income*) and guarantee fee amortization (which is recorded separately in the income statement as *Guarantee fees)*. Various Fannie Mae analyses prepared in conjunction with these memoranda, as well as early policy drafts (FMSE 217499), indicate that these combined amortization amounts would be applied when measuring against the applicable recommended threshold. The policy subsequently adopted in December 2000 (FMSE 074523) also specified that these components would be combined. However, the policy also stated *"Since the components of the total catch-up position are related to two different income statement line items, net interest income and Gfee, it is important to look at each component separately to determine whether an audit difference has occurred.* For the quarterly periods for which OFHEO has the relevant information (Q1 2001 through Q1 2004), the highest separate amounts of quarterly purchased premium/discount amortization and guarantee fee amortization were approximately $(151) million (FMSE 186045,186115, and 186186) and $244 million (FMSE 186053, 186123, and 186195) respectively.

[51] Change from Q4 2002 (FMSE 184911, 184994, and 185079) to Q1 2003 (FMSE 185164, 185244, and 185319).

[52] Change from Q4 2003 (FMSE 185835, 185907, and 185980) to Q1 2004 (FMSE 186053, 186123, and 186195).

[53] Q1 2001 through Q1 2004

[54] Purchase Premium and Discount Amortization Policy, December, 2000, FMSE 074523

i. If our catch-up moves beyond one, but within two percent of combined portfolio net interest and guarantee fee income, we will book monthly "on-top" adjustments that bring us back to within the plus or minus one percent range within our three year planning period.[55]

ii. Should our catch-up ever exceed two percent of the combined portfolio and interest guarantee fee income, however, we will bring it back to within the one to two percent range within a six month period. After that time, we will continue our monthly "on-tops" to return the catch-up to the plus or minus one year range within the three year horizon.[56]

That policy adopted in December 2000, remains the Enterprise's official policy today. In his testimony, Mr. Jonathan Boyles, Senior Vice President Financial Standards, acknowledged that these provisions were not consistent with GAAP.[57] Even though the estimated $200 million expense in 1998 was deferred and recognized in subsequent periods, Mr. Boyles and other senior officers explained that neither of the above two provisions were ever used since this policy was adopted in December 2000. However, it should be noted that the accounting treatment of the estimated $200 million expense in 1998 is similar (if not identical) to the same policies which Mr. Boyles stated would not be in accordance with GAAP.

Information gathered thus far in this Special Examination has not identified any instances since December 2000 where either of these two provisions had been used. However, we have identified other practices employed by the Enterprise whereby adjustments that should have been recognized immediately, were instead deferred and recognized over multiple reporting periods. [See section *Capitalization of Amortization of Reconciliation Differences* for a discussion of the Enterprise's treatment of "realignment" differences.]

*Policy to Defer Income and Expense Up To Certain Thresholds*

Management's drive to formulate policy in 1999 and 2000 was fueled by management's surprise at the magnitude of the $400 million estimated expense at the end of 1998, by a determination to avoid audit differences,[58] and by the insistence of KPMG[59] that a policy be developed. In

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[55] *Id.*

[56] *Id.*

[57] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, pp. 12-13 (with respect to Exhibit 9A: Purchase Premium and Discount Amortization Policy, FMSE 074523-074524)

Q: The first sentence of this paragraph states: If our catch-up moves beyond one within two percent of combined portfolio net interest in guaranty fee income, we will book monthly "on-top" adjustments that bring us back to within the plus or minus one percent range within our three-year planning period. Is that a provision that you recollect discussing with the outside auditors, KPMG?

A: I don't recall discussing that provision.

Q: Is that a provision that you had approved at all?

A: I don't recall approving it.

Q: Okay. In your opinion is that provision permitted under General Accepted Accounting Principles?

A: No, I don't believe that would be allowed.

Q: Okay. In your opinion is that provision permitted under General Accepted Accounting Principles?

A: No, I don't believe that would be allowed.

[58] OFHEO Interview, Ms. Leanne Spencer, August 12, 2004, pp. 87-90

Q: Now my question is what basis does the company – did the company have when they established this policy for believing that adding a de minimis [sic. minimus] amount onto the target range was appropriate

addition to the policy provisions that would permit the Enterprise to recognize greater estimated income or expense over time, the Enterprise also recommended and ultimately adopted thresholds within which estimated income or expense would not be recognized at all. Indeed, such practice had already been an established part of the Enterprise's financial reporting, even prior to the 4th quarter of 1998. During 1998, Mr. Jonathan Boyles was the individual within the Enterprise responsible for determining the amount of the catch up position. In his testimony Mr. Boyles could not recall the catch-up ever being booked to zero during this timeframe.[60] In a memorandum dated November 25, 2000 from Mr. Tim Howard to Ms. Janet Pennewell, that discusses the elements of proposed policy, Mr. Howard notes that KPMG was comfortable with

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for GAAP? Was there some accounting standard or some understood practice within industry that would have provided that basis?
A: Are you asking – I'm just trying to be clear here so I can give you exactly what you need. Are you asking me why we considered a de minimis [sic. minimus] amount on top of the plus or minus 1 percent? This discussion occurred between Fannie Mae and KPMG at the same time that we were in discussions around what did or didn't constitute an audit difference. And what we were really trying to accomplish here with this document is to put things in writing and put things on paper so that we had an understanding and KPMG had an understanding of how we would operate in this framework. And so this was only put on here just for clarity and transparency. You probably know specifically – I can't recall, about the same time was there not a new – I don't know if it was an auditing standard or if it was an SEC standard, whereby all audit differences became a required part of conversations with the audit, you know, committee, or you know, this – you know where I'm going with this?
Q: Uh-huh.
A: And so what we were really trying to do, you know, I don't really like audit differences. I prefer not to have them. If there is something that needs to be corrected, I just want to post it.
Q: You wouldn't be the first company to have that feeling.
A: Pardon me?
Q: You wouldn't be the first company that had that feeling.
A: But that's how I feel. And so in a lot of putting this framework together, for our communication between Fannie Mae and KPMG to be very clear, and that we were going to operate within this policy, and I wasn't interested in having an audit difference. But since at the same time this new requirement in -- I can't remember what new requirement it was, but the new requirement around the discussion of audit differences, we were just trying to be clear about what constituted an audit difference. I never intended to have one. But we wanted to not wait for that. We wanted to be clear up front, and so just in terms of how you would operate within this policy and then tie that back to the other separate discussions we were having with them around – that I described to you, which this actually confirms what I was telling you earlier, pretax amount by 1 percent on adjustment [sic] that causes the net interest margin to move by a basis point, where it causes the fee rate to change by a tenth of a basis point. That's the earlier discussion that I was trying to describe to you.

[59] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, p. 78-79
Q: During 1998, what was the company's policy for recording catch-up?
A: I don't recall there was a stated policy, and that was the issue that was raised with KPMG, They wanted a policy, and they wanted us to consistently apply a policy. And that was the genesis of the policy that we developed.

[60] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, p. 79
Q: Do you recall whether or not the catch-up was booked to zero on a routine basis during that time?
A: I don't recall that it was ever booked to zero.



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a $100 million threshold going back to the mid-90's.[61] During 1999 and 2000, the informal policy of the Enterprise was to stay within a $100 million threshold.[62]

The memorandum dated March 2, 1999 recommended that the range, within which the Enterprise did not need to recognize income or expense, be +/- 1% of projected revenue.[63] The policy adopted in December 2000, was consistent with this recommendation; however, the policy further established separate thresholds for purchase premium and discount amortization, and guarantee fee amortization. The threshold for purchase premium and discount amortization was stated as +/- 1% of Portfolio Net interest income, while the threshold for guarantee fee amortization was stated as +/- 2% of related Gfee revenue. These thresholds were referred to as the target catch-up for both of these respective revenue items.[64] As embodied in the December 2000 policy Enterprise management considered any point within the respective target catch-up ranges as the "functional equivalent of zero."[65]

Superficially, these ranges within which estimated income or expense will not be recognized may seem immaterial. However, OFHEO has concluded that such target thresholds are inappropriate for many reasons:

- SEC Staff Accounting Bulletin (SAB) No. 99 takes a dim view of defining any threshold of immateriality (no matter how small), and then purposely accounting for those transactions in a manner that does not conform to GAAP.

- According to management, the threshold was established due to the uncertainty of forecasting interest rates and prepayments. However, the range that the Enterprise has employed is not expressed as a range around the amount of calculated catch-up, but rather a more or less fixed threshold that is determined by reference to revenue amounts (e.g. NII) that include significant activity unrelated to amortization.

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[61] The attachment to an email from Mr. Tim Howard to Ms. Janet Pennewell, November 25, 2000, Subject: Amortization, states that "the second precedent is somewhat weaker but is KPMG's own – they were comfortable with a $ 100 million PDA threshold in the mid-90s, when our book was half the size it is today." Pennewell 08182004

[62] OFHEO Interview, Leanne Spencer, SVP Controller, June 22, 2004, p. 61.
Q: You said before there was roughly a hundred million dollar threshold.
A: I said that previously in when we were talking about inherent limitations of the model, what the model could do and couldn't do, that our auditors understood those limitations, and that it was an unwritten policy that was not documented, but it was an established practice we had in operating on our auditors that a plus or minus 100 million represented the acknowledgement of the imprecision that exists in this estimation process in connection with our model.

[63] Memorandum from Ms. Leanne Spencer and Ms. Janet Pennewell to Mr. Tim Howard, Subject: Policy on Purchase Premium/Discount Management, March 2, 1999, FMSE-SP 000110-000111.

[64] Purchase Premium and Discount Amortization Policy, December 2000, FMSE 074523-074524.

[65] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp.48-49
Q: So getting back to the plus or minus 1 percent threshold, which I understand you also called a target range, but if you are within that target range, policy doesn't require you make an adjustment, and in fact you may leave the amounts as you have recorded them during and through the quarter, correct?
A: That's correct.
Q: And you've also said that it's the – that the nature of the range is that it's the functional equivalent of zero?
A: Right. That's a phrase that we used for it, because again, that's our view as the level of precision in our estimate.

- The Enterprise's justification for such thresholds contradicts the basis for their election to change the amortization periods used from periods based upon contractual terms to estimated periods, which incorporated forecasts of prepayments.

- The thresholds are based upon *annual* income statement amounts, but are then applied in determining whether adjustments should be made to the *quarterly* financial statements.

- The thresholds are so large relative to the amounts of deferred price adjustment amortization that the retrospective adjustments required by SFAS 91 are unlikely to occur. As such, the Enterprise has effectively ignored this requirement of the standard by spreading income and expense due to normal market fluctuations over future periods.

- The Enterprise has provided no analysis which could separate what they have described as "artificial volatility"[66] from the actual market volatility of a mortgage portfolio.

- The range of the threshold is significantly larger than the amount of actual quarterly amortization and, in most cases, is almost as large as the amount of annual amortization.

- The Enterprise applied a different threshold to net interest income (NII) and guarantee fees (Gfee) despite the fact that both NII and Gfee are exposed to interest rates and prepayments in a similar manner.

In their testimony, members of Fannie Mae management have contended that the target range thresholds were necessitated by the uncertainty and imprecision associated with estimating the amortization of deferred price adjustments pursuant to the calculation of constant effective yield that was required by SFAS 91.

This line of reasoning on the part of management can be rejected on several grounds:

a. There is no basis of support either from a statistical standpoint or within Generally Accepted Accounting Principles for applying a range of uncertainty in this manner. The catch-up position for each respective source of revenue represents the

[66] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 187-188 (referring to Exhibit 8, Note for Janet Pennewell from Tim Howard, October 27, 1999, FMSE 217558).
Q: […] Then the next paragraph reads, "I then attempted to use our projected PDA sensitivities to ask 'where would we like our PDA to be' in order to minimize the amount and frequency of PDA adjustments we would have to make as interest rates moved (as we know they will)." The question that I have for you is – well, actually, I have several questions. The first question is: Would you understand that FAS 91 would actually attempt to capture the volatility that would arise in both retrospective and prospective changes to purchase premium/discount interest amortization that would result from changes in interest rate fluctuations and result in changes in prepayments?
A: Yes. And this is a shorthand that I think not really accurately worded formulation. The attempt was never to minimize economic sensitivity. This is always in the context of not having our assumptions drive artificial volatility, so that's what we were talking about.

difference between 1) an amortization amount that was recorded during the quarter based upon assumptions made at the *beginning* of that quarter, and 2) an amortization amount estimated at the *end* of the quarter that uses the latest available information on current interest rates and actual prepayments experienced.[67] Imprecision and uncertainty indeed exist when making estimates. **However, the Enterprise is using this uncertainty and imprecision to rationalize why it need not recognize changes to income that simply result from fluctuations in market rates that occur naturally over time.**

b. The Enterprise's treatment of estimation uncertainty was not consistently applied, even *within* the accounting framework for deferred price amortization itself. Determining a constant effective yield in accordance with SFAS 91 requires both a retrospective (historical) and prospective adjustment based on the revised estimated amortization period due to changing rates of prepayments. Fannie Mae's objection to uncertainty seemed confined only to the immediate financial statement impact of the estimate. In fact, estimation uncertainty did not prevent Fannie Mae from adjusting the prospective amortization period of both discounts/premiums and guarantee fees in accordance with its revised estimate of prepayment speeds.

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[67] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp. 46-48.
Q: And only if the difference is 1 percent plus or minus do you make an adjustment. Otherwise you use what you've booked previously?
A: That would be true, yes.
Q: Now, why is what you booked previously a better estimate than the sensitivity analysis that you would perform at quarter end?
A: Well, what we're really saying is that because we don't exactly know what prepayments are going to do in the future, that you cannot know what your--how much you should have booked in the past with precision, and that that range of plus or minus 1 percent is meant to recognize the fact that you don't know with precision what your prepayments are going to do, and so therefore, you don't know with precision exactly how much you should have booked inception to date. So to say that--within a range, to say that--because it's kind of all the same, that's as close as you can get. It's just to recognize the degree of imprecision in coming up with that estimate position, because it is an estimate until you know exactly what prepayments are going to be in the future.
Q: I agree that it's subject to uncertainty, but when you're within the 1 percent threshold or when the difference is in the 1 percent threshold, why would what you booked previously be a better estimate than your latest modeling?
A: It's not necessarily a better--as good of an estimate than to us it is within what we call—we actually the term functional equivalent of zero to say, yeah, that's what our estimate is. Our estimate is a number within this range. That's as close as we can estimate it. It's kind of like—I always kind of think of it as polling error, so if you see a poll that says, you know, John Kerry's behind by 9 points, however our polling error is plus or minus 4 percent, so it's really not as close as it sounds. You've got polling error here. There are just certain aspects that you don't know with precision, and therefore there is not a precise number. And you'd fool yourself if you treated it as if there was a precise point in time number. There isn't.
Q: So because there is uncertainty, you in effect default to what you had previously booked as long as you're within the threshold?
A: Because what we previously booked, in the example that you give, where what we previously booked is within our range of what we think is exactly what we should have booked, that's as close as we can calculate the number. And we're saying what we did book was the correct amount to have recorded.

Fannie Mae personnel fully understood the prospective nature of their policy in their own characterization of their method for managing the catch-up position. An undated and unsigned document[68] provided by the Enterprise discusses a suggested defense to possible challenge by KPMG of the Enterprise's proposed amortization policy. The document states:

> We have traditionally used a prospective approach because it reduces our income statement volatility; we don't want to be placed in a position where we are booking a positive number one quarter and negative the next.

A memorandum from Mr. Tom Lawler dated April 2000 further states:

> We currently employ what I would call a 'modified prospective method' in determining the premium or discount amortization to be booked to current income. By that I mean that we do not manage our 'catch-up' position to zero each quarter…..It is a 'modified prospective method', however, in that if our catch up moves beyond a certain threshold, we then periodically may take a one-time adjustment into income to lower the catch up amount to a 'manageable' number.[69]

A prospective approach to adjusting income recognition on the amortization of deferred price adjustments is an explicit contravention of the requirements of SFAS No. 91. This accounting standard requires that the determination of constant effective yield be adjusted for the historical 'inception to date what-if' (retrospective) impact of changes in prepayment speeds each reporting period.

c. The Enterprise's rationale for the catch-up threshold because of uncertainty[70] in estimation calls into question their ability to elect to estimate prepayments (pursuant to the requirements of SFAS 91.) As mentioned previously in this report, FAS 91 requires that the amortization of deferred price adjustments be made over the contract life[71] (e.g., 30 years for a 30 year MBS.) However, such accounting could cause significant volatility in certain market environments. For instance, a large drop in interest rates could lead to a wave of prepayments.

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[68] Undated and unsigned document, Titled Proposed Amortization Policy, FMSE 217504 –217505.

[69] Undated and unsigned document, Titled Suggested Amortization Strategy, FMSE 217556-217557. This document has a handwritten note that indicates "from Tom April 00". In his testimony Mr. Tim Howard provided information regarding the sender of the document;
Q: Okay, I'd like to introduce into the record Exhibit 11.
A: I can tell you just from the style that this would have been written to somebody from Tom Lawler. I don't know if you knew that. It does say "from Tom".

[70] The Enterprise's rationale of uncertainty includes not only the designation of the target catch-up range, but also the estimation methods to determine the catch-up. See Appendix I.

[71] Except as stated in the following sentence, the calculation of the constant effective yield necessary to apply the interest method shall use the **payment terms required by the loan contract** [Emphasis added], and prepayments of principal shall not be anticipated to shorten the loan term. SFAS 91, p. 19.



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Under such conditions, previously unamortized amounts would be immediately recorded into income.

For large pools of similar loans, SFAS 91 provides an elective to companies that are seeking to avoid such volatility by including a forecast of prepayments in the determination of an estimated amortization period. The particular wording of this elective is as follows:

> **If the enterprise holds a large number of similar loans for which prepayments are probable and the timing and amount of prepayments can be reasonably estimated** [Emphasis added], the enterprise may consider estimates of future principal prepayments in the calculation of the constant effective yield necessary to apply the interest method.[72]

As such, the Enterprise's justification of large target thresholds based on the uncertainty of estimating prepayments does not reconcile to the elective in SFAS 91 which requires that "prepayments can be reasonably estimated.[73]" **As such, OFHEO has concluded that the Enterprise's adoption of a policy which establishes a threshold for recording adjustments to deferred price amortization is a violation of GAAP.**

d. Fannie Mae's treatment of estimation uncertainty is not consistent with the Enterprise's own treatment of other critical accounting estimates.[74] In addition to the amortization of deferred price adjustments, the Enterprise's Form 10K, filed with the SEC, identifies three other critical accounting estimates:[75]

   i. Determining the adequacy of the allowance for loan losses and guarantee liability for MBS;
   ii. Estimating the time value of purchased options; and
   iii. Assessing other-than-temporary impairment.

The Form 10K states that *all* of the critical accounting estimates "require significant management judgment and assumptions about highly complex and uncertain matters."[76] Yet, none of these other accounting estimates are determined in accordance with methods analogous to the 'target catch-up range' that is applied to the amortization of deferred price adjustments. In their testimony to OFHEO,

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[72] *Id.*
[73] *Id.*
[74] Fannie Mae Controller Ms. Leanne Spencer commenting on other critical accounting estimates. OFHEO Interview, Ms. Leanne Spencer, August 12, 2004, pp. 95-96.
Q: I just wanted to continue discussion around the purchase premium discount amortization policy. I think you have testified previously that you do not apply a target range to other accounting estimates of the company; is that correct?
A: I can't recall an area where we do.
[75] Fannie Mae 2003 Annual Report, pp. 39-40.
[76] *Id.,* p. 40.



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officers of the Enterprise alternatively explained that the uncertainty associated with estimating deferred price amortization would give rise to "artificial" [77] or "spurious" volatility[78] of reported financial results. Many readers of this summarized report will understand that estimation uncertainty in statistical parlance refers to how *accurate* an estimate may be. But accuracy, in this context, is referring to an amount calculated at a point in time. Volatility, however, refers to the degree of change between an estimate made in one quarter, and the estimate made either the previous or following quarter. Therefore, uncertainty in accuracy and uncertainty in volatility are two different things. For example, a watch may be inaccurate because it is set 10 minutes ahead. However, that watch, all other things being equal, will still correctly mark the passage of three hours. While the Enterprise did prepare analysis that purported to demonstrate the extent of uncertainty associated with determining an estimate of deferred price amortization,[79] **OFHEO is not aware of any analysis ever prepared that demonstrates the existence, nature, or magnitude of any 'artificial' or 'spurious volatility' associated with estimating deferred price amortization.** [80]

Further undermining the argument of linkage between policy development and the manifestation of spurious volatility was the inability of Fannie Mae officers to explain why the target catch-up range for purchase premium/discount amortization (+/- 1%) was different from the target catch-up range for guarantee fee amortization (+/-2%).[81] Furthermore, the

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[77] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, p. 18.
Q: So isn't there actually some volatility in the business that you're in?
A: That's true. There certainly is volatility in the business that we're in, and certainly one would expect some volatility therefore in the premium and discount amortization that you're reporting. And what I was focused on was, what I really want to be very clear on is, artificial volatility. In other words, dramatic changes on what you're recording to income through FAS 91 because of what could be arbitrary changes in your assumption about interest rates. […]

[78] OFHEO Interview, Mr. Tom Lawler, June 24, 2004, pp. 127-128.
A: […] what we have first on the core data and modeling, we have some core uncertainties about the accuracy of the results, and sometimes there is the arbitrary nature of the date of the sensitivities we do, and we felt that in looking at the results swings that, in our mind, were spurious in nature or related to--unrelated to anything fundamental would be such that we would not want to, I believe the word they use here is book, although I don't do any booking.

[79] Memorandum from Mr. Jeff Juliane to Mr. Tim Howard, June 21, 2000, Subject: Amortization Policy Runs. FMSE 217521- 217526.

[80] Fannie Mae officer Mr. Tom Lawler commenting on deferred price amortization. OFHEO Interview, Mr. Tom Lawler, June 24, 2004 p. 149.
Q: How did the company conclude that the inaccuracy in the modeling translated into spurious volatility?
A: How did we know for a fact that it created spurious volatility?
Q: Yes.
A: I don't know that I could demonstrate for a fact that it created spurious volatility. It was based on analysis sensitivities and time where we saw that, that the conclusion was that we felt it did, it could create spurious volatility.
Q: And did anyone at the time prepare an analysis or paper attempting to demonstrate that at the time?
FANNIE MAE COUNSEL: What time are we talking about?
Q: At the time you were formulating the policy at the 1 percent threshold.
A: I don't believe so.

[81] OFHEO Interview, Jonathan Boyles, August 24, 2004, pp. 34-35.



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respective target catch-up ranges are each expressed in a curiously different manner. The +/- 1% portfolio NII target catch-up range for purchased premium and discounts is expressed as and determined on a *tax equivalent basis*, while the +/- 2% guarantee fee target catch-up range is expressed on a basis not adjusted for taxes. Indeed, the income tax treatment of these respective revenue amounts is in fact different. However, since both revenue amounts are reported in the financial statements before tax, modifying the threshold to reflect NII on a tax-equivalent basis would only be relevant to managing after tax net income or EPS. This convention would seem to have no relevance whatsoever to the issues of either estimation uncertainty or volatility of pre-tax reported financial results.

Could the motivation for focusing on estimation uncertainty have been a means to justify the application of a materiality threshold? In their response to requests for information made by OFHEO, the Enterprise responded that the basis for justifying the magnitude of the target catch-up range was an analysis prepared on June 21, 2000.[82] However, a memorandum[83] dated March 2, 1999 proposed a plus or minus 1% target catch-up well before the analysis dated June 21, 2000 was prepared.

A memorandum[84] dated April 2000 that Mr. Tim Howard testified was from Mr. Tom Lawler, explicitly refers to measures of materiality as the basis for determining the magnitude of target catch-up thresholds. A memorandum[85] dated September 23, 1999, from Ms. Janet Pennewell, Vice President Financial Reporting,[86] to Mr. Tim Howard devotes a section consisting of two paragraphs that discuss materiality. The first paragraph argues that it "may be appropriate to adjust the catch-up over time if the amount is not material,"[87] and even suggests that "since catch-up relates to the entire period since the mortgages/fees were put on the books, one could

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Q: Do you have an understanding as to why the target catch-up for purchase discount and premium amortization is plus or minus one percent and why alternatively for guaranty fee income, it's plus or minus two percent?
A: I don't recall why there is a difference.
Q: Do you recall seeing any analysis that would have demonstrated that the estimation of guaranty fee income is subject to greater uncertainty than purchase premium discount amortization?
A: I don't recall an analysis.

[82] Memorandum from Mr. Jeff Juliane to Mr. Tim Howard, June 21, 2000, Subject: Amortization Policy Runs. FMSE 217521-217526.

[83] Memorandum from Ms. Leanne Spencer and Ms. Janet Pennewell to Mr. Tim Howard, Subject: Policy on Purchase Premium/Discount Management, March 2, 1999, FMSE-SP 000110-000111

[84] Unsigned document, Titled: Suggested Amortization Strategy, FMSE 217556-217557. This document has a handwritten note that indicates "from Tom April 00."

[85] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 23, 1999, Subject: Policy on Purchase Premium/Discount Management, FMSE-SP 000106-000109.

[86] Ms. Janet Pennewell was Vice President of Financial reporting at the time this memorandum was written. In May of 2003, Ms. Pennewell was promoted to Senior Vice President Financial Reporting and Planning. OFHEO Interview with Ms. Janet Pennewell, June 15, 2004. p. 8
Q: So in 1999 you took on the responsibilities in Financial Reporting that you – describe what happened in 1999 again, if you would.
A: Sure. In 1999 I was promoted to Vice President, and before my promotion I was in charge of the business planning function, which resides within the Controller's Department, and when I was promoted to Vice President in 1999, also took on responsibility for financial reporting and for financial accounting.

[87] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 23, 1999, Subject: Policy on Purchase Premium/Discount Management, FMSE-SP 000106-000109.

argue that materiality should be judged in the context of multiple years of revenue."[88] The second paragraph however warns of SAB No. 99, which was released by the Securities and Exchange Commission just one month prior on August 13, 1999.[89] Clearly, management was thinking in the context of materiality – as opposed to uncertainty – at the time that memorandum was written. Lastly, as late as last year Fannie Mae's Office of Auditing describes the catch-up threshold as "a materiality threshold that is used in determining when differences should be booked."[90]

The Functional Equivalent of 16%

At this point, one might be forgiven for concluding that the thresholds ultimately adopted by the Enterprise were small in relation to the magnitude of the financial statement revenue amounts being reported. After all, management expressed the belief that the target catch-up was the functional equivalent of zero.[91] However, the thresholds either proposed or adopted were in reference to *annual* revenue amounts.[92] The effect on quarterly income was therefore much larger.

First of all, each of the percentage thresholds needs to be appropriately scaled to understand the impact on quarterly reporting. If we assume, for purposes of simplification, that quarterly revenue is approximately 1/4th of annual revenue, the percentage thresholds scale up to a quarterly effect of +/-4% and +/- 8% respectively. These percentages are the relevant threshold to understand the potential balance sheet effect on purchased premium/discounts and guarantee fees. To understand the potential impact on the volatility of reported earnings, the percentage thresholds need to be scaled further, in accordance with the full *range* of the threshold, to properly consider the impact on quarterly income. Since volatility refers to the degree of change between financial measures, in theory, quarterly guarantee fee catch-up could swing from +8% one quarter to -8% the next without any adjustment to income for the

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[88] *Id.*

[89] *Id.,* FMSE-SP 000108. The full paragraph referred to reads:
"However, on August 13, of this year [1999] the Securities and Exchange Commission released Staff Accounting Bulletin (SAB) No. 99, which specifically addresses the application of "materiality" thresholds to the preparation and audit of financial statements. This bulletin was released in response to the SEC's concern about the tendency of companies, with the acquiescence of their auditors, to manage earnings by designating certain transactions or events below a certain percentage threshold as "immaterial" and the accounting for transactions and events in a manner that does not conform to GAAP. The bulletin states that the use of a percentage ceiling test alone to make materiality determinations is not acceptable. Although a quantitative test can be used as an initial assessment, all "facts and circumstances" must be evaluated to determine materiality - including whether a reasonable investor would find the amount to be material to the company's ability to meet earnings expectations."

[90] Fannie Mae Office of Auditing Workpaper, July 7, 2003, Reviewed by Ms. Joyce Philip, Manager Office of Auditing, FMSE 118802-118803.

[91] OFHEO Interview, Mr. Tim Howard, August 5, 2004, p. 124.
Q: And as long as it did not exceed the plus or minus 1 percent, then, in fact, no adjustment be required, correct?
A: Yes, because we deemed any estimate within the plus or minus 1 percent to be what we called the functional equivalent of zero.

[92] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, p. 199.
Q: On a quarterly basis, the cumulative catch-up amount is always evaluated in relation to one percent of projected annual net interest income?
A: Correct.

retrospective impact of that swing. **Therefore, the potential magnitude of avoided volatility becomes 8% and 16% of the respective quarterly revenue amounts.**

In 2003, the threshold for NII catch up was approximately +/-$110 million.[93] The associated range of this threshold therefore was over $220 million. It was this threshold and range that were applied to *quarterly* financial reporting. The highest amount of quarterly Net interest income related to purchase premium and discount amortization, for the period in which OFHEO has such information (Q1 2001 through Q1 2004), was approximately $151 million. The largest magnitude of change in purchase premium and discount amortization between consecutive quarterly reporting periods was approximately $135.8 million. The analogous threshold and range for Guarantee Fees was approximately +/- $45 million and $90 million, respectively.

In either case, when policy did not require that deferred price amortization adjustments be made the effect was to shift the catch-up amount to future periods, and the default amortization estimate in the current quarter would have been the estimate made at the beginning of the quarter. In quarters when the percent thresholds were exceeded and policy required that adjustments for estimated income or expense be made, the policy would have only required that amortization be adjusted to the amount of the target catch-up threshold. For example, if the target catch-up threshold was +/-$110 million, and the modeled catch-up estimate was $125 million, only a $15 million adjustment needed to be made under the policy.

The key attributes of the policy were that: 1) quarterly thresholds were pegged to annual amounts, 2) the additional scaling of a plus and minus range insofar as quarterly changes were concerned, and 3) the operation of policy whereby the Enterprise only recognized estimated adjustments that exceeded the range, allowed volatility to be avoided altogether - or at least significantly dampened – and future earnings surprises were rare.

The application of the quarterly thresholds results in the failure to record amortization and misstates financial results. Such misstatements mask changes in earnings and other trends that are important to investors. The SEC issued Staff Accounting Bulleting No. 99 to specifically prohibit such misstatements.[94]

*Policy To Permit Discretionary Adjustments Within The Target Catch-Up Range*

Yet another significant aspect of the Enterprise's policy was the ability of management to make discretionary adjustments[95] to quarterly income as long as they were within the target catch-up

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[93] OFHEO Interview, Mr. Tim Howard, August 5, 2004, p. 147.
Q: And, in fact, I think, just to be more precise because I was using an approximation that the company has defined this 1-percent range as being as high as $ 110 million is my understanding.
A: As of the date of that document, that was probably true, but net interest income has been elevated for the last couple of years. So I think that's an outdated number.
Q: And possibly understated; is that –
A: Yes, it could be.

[94] SEC Staff Accounting Bulletin: No. 99 – Materiality, issued August 12, 1999.

[95] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp. 34-35
Q: Sometimes when you're under the 1 percent threshold, you may or may not make an adjustment?
A: That's correct.
Q: And that's based on management discretion?

range. While this was not explicitly stated in the policy, it arose as an extension of management's assertion that the 'functional equivalent of zero' was anywhere within the range. Accordingly, in 2003, when the NII target catch-up position approximated +/- $110 million, management had the ability to make discretionary adjustments to income of up to $220 million that, in theory, could move the catch-up from one end of the range to the other and still be permissible under their policy.

The following is a quote from testimony by Mr. Howard, CFO, regarding the latitude of recording adjustments to the catch-up position allowed in the amortization policy:

> Q: And then just to be clear, your terminology "deeper into the range" means that you could have booked an entry that would have made a positive catch-up a greater positive number, correct, in any given quarter?
> A: Right. If the calculated number was 120, and the minimum amount of the upper end of the range was 80, according to our policy, we needed to book the $40-million difference, but we were permitted to book--am I missing here?
> Q: No, keep going. I'm listening.
> A: We do the five scenarios, and each scenario we have an amount of catch-up that has to be recorded as income or expense to produce the level of yield [sic]. In averaging the five scenarios, we get a single number. And let me just assert that that number is $120 million, and the question is how much of that $120 million should be brought into income in the current quarter? Using our range--and let's call it plus or minus 1 percent--I will assert that 1 percent of net interest income, at this hypothetical time we're doing this, is $80 million. So that would mean that the smallest amount we could book as income was the difference between a $120- catch-up and the $80 million, top of the range. We could, by following the policy, conceivably book as much as $200 million of income, which would take us from the $120- all the way down to the negative $80-.[96]

Additionally, when asked about the ability to adjust earnings Mr. Tim Howard, Chief Financial Officer, provided the following testimony:

> Q: Okay. Now, were adjustments within the plus or minus 1-percent range ever made to cause actual earnings to more closely align with forecasted earnings, as far as you know?
> A: Not to my recollection.
> Q: Do you believe that would be prohibited under your policy?
> A: Technically, no.[97]

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A: That's based on management's judgment in looking at our asymmetrical exposure to interest rates, yes.
Q: Is it ever based on anything else?
A: There might be other factors that management might look at in making that judgment, such as the current composition of the book. Most of those other things we might look at come down to evaluating, again, that asymmetry of the impact if rates don't move in line with how we forecasted them.

[96] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 139-141

[97] OFHEO Interview, Mr. Tim Howard, August 5, 2004, p. 207



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Subsequent sections of this report will provide examples in which the Enterprise exercised latitude in making adjustments within the range of uncertainty permitted by the policy. If accounting standards permitted this practice (which they do not), similar latitude could be applied to other estimates such as loan loss allowances, pension obligations and estimates of fair value. **If other companies used Fannie Mae's logic in applying accounting principles, they could dictate the financial results they desired, and there would be no comparability of financial results between reporting entities even within the same industry.**

## Managing the Catch-Up

*Managing Within The Current Quarter's Catch-Up Range*

Another proposed mechanism to reduce earnings volatility was the intention to manage to a specific target level of catch-up. Targeting a specific level of catch-up was a means to minimize the probability that adjustments would be necessitated by exceeding either end of the plus or minus catch-up range. The idea essentially was to target a level of catch-up, such that the probability – in future periods - of exceeding one end of the range be no greater than the probability of exceeding the other end of the range. In this manner, the Enterprise could navigate the catch-up within the threshold range such that future income volatility which might arise through recording adjustments which would exceed the target threshold would be avoided. This objective, as well as the means, was suggested by the Chief Financial Officer himself to Ms. Janet Pennewell.

> Here's what I did in coming up with my proposed purchase premium and discount rule.
>
> First, I looked at our projections three years from now, and calculated the 'expected' amount of unamortized PDA.[98] This is simply the average of the results from the 'rates unchanged' and 'up and down 1 and 2 standard deviations' cases. Using the October projections, this 'expected PDA amount' in December '02 was $160 million.
>
> **I then attempted to use our projected PDA sensitivities to ask "where would we like our PDA to be" in order to minimize the amount and frequency of PDA adjustments we would have to make as interest rates moved (as we know they will).** [Emphasis added] To answer that, I looked at the sensitivity of our PDA calculations to up and down 2 standard deviation moves in interest rates in each of the next four years. What I found when I did that is that, on average over this period, if interest rates went up by two standard deviations, our so-called 'catchup' credit would increase by a positive $80 million dollars (roughly). For a two standard deviation fall in interest rates, however, the catchup would drop by $250 million – actually turning into a negative. So to make our corporate sensitivity to these rate changes symmetric, I figured that as long as our PDA sensitivity looked like this we should aim for a PDA catchup position of a positive $85 million. (That way, if rates moved up by 2

[98] PDA is the acronym for 'premium/discount amortization'



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> standard deviations the catchup would rise by $80 million to a positive $165 million; if rates fell by 2 standard deviations our catchup would decline by $250 million, to a negative $165 million. That's symmetric.)
>
> My final step was to integrate the first and second paragraphs. That is, to say "given our current projected PDA sensitivity we want to be at $85 million; our probability-weighted expectation is that we will be at $160 million over the next three years, so to get where we want to be we should amortize the difference ($75 million) evenly into income over the next three years (at $25 million per year).
>
> I then added a couple of refinements to that. First, if the difference between where we were and where wanted to be was large (and particularly if it were large and negative), we would want to get back to our target more quickly than would be achieved by an even amortization over three years. So I would front-load the change – perhaps fifty percent in the first year, and 25 percent in the next two years.
>
> It also seemed to me that if we followed this procedure rigorously – i.e., we updated our PDA position and sensitivities, and our 'where do we want to be calculation' quarterly – we would find that the changes we would be making to our projected 'on top PDA adjustments' would be relatively small, spread out over a three year period. That would help with our goal of minimizing unnecessary net income volatility, while ensuring that we maintain an adequate amount of PDA amortization at all times. [99]

In a later memorandum[100] to Ms. Pennewell, dated November 25, 2000, Mr. Howard - on the eve of the adoption of the policy - further wrote:

> In looking out three years, we should look not only at the base scenario (rates unchanged) and the weighted average of the five scenarios, but also at the two extremes. The reason is to see whether we get a sense of whether we may find ourselves needing to move our catch-up quickly and in large amounts if rates move in a particular direction. This should affect where within the plus or minus $75 million range we aim for (i.e., if three years out the catch-up really plummets in the 'down 120' scenario, we should probably want to aim to be fairly high in the plus-or-minus $75 million range, as a cushion in case rates fall further).

This memorandum clearly shows that the intention of the policy the Enterprise adopted was to allow for positive (income) adjustments to the catch-up and to mitigate negative (loss) adjustments. OFHEO has concluded that such a practice is the equivalent to establishing a

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[99] Memorandum from Mr. Tim Howard to Ms. Janet Pennewell, October 27, 1999, FMSE 217558

[100] Memorandum titled "Notes on Purchase Premium and Discount Amortization," attached to email from Mr. Timothy Howard to Ms. Janet Pennewell, November 25, 2000, Subject: Amortization. Howard 08152004.

reserve for amortization expenses. **However, since the catch-up was never fully recorded, the policy of the Enterprise effectively created a "cookie jar" reserve.**

In his testimony regarding the October 27, 1999 memorandum, Mr. Howard went on to state that the concept of a "where we want to be" target "never went anywhere."[101] However, a memorandum dated April 12, 2001, describing the Q1 2001 Amortization results, indicates that the Enterprise determined to make additional on-top adjustments for NII and Gfee of $10 million and $8 million respectively, of which each had the effect of increasing the catch up, even though the modeled deferred price adjustment amortization was within the respective threshold. In her testimony regarding the information contained within the April 12, 2001 memorandum, Ms. Leanne Spencer confirmed that it was management's practice to make adjustments because of the Enterprise's asymmetric exposure.[102] Ms. Pennewell, when asked about the practice of making adjustments within the catch-up range, also confirmed that the asymmetric exposure of interest rates influenced where management wanted to be within that range, and further pointed out specifically where within the *current* policy this practice would be supported.[103]

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[101] Mr. Tim Howard commenting on the memorandum to Ms. Pennewell dated October 27, 1999, FMSE 217558. OFHEO Interview, Mr. Timothy Howard, August 5, 2004, pp 197-198
Q: Would you regard the quarterly analysis that's done of catch-up as a "where we want to be calculation"?
A: No. The reason that's in quotes, this is – the "where you want to be" is looking out towards the famous moving target. This is not a "fiddle the number" concept. And that's why I put it in quotes. But, again, because this was sufficiently complex and hard to pin down, it never – the concept never went anywhere.
[102] Ms. Leanne Spencer commenting on a memorandum from Mr. Jeff Juliane and Mr. Rene LeRouzes to Distribution, dated April 12, 2001, Subject: Q1 2001 amortization update. FMSE-SP 000220-000223. OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, p. 99.
Q: Would it have been your practice to sometimes book such an amount in because of this asymmetric exposure?
A: Yes.
Q: So, while you do not recollect specifically whether it was 10 million was booked or not, it could have been the case consistent with your practice.
A: Yes.
Ms. Leanne Spencer further commented. OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, p. 100
Q: […] and I assume you don't have any specific recollection specifically whether 8 million was booked or not.
A: I do not.
Q: But by analogy looking [sic] such an amount would have been consistent with practice that you might have employed?
A: Yes.
[103] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp. 33-34.
Q: Now, if this threshold were to be exceeded and you were required under your policy to make an adjustment to the quarter's interest amortization, you would only book the difference between the mean catch-up number and the threshold?
A: No. Our policy explicitly says that as long as we fall within that range, and the policy recognizes that we may use management judgment to recognize the fact that we typically have asymmetric exposure to interest rates. And so it's recognized that management may- that that may influence management's judgment in terms of where within that plus or minus 1 percent range we think is appropriate to be. Mortgages have a good deal of negative convexity, as I know you know, and therefore, depending on exactly the composition of our book, we won't – our catch-up position won't move symmetrically to, say, a plus or minus 100 basis point move in rates, and so where exactly within that policy range we thought it was appropriate to be, would typically be influenced by that asymmetry.

This practice and the latitude within the policy that authorized it, meant that the Enterprise was no longer making adjustments to improve the accuracy of its reported financial results**. Rather, the Enterprise was making preemptive adjustments for the sole purpose of managing prospective earnings.** OFHEO is not aware of any basis in promulgated accounting standards that would support this accounting treatment.

In his memorandum to Ms. Pennewell, Mr. Howard summed up the achievement of constructing the catch-up framework implemented by the Enterprise:

> There are variations on this theme, but you can see what I am trying to do. We have a target range that we define as the 'functional equivalent of zero'. We look at a three year horizon and multiple rate scenarios to try to avoid volatility in the monthly amortization numbers. And we give ourselves a (small) 'safe zone' before we force ourselves to make large changes in amortization to get quickly back to within our target range.[104]

*Modeling And Managing The Forecasted Catch-Up*

The discussion of catch-up thus far has focused on the impact associated with the reporting of *current* period income. However, a full understanding of the accounting for deferred price adjustment amortization, and its impact on the Enterprise's reported financial results, also has to consider the dimension of time and future reporting periods. For any given quarter, the quarterly catch-up amount is, by its very nature, simply unrecognized income or expense. The accounting policy adopted by the Enterprise specified the accounting to be applied to the catch-up in the current quarter. However, the policy also states:

> "In managing the premium/discount catch-up position, it is important to project how that position can change over time. We believe that a three year time horizon is appropriate for that assessment."[105]

Since catch-up is unrecognized income or expense, a *forecast* of catch-up is, in effect, nothing more than a forecast of *future* unrecognized income or expense. It was in this regard that the Enterprise devoted considerable systems and human resources to supporting a well developed and robust capability to forecast the level of catch-up in future periods, in accordance with the several years planning horizon referred to in the policy.

Each quarter, and often much more frequently, the Enterprise would perform analysis to determine both the current quarter's catch-up as well as the forecast of catch-up for prospective periods. The forecasting of prospective period catch-up would further be

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OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, p. 83.
Q: Could you tell me in here where it refers to this policy around the negative convexity and booking within the target range that you referred to before?
A: It's on the second page, and specific – and I will tell you that the language that we look to in this policy is, "…we also need to be sensitive to the impact of extreme interest rate moves on our catch-up. This will affect where within our target range we should aim to be."

[104] Attachment to email from Mr. Tim Howard to Ms. Janet Pennewell, VP Financial Reporting & Planning, November 25, 2000, Subject: Amortization, Pennewell 08252004.

[105] Purchase Premium and Discount Amortization Policy, FMSE 074524.

performed pursuant to a variety of different assumptions, in order to determine, for example, the impact of different interest rate assumptions on future period catch-up.

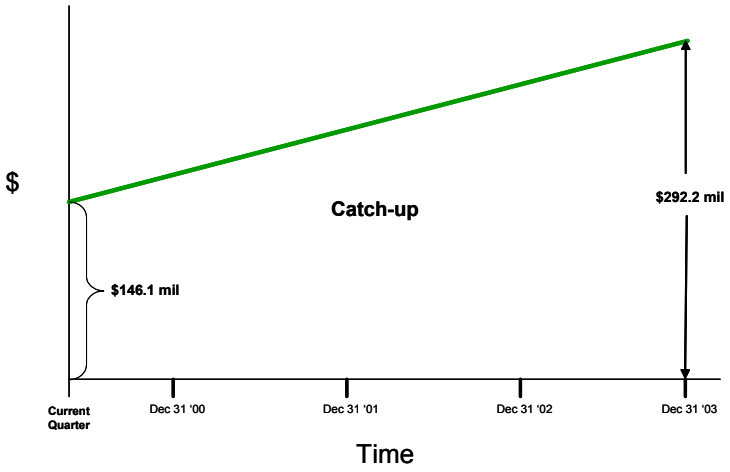
During the period from 1999 through to 2004, the Enterprise performed many sensitivity analyses for forecasting purposes. Over this timeframe, the relationship between forecasted catch-up for near term periods, and forecasted catch-up for outer periods varied. In 2000, the forecasts performed show progressively higher levels of catch-up, where the cumulative amount, at the end of the planning horizon, is significantly higher than the current period catch-up. For example, the table below presents a sensitivity analysis for the first quarter of 2000 that provides an estimate of the catch-up for prospective periods through to 2004 - the end of the planning horizon. This forecast was contained within a memorandum dated April 5, 2000. The forecasted catch-up for each period represents a weighted average of the catch-up calculated using prepayment estimates associated with each of five interest rate scenarios: Base Rate Path, +/- 60 basis points and +/- 120 basis points.[106] See Appendix I of this document for a more detailed description of the modeling methodology.

| Forecast Period | 5-Apr-00 Analysis |
|---|---|
| Dec-00 | $183.0 |
| Dec-01 | $222.0 |
| Dec-02 | $258.0 |
| Dec-03 | $292.2 |
| ***Base rate path used*** | 8.65% |
| ***Book used*** | Jan-00 |
| ***Reference*** | *FMSE-SP 000237* |

Another way to understand the catch-up is to view it graphically. The following is an illustration that uses the estimate of catch-up contained within the April 5th 2000 analysis.

[106] Memorandum from Mr. Jeff Juliane to Ms. Leanne Spencer, dated April 5, 2000, Subject: Amortization Sensitivities. FMSE-SP 000236–000238.

**Illustration**




The catch-up represents the difference between the projection of deferred price adjustment amortization in accordance with a forecast using multiple up and down rate path scenarios versus the prospective amortization that would be taken in accordance with 'in-use' amortization factors applied prospectively. The level as well as shape of both the catch-up, and prospective amortization could however vary. This is due to the fact that such amortization could include the amortization of both premiums and discounts. All other things being equal, the amortization of premiums would result in projected expense and the amortization of discount would result in projected income. The projected amount of net interest income from the amortization of both premiums and discounts would be a combination of the two. This net amount, therefore, is going to be impacted by whether there are more premiums or discounts associated with the underlying mortgage assets held by the Enterprise. Further complicating this is that at any given point in time, the mortgage assets held by the Enterprise have varying estimated lives. For example, a 15 year mortgage has a different estimated life than a conventional 30 year mortgage.

For purposes of this discussion, the shape and level of expected amortization is not important. The illustration is meant to show the nature of the catch-up itself. In this example, the sensitivity analysis prepared on April 5, 2000, serves as an example of the catch-up calculation that would be made in the current quarter. The estimate of current quarterly catch-up would then be subject to comparison to the catch-up target threshold in effect in order to determine if an adjustment to the *current* quarter's income is required. Alternatively, the estimate of the subsequent year's catch-up is, in this illustration, an estimate of the cumulative amount of future unrecorded income (catch-up) that would exist at each point forward if no other action is taken.

Hypothetically, if the Enterprise were to record the entire amount of the current quarter's catch-up, the forecasted catch-up for subsequent periods would be similarly affected as well.



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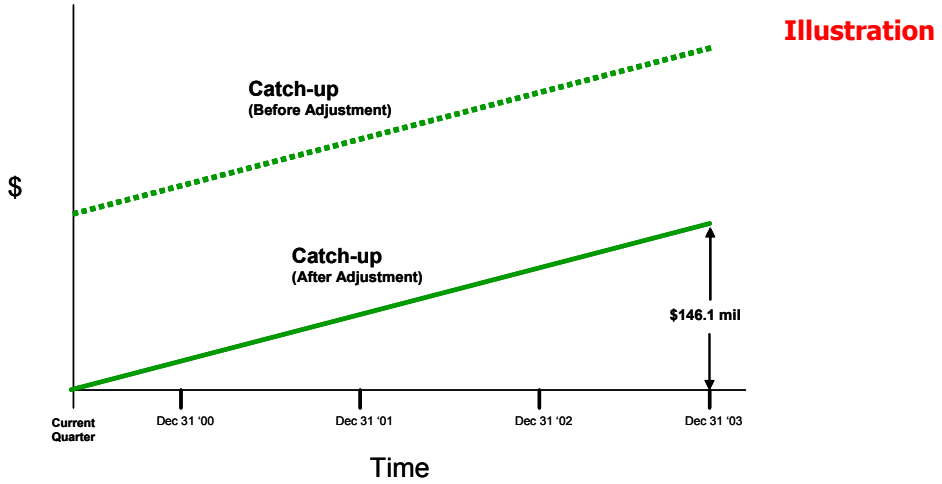



**OFHEO believes that the methods selected and infrastructure developed to support the estimation of prospective unrecognized income or expense, were in fact designed to facilitate a proactive management of earnings that extended well beyond the flexibility merely afforded by the Enterprise's accounting for the *current* quarter's catch-up.** This contention is supported both by a conceptual understanding of the catch-up and estimation methods used, as well as by the actual practices and accounting employed by the Enterprise that are documented both within this section, as well as other sections in this report.

Relationship of Catch-up to Amortization

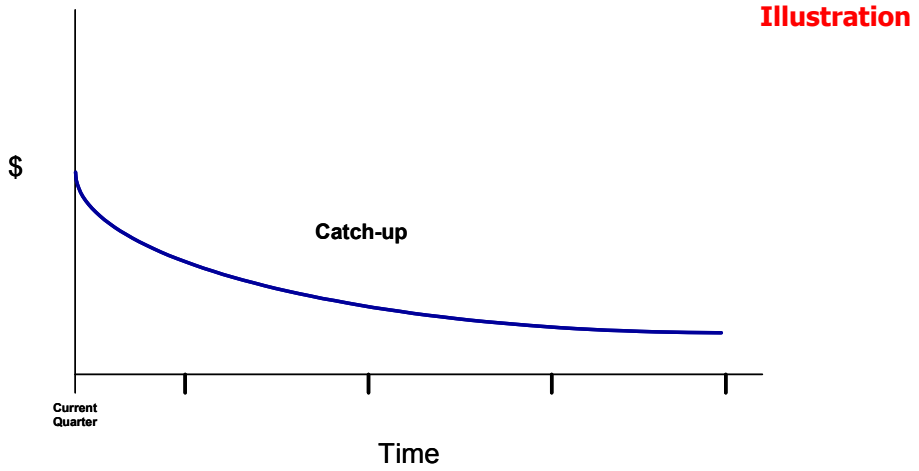
Outer periods that have a greater magnitude of either unrecognized income or unrecognized expense than the current or nearer term periods do, suggest a divergence between two estimates that conceptually should either be the same or at least be converging.

SFAS 91 requires that a retrospective - "inception to date what-if" - adjustment be made to accumulated amortization and the corresponding income statement (amortization) account. This adjustment would be based on the latest estimate of the effective life of the mortgage assets being amortized. SFAS 91 also requires that the mortgage assets be amortized *prospectively* over the new estimate of effective life. Presumptively, the estimated life of the deferred price adjustments would be the same for both the retrospective and prospective treatment. Why then, would forecasted unrecognized income or expense be growing in magnitude?

In making the adjustment required by SFAS 91, there should be no unrecorded income or expense other than the momentary difference that should then be immediately recorded, from applying the revised forecast of the new estimated lives of the mortgage assets that forms the basis of the retrospective adjustment.

If hypothetically, a reporting entity were permitted to avoid making the retrospective adjustment under SFAS 91, the forecasted amount of unrecorded income or expense associated with that treatment would then be either positive or negative but should still nevertheless, be

diminishing and converging to zero. The following graphic illustrates this effect in a circumstance where a positive (income) retrospective adjustment is not made.



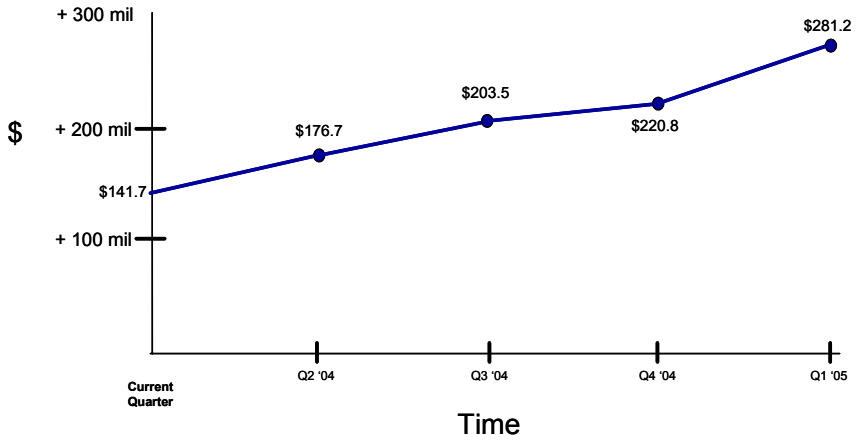

In the circumstance above, one would expect that the difference, between the amortization that *should* have been recorded and the amortization that *was* recorded, should diminish. The rate at which the unrecorded amortization would diminish would be a function of the rate at which the portfolio of mortgage assets itself is diminishing due to mortgage loan prepayments. In a typical pool of mortgages, the rate at which mortgages prepay – and the portfolio diminishes – is faster earlier in the life of the pool, than at the end.

This expectation of diminishing differences however, was not always reflected in the forecasts of catch-up at the Enterprise. The graph below shows the forecast of guarantee fee[107] catch-up for the first quarter of 2004.[108]

[107] Fannie Mae started to separately track the catch-up associated with purchased premiums and discounts and guarantee fee separately, in accordance with the requirements of the December 2000 purchased premium and discount amortization policy. Purchase Premium and Discount Amortization Policy, FMSE 074523-074524.

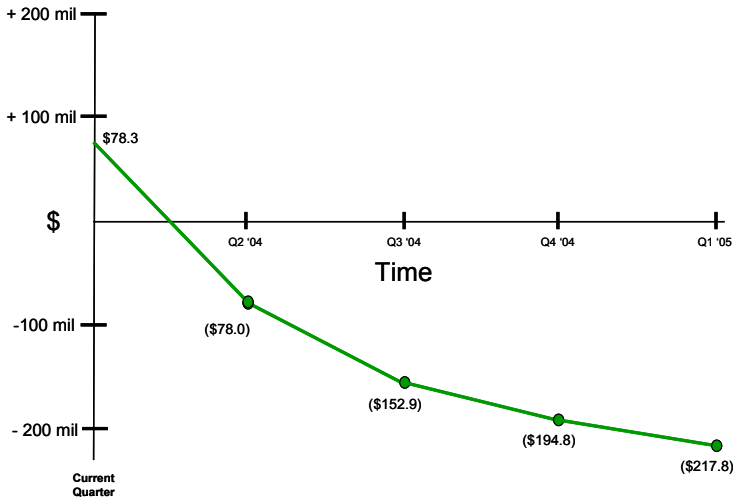
[108] The first quarter 2004 estimate of current quarter catch-up was further adjusted by the correction of an error related to the treatment of Dollar Rolls. The impact of this correction resulted in an adjustment to NII that reduced that catch-up by approximately $36 million. Accordingly, all prospective periods of forecasted catch-up would have been similarly affected as well. OFHEO utilized the 'before adjustment amounts' since it did not have the 'post adjustment' analysis.
Memorandum from Jeff Juliane and Rene LeRouzes, Subject: Q1 2004 Amortization Results, to File, dated April 27, 2004, FMSE-SP 000260-000265 and
Memorandum from Mukul Gupta, Subject: Error in Amortization of Securities Used in Dollar Rolls, to Distribution, dated May 3, 2004, FMSE-SP 000266-000272. Distribution included among others Ms. Leanne Spencer, Mr. Jonathan Boyles, Ms. Janet Pennewell.

**GFEE**




This analysis shows the estimate of catch-up to be growing over subsequent prospective quarters. The next graph shows the forecast of NII catch-up for the same period:

**NII**




In either case, the magnitude of forecasted unrecognized income and loss should be trending towards zero in subsequent periods.

The selection of the catch-up forecast for the first quarter of 2004 was specifically made because according to the testimony of Fannie Mae management decided not to make any 'in use' factor changes at the end of that quarter. OFHEO does not find this decision to be appropriate. However, it serves a useful purpose since the Enterprise could not provide many

instances where full catch-up forecasts were performed on both a before and after 'in use' factor change basis.[109]

Appendix I provides an analysis of the estimation methods that Fannie Mae employed to determine the catch-up. As noted in this appendix, the Enterprise uses a *different* method for forecasting catch-up and estimating prepayment speeds for determining the SFAS 91 retrospective adjustment than it uses for determining prospective amortization. Pursuant to the analysis provided in the appendix, OFHEO has concluded that Fannie Mae's forecast of catch-up and estimate of the SFAS 91 retrospective adjustment, based on their method of using multiple rate paths and related assumptions, is incorrect. In addition, since the Enterprise's own forecasts of catch-up do not consistently show a diminishing level of catch-up, **OFHEO has further concluded that the estimate of effective lives used for prospectively amortizing deferred price adjustments is also incorrect.**

The Use of Catch-up to Promote Earnings Stability and Shift Income or Expense between Periods

In two previous sections, this report described 1) the latitude of the Enterprise – within the framework of policy – to recognize discretionary income or expense within the target threshold range, and 2) the view that the catch-up was to be managed in accordance with maintaining a target level of catch-up, such that the potential of exceeding the target range thresholds and the resultant earnings volatility, was minimized.

The capability to forecast catch-up therefore was, among other things, the means to steer toward the desired target catch-up. Making discretionary adjustments within the target range served to propel the Enterprise toward this goal. A challenge however, would be the wake of earnings volatility that such navigation created. In this regard, course corrections using such discretionary adjustments would themselves potentially create an undesirable impact in the quarter in which they were made.

A memorandum[110] dated April 12, 2001 from Jeff Juliane and Rene LeRouzes indicates that planned on-tops of $75 million of income related to NII, and $57 million of expense relating to GFEE will be taken prospectively via 2001 amortization factors. The memorandum further states that 1) an additional $10 million of on-tops will be booked for 2001 "to hedge our exposure if rates continue to decline,"[111] and 2) "However, since we are disproportionately exposed to the Gfee catch-up in the down sensitivities (50 and 100 bps respectively), it was

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[109] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, p. 15.
Q: Getting back to the instances you described before where the rate change was not processed, can you recall specifically what period that was?
A: The only period I can recall was Q1 – it was the April 2004 rate change. We did not process the April 2004 rate change.
Q: And that's the April 2001 –
A: Four.
Q: April 2004, okay.

[110] Memorandum from Mr. Jeff Juliane and Mr. Rene LeRouzes to Distribution dated April 12, 2001, Subject: Q1 2001 Amortization Update. Distribution included Mr. Tom Lawler, Mr. Peter Niculescu, Ms. Leanne Spencer and Ms. Janet Pennewell. FMSE-SP 002787–002790.

[111] *Id.*

decided to layer on an additional $8 million of expense on-tops in 2001. This results in a total on-top amount of $66 million of related expense for 2001."[112]

The practice of booking scheduled monthly on-tops was previous practice at Fannie Mae. OFHEO's examination procedures did not extend to an exhaustive review of accounting records to determine all instances in which this occurred. However, in 1999 and 2000 OFHEO is aware of scheduled on-tops taken to reduce the $200 million deferred expense not taken in 1998. In addition, for purposes unrelated to this $200 million, scheduled monthly on-tops were made in 2000 as well.[113]

The memorandum dated April 12th 2001 however, is OFHEO's first understanding that scheduled on-tops were now being made as factor change adjustments. Within the amortization system itself, adjustments to current quarter and future period income could now be made. There are further instances of on-top adjustments being made through factor changes.

More significantly, and as noted in subsequent sections of this report, there are numerous instances where the impact of other accounting events were capitalized as phantom assets or liabilities within the amortization system and subsequently amortized over a 30-year conventional mortgage proxy life. Typically, these items were reconciliation differences between various accounting sub-ledgers that had an income statement effect; however, other accounting events of a different nature were treated in similar fashion as well. Thus, earnings volatility could be managed and income shifted from one period to another.

In fact, just two quarters prior to the commencement of the scheduled factor amortization adjustments of 2001, an unsigned note to Ms. Janet Pennewell stated the following:

> Lost $20 million in catch-up due to rate change and picked up $30 million in catch-up due to change in book (recognizing to [sic] little discount into income). Lost $78 million in catch up due to methodology change (short term CPR's were changed from 3-months to 24-month) to slow down the recognition of discount into income in request to reducing the positive catch-up and transferring income into the outer years.[114]

The use of the amortization process to effect changes to the Enterprise's financial statements also supports OFHEO's contention that Fannie Mae management selected estimation methods that understated the true level of the catch-up. Any items, on-tops or other accounting events that had an income statement impact would have had the earlier noted effect of reducing the estimate of prospective catch-up for all forecast horizons impacted. In this regard, having a

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[112] *Id.*

[113] Memorandum from Mr. Rene LeRouzes to Distribution, dated October 17, 2000, Subject: PDA/REMIC Results (August Book), the distribution list includes Ms. Janet Pennewell and Mr. Jeff Juliane. FMSE-SP 000113-000116. This memorandum states: "With the Q3 update, our on-top adjustments for the remainder of 2000 and the forecast horizon was revised. Previously, we were booking approximately $8.0M monthly ($1.8 M Gfee, $6.0 M NII) for the balance of 2000. Revised for the Q3 update, and incorporated within the forecast, on-tops are approximately $2.0M monthly ($.7M GFee, $1.0M NII) for the remainder of the year."

[114] Undated document titled: "Notes for Janet – Explanation of results." FMSE-SP 002590.

large catch-up would be preferred. In theory, the catch-up could mechanically support the ratable recognition of stable earnings, or the shifting of income between periods, if it was in either a positive or negative position. However, it would be much better to have a proportionally larger, rather than smaller, unrecognized income to cushion against earnings volatility – both market driven (i.e., changing prepayment estimates) and event driven (reconciliation errors). A larger rather than smaller catch-up could also serve as a reserve that could be drawn from or replenished as necessity might dictate.

The use of the amortization system to effect adjustments to the financial statements also provided a means to contravene the internal controls that would otherwise be necessary when making adjustments to the general ledger. Accounting systems, as well as traditional related internal controls, serve to highlight such entries both on a current basis as well in accordance with maintaining a history or an audit trail of such adjustments that would facilitate inquiry and critical review. The amortization system on the other hand was not subject to these same internal controls. **A diminished transaction trail, key person dependencies, as well as accounting effects obscured within sub-ledgers containing hundreds of thousands of records, were all manifestations of the process of amortization at Fannie Mae.**

Subsequent sections of this report will detail matters concerning the weak control environment associated with the amortization process. We have concluded that Fannie Mae tolerated significant control weaknesses as a further means to obscure the management of the catch-up and any related income effects.

## Development of Systems and Modeling Capability

**OFHEO has concluded that iterative modeling of the catch-up was performed for both the current quarter as well as prospective reporting periods for the purpose of generating results under varying assumptions in order to achieve a specific desired outcome.**

The active modeling and management of both current and forecasted catch-up required systems applications more robust than the Enterprise previously had. This section of the report links methods for modeling and managing the catch-up that were previously described, to systems functionality specifically designed to support them and the earnings management intended. Subsequent sections of this report, as well as the included appendix titled "Estimation Methods Used for Modeling the Catch-up" will document examples of instances where either iterative modeling was performed or assumptions were selected specifically to achieve desired financial results.

In 1998, the Enterprise anticipated this need and installed an application called "BancWare Convergence" (hereafter referred to as "BancWare"). This software was "purchased and installed as a tool to facilitate the scenario analysis of our purchase discount/premium and deferred/ prepaid fee position."[115] In a memorandum dated March 12, 1999, Mr. Jeff Juliane

[115] Memorandum from Mr. Jeff Juliane to Distribution, dated March 12, 1999, Subject: BancWare Convergence – Next Steps, distribution included; Mr. Tom Lawler, Ms. Leanne Spencer, Ms. Mary

described that the first phase of implementation began in the fall of 1998 and further advocated the elevated priority of functional development. In commenting on the capability now provided by BancWare, Mr. Juliane noted: "Phase I of the conversion to BancWare was completed recently increasing our 'what-if' capabilities in analyzing purchase premium/discount and deferred/prepaid fees on the core book of business."[116] Commenting on upgrades in capability achieved in Phase I, Mr. Juliane further noted that "These upgrades created enhanced cash flows, which improved our catch-up forecasting ability."[117]

In commenting on the need for a specific additional enhancement that would allow BancWare to produce modeling reports in dollars, and therefore bypass PDAMS[118], Mr. Juliane states a need for producing multiple scenarios quickly: "This enhancement would eliminate the need to run scenarios through PDAMS to produce useable reports. This greatly enhances our ability to produce multiple scenarios within short timeframes." [119]

Commenting on needs beyond speed, and providing a stated objective for certain desired capabilities, Mr. Juliane further wrote:

> BancWare amortizes premium and discount using an interest proxy method based on a proportionate amount of principal collected. This generates an amortization amount that ensures that the purchase price is maintained throughout the life of the instrument. Consequently, the normal amortization factors BancWare produces assume that you record catch-up in the period when incurred. **However, even though the normal factors assume that you will recognize catch-up in the period incurred, BancWare gives you the flexibility to manipulate the factors to produce an array of recognition streams.[120]** [Emphasis added]

Mr. Juliane continues in the paragraph:

> With this manipulation you can 'bleed' the catch-up within a specified time period and affect both the subsidiary ledger as well as the general ledger equally. This strengthens the earnings management that is necessary when dealing with a volatile book of business.[121]

Further in the memorandum, Mr. Juliane describes additional functionality that – if built - would provide further flexibility and control over the recognition of the catch-up:

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Lewers, Mr. Jonathan Boyles, with copy to Ms. Janet Pennewell and Mr. Rene LeRouzes, FMSE-SP 000364–000367.

[116] *Id.*

[117] *Id.*

[118] Purchase Discount Amortization System. This was the system used at the time by the Enterprise to model catch-up.

[119] Memorandum from Mr. Jeff Juliane to Distribution, dated March 12, 1999, Subject: BancWare Convergence – Next Steps, distribution included; Mr. Tom Lawler, Ms. Leanne Spencer, Ms. Mary Lewers, Mr. Jonathan Boyles, with cc to Ms. Janet Pennewell and Mr. Rene LeRouzes, FMSE-SP 000364–000367.

[120] *Id.*

[121] *Id.*

> It is recommended that we adopt the amortization method currently used within BancWare. It applies Fas [sic] 91 more consistently than our PDAMS process and has the ability to generate factors that give us multiple recognition patterns that create maximum earnings flexibility. We will need to build a table within BancWare (or multiple tables) that will allow us to control the period over which catch-up is recognized.[122]

OFHEO believes that the catch-up convention itself is inconsistent with the requirements of GAAP. **It is clear however, that in addition to not recognizing amounts that should be recorded in the current period as they are estimated, the Enterprise intended to also manage the prospective periods over which the deferred amounts were managed, and devoted resources in order to systematically apply this inappropriate treatment.**

Additional sections of this report will demonstrate the circumstances under which this capability was used.

### *Historical Analysis of Accounting for Deferred Price Amortization*

The previous discussion of OFHEO's preliminary findings on accounting for deferred price amortization focused on the Enterprise's accounting at the end of 1998 and years immediately subsequent, as well as the formulation of a policy that led to the adoption of the Enterprise's policy in December 2000 that remains in effect currently. But what was the impact?

We have attempted to illustrate the effect that the Enterprise's policies and practices have had on the recorded amount of amortization. All of the information that these charts are based on was provided by the Enterprise. While we have made adjustments to reflect the impact of particular aspects of the Enterprise's policies and practices, in some cases this was difficult due to inconsistent information and inadequately described adjustments. It should be noted that while we have included adjustments to amortization for the periodic swings in the catch-up level, we have concluded elsewhere in this report that the calculation of the catch-up level was not consistent with the requirements of SFAS 91.

An overview of the effect is illustrated in the following charts which show how the implementation of the Enterprise's amortization policy reduced income statement volatility:

[122] *Id.*

**Chart 1:**

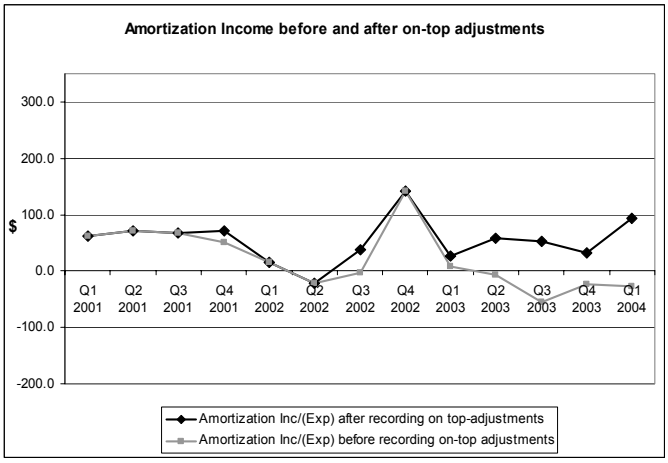



***Chart 1*** shows the effect the on-top adjustments had on the recorded amount of amortization income or expense.

**Chart 2:**

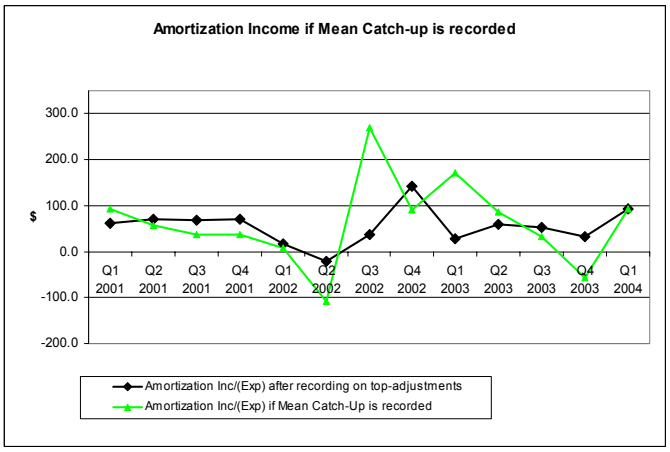



***Chart 2*** shows the effect of recording the mean amount of catch-up to $0 at each quarter-end. The base amount is calculated using a base rate path, which is the interest rate path the Enterprise deems to be the most likely forecasted rate. Such base rate path is then used to generate a forecast of prepayments. The mean amount is a simple average using the base rate path and 4 shocks scenarios of up and down 50 bps and up and down 100 bps. As we have noted elsewhere in this report, we do not believe that the mean catch-up would be equivalent to the retrospective adjustment that is required by SFAS 91. However, this chart does show that the Enterprise's policy of applying the catch-up thresholds and not recording the mean

amount to $0 at each quarter end had the effect of significantly reducing the volatility of recorded amounts.

**Chart 3:**

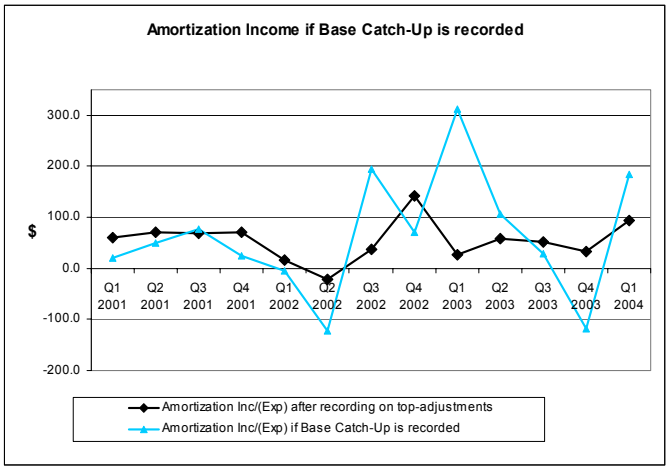



***Chart 3*** shows the effect of recording the base amount of catch-up to $0 at each quarter-end. This analysis clearly shows that, not only did the Enterprise's policy provide more stable earnings but also the use of the mean of the five scenarios in the calculation of catch-up further served to minimize the volatility of the catch-up position (as compared to the base amount of calculated catch-up) in certain periods.

**Chart 4:**

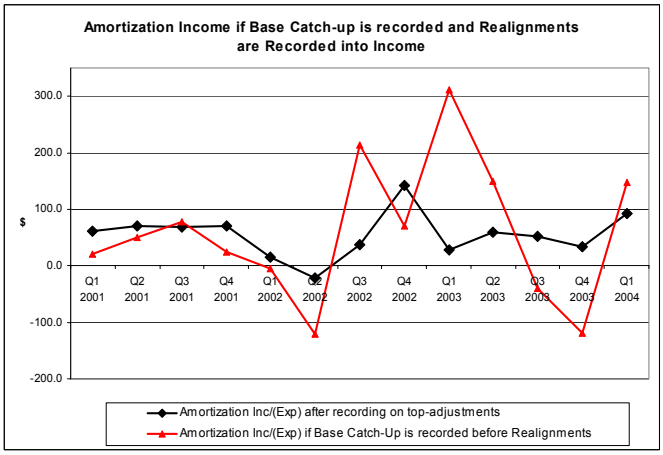



***Chart 4*** shows both the effect of recording the base amount of catch-up to $0 at each quarter-end as well as what the impact would have been if the reconciliation differences had been recorded (rather than capitalized and amortized over proxy lives) in the periods that they were

calculated. Although the true determination of what amounts should have been recorded in prior periods is a matter of ongoing examination, this chart adequately depicts the total impact of some of the Enterprise's policies and practices based upon the information we were provided.

The remainder of this section provides further specific examples regarding the Enterprise's *application* of its policies. These *examples* are intended to illustrate our findings. **OFHEO is still in the process of reviewing further information and analysis regarding the Enterprise's accounting for deferred price adjustment amortization.** Examples of the Enterprise's accounting for deferred price adjustments include:

a. On two occasions during 2003, a variety of means were employed to affect the amount of catch-up adjustment required during periods in which investment analysts' expectations would otherwise not have been met.

b. Numerous sensitivity runs of the catch-up were performed so that results under different assumptions could be evaluated. In the instances reviewed, assumptions were selected so that generated results would trigger adjustments to income in order to produce desired financial results.

c. Management exercised discretion in accordance with the adopted policy in the selection of interest rate assumptions to ensure desired financial results were achieved.

d. Inconsistent accounting practices were applied in the determination of the catch-up position. These inconsistently applied practices allowed management to avoid exceeding the thresholds for the catch-up position.

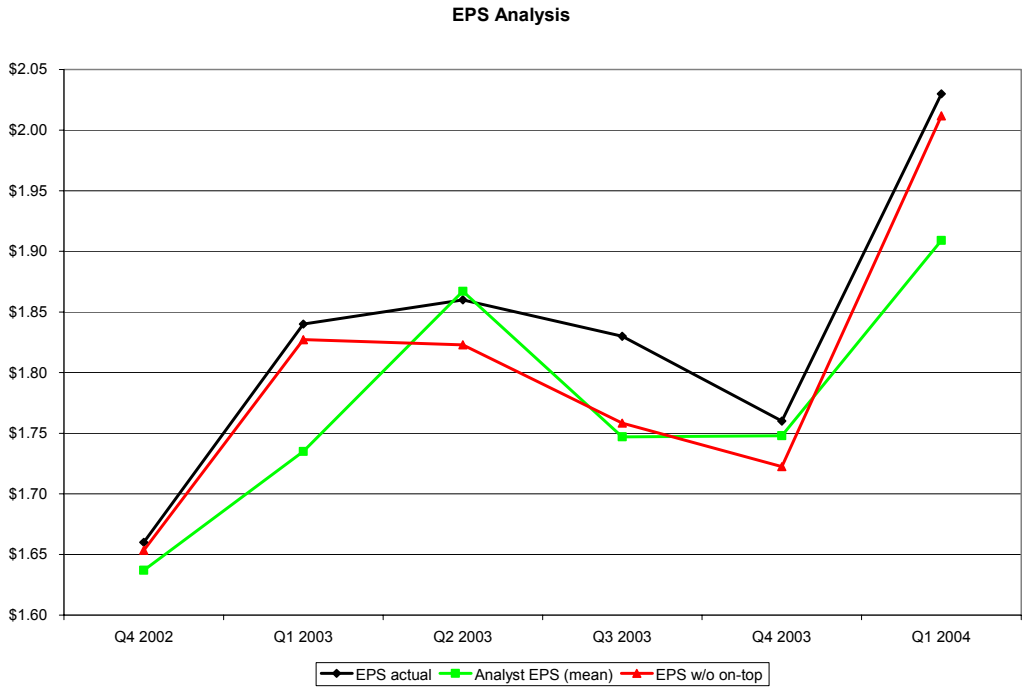
e. Reconciliation differences between information maintained on sub-ledgers and information used by the catch-up modeling application were recorded as 'phantom' assets or liabilities and were amortized over subsequent years.[123]

## Management of Catch-Up Results

The Enterprise's policies for accounting for amortization were purposefully designed and implemented in a manner that provided management with the discretion to adjust the amount of recorded income or expense as long as such adjustments were made to reduce catch-up to the threshold amount as well as within the target catch-up ranges. This gave management the means to mitigate the volatility of income that is normally associated with a large mortgage portfolio, and further gave them the flexibility to achieve desired financial results.

[123] Fannie Mae Audit Report, Office of Auditing, Amortization Audit, dated July 9, 2003, FMSE 023745-023752 under the caption 'Data Processes' states:
"Because of systems and process limitations, reconciliation differences exist between the amortization account sub-ledgers (STATS and LASER), the G/L, and the amortization database (PDI). For this reason, the various systems need to be periodically realigned, resulting in adjustments to original unamortized accounts and accumulated amortization account balances.
These adjustments ranged from $700 thousand to $45 million during the period 11/2002 to 5/2003. Management's practice has been to expense smaller differences, to book and amortize larger differences as new acquisitions, or incorporate the differences into the overall Catch-up balance."

**In addition, the Enterprise engineered the catch-up results to generate a catch-up amount that exceeded the threshold, in order to trigger a specific amount of an on-top adjustment pursuant to the policy.**




During Q2 and Q4 of 2003, on-top adjustments were recorded that - after adjusting for the effect of income taxes - allowed the Enterprise to meet (or very closely meet) analysts' estimates. Such adjustments made to the accounting for amortization - during the period since the Enterprise began filing public financial information - were contrary to SEC Staff Accounting Bulletin No. 99 (SAB 99).

In June of 2003, the consensus EPS estimate for Fannie Mae was $1.867 per share and the low estimate was $1.81 per share.[124] The actual EPS of Fannie Mae prior to recording the on-top adjustment would have been only $1.82 per share. After recording the on-top adjustment, the final EPS amount was $1.86 per share.

The amount of the on-tops recorded for the June 2003 closing were $21.2 million for NII and $24.9 million for Gfee. The amount of the on-top required (per the Enterprise's policy) as of June, 2003 was significantly affected by two different events. Both of the two events described below had the effect of increasing the amount of income to be recorded without borrowing too much income from future periods:

- First, the interest rate selected for the computation of the catch-up as of June 30 was specifically changed to incorporate interest rate drops that occurred (primarily during the

[124] Source: Bloomberg

month May).[125] OFHEO has concluded that the interest rate chosen by the Enterprise for the June 2003 catch-up sensitivity was chosen, in part, because of the effect that such a change would have on the amount of income for the quarter as well as the *forecasted* amount of catch-up. Essentially, the rate was chosen to increase income, but in a measured fashion. See Section "Management Discretion Applied in the Selection of Market Assumptions" for more information on this matter.

- Second, the Enterprise began to add certain capitalized reconciliation differences to the catch-up results (in addition to the impact of certain forecasted reconciliation differences which had been included in the catch-up analysis beginning in the prior quarter.) Again, the inclusion of a *forecasted* reconciliation difference in the catch-up results shows that management was thinking about current and future periods in determining the amounts to be recorded in the financial statements. OFHEO has concluded that the inclusion of such realignment differences in the catch-up sensitivity is not appropriate. See Section "Inconsistently Applied Accounting Practices to Determine the Catch-up" for more information on this matter.

In December of 2003, the consensus EPS estimate for Fannie Mae was $1.75 per share.[126] The actual EPS of Fannie Mae prior to recording the on-top adjustment would have been only $1.72 per share. After recording the on-top adjustment, the final EPS amount was $1.76 per share.

The December 2003 catch-up analysis was notable for the manner in which the catch-up amount was determined. In this circumstance, multiple catch-up sensitivities were run[127] before the final catch-up amount was determined. OFHEO has received draft sensitivity reports generated on January 5, January 6, and January 8, 2004. In addition, there was a final draft sensitivity report, which is undated, but which matches the amount of the final on-top adjustment which was recorded on January 10, 2004.

In addition, there were two journal entries used to record the on-top adjustments. The first journal entry, dated January 7, 2004 was for $50.1 million of income.[128] The entry is supported by a sensitivity analysis and bears a number of authorizing signatures including sign-offs by Mr. Juliane and Ms. Pennewell. The second entry, dated January 10, 2004 was for an additional $6.5 million.[129] Such activity, on its face, may not raise much attention. But in retrospect, it seems suspect. The final catch-up threshold for the fourth quarter of 2003 was $110.2 million. If a sensitivity analysis was run on January 7th and an on-top had already been recorded, then why would another sensitivity analysis need to be run? Also, why would the result, a mere $6.5 million then be recorded? The $6.5 million number seems especially small when you consider that, according to the definition provided by management, the "functional equivalent of zero"[130] was +/- $110.2 million?

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[125] The Fannie Mae 30-year coupon dropped from 4.908% on April 30, 2003 to 4.177% on June 12, 2003. The rate then rose to 4.648% on June 30, 2003. Source: Bloomberg. FMSE 194295-194296.
[126] Source: Bloomberg
[127] For bates ranges see references in the table on the following page.
[128] Journal Entry Dated 1/7/2004, FMSE 216777
[129] Journal Entry Dated 1/10/2004, FMSE 216778
[130] OFHEO Interview, Mr. Tim Howard, August 5, 2004, p. 151
Q: And do you think that, given the historical amount of the variability, that even an annual variability, that the $ 200- or potentially greater than $ 200-million target range that you apply is reasonable?

The results of the four sensitivities that we received are compared in the following table:

| Date | NII Catch-Up Mean | Catch-Up Threshold | Difference | Comments |
|---|---|---|---|---|
| January 5, 2004 | $ 173.5 | $ 109.5 | $ 64.0 | Marked "Not Final" |
| January 6, 2004 | 159.6 | 109.5 | 50.1 | Agrees to on-top recorded on 1/7 |
| January 8, 2004 | 133.6 | 110.2 | 23.4 | Marked "Alternative" |
| January 10, 2004 | 166.8 | 110.2 | 56.6 | Agrees to combined on-tops recorded on 1/7, 1/10 |

Bates numbers (in order by date above): FMSE-SP 002872, 002875, 002869, and 002502

As the table above shows, the NII catch-up was recalculated twice after the on-top journal entry was recorded on January 7, 2004. In addition, it should be noted that the NII revenue target was also slightly adjusted from $109.5 million to $110.2 million. The adjustment of the NII target had the effect of changing the catch-up threshold itself.

As of the date of this report, we have received no specific evidence that such adjustments were made to intentionally match the analysts' estimates. However, the existence of multiple sensitivity runs, the timing of their production and the small amounts of on-top journal entries recorded suggests that results were generated to achieve desired financial results.

A reason for the multiple runs however, *is* suggested by Mr. Juliane's 2002 performance appraisal. That performance appraisal states:

Under a section entitled "Objective 1" of Mr. Juliane's 2002 year-end appraisal, the following statement appears (among others): "Assist management to reach results that fit within established guidelines." Under the "Results Achieved" section of Objective 1, the following appraisal if provided:

> This was an extremely intense year as record low interest rates could have caused our catch-up position to fall outside of our corporate policy. The low interest rates resulted in a significant increase in the number of sensitivity runs performed to provide management with the best analysis possible when making decisions. In support of this need, Jeff and his staff completed several unscheduled sensitivity runs and responded to numerous requests for information.[131]

Although this performance appraisal was for the prior year (2002) it supports OFHEO's contention that the Enterprise processed multiple sensitivity runs in order to "reach results." **This strongly suggests that amortization expense was being actively and inappropriately managed by the Enterprise.**

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A: I wouldn't relate it to the variability, economic variability, because what we were attempting to do was calculate a zone of estimation error, if you will, within which any number we produced we would view as the functional equivalent of zero – could not differentiate between whether $70 million is the right number or minus $50 million is the right number. That was the theory and intent behind the policy.

[131] Employee Contribution Review Form for Mr. Jeffrey Juliane for the period January to December 2002. The appraisal was provided by Mr. Richard Stawarz and approved by Ms. Janet Pennewell and is dated March 18, 2003. FMSE 220368-22073.

## Management Discretion Applied in the Selection of Market Rate Assumptions

Appendix I "Estimation Methods Used for Modeling the Catch-up" provides an analysis of estimation methods selected, and their impact on the catch-up. The appendix also provides an analysis of assumptions selected in 1999 and 2000 by management that were used in the determination of the catch-up. OFHEO believes that the estimation methods selected, as well as market rate assumptions applied during this period, were consistent with an intent to avoid volatility and achieve desired financial results. **OFHEO also believes there are other noteworthy instances in which management selected assumptions, in periods subsequent to 2000, in order to produce desired financial results as well.**

Noteworthy in particular is the calculation of the June 2003 amortization. First, in this period, rates had declined sharply during the quarter. This rate decline precipitated a significant amount of discussion on how it should be addressed insofar as the modeling of the deferred price amortization was concerned.[132]

During testimony, management indicated that due to the timing of the rate setting meeting, it was common that the rate might be updated prior to quarter-end.[133] Due to the steep decline in rates, an analysis was performed to determine the most appropriate rate path to use for the June 2003 quarter-end sensitivity analysis. As a result of the analysis, management decided that it would be best to use a "hybrid rate" in order to calculate the amortization for that quarter.[134] The hybrid rate would be a combination of the current rate curve and the forward curve run as of April 30, 2003.[135]

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[132] Memorandum prepared by Mr. Jeff Juliane, Re: Amortization, June 11, 2003, FMSE-SP 000166-000167, in which he discusses 3 different interest rate scenarios and their expected impact on the Net Interest Income and Guarantee Fee catch-up position as of 6/30/03, 9/30/03, 12/31/03 and 12/31/04 compared to the respective thresholds.

[133] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, p.34
A: In Q2 there was a significant rate move after the rate setting meeting that came out. So we had a subsequent meeting with the rate setters and we came up with an adjusted rate path that they felt was the more prudent rate path to deal with because rates had been so substantial.

[134] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, p. 56
A: We felt it prudent that we needed to adjust our interest rate forecast because taken into the effect that rate reduction and then management had discussions around whether we should use like the May 15 floor or some other floor or what was an appropriate long-term rate associated with that historically low short-term perspective and they came up with this hybrid approach of getting back to the April 30 forward long-term perspective over a seven-month time horizon--6 month time horizon.

[135] Memorandum prepared by Mr. Jeff Juliane, Re: Amortization, dated June 11, 2003, FMSE- SP 000166-000167 states "Management elected to determine the impacts in considering the move down in rates as a "temporary shift" in the curve from the rates of April 30th. A third rate curve was modeled which we consider as a "hybrid" of the two runs. The "hybrid" rate path started at the May 28th current coupon rate, which was 50 basis points lower as compared to the April 30th forward rate, reverting back to the April 30th curve by the end of October. The curve was then consistent with the April 30th curve from that point forward."

The hybrid rate would consider the recent decline in rates, but at the same time assume a return to the April rate level over a short period of time. The net amount of the total catch-up position at that point was a deferred income amount. The change to the hybrid rate had the effect of increasing the amount of deferred income and thereby increasing the amount available for income recognition in the future.

The rate that was originally used for that quarter was previously determined at a meeting in April of that year. Subsequent to that meeting, rates suddenly dropped by approximately 50 basis points. The effect of the rate change on the catch-up level was analyzed in a memorandum dated June 11, 2003 from Mr. Jeff Juliane. The following table is an excerpt from that analysis:

**4/30/2003 Forward Curve Run**

| Date | NII Catch-up | 1% of NII Revenue Target | Gfee Catch-up | 2% of Gfee Revenue Target |
|---|---|---|---|---|
| 6/30/2003 | $190.2 | $99.6 | $77.6 | $44.4 |
| 9/30/2003 | $142.0 | $99.6 | $81.3 | $44.4 |
| 12/31/2003 | $112.8 | $99.6 | $83.2 | $44.4 |
| 12/31/2004 | $68.2 | $108.5 | $90.0 | $47.7 |

**Down 50 Run**

| Date | NII Catch-up | 1% of NII Revenue Target | Gfee Catch-up | 2% of Gfee Revenue Target |
|---|---|---|---|---|
| 6/30/2003 | $216.0 | $99.6 | $174.3 | $44.4 |
| 9/30/2003 | $138.7 | $99.6 | $192.5 | $44.4 |
| 12/31/2003 | $99.4 | $99.6 | $204.6 | $44.4 |
| 12/31/2004 | $8.6 | $108.5 | $231.2 | $47.7 |

**Hybrid run**

| Date | NII Catch-up | 1% of NII Revenue Target | Gfee Catch-up | 2% of Gfee Revenue Target |
|---|---|---|---|---|
| 6/30/2003 | $217.3 | $99.6 | $92.1 | $44.4 |
| 9/30/2003 | $158.0 | $99.6 | $100.2 | $44.4 |
| 12/31/2003 | $129.4 | $99.6 | $102.4 | $44.4 |
| 12/31/2004 | $92.6 | $108.5 | $106.7 | $47.7 |

*Tables from memorandum dated June 11, 2003 from Jeff Juliane to Distribution. Subject: Amortization, FMSE –SP 000166-000167*

The first table labeled "4/30/2003 Forward Curve Run" shows the amount of catch-up position using the interest rates from the April forecast.

The second table labeled "Down 50 Run" shows the amount of the catch-up position using the revised interest rate from a date in early June of 2003.

The third table labeled "Hybrid Run" shows the amount of the catch-up position using the revised interest rate from a date in early June combined with an assumption of a return to the April 30th rate level by the end of October 2003.

**It is important to note that in all these rate scenarios, management's analysis included a *projection* of how it would affect future periods. This is consistent with emphasizing the forecasting and management of the catch-up over prospective periods.**

The different dates on the tables reflect the forecasted trend in the catch-up position based upon the forecasted interest rate and prepayment assumptions assuming no future change in market conditions. In all three scenarios, the amount of the deferred income for NII was forecasted to decline and the amount of the deferred income for Guarantee Fee was forecasted to increase.

A Bloomberg printout obtained from Enterprise management shows that the decrease in rates from April was a temporary decline, and that rates actually rose towards the end of June. The low point of rates for the quarter actually occurred on June 12, 2003, one day after the date of Mr. Juliane's rate analysis.[136] Coincidentally, this curve was the most advantageous rate curve possible. Had the analysis been re-run using the June 30 rate estimates, it is likely that the catch-up amounts would not have exceeded the respective thresholds and no income on-top adjustments would have been required or the amounts of the on-top adjustments would have certainly been lower.

Why the Hybrid Rate was Advantageous

The hybrid rate was attractive for two reasons: (1) the incorporation of the rate decline provided more income that could be recorded as compared to the income that could be recorded using the April rate and (2) the hybrid rate provided less income than the "Down 50" scenario. This allowed management to record some income, but not so much that the catch-up position would become negative, if rates changed adversely in subsequent periods. To this extent, the hybrid rate presented a "Goldilocks" solution: it was not too high, not too low; it was just right.

In addition, the Enterprise was in the process of correcting certain errors that had been discovered in the data used to calculate amortization. For instance, securities that were purchased at a premium were erroneously included in modeling groups with securities purchased at par or at a discount. The reason that including them together was incorrect is due to the fact that securities purchased at a premium do not respond to changes in interest rates in a similar manner as those purchased at a discount.[137] The correction of these misclassifications was being done pursuant to a project known as "Security Master."

Beginning in the first quarter of 2003, the Enterprise began modeling the effects of the Security Master project. This was important because the potential adjustments resulting from the project could have a significant effect on the amount of accumulated amortization. Specifically, the changes were likely to result in large amounts of catch-up adjustments. As the modeling

[136] Bloomberg screen print, FMSE 194295-194296
[137] SFAS 91, Q&A 51



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progressed, it became clear that the adjustments resulting from the Security Master project would result in a negative (expense) catch-up adjustment. This recognition was acknowledged by the inclusion of the projected expense as one of the reconciling items in the amortization results memorandum prepared for the quarter ended June 30, 2003.[138]

Because the Security Master project was expected to result in a large expense adjustment, it was monitored closely so that the final effect could be absorbed into the catch-up position when the project was completed without having an adverse effect on reported earnings.

The projected expense resulting from Security Master is also a reason why the "Down 50" rate scenario was not advantageous as of June 30. If too much income was taken in June, then there might not be enough unrecorded income in the catch-up position to absorb the expense resulting from the corrections identified by the Security Master project in the following quarter when the project was expected to be completed. This is another example of how the catch-up framework was used as a "cookie-jar" to mitigate forecasted expenses.

In her testimony Ms. Janet Pennewell described a point in the formulation of the policy in 1999 where the concept of a mean reversion technique was considered.[139] Mean reversion is a concept whereby forecasts of long-term interest rates are assumed to always revert to a mean interest rate level. Ms. Pennewell indicated that the Enterprise chose not to implement the mean reversion technique because they did not feel that such a technique was permissible. Ms. Pennewell further elaborated that it was her personal belief that such a technique (if employed as a matter of policy) could lead to even greater volatility. For instance, if rates fell, the mean reversion technique could slow down the rate of change in the amortization speeds. However, if rates did not revert to the mean shortly thereafter or continued to fall a large amount of catch-up adjustment could result.[140]

Although the hybrid rate did not technically constitute a mean reversion technique, in fact, it had an analogous effect. The current rate path was only used for the next few months and expected to revert back to the April 30th rate curve within a 4 month period. The flexibility to apply discretionary judgment to selecting interest rate assumptions and modeling rate curves provided much more favorable results than mandating certain rate scenarios by using the

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[138] Memorandum prepared by Mr. Jeff Juliane, Subject: Q2 Amortization Results, July 29, 2003, FMSE 023763-023765.

[139] Memorandum prepared by Mr. Jeff Juliane, Subject: Amortization Policy Runs, to Mr. Tim Howard, June 21, 2000, FMSE-SP 000024-000025, in which he discusses various scenarios showing "sensitivity results using mean reversion to generate the prospective cashflows."

[140] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp. 176-177.
Q: […] In this discussion of this alternative, the effect of assuming that rates will trend back down towards a historical average, that would have the effect of reducing earnings volatility, correct?
FANNIE MAE LEGAL COUNSEL: Would or did? Because this was done –
Q: Would.
FANNIE MAE LEGAL COUNSEL: Hypothetically.
Q: Hypothetically, it would.
A: I actually don't think it would. The proponent of that particular view thought that it would help reduce the arbitrary earnings volatility that we've talked about before. In fact, I was of the view that, in fact, it would increase the potential, in certain circumstances, for additional volatility and, more importantly, I was concerned that if rates continued to, over a sustained period of time, continued to [sic] move away from historical means that you could very quickly develop a large catch-up, and that was never our objective.

concept of mean reversion. As this circumstance shows, management had the latitude to determine whatever interest rate assumptions it desired.

## Capitalization and Amortization of Reconciliation Differences

Limitations in systems integration and application level controls undermined the integrity of information used to estimate amortization. This necessitated periodic reconciliations between information on transaction sub-ledgers (i.e. STATS, LASER) and the information on the amortization sub-ledger (iPDI). Differences from these reconciliations are known to Fannie Mae personnel as "realignments." On some occasions, these differences were recorded as adjustments in the period in which they became known. On other occasions, these differences were capitalized as phantom assets or liabilities and amortized over a period of time using the life of a proxy security.[141] Amounts capitalized in this manner were placed in a separate account in the PDI sub-ledger which was commonly referred to as the "deferred pool bucket" or the "bucket". Management of the Enterprise refers to such reconciliation differences as realignments.[142]

This practice was well known within the Enterprise. In their July 9, 2003 audit report on Amortization, the Office of Auditing included the following statement (referring to reconciliation differences):

> Management's practice has been to expense smaller differences, to book and amortize larger differences as new acquisitions, or incorporate the differences into the overall catch-up balance.[143]

In addition, Ms. Joyce Philip provided the following background on the above observation:

> Q: Did audit inquire as to whether the alternative treatment of expensing smaller items and amortizing larger items was consistent under GAAP?
>
> A: We raised-we discussed this with Jonathan [Boyles] to determine whether any one of these treatments was appropriate. And Jonathan indicated that he had no concern with either one of the methods. But he did agree that there should

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[141] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, pp. 137-138.
Q: Is – what is the amortization characteristic of balances that are assigned to the bucket?
A: We assign a conventional proxy for the amortization flow of those bucket acquisitions.
Q: "Conventional" meaning 30-year fixed rate?
A: Yes.
Q: That would be true even though originally the amount assigned to this bucket may have come from a pooled mortgage that – pooled mortgages that was not 30-year fixed rate?
A: That's correct. I mean, the color of the elements of our asset is 30-year fixed range [sic: should be rate]. The specific answer to your question is you're right.

[142] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, pp. 82-83.
Q: […] So what is the deferred pool bucket comprised of?
A: When we have--when we do--the deferred pool bucket is where we do realignments. We have a realignment policy that states that amounts above a certain threshold are put in the deferred pool bucket and given the proxy factors that amortize it over the life of that proxy collateral, and--but the amount is fully incorporated within the framework of the policy in times of catch-up.

[143] Fannie Mae Office of Auditing Report, Amortization Audit, July 9, 2003, FMSE 023745-023752.

> be consistent direction or procedures as to how, going forward, realignment differences should be treated.[144]

In his testimony, Mr. Boyles claimed no recollection of that discussion.[145]

There is no justification in GAAP for capitalizing and deferring differences resulting from reconciliation differences. Also, the effort involved in performing these reconciliations, and the magnitude of the differences, suggests that meaningful weaknesses in internal controls and system deficiencies had existed in previous years.

The following is an illustration of how the practice of transferring differences into the bucket would work: For example, a security is purchased with a premium of $10, a purchase price of $ 110 and $100 redemption value. Six months later the systems are realigned and the premium, which was originally recorded at $10, is adjusted to $5. As such, the amortization that has occurred to date is roughly twice as high as it should have been. Rather than recording an adjustment to income as they should have, Fannie Mae moved the difference to the bucket and amortized it using a proxy estimated life.

According to information OFHEO received during the examination, the practice of capitalizing reconciliation differences dates back to 1991. The last significant LASER reconciliation difference added to the bucket was a deferred income of approximately $27.8 million in April of 1998.[146] Most of the older amounts in the bucket relate to LASER realignments and were for the most part fully amortized as of June 2002. The total net composition of the bucket as of June 2002 was a deferred credit balance of approximately $43 million.[147]

The first STATS realignment, however, was performed in August of 2002[148] and the resulting difference was also recorded as a "new acquisition" into the bucket. This accounting practice was described in the Office of Auditing Amortization Audit Report, dated July 9, 2003, as one of their audit observations regarding processes that "should be improved to provide better documentation of analyses supporting G/L activities"[149] as follows:

> <u>Data Processes:</u>
> Because of systems and process limitations, reconciliation differences exist between the amortization account sub-ledgers (STATS and LASER), the G/L, and the amortization subledger (PDI). For this reason, the various systems need to be periodically realigned, resulting in adjustments to original unamortized accounts and accumulated amortization account balances.

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[144] OFHEO Interview, Ms. Joyce Philip, July 21, 2004, p. 91.
[145] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, pp. 97-98.
Q: Okay. Have you ever rendered an opinion that it would be appropriate to capitalize and amortize reconciliation differences at any point?
A: I don't remember ever giving an opinion as relates to that.
[146] Subsidiary G/L Account by Acquisition Date, Month Ended: March 2002, FMSE 193570.
[147] *Id.*
[148] Subsidiary G/L Account by Acquisition Date, Month Ended: September 2002, FMSE 193572, shows an addition to the STATS realignment product type in August of 2002 for approximately $46 million.
[149] Subsidiary G/L Account by Acquisition Date, month ended: June 2002, FMSE 331640

> These adjustments ranged from $700 thousand to $45 million during the period 11/2002 to 5/2003. Management's practice has been to expense smaller differences, to book and amortize larger differences as new acquisitions, or incorporate the differences into the overall catch-up balance.[150]

The following table shows significant STATS realignment amounts that were transferred into the bucket since 2002 and the total net balance of the bucket as of March 2004:

**Composition of the Bucket as of March 2004**
**Deferred Debits (Credits)**

| | | |
|---|---|---|
| August 2002 | $ | (15,102,606) |
| May 2003 | $ | (40,183,296) |
| August 2003 | $ | 63,951,446 |
| February 2004 | $ | 105,915,406 |
| Other (Net) | $ | (25,697,089) |
| Total | $ | 88,883,861 |

*Source: Subsidiary G/L Account by Acquisition Date: For Original Amount: Deferred Debits (Credits) Month Ended March 2004 (G/L Account 1201-01) FMSE 193584*

The amount shown on the schedule above for February of 2004 relates to a different error in the amortization process. OFHEO understands that the $105 million amount was subsequently revised to an amount of only $36.5 million.[151] Management of the Enterprise informed OFHEO that the amount of this $36.5 million realignment was later reversed and recorded as an expense in the month of March.[152]

The error related to a system problem in handling dollar roll transactions. In a dollar roll transaction, securities are lent out of the portfolio in secured financing arrangements. The error occurred when, upon return of the collateral, the original acquisition date of the security was overwritten with the date the security was returned to the portfolio. Such a date change caused issues with the accounting for amortization since the original acquisition date was needed to estimate the period of amortization.

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[150] *Id.*

[151] Fannie Mae Reasonableness Test of Purchase Discount Income, for month ended March 31, 2004, FMSE-SP 003313.

[152] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, p. 181
Q: If I understand this correctly, then at the end of that same corridor [sic quarter], Q104 [sic Q1 04], you were within the threshold for NII, but a debit was booked –
A: For $36,515 [sic].
Q: Right. What did that amount relate to?
A: That related to the dollar-roll realignment that Financial Standards determined that was an error. We did a SAB 99 on it, and we booked it. We just happened to use that account booking. It wasn't an on-top based on policy. That's the account that we chose to recognize the expense related to this dollar-roll error.

The final amount of the adjustment was determined by correcting the data in the STATS system and then determining the impact of the corrected information. Mr. Juliane specifically referred to the dollar-roll realignment as "non-standard."[153]

A formal SAB 99 analysis was prepared on the error including an evaluation of what effect the error had on prior periods, earnings per share, employee award calculations and other measures. This analysis was performed by the Financial Standards group at the request of Ms. Spencer.[154]

It should be noted that the analysis completely ignores the Enterprise's prior practice of capitalizing differences and amortizing them over proxy periods. **While the memorandum recommends that the results of the analysis should be shared with management, any comparison to the Enterprise's realignment policy is noticeably absent.[155]**

The recording of this error as an expense is in direct contrast to the treatment of past differences. In addition, it is not in conformity with the Enterprise's policy for recording realignments into the bucket. Management of the Enterprise indicated that going forward all non-standard realignments will be evaluated by Financial Standards before they are recorded.[156]

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[153] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 181-182.
Q: What differentiated that dollar-roll error from, let's say, a realignment?
A: That would be a question for Financial Standards because we engaged them on this realignment, and I provided analysis to their group, and they did a determination, whether it was a change in estimate or an error.
Q: When did that occur?
A: End of March. You'll see a Q1 memo for 2004, there's an attachment of Nicole's [sic. Mukul's] analysis of whether there was an error or not in the materiality relating to previous periods.
Q: I thought that was for dollar rolls and not for realignments.
A: No, it was a realignment due to the fact that we determined that we determine there was a dollar-roll error inside of STATS. So this was the processing of changing the original un-ams associated with the fact that there was a dollar-roll error, and that's what Nicole's [sic. Mukul's] analysis is all about.
Q: Does that mean that future realignments will no longer be capitalized into the bucket?
A: No. Once again, when you see our SOX documentation, we have a formalized realignment policy that says that standard realignment differences will be handled in the same fashion that they're currently being handled. Nonstandard realignments will be run through Financial Standards to determine the proper handling of the accounting associated with that.
[154] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, pp. 83-84.
Q: Referring back to, I guess, audit difference related to dollar rolls, we saw an analysis that was done by someone who worked for you named Mukul Gupta?
A: Yes.
Q: And he evaluated the error in context of many periods and many different things, basically a SAB 99 analysis. Who directed him to perform that analysis?
A: I don't recall who it was in particular, but either Janet or Leanne. My best guess would be Leanne. In one of my meetings with her, one of my regular meetings with her, described this issue and asked me to perform the analysis. And so I obtained the information from Janet Pennewell's group and Mukul did the detailed analysis and reported up through me.
[155] Memorandum dated May 3, 2004, from Mukul Gupta to Distribution, Re: Error in Amortization of Securities Used in Dollar Rolls, FMSE-SP 000268.
[156] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, p. 182.
A: […] Once again, when you see our SOX documentation, we have a formalized realignment policy that says that standard realignment differences will be handled in the same fashion that they're currently being

Our examination has not seen any evidence to indicate that the errors on dollar rolls are any different than other types of errors that have an effect on the accounting for amortization.

OFHEO believes that the expense was taken for two reasons: (1) there was a large income on-top adjustment required for Guarantee fee amortization at the end of the first quarter of 2004 which more than offset the amount of the expense resulting from the recording of the dollar roll error, and (2) changes in interest rates projected that the net interest income catch-up position would grow negative by the end of the year. If correct this conclusion would be consistent with the intent to maintain the catch-up amount in a deferred income position.

Accounting for the Correction of an Error

The relevant accounting guidance for the treatment of the reconciliation differences can be found in Accounting Principles Board Opinion 20, *Accounting Changes* (APB 20). APB 20 provides the following guidance about why matters such as the reconciliation differences should be considered errors:

> Reporting a correction of an error in previously issued financial statements concerns factors similar to those relating to reporting an accounting change and is therefore discussed in the Opinion. Errors in financial statements result from mathematical mistakes, mistakes in the application of accounting principles, or oversight or misuse of facts that existed at the time the financial statements were prepared. In contrast, a change in accounting estimate results from new information or subsequent developments and accordingly from better insight or improved judgment. Thus, an error is distinguishable from a change in estimate.[157]

APB 20 also provides guidance on how corrections of errors should be recorded in the financial statements:

> The Board concludes that correction of an error in the financial statements of a prior period discovered subsequent to their issuance (paragraph 13) should be reported as a prior period adjustment.[158]

Although the guidance above would indicate that the adjustment should be shown as a prior period adjustment, the SEC issued Staff Accounting Bulletin Topic 5F which provides the following additional guidance with respect to the correction of immaterial errors:

> If prior periods are not restated, *the cumulative effect of the change should be included in the statement of income for the period in which the change is made* [Emphasis added] (not to be reported as a cumulative effect adjustment in the manner of APB Opinion 20). Even in cases where the total cumulative effect is

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handled. Nonstandard realignments will be run through Financial Standards to determine the proper handling of the accounting associated with that.

[157] APB No. 20: Accounting Changes, Par 13.

[158] *Id.,* Par. 36



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not significant, the staff believes that the amount should be reflected in the results of operations for the period in which the change is made.[159]

**Based upon the guidance above, OFHEO has concluded that the practice of capitalizing and deferring these reconciliation differences is not permitted under GAAP.** In addition, the Enterprise's practice of treating reconciliation differences in one of three ways (expense, capitalize or include in catch-up position) demonstrates yet another manner in which inconsistent decisions were made by management that affected the recorded amount of amortization.

## Inconsistent and Incorrectly Applied Accounting Practices to Determine the Catch-Up

**OFHEO's examination identified a number of instances whereby the catch-up results were changed by including adjustments that were incorrect or inconsistently applied.**

During 2003, certain of the reconciliation differences started being included in the catch-up analysis for NII. However, not all reconciliations were included. The inclusion of reconciliation differences in the catch-up framework is inappropriate for a number of reasons:

- According to management, the catch-up sensitivity analysis is necessary due to the range of uncertainty in estimating prepayments. However, the inclusion of such adjustments (which result from errors created by system limitations and other items) to the results of the catch-up sensitivity analysis is fundamentally inconsistent with this line of reasoning.

- Certain modeled future reconciliation amounts – modeled pursuant to only one interest rate scenario - were included as adjustments to different catch-up sensitivities. Even management of the Enterprise pointed out to us that this would not make sense since the catch-up sensitivity is based upon the mean of five interest rate scenarios while the estimated impact of the future reconciliation amounts is based upon only *one* interest rate scenario.[160]

- Management of the Enterprise used discretion to select which amounts to include as adjustments to the catch-up on a quarterly basis.

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[159] SEC Staff Accounting Bulletin Topic 5F: Accounting Changes Not Retroactively Applied Due To Immateriality.

[160] OFHEO Interview, Rene LeRouzes, July 16, 2004 p. 144
Q: Three hundred and ninety-three million. So if you had run catch-up sensitivities as of that date, the 393 million would have been the net impact that using an updated factor after-affecting the MBS reclass would have on catch-up?
FANNIE MAE LEGAL COUNSEL: Q: Can you tell him what that number is?
A: That number – a sensitivity analysis of five rate environments, a base and two outliers up and down. This [the $393] is only reflective of one environment. So to confuse this with a sensitivity analysis would be apples and oranges, from my perspective.

The catch-up calculation for the first quarter of 2003 was the first one to include the effects of reconciliation differences. The adjustment was actually made for the effect of a future realignment related to the Security Master Project. Alternatively, no adjustment was made for past reconciliation differences. The following description of the Security Master project was included in the Q2 2003 Amortization Results Memorandum:

> Security Master is an attribute level identification process that ensures consistent handling of collateral by assigning the FAS 91 type and associated general ledger accounts based on the actual security characteristics. These attributes are compared against rule-based tables within STATs [sic] to assign the appropriate set of accounts and FAS 91 designation. The rules are defined by the business users and maintained within STATs [sic].[161]

The result of the project would be that securities that had previously been included in inappropriate modeling types would now be included in modeling groups based upon objective criteria. Prior to the implementation of Security Master, the process of identifying securities had been done manually by the trade input area.[162] The two significant issues that were supposed to be resolved by Security Master were as follows: 1) certain securities purchased at a premium had been included with securities purchased at par or at a discount. This was not appropriate because (as described in this report) prepayments on securities purchased at a premium were not affected by changes in interest rates in a similar manner as securities purchased at a discount; and 2) certain REMIC tranches[163] were inappropriately grouped together for modeling purposes as well (for example, premium and discount REMICs were commingled).

The reason that Security Master was going to have a large effect on the financial statements was due to the fact that, after the securities would be transferred, catch-up would be recorded (comparing the new life-to-date calculation to the previously recorded amounts) and any errors in the previous calculation would cause significant swings in the catch-up balance.

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[161] Memorandum prepared by Jeff Juliane, Subject: Q2 Amortization Results, dated July 29, 2003, to File, FMSE 023763-023765.

[162] OFHEO Interview, Mr. Rene LeRouzes, July 16, 2004, pp. 147-148.
Q: So this analysis that we just looked at, that was – that showed the dollar effect of the MBS reclass. Was there an analysis prepared to show any dollar impact of the REMIC remapping?
A: Not that I worked on. No.
Q: Do you know, in fact, whether or not the REMIC remapping did have a dollar effect on the catch-up or on the amortization?
A: Yes, it had – it had an impact. But I don't know what that was and, sitting here today, when that analysis was integrated with this one. If it was, in fact, done, but I would think it would have been.
Q: Would it be possible for you to explain to us why that – what generated that impact?
A: What impact?
Q: The impact of the REMIC remapping?
A: The REMIC remapping was a rule-based engine that provided instead of manually determined concepts at the cohort level, the rule-based engine for securities, specifically the MBS reclass and the REMIC project, made the actual process as best as it could be. So there was no manual tagging done at the trade level to determine FAS 91 types. It was an automated approach to provide increased data integrity.

[163] Risk, maturity or other classes into which a multi-class security such as CMO or REMIC is split.

An amount of $118 million was deducted from the amount of the NII catch-up position as of the first quarter of 2003. In addition, there were four sensitivity analyses run for the first quarter of 2003[164] which calculated a positive catch-up (income position) ranging from $175 million to $232 million.

The impact of the Security Master was actually modeled twice (presumably for purposes of estimating the effect it would have on the catch-up). The first analysis was done using the existing (in-use) factors. That analysis showed that the Security Master Project would result in an estimated $118 million expense amount.[165] The second analysis was done using the updated (March 2003) factors and showed that the project would result in an estimated $393 million amortization expense amount.[166]

Management decided to rely on the analysis using the older rates. This was important for two reasons: 1) Had the analysis using the newer rates been used, the inclusion of the $393 million amount in the analysis of catch-up would have required management to record an on-top expense adjustment of roughly $62 million (using even the most advantageous catch-up based upon the 4 scenarios run).[167] In addition, that would have left the catch-up position in a negative $99 million (deferred expense) position, the least advantageous position under the policy. 2) The catch-up position (based upon the final calculation) exceeded the threshold by approximately $78 million. By including the lower amount, no on-top adjustment was necessary because the catch-up was now within the range of +/- 1% of portfolio NII.

Even though the adjustment for the Security Master project related to prior periods, it should be noted that an assessment of the impact of the project on prior reporting periods was never performed. However, in the first quarter of 2004, a comprehensive assessment was done for the amortization errors related to dollar rolls. This is interesting, especially due to the magnitude of the potential Security Master Project adjustment.[168] In the instance of the dollar roll error, management concluded that the $36.5 million impact was immaterial.

The final catch up calculation prepared for the quarter ended June 2003 showed a total catch-up position of $220.5 million. However, the impact of Security Master had grown to be $155 million as of June 30, 2003. It is interesting to note, however that the amount of the impact had not been re-modeled (as would be necessary to appropriately reflect the updated rate

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[164] The four sensitivity analyses referred to are labeled FMSE-SP 002926, FMSE-SP 002930, FMSE-SP 002942 and FMSE-SP 002943.
[165] MBS Reclass Summary Update, FMSE-SP 000155-000156.
[166] *Id.*
[167] $232-393=-161. With a catch-up threshold of approximately 99 million as of March 31, 2003, an on-top adjustment of approximately $62 million ($99-161) would have been required under the Enterprise's policy.
[168] OFHEO Interview, Mr. Jonathan Boyles, August 24, 2004, p. 86.
Q: I'm just curious. Why prepare a SAB 99 analysis for this particular item and not, for instance, for the security master items?
A: Again, I'm not on the day-to-day, you know, feed on what's happening down in the purchase discount area. When I'm asked to perform it, I perform it. I'm not aware of other issues or other concerns that Leanne would have thought would have required a SAB 99. So, you know, what she will do will she'll ask me or, you know, here's something that we think we might have missed. You know let's evaluate it. And so she asked me to do it, and I would not have even known about the dollar roll if somebody didn't bring that to my attention and ask me to perform it.

environment). Instead, an amount of $37 million was simply added to the original $118 amount. The $37 million was the estimated impact that moving those securities (that had an estimated impact of $118) would have on the other securities that would still remain in their original modeling entities. Management of the Enterprise indicated that this amount had been more difficult to isolate and to model, and that is why this number was not determinable on the same date as the $118 million amount.[169] It is not clear why the $118 amount was not updated, especially since there had been such a wide range of possible outcomes ($118-$393) using the data from the first quarter.

The amortization catch-up results for the second quarter of 2003 were also adjusted to take into account certain reconciling items. The inclusion of reconciling items was identified as an observation in the internal audit report.[170] That report noted that there were no standards specifying which reconciling items should be included.[171] The reconciling amounts were related to certain realignments arising from the STATS system. However, reconciliation differences from the LASER system were ignored. Management of the Enterprise has not offered any credible explanation for why only certain items were included.

The amounts included as reconciling items in the catch-up analysis performed for the second quarter of 2003 were deferred credits which totaled approximately $60 million increasing the mean catch-up position from $ 220.5 million to approximately $ 280.5 million.[172] The actual net amount of deferred reconciliation differences as of that date was, however, $92.3 million.

This raises the question of why only certain amounts of the realignments were included in the reconciliation. Although our examination has not found specific evidence that the inclusion of only certain realignments at June 30, 2003 was done intentionally to achieve a particular result, the inclusion of the reconciliation differences did have a direct impact on the amount of the on-

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[169] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 104-105.
Q: Was that effect incorporated into the catch-up and the on-top, or was it included – was it treated similar to a realignment?
A: It was completely encapsulated in the framework of the policy. There's multiple stages of this thing. We did an analysis in Q1 to determine the 118 [million]. Then there's an analysis that we – we enhanced that analysis because when you're moving collateral out of a FAS 91 type and into a FAS 91 type, there's going to be ancillary effect to the assets that remain in the old FAS 91 type because you're altering the cash flows. So we went in and as we enhanced our estimate over time, we said that 118 was the initial estimate that we have from just moving collateral X – collateral out of conventional into conventional premium.
We then said, okay, we didn't have time at that point in time in Q1 to do an analysis, so, okay, what's that going to do to the factor of the assets that are left behind in the conventional FAS 91 type, because theoretically you had just taken the higher-yielding assets, i.e., premium priced assets, out of conventional and moved them somewhere else. So you're theoretically going to slow down or lengthen the duration of the remaining assets in conventional. So we did that analysis in Q2, and we came up with an estimate of, I believe, $37 million that was going to be the impact of the catch-up related to the conventional acquisitions. At that point in time, our total estimate was $155 million related to the entire Security Master impact relating to MBS re-class. […]
[170] Fannie Mae Audit Report, Office of Auditing, Amortization Audit, July 9, 2003, FMSE 023749
[171] *Id.*, the audit report states "[…] procedures do not specify what level of documentation is required to support actions taken, or what level of management involvement is required. Examples include: - Changes to modeling methodology […], - Adjustments to Catch-up Results […]."
[172] Memorandum prepared by Jeff Juliane, Subject: Q2 Amortization Results, July 29, 2003, to File, FMSE 023763-023765.

top adjustment recorded in that period. Essentially, by including the projected effect of the STATS realignment, management of the Enterprise had allowed the amount of catch-up to grow so that the impact of the errors to be corrected by the Security Master project could be absorbed in the period the project was completed while still maintaining a positive catch-up position. This is further evidence that the catch-up framework was not a range of uncertainty in estimation but rather a reserve that management could rely upon and offset against other adjustments.

Later, in September 2003, the net amount of *all* realignments was included as a reconciling item in the catch-up analysis.

The following table, taken from a draft of the Q3 Amortization Results Memorandum, shows the adjustments made to the modeled catch-up position for both the second and third quarters of 2003:

| | **Q2** | **Q3** | **Difference (Q3-Q2)** |
|---|---|---|---|
| Mean Catch-up position on preliminary sensitivity report | $220.5 | $298.1 | $77.6 (a) |
| All realignments | $60.9 | $82.8 | $21.9 (b) |
| Back out catch-up from PO sales | $0 | $(30.4) | $(30.4) |
| Modeling estimate of $1.3 billion MBS reclass | $(155.0) estimate | $(132.0) actual | $23.0 |
| **On-top recorded** | $(21.2) | $(107.5) | $(86.3) |
| Ending Position | $105.2 | $111.0 | $5.8 |

(a) Difference due to higher rate environment. This caused the net premium book amortization speeds to slow relative to current in-use factors. This causes an increase in the overall income (over amortization of premium) position.

(b) Included the impact of all net LASER realignments for the Q3 sensitivity runs. This caused an additional 21.9 million of positive catch-up to included [sic] into the analysis.

*Q3 Amortization Results Memorandum draft dated October 22, 2003; FMSE-SP 000377.*[173]

There are a few things to note about the realignments included in the analysis above:

- The catch-up threshold is, according to management, meant to serve as a measure of the range of uncertainty in estimating prepayments. Conversely, the realignment amounts relate primarily to known and quantified amounts that reflect the correction of processing errors.

[173] Although the memorandum dated October 22, 2003 is a draft, the amounts included in the table agree to a copy of the final memorandum dated as of the same date except that, in the final memorandum, the realignment amounts were included together with the mean catch-up amounts. See FMSE-SP 000576.

- There are differences between the manner in which included amounts have been calculated. The mean catch-up position is calculated using the simple mean of five different interest rate scenarios. Alternatively, the estimated impact of the MBS reclass as of June 30 ($155 million expense) was estimated using only one interest rate path. Lastly, the recorded realignment amounts ($62.9 and $82.8 for June and September, respectively), the amounts related to PO sales in September ($30.4 million) and the amount of the MBS reclass are actual *recorded* amounts. **This commingling of different reconciling items (with mixed bases of valuation) clearly shows that the catch-up framework devised by the Enterprise is a means for managing amortization expense and not, as management claims, a range of uncertainty in estimation.**

In addition, the balance of all realignments recorded to the bucket was $92.3 million and $20.9 million (both deferred credits) as of June 30, 2003 and September 30, 2003, respectively. Based on OFHEO's review neither of the amounts included in the table above agree to the balance of the bucket as of the respective dates.

The amount included in the table for realignments as of June 30, 2003 ($60.9 million) does not agree, because only certain realignment amounts were included, as previously discussed.

The amount included in the table for realignments as of September 30, 2003 ($82.8 million) also does not agree. Information about how the $82.8 million amount was derived is not clear at this point in OFHEO's examination. This amount appears to be included in error because the following month, only $19.4 million[174] of deferred income from realignments was included in the analysis of the amortization results despite the fact that there were no realignments between September and December of 2003.

However, management of the Enterprise did inform OFHEO that an amount of $67 million, which was recorded into the bucket in August of 2003, directly corresponded to the originally estimated amount of the Security Master impact of $118 million.[175] This means that the impact of Security Master had been included in the catch-up framework for three quarters, which directly impacted the amount of amortization recorded. However, when the project was completed and the impact was quantified, the amount was recorded as a new acquisition and amortized over a proxy (thirty year) life**. This clearly shows that the inclusion of certain reconciling items had the effect of shifting large amounts of income from one period to the next. Had the impact of Security Master not been included as an adjustment**

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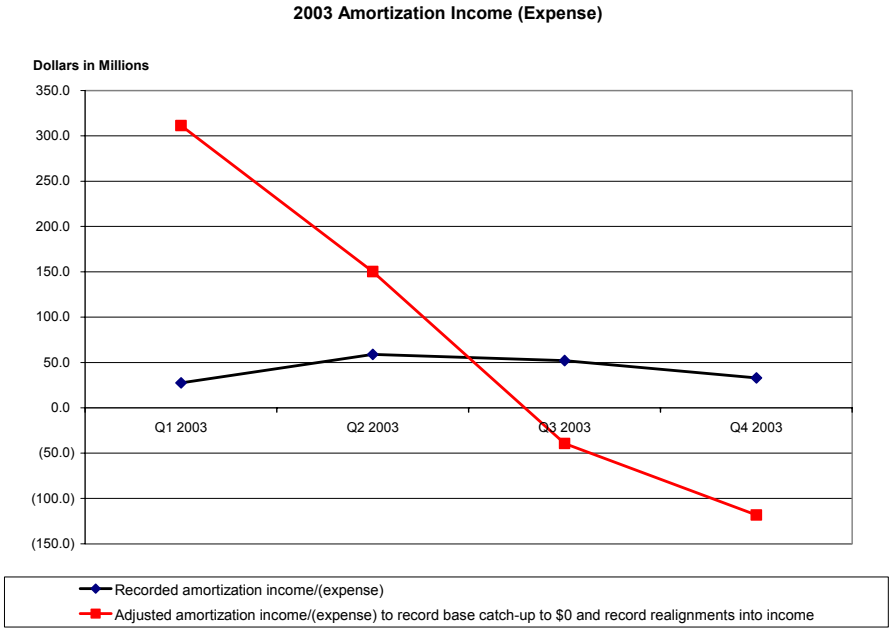
[174] Memorandum prepared by Mr. Rene LeRouzes, Subject: Q4 Plan Amortization Results, dated January 30, 2003, FMSE-SP 000370.

[175] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 114-115.
Q: […] Do you recall what the purpose of including these reconciling items was?
A: My recollection as we sit here today is that we were trying to encompass all the different arenas where STATS had been – where issues between STATS and iPDI were impacting the results. So at that point in time, we had two of them through realignments and one through Security Master. So we encompassed all those things to look at – to come up with what we thought at that point in time was our best estimate of our catch-up position.

**to the catch-up results beginning in Q1 2003, the amortization results for the year would have looked very different.**

The following chart illustrates the difference between the amount of amortization recorded by the Enterprise during 2003 and the amount that would have been recorded if realignments had been recorded in income and if the catch-up (using the base rate forecast) had been recorded to $0 at each quarter end.




Management's decisions on how to include realignments in the catch-up evolved as follows:

Q1 2003: Include only the effect of the projected impact of the anticipated Security Master Realignment
Q2 2003: Include Security Master and certain other STATS realignments
Q3 2003: Include all realignments
Q3 2004: Continue to include all realignments

As described previously, in the first quarter of 2004, the Enterprise performed another reconciliation and corrected a known error in the accounting for Dollar Rolls. In that case, management first decided to capitalize the amount and later decided to expense it. So in the span of one year, the Enterprise has employed four different practices with respect to realignment differences. See section X for more discussion about the expensing of the Dollar Roll realignment.

OFHEO also identified other adjustments to the modeled catch-up amount that were either not approved by management or the amortization policy did not provide guidance on how to handle these adjustments:

- For the 4th quarter of 2002 and the 1st quarter of 2003 the modeled catch up amount was adjusted for the impact of new acquisitions. In the 4th quarter of 2002 this adjustment brought the amount of the catch-up position within threshold and therefore made the recording of an adjustment to amortization income unnecessary. The adjustments for the impact of new acquisitions on the book of business were not approved by management. The inclusion of new acquisitions in the modeling process is necessary because the book of business is generally on a two to three month lag;[176] however, this process is not documented and was not applied consistently.

- For the 3rd quarter of 2003 the catch up results for guarantee fees (as modeled by the system) were manually adjusted by $ 20 million. The adjustment was not disclosed on the catch-up sensitivity analysis report as a manual adjustment to the model results and therefore might not have been known and approved by management. Fannie Mae's Office of Auditing was able to obtain some support for the adjustment; however, the amount was based on judgment and therefore "not very intuitive".[177]

### *Internal Controls over the Amortization Process*

During our examination, we noted a number of significant control weaknesses in the process of accounting for amortization. A majority of these internal control weaknesses are centered around the AIMS system[178] and the modeling process. Such findings have been made in spite of the fact that the Fannie Mae Office of Auditing (OA) completed an audit (which noted some issues but only issued a "yellow"[179] rating) of the amortization process as recently as July 2003 and had, in addition, performed other procedures subsequent to that date.[180] OFHEO believes

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[176] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, pp. 99-100.
Q: At some point, our understanding is that you began to incorporate – let me ask a question prior to that. The balances upon which the catch-up analysis is performed lagged by one quarter, so when – is that correct?
A: That is correct. There is a – when a book is presented four [sic. for] our consumption; that is, between 28 to 29 days after the months that is just closed so we always strive to stay on the same book as portfolio, so there is a two- to three month lag between the book of business remodeling versus where we're actually at from a calendar period.
[177] Fannie Mae Office of Auditing SDI, Amortization Audit, 2003, FMSE 118808-118811.
[178] AIMS - Amortization Integration Modeling System.
[179] The Office of Auditing "yellow" rating translates into a conclusion that "Controls need strengthening. Requires attention during the normal course of business."
[180] OFHEO Interview, Ms. Joyce Philip, July 21, 2004, pp. 158-159
Q: As a follow-up, I noted that Security Master was referred to in management's corrective action. As a follow-up to this audit, would you do a post implementation review of the Security Master Project?
A: We did do a post implementation review of Security Master.
Q: And what was the date of that work, roughly?
A: It would have been some time in the third of fourth quarter of '03.
Q: Would there have been an official audit report similar to the July 9th report?
A: There would have been a memo issued.
Q: And would there be work papers that support that memo?
A: Yes.
OFHEO Interview, Ms. Joyce Philip, July 21, 2004, p. 111

that the presence of these significant control weaknesses themselves, undermined the process of amortization to such an extent that the material accuracy of deferred price adjustment amortization could not be reasonably assured. The significant control weaknesses include:

- Insufficient segregation of duties and key person dependencies
- Modeling undertaken to produce desired results
- Underlying data issues, including illogical or anomalous amortization factors
- A lack of written procedures, supporting documentation and an insufficient audit trail.

## Segregation of Duties and Key Person Dependencies

In July 2003 Mr. Jeff Juliane was promoted and given responsibility over both the modeling and accounting for amortization. Immediately subsequent to his promotion, a concern was raised regarding the segregation of these functions in a meeting on August 8, 2003. The meeting related to an Office of Auditing investigation into an employee's – Mr. Roger Barnes - concern over amortization factor anomalies, and Mr. Barnes' further allegation that amortization factor change adjustments had been made to cause actual earnings to more closely align with planned earnings (See subsequent sections of this report for more information on the Amortization Investigation).

The following appears under the heading "3) Discussion of the internal controls over amortization activities" in the minutes to the August 8th meeting:

> Sam [Mr. Rajappa, SVP Operations Risk, Office of Auditing] stated that a recent reorganization, that organized iPDI subledger process (Roger Barnes' team) under the AIMS modeling function (Jeff Juliane), weakens the segregation of functions between the modeling and PDI data processing and general ledger functions.

Despite the Office of Auditing report, and Mr. Rajappa's concerns over the reorganization, that very same paragraph of the August 8th meeting minutes states:

> Janet Pennewell responded that the previous segregation of duties was largely due to how the two systems and functions had been developed and evolved over time. She added that she did not see this segregation as a key control being that determining how much income or expense should be recognized (accomplished by AIMS system) and processing to the G/L (accomplished by PDI) would be uncommon [sic] across other accounting operations within the Company.[181]

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Q: Okay. Our understanding is that on August 8, 2003, a meeting was held to discuss his allegations. Is that consistent with your understanding?
A: My understanding of the meeting of August 8th was to provide a status update to various parties within Fannie Mae of the results of the test work we had done up to that point in time.

[181] Summarized Minutes of the Meeting (8/8/03), Unamortized Balances and Factor Analysis, FMSE-SP 000080-000081.

It is clear that members of the Controller's staff had the ability to effectively ignore concerns about control weaknesses raised by the OA. OFHEO has not been provided with any information to indicate if the segregation issue raised by Mr. Rajappa has been addressed.

OFHEO has determined that Mr. Juliane was already responsible for: a) all amortization modeling, b) determining changes to amortization prepayment assumptions, c) specifying functional requirements for the system that supported amortization modeling, d) performing the quarterly catch-up analysis, and e) making adjustments to earnings that were made directly to the AIMS modeling system as factor adjustments. With the reorganization, Mr. Juliane was now responsible for the PDI data processing and general ledger function. The segregation of those functions previously served as an important check and control point in the amortization process. In fact, the factor anomaly concerns that were examined by the OA were observed through the PDI data processing and general ledger recording activities, and significantly, the allegation that earnings were being adjusted to align with plan, were being directed at Mr. Juliane himself. An underdeveloped audit trail additionally impeded the capability of the Enterprise to effect any meaningful review or oversight of the processes and activities that now collectively fall under his responsibility.

## Modeling Undertaken to Produce Desired Results

The AIMS System -as designed by the Enterprise- has two primary functions: the calculation of the catch-up and the calculation of the amortization factors that are used to determine prospective amortization. The system has the functionality to model the amortization results using a variety of different scenarios. This provides management of the Enterprise with a "menu" of available options for calculating the amount of catch-up. For instance, the AIMS system has the functionality to model a variety of possible rate scenarios, prepayment speeds, prospective catch-up adjustments and other modeling parameters. This allows the system user to evaluate results generated under varying scenarios before determining which specific assumptions to use for quarterly reporting.

OFHEO has found that, on a number of occasions, multiple sensitivity runs were processed after the quarterly closing. In particular, these occasions included periods after the yearly close. This is curious because the model-ready book is generally based on a book of business that is anywhere from one to three months old.[182] As such, the catch-up sensitivity report could have been run well before the closing of the books at the end of these periods. It is furthermore not clear why performing multiple runs using different assumptions or parameters would otherwise be necessary at all. The Office of Auditing did not identify any systems performance issues that would have necessitated such multiple runs. Neither, did the Controllers Group, identify any

[182] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, pp. 99-100.
Q: At some point, our understanding is that you began to incorporate – let me ask a question prior to that. The balances upon which the catch-up analysis is performed lagged by one quarter, so when – is that correct?
A: That is correct. There is a – when a book is presented four [sic. for] our consumption; that is, between 28 to 29 days after the month that is just closed so we always strive to stay on the same book as portfolio, so there is a two- to three-month lag between the book of business remodeling versus where we're actually at from a calendar period.

performance issues in the controls self assessment questionnaire that all business units are required to complete.

## Underlying Data Issues

There were also significant differences between the source systems (e.g. STATS, LASER) and the amortization system (iPDI), regarding the original balances to be amortized. These differences were primarily due to limitations in the timing and quality of the data which was fed from the transaction subledgers to the amortization system. As previously noted in this report, the reconciliation of those systems occasionally led to large differences which the Enterprise capitalized as new acquisitions and amortized over a proxy life. In addition however, such realignments also led to manual adjustments made to the catch-up sensitivity analysis. These manual adjustments were sometimes inconsistently treated and were not always adequately documented or supported. Thus review or validation of them was difficult.

The Enterprise's method for recording on-top adjustments within AIMS was also manually effected as well. AIMS system functionality supported the ability to selectively update factors for certain products without affecting others. This was one means to effect on-top adjustments (recorded as factor changes). Such adjustments were judgmentally allocated to particular modeling groups. This process of adjustment and allocation is inconsistent with maintaining the integrity of loan and security level information and, at a minimum, makes analysis and review of the amortization results more difficult (See following on Factor Anomalies). In her testimony Ms. Ann Eilers, Director Office of Auditing, described misclassifications caused by system feeds as one of her biggest concerns surrounding the amortization process.[183]

A manifestation of the extent of underlying data issues is illustrated by an adjustment to the catch-up results that was made in the third quarter of 2003. The analysis of amortization results noted an adjustment of approximately $30 million to the calculation of the catch-up amount to correct for improperly determined amortization for three principal-only ("PO") mortgage securities that had just been sold, and upon which, incorrect gains on sale had also been determined. OFHEO is still evaluating this issue and its implications. However, in his testimony, Mr. Juliane acknowledged the inaccurate amortization, and further stated that a review of the accuracy of the amortization of securities sold had never been previously performed. Aside from raising questions as to why such a review was performed at this particular time (the adjustment allowed the Enterprise to stay within the catch-up threshold), it also raises further concern about the extent or magnitude of similar errors on other securities.[184]

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[183] OFHEO Interview, Ann Eilers, Director Office of Auditing, July 23, 2004, pp. 45-46.
Q: What was your biggest concern personally about the control surrounding the amortization process?
A: We had some system feeds that were creating misclassifications. We had some policies and procedures that weren't documented, and we had some business area records that were not as well documented.

[184] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, p. 103.
Q: You did an analysis on gain/loss?



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## Factor Anomalies

The AIMS system produces results that are illogical or that represent mathematical anomalies. These illogical or anomalous conditions include negative amortization factors and amortization factors greater than one. In theory, a negative amortization factor would cause a premium or discount to grow larger over time. A factor greater than one could potentially cause for example, a premium to amortize beyond the original balance to become a discount.

Management has asserted that such illogical and anomalous results derived from the aggregation of premiums and discounts as well as REMIC tranches with dissimilar characteristics, but that they did not translate into inaccurate financial statements. This explanation however implies, at a minimum, the presence of other potentially deeper issues regarding the aggregation of deferred price adjustments into incorrect modeling groups. In addition, it raises the question as to why edit checks and error reports on data processes did not prevent the illogical results and anomalies from occurring, or why the Enterprise was not able to sufficiently flag their existence or report their breadth.

The improper aggregation of premiums and discounts and the illogical results and anomalies themselves posed other internal control concerns because such issues made it virtually impossible to correlate the amortization results to the actual performance of the underlying loans/securities. OFHEO believes that management would have been unable to effect such a review. In addition, the full extent to which illogical results and anomalies did, in fact, cause inaccurate financial reporting is a focus of OFHEO's continuing examination.

Our examination has concluded that these factor anomalies were caused primarily by a lack of clear delineation of responsibility by management of the Enterprise. A breakdown clearly occurred between the business unit owners of the source systems and the personnel in the Controller's Department responsible for calculating amortization. Because neither party took responsibility for the quality of the data, amortization errors occurred. When questioned about responsibility for ensuring whether a loan or security was included in an appropriate modeling group, Mr. LeRouzes offered the following answer: "Well, it's not me."[185] This was further validated by Mr. Juliane.[186]

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A: No, no. I did an analysis quantifying the CUSIPs that we're moving and passed it along. I mean, I – I don't know if we – from an institutional perspective if we looked at that or not. I don't know if STATS did an analysis or not.

[185] OFHEO Interview, Mr. Rene LeRouzes, July 16, 2004, p. 30.
Q: I guess – okay, that's fine. From a functional perspective, would you know which functional area would be the owner of that process?
A: Of signing off of ALEX?
Q: Making sure that securities are going into the right cohort?
A: I really can't speculate on what functional area there would be responsible for that.
Q: Okay. But it's clearly not – clearly not your area?
FANNIE MAE LEGAL COUNSEL: Not him. Right.
A: Well, it's not me.

[186] OFHEO Interview, Mr. Juliane, June 8, 2004 p. 68.
Q: So, the business unit owner of the system would be responsible for setting the rules?

Factor anomalies can occur in a variety of ways and for a variety of reasons. There are a few simple maxims that can be applied, however, to ensure that factor arrays are correct. Mathematically speaking, a graph of level-yield factor arrays should be curvilinear and downward sloping over time. Updates to factor arrays could shift the curve up or down, but the prospective array thereafter should assume a similar relationship. In addition, the sum of all factors in any given array should total to 1 (or 100% of the item to be amortized). Another example of a factor anomaly would be a negative factor (which technically should never occur except in the case of a retrospective adjustment.)

Ms. Mary Lewers, Vice President of Financial Accounting, was the supervisor of Mr. Barnes and the iPDI area (among other things) and, as such, was ultimately responsible for the amounts recorded to the general ledger. She provided the following example of how such anomalies could occur:

> Question: How can you get a correct answer with a negative amortization factor?
>
> Answer: My understanding is that in total, when you combine all of the related information that you get to the same answer. It's just the pieces have this appearance to them that makes it difficult to analyze, but that fundamentally the amortization and the creation of factors is occurring at the REMIC level, which is the right level in terms of calculating the level yield.

Her response reflects two recurring themes about factor anomalies that we have encountered in our examination: 1) Personnel in the Controller's Department accepted the fact that factor anomalies existed and 2) Ms. Pennewell and Mr. Juliane continuously offered the same explanations as to *why* factor anomalies could occur, while always managing to avoid the larger question of whether such anomalies represented errors.

The question of whether such anomalies represented errors did not get addressed until the concerns raised by Mr. Barnes precipitated the Office of Auditing Amortization Investigation. **OFHEO has concluded that factor anomalies, in certain cases, do in fact represent errors and may also constitute departures from GAAP.**

According to direct testimony received in our examination, there appears to be a critical control point between the AIMS and iPDI systems that would identify any factor anomalies.[187]

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A: They are responsible for insuring the light [sic, "right"] collateral on assets are getting put in the same FAS 91 types.

[187] OFHEO Interview, Mr. Roger Barnes, September 1, 2004, pp. 115-116.

Q: Why would AIMS not calculate the right amount of the current month's amortization if it had the factor with it generated and if it had received the balances from PDI?

A: The way AIMS was structured, and I am not the expert on AIMS, being on the periphery, they had the ability to include and exclude certain things. You could be including or excluding components that were part of AIMS. They could select, as they called it, a book of business to use for calculating the amortization. If they did not use the write-back [sic. right book] of business, they would be using a different month than what the production system had and not even realize until they finished the run and then had differences. These were the kinds of things that happened with great regularity even though they had the balances there, but because one could go in and make changes to what was and was not



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However, this control was not working effectively. Such a breakdown in controls is clearly evidenced by the size of the adjustment related to the Securities Master Project, and the significant number of securities involved. This issue was known by personnel in the Controller's Department for several years before the problem was resolved.[188]

Prior to the implementation of Security Master, the portfolio area was responsible for the process of coding securities into modeling groups – information that ultimately found its way into the STATS system. This process was essentially a manual process and was not consistently applied by all relevant personnel.[189]

*How Factor Anomalies Could Represent Departures from GAAP*

As previously described, securities are pooled into similar groups for purposes of modeling. SFAS 91 provides specific guidance on how to determine what constitutes "similar" for the purposes of grouping securities.

Because the Enterprise is the largest holder of mortgage loans and mortgage-related securities, the process of grouping securities into similar groups is a data-intensive process. For example,

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included, certain components, there would be instances where the results would be different because I maintained a tightly controlled system where very few changes could be made, and their system was somewhat different where they in turn were inevitably massaging their write-back [sic. right book] of business, even though you are generating the factors, or some of the factors get passed in error in transition, or they could go through editing, and when the factors come to PDI, and they would show a list showing me their reports and I would reject them and pass them back to them saying there were problems. […]

[188] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 106-107.
Q: You said earlier that the problem associated with the misclassified securities was something that you yourself became aware of when you started doing this job?
A: Yes.
Q: Who did you report that to in management?
A: We really had – we had a regularly convening FAS 91 kind of group, and that would have been Tom, myself, Leanne, Janet, and over time other people have come and gone, Bill Quinn, et cetera. At the point in time that you're talking about with this conversation, I know there was a conversation with the group at that point in time that this dynamic was going on.

[189] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 98-99.
Q: When did you first become aware that there was going to be a need to reclassify securities that had been erroneously categorized as discounts and reclassify them under premium FAS 91 –
A: When did I first learn that we needed to do that?
Q: Right.
A: It would have been reasonably early on when I took over. When I looked at the inventory of the collateral, you realize that if in the conventional bucket we had premiums and discounts in there. It really became a question more of when could we do something about it because we didn't have the infrastructure at that point in time to do anything about it.
Q: Was it a matter of securities being miscoded as premiums?
A: The process to assign a FAS 91 type before Security Master, the way I understand it, was that the traders would enter a pool type code that would then be translated into a FAS 91 type. So these assignments of pool type code could theoretically be translated from one trader to another trader differently. So there wasn't a way to ensure consistency of application of this information. Once Security Master came in place, we were able to do that by looking at relative sets of attributes and then assigning FAS 91 types at that point in time.



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the Enterprise's MBS portfolio alone contains approximately 400,000 different security CUSIPs.[190]

The criteria for determining whether securities can be pooled into a group are prescribed by Question 51 to the Q&A on FAS 91 as follows:

> Q: What characteristics should be considered in determining whether the lender holds a large number of similar loans for purposes of estimating prepayments in accordance with paragraph 19?
>
> A: The objective is to evaluate all characteristics that would affect the ability of the lender to estimate the behavior of a group of loans. The following are examples of some characteristics that should be considered when aggregating loans:
>
> - Loan type
> - Loan size
> - Nature and location of collateral
> - Coupon interest rate
> - Maturity
> - Period of origination
> - Prepayment history of the loans (if seasoned)
> - Level of net fees or costs
> - Prepayment penalties
> - Interest rate type (fixed or variable)
> - Expected prepayment performance in varying interest rate scenarios.

The purpose of the guidance above is to distinguish between loans and/or securities that, based upon their characteristics, should be modeled together because they are likely to have similar estimated lives. Conversely, loans and/or securities that would not be expected to have similar estimated lives should not be modeled together.

From an accounting control perspective, the pooling of securities with dissimilar characteristics would lead to anomalies in the factor array. This could be easily assessed by a comparison of the performance of the underlying collateral to the amount of amortization recorded. As mentioned above, a number of factor anomalies existed which clearly indicated that the guidance in Q&A item 51 was not being followed appropriately.

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[190] OFHEO Interview, Mr. Sam Rajappa, June 17, 2004, pp. 96-97.
Q: What specific parts of the accounting transaction did he not – the accounting for those transactions did he not understand?
A: Okay. Again, I want to make sure – I'm not saying he didn't understand. I'm just saying either he didn't understand or he didn't go there. For whatever reason, he didn't go there.
The way we do the amortization, like we said, we have 400,000-plus securities. It's not possible on each security or a CUSIP to determine what the factors should have been and what it was. So we grouped them into what we considered to be logical buckets of like securities, those with like characteristics. […]

## The Office of Auditing Amortization Investigation

Prior to the commencement of our examination, the Enterprise informed us that Mr. Barnes, a former manager in the Controller's Department, had raised his concerns about several matters including the modeling of amortization factors, significant control deficiencies in the modeling systems, segregation of duties issues as well as other matters.[191]

In August 2003 Fannie Mae's OA performed an Amortization Investigation, which included a review of the controls over factor changes and a review of factor anomalies themselves. The timing of the investigation was made much more complicated due to the fact that the Enterprise's quarterly report on Form 10-Q was expected to be filed the following week.[192] In addition to completing the investigation, Mr. Rajappa also needed to inform the CFO and CEO of the investigation as part of the quarterly financial statement certification process, as well as update the Audit Committee of the Board.

Although some of Mr. Barnes' concerns were raised to the highest levels of the Enterprise, culminating in a presentation by Mr. Sam Rajappa on August 14, 2003 to the Audit Committee of the Board of the Directors, our examination has concluded that the Amortization Investigation was flawed in a number of ways.

Mr. Barnes raised concerns about the modeling process in an e-mail to Sam Rajappa.[193] These concerns were related to three specific anomalies, which he had observed in the data passed to the iPDI system from the AIMS system: 1) factors in excess of 100%, 2) negative factors and 3) factor arrays that amortized almost the entire amount to be amortized in the first few months.[194]

A meeting was held on August 8, 2003, one week after Mr. Barnes expressed his concerns. This meeting was attended by a number of representatives from different internal groups as well as the external auditors to discuss the concerns raised by Mr. Barnes. The OA performed a number of procedures to evaluate the issues raised by Mr. Barnes in preparation for this meeting. At this meeting. Mr. Rajappa stated that "…this process is in compliance with the company's accounting policies that are in compliance with GAAP" and then asked if anyone at the meeting objected to that statement. There were no objections.[195] Although we have interviewed a

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[191] Undated document titled 'Unamortized Balances and Factor Analysis', handwritten notes identify Mr. Roger Barnes as the source for this document. FMSE 023356.

[192] The audit notification memorandum is dated August 6, 2003 (FMSE 023289) and the 10-Q was officially filed on August 14, 2003 (http://www.fanniemae.com/ir/sec/index.jhtml?s=SEC+Filings).

[193] An email from Mr. Roger Barnes to Mr. Sam Rajappa, Subject: Request for Meeting, dated July 29, 2003, states that "it is necessary that I schedule an important meeting with you regarding analysis and research I have been conducting for a number of weeks." The email further states "it might be a good idea to invite select members of your staff (Ann Eilers, Paul Jackson, and/or Joyce Philip) who will have familiarity with the subject I must cover." FMSE 024268

[194] "Unamortized Balances and Factor Analysis" Prepared by Mr. Roger Barnes and provided to the Office of Audit. FMSE 023356

[195] OFHEO Interview, Mr. Roger Barnes, September 1, 2004, p. 147-148.
Q: Were you informed that they were concluded or that there was no problem?
A: I think they said it was not material and that it was in compliance with GAAP.
Q: But they never came back and provided you with any supporting documentation at all?

number of witnesses on this particular conclusion, it is still not exactly clear how such a conclusion was reached, since many of the anomalies that Mr. Barnes had identified were subsequently fixed through various projects including the Security Master Project, the enhancements to the Gfee modeling process and the REMIC re-mapping project.[196]

However, one particular test performed by the OA was significant by virtue of the fact that it was performed at all. The OA performed specific procedures to test whether the transactions identified by Mr. Barnes were included in the catch-up analysis. As stated previously, OFHEO strongly disagrees with the Enterprise's accounting (catch-up threshold) for estimation uncertainty. However, if one were to accept the Enterprise's reasoning for establishing a catch-up, would that acceptance further permit including adjustments resulting from data errors and other issues in the catch-up as well? Furthermore, the OA analysis in this regard was flawed for the simple reason that their procedures were insufficient to assess the breadth of the issues or their quantitative impact on the catch-up analysis. Mr. Rajappa's testimony on this matter follows:

> Q: Now, was that correct or appropriate--was it appropriate under generally accepted accounting principles to assign REMICs to FAS 91 buckets regardless of their characteristics?
> A: I do not know the--I cannot opine on the generally accepted accounting principles, but that's the way it was done.
> Q: Were you aware that it resulted in large variance--were you aware that this practice of assigning REMICs to FAS 91 types, regardless of the characteristics of the tranche, that it resulted in large variances in modeling characteristics of the CUSIPs that reside in that type?
> FANNIE MAE LEGAL COUNSEL: Are you reading from a particular part of the document?
> Q: Yes.
> [Pause.]
> A: Yes.
> Q: Yet you had--yet the company concluded overall that its reported results were in accordance with generally accepted accounting principles, correct?
> A: The company concluded--I concluded based on my audit that those specific 62 CUSIPs, give or take a few, and the 26 identified by Jeff, they were part of the beginning balance of the catch-up analysis.
> Q: And that compensating control is what, in fact, made the financial statements correct?

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A: No, no one went in depth to try to explain, and that is what led to my comments of how can the review be done when at this point I raised questions and the items in [sic. internal] audit referred to were only one or two of the, so how can you have your review done? We had amortization of – it was occurring so rapidly that we were amortizing the income expense, the entire discount that should have been 10 to 15 years, in as short as seven months. […]

196 OFHEO Interview, Mr. Jeff Juliane, June 8, 2003, pp. 125-126.

Q: […] My question is, is it your opinion that the amortization of the securities that he [Mr. Barnes] identified was corrected as a result of implementation of the project?

A: I'll answer that specifically. There was no correction needed in the securities he identified in his analysis. There was an enhancement done through Security Master to better group the assets so these kinds of anomalies from a myopic perspective would not show up any longer.

Q: Do you still have REMIC as 91 categories or REMICs that produce negative factors?

A: A, yes, we do, and – but the occurrence of these are much – have been greatly reduced through Security Master.

FANNIE MAE LEGAL COUNSEL: Would you describe that as- OFHEO has characterized it as a "compensating control." You don't necessarily have to phrase it that way, but...
Q: Would you agree that including that effect in the catch-up is a compensating control?
A: I don't want to quibble on compensating or not, but it is a good control, having a catch-up analysis that is approved by our external auditors and making sure that the catch-up analysis starting point included this and all the other effects that we talked about that could change. As a starting point, I think that is a good--that gave me comfort.[197]

The Office of Auditing's attention was also brought to another matter related to a manual factor change submitted by the modeling group. This matter was raised at the August 8, 2003 meeting to address the issues raised by Mr. Barnes.[198]

The iPDI system, which at that point was the responsibility of Mr. Barnes, had the capability to manually change an individual factor that had previously been passed from AIMS. A manual change could be necessary if, for instance, it became too late in the closing process to effect another complete pass of information from AIMS to iPDI. If a change was necessary, a message would be sent from the AIMS modeling team to the iPDI team to process the change. In addition, the AIMS team was responsible for validating the reason for the change. This is a segregation of duties that no longer exists today as a result of the changes to Mr. Juliane's responsibilities.

The manual factor change was processed "without full understanding by the iPDI group of the reason for the change"[199] and despite the fact that "written documentation supporting the change request was not sufficient."[200] The minutes of the August 8, 2003 meeting clearly state Mr. Barnes' concern: "Roger said that this transaction bothered him because it appeared that the factor change was made to make iPDI "agree" with forecasted amortization expense."[201] Mr. Barnes' concerns were significant because, in his mind an intentional misstatement may have occurred, and by raising his concerns, he also brought attention to the potential segregation of duties issue in the Controller's Department.

The CFO, Mr. Howard, clearly understood that Mr. Barnes had alleged an intentional misstatement in the matter of the $6.5 million factor change. When OFHEO asked Mr. Howard whether Mr. Barnes had made such an allegation, Mr. Howard responded as follows: "Well, he alleged that was intentional misstatement."[202] Ms. Spencer, who reported directly to Mr. Howard and was ultimately responsible for the amortization area because it was part of the

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[197] OFHEO Interview, Mr. Sam Rajappa, June 17, 2004, pp. 99-101
[198] Summarized Minutes of the Meeting (8/8/03), Unamortized Balances and Factor Analysis, FMSE-SP 000081. The minutes state that "Roger [Barnes] said that this transaction bothered him because it appeared that the factor change was made to make iPDI "agree" with forecasted amortization expense."
[199] *Id.,* The meeting concluded the investigation by the Office of Auditing and was attended by members of the Controller's Department, Financial Standards, Office of Auditing, Corporate Compliance and KPMG.
[200] Fannie Mae Office of Auditing, Amortization Investigation, August 2003, FMSE 023283
[201] Summarized Minutes of the Meeting (8/8/03), Unamortized Balances and Factor Analysis, FMSE-SP 000081.
[202] OFHEO Interview, Tim Howard, August 5, 2004, p. 99.

Controller's Department, did not understand Mr. Barnes' allegation as intentional misstatement or fraud.[203]

In addition, neither Mr. Rajappa, nor his staff (the very people who were responsible for conducting an independent investigation) understood his allegations as intentional misstatement. [204] Such a lack of understanding is strange, especially since the summarized minutes of the August 8, 2003 meeting (which included the statement made by Mr. Barnes that the factor change appeared to have been made to make actual results *agree* with forecasted results) were prepared by Mr. Paul Jackson, Director in the OA, and were reviewed by Mr. Rajappa.[205]

What made the manual factor change even more difficult to understand is the way in which it was processed. It seems, according to documentation reviewed by OFHEO, that the issue that gave rise to the need for the factor change occurred in one particular FAS 91 type but the factor adjustment actually occurred in a different FAS 91 type.

The factor change actually occurred in the FAS 91 type RMC T802. RMC T802 is a special FAS 91 type, which was created for a particular pool of securities related to a single transaction. The RMC T802 bucket was chosen because it would be easier to deal with later operationally when

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[203] OFHEO Interview, Leanne Spencer, August 12, 2004, pp. 52-53.
Q: Okay. At any time in the past, did you ever have the opinion that the company's accounting was not in accordance with generally accepted accounting principles?
A: No.
Q: Are you aware of any company officer or employee ever expressing their belief that any of Fannie Mae's accounting policies or practices were inconsistent with GAAP?
A: There was an employee in the controller's department in 2003 that raised some concerns to the level of the controller of some items that he felt warranted looking into and was unclear if they were appropriate and we investigated it.
Q: And that was Roger Barnes?
A: That's correct.
Q: When he raised these issues, did he ever allege fraud or intention to misstate financial results?
A: No. Not to me.
Q: Okay. Did you ever develop an awareness that that was what he was alleging?
A: No. I -- no.
[204] OFHEO Interview, Ms. Ann Eilers, July 23, 2004, p. 222
Q: Now you testified earlier that you were present in the initial meeting that Roger Barnes had with Sam Rajappa where Mr. Barnes provided his concerns regarding premium discount amortization; correct?
A: Yes.
Q: Now did Mr. Barnes make any allegations or statements regarding intentional misstatements?
A: At that meeting?
Q: Yes.
A: Not that I recall.
Q: Did he make any allegations or assertions regarding intentional misstatements at any other time that you are aware of?
A: Not that I'm aware of.
[205] OFHEO Interview, Mr. Sam Rajappa, June 17, 2004, p. 86-87.
Q: Did you prepare this document (FMSE-SP 000080-81)?
A: No, I reviewed it. I believe it was prepared by Mr. Paul Jackson.



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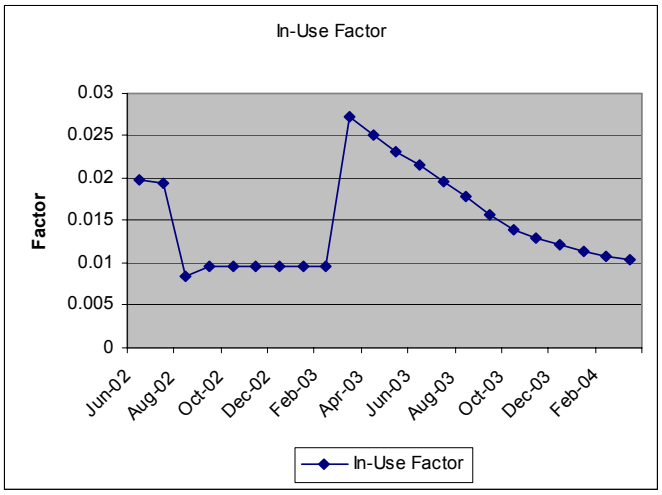
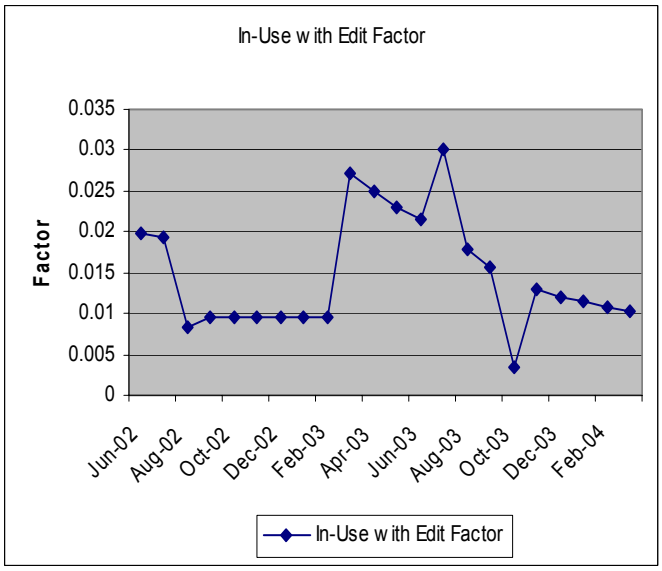
the factor change (which was made in iPDI) would need to be reflected in the data which feeds the AIMS system (from ALEX).[206]

OFHEO has prepared graphs to show the before and after effects of the factor change:




The chart above is as of July 31, 2003 and, as such, shows the actual factors used prior to July 2003 and the projected factors for periods thereafter. The prospective factor array (after June 30th) is –as would be expected- a curvilinear, downward sloping line.




[206] "However, FAS 91 type RMC-T802 was selected for the factor change simply because it had only one underlying security (thus no changes would be required at the next discrete level – ALEX product type.)" KPMG 2003 workpapers "FAS 91 Amortization – Manual Adjustments", KPMG 000904.

The chart above shows the effect that the factor change has on the prospective array (after June 30th). Because the factor array should correlate roughly to the forecasted cash flows (in this case on a security) the prospective factor array created by the factor change is clearly not logical.

The factor change was applied to two specific factors in the array for one amortization type for the periods of July and October 2003. This resulted in a transfer of amortization expense of approximately $ 6.5 million from future periods to the 3rd quarter of 2003. According to testimony provided by Mr. Juliane during OFHEO's examination, the business purpose of the factor change adjustment was to roll forward the book of business used for modeling purposes.[207] However, the rate change clearly seems to be counterintuitive based on the revised array of factors. The end result of the change (as the charts show) was to shift income from the July 2003 period into future periods.

Fannie Mae's OA reviewed the documentation supporting the request for the factor change as part of the Amortization Investigation performed in August 2003 and concluded that the supporting documentation was in fact not sufficient to support the factor change made.[208]

Based on the information the OA team received from the modeling group during their investigation the OA team was not able to come to a conclusion about whether the factor change causing the $ 6.5 million adjustment to amortization income was in fact a *valid adjustment*. The procedures performed by the OA team consisted of reviewing the supporting documentation provided by the modeling group and, despite several requests, conclusive documentation was not provided by the modeling group. It was at precisely that point that the OA concluded its investigation. **The lack of diligence on behalf of the OA in the matter of the manual factor change is inconsistent with their responsibility to exercise due professional care.**

The summarized minutes of the meeting on August 8, 2003 include the following conclusion from Mr. Rajappa:

> Sam [Mr. Rajappa] stated that in his opinion, the July factor change process showed a weakening of this control because the factor change request did not include sufficient written documentation to support the transaction and because a change was made without full understanding by the iPDI group of the reason for the change. Sam added that this required remediation in the form of written

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[207] OFHEO Interview, Mr. Jeff Juliane, June 8, 2004, pp. 117-118
Q: Do you recall the $ 6.5 million factor change and what it related to?
A: Yes.
Q: Can you describe it?
A: […] what we did is that we did a factor change. And in AIMS we had done an estimate on what that factor change was. There were new business books that we took into consideration. We basically rolled for our estimate and came up with an estimate that was. $6.5 million higher than what iPDI was booking. So, I vetted that conversation with my management team, and we decided that, based on my analysis, that we would increase the expense by $6.5 million through and a partial factor change.
[208] Summarized Minutes of the Meeting (8/8/03). Unamortized Balances and Factor Analysis, FMSE-SP 000081

procedures and better defined roles and responsibilities. Jonathan Boyles agreed with this statement.[209]

When asked during his testimony whether, in the instance of an assertion regarding intentional misstatements, it would be the Enterprise's policy to prove that entries made to the financial statements are in fact correct, Tim Howard, Chief Financial Officer, testified that it would be expected practice to verify the validity of these entries.[210] However, Fannie Mae's OA did not perform additional auditing procedures to determine if the request for a factor change was valid or not. In fact management of Fannie Mae's OA "had no basis to believe it was correct or wrong"[211] and could "not rule out the possibility that entry could be incorrect."[212]

Therefore the amortization investigation performed by Fannie Mae's OA did not arrive at a conclusion on whether or not these factor changes are made to manage earnings rather than to arrive at a best estimate for the amortization period of the underlying securities.

Lack of Written Procedures and Supporting Documentation, and an Insufficient Audit Trail

In July 2003 Fannie Mae's Office of Auditing issued its Audit Report[213] summarizing the results of their review of controls over Fannie Mae's amortization of mortgage related price adjustments. OFHEO believes that this report was flawed because it merely reflected a "yellow" rating of "controls need strengthening requires attention during normal course of business," rather than a "red" rating of "Controls need strengthening, request immediate attention." OFHEO further believes that the characterization of findings within the report was either not clear, did not provide appropriate emphasis and inappropriately represented certain significant control weaknesses as documentation issues. Lastly, OFHEO determined that a number of meaningful findings that were noted in the workpapers were inappropriately omitted from the report.

However, irrespective of OFHEO's evaluation of the July 2003 OA report itself, matters noted by OA auditors, in combination with OFHEO's own analysis and findings **suggest a pervasive lack of written procedures and documentation for most of the Enterprise's amortization activities.**

OFHEO has concluded from its own examination procedures that:

- Insufficient documentation existed for most procedures.

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[209] Summarized Minutes of the Meeting (8/8/03), Unamortized Balances and Factor Analysis, FMSE-SP 000080-000081

[210] OFHEO Interview, Mr. Tim Howard, Chief Financial Officer, August 5, 2005, p. 58
Q: In the instance of an assertion regarding intentional misstatement, would it be company policy to prove that any entries made to the financial statements were in fact correct?
FANNIE MAE LEGAL COUNSEL: Are you talking specifically about the Barnes complaint or generally?
Q: Generally.
A: I don't know that I would say company policy. It would certainly be expected practice to do so.

[211] OFHEO Interview, Mr. Sam Rajappa, June 17, 2004, p. 108

[212] OFHEO Interview, Mr. Paul Jackson, August 17, 2004, pp. 152-153

[213] Fannie Mae Audit Report, Office of Auditing, Amortization Audit, July 9, 2003, FMSE 023745-023754.

- Explanations regarding the basis for changes to methodology were not adequate or appropriately documented.

- Catch-up results were poorly documented, particularly for the periods prior to 2003.

- Inconsistent accounting methods were applied without adequate supporting explanation.

- Factor change adjustments were not sufficiently explained or documented.

In addition, an observation contained within the July 9, 2003 report was that "policies over data processes and key modeling methodology and assumptions should be developed to provide better supportability."[214] Specifically, the audit report pointed out that "procedures do not specify what level of documentation is required to support actions taken, or what level of management involvement is required."[215] Additional areas, not stated previously, cited for lacking appropriate documentation included among others:

- Modeling performed outside the AIMS framework
- Use of proxies instead of actual data

Other items *not* included in the audit report, but separately conveyed to business unit management further identified the need to develop guidelines to address documentation requirements related to:

- The use of proxies for FAS 91 types used to group types of securities with similar characteristics;
- Manual factor adjustments to the amortization accounting sub-ledger and
- Archiving the support for interest rate assumptions and the level of required management approval of these interest rate assumptions.[216]

Lastly, the workpapers prepared by Fannie Mae's Office of Auditing include comments about formalizing and documenting procedures to properly address the modeling process including changes to the modeling methodology and to CPRs[217] used in the modeling process.[218]

In evaluating the catch-up process, Fannie Mae's Office of Auditing identified several further areas with documentation weaknesses as described below:

- Approval procedures documented in 2001, may not still apply and are not being followed currently. Specifically, Portfolio Management does not sign off on the Sensitivity Analysis prepared by the Controller's Department

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[214] *Id.,* FMSE 023749
[215] *Id.,* FMSE 023749
[216] Email from Ms. Joyce Philip, Manager Office of Auditing, to Mr. Jeff Juliane and Mr. Paul Jackson, Director Office of Auditing, July 6, 2003, FMSE 118812
[217] CPR stands for Constant Prepayment Rate and is one of the critical components used in determining amortization factors.
[218] Fannie Mae Office of Auditing SDI, Amortization Audit 2003, FMSE 117502-117503, states that "there are not documented procedures that address the CPR change process and specifically the documentation and approval process."

- Documented procedures do not address the incorporation of current month acquisitions activities into the quarterly catch up analysis and adjustment process. Adjusting the catch up analysis to include current period acquisitions was first incorporated in November 2002 for the September book of business.[219]

- The business analyst who runs the AIMS model was unable to provide support for the current acquisitions adjustments – this could only be provided by the manager – potential Key Person Dependency.

- There are no guidelines that identify what activities require management [approval or sign-off]."[220]

**OFHEO believes that the lack of documented procedures and underdeveloped audit trail for the various processes and systems used to calculate deferred price adjustment amortization allowed personnel within the Enterprise to affect the management of earnings and volatility in a manner not easily observable or readily subject to sufficient review.**

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[219] Note that the process of determining the impact of current acquisitions on the catch-up analysis is performed manually.
OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 60-61
Q: And you said that's done manually, so what systems in particular is that information –
A: Well, we don't do it manually. It's done through system interfaces between us and ALEX. There's no manual processing involved at all in terms of rolling the book forward. We manually [sic. model] outside the system, if we're on a December book of business, look at the catch-up impact of January acquisitions and February acquisitions. That's the manual process in terms of generating the sensitivity that I'm talking about. […]

[220] Fannie Mae Office of Auditing Workpaper, Amortization Audit 2003, FMSE 118804-118807 The workpapers prepared by Fannie Mae's Office of Auditing cut off the text in the last bullet point. However, the related SDI prepared by the Office of Auditing titled "Catch Up Processes and Controls are not fully articulated, formalized, or documented" states that "the following areas need to be better defined" listing among others "when management approval/sign-off is required." FMSE 118808

## HEDGE ACCOUNTING UNDER SFAS 133

### *Introduction*

OFHEO's on-going special examination has placed a specific focus on Fannie Mae's application of Statement of Financial Accounting Standards No. 133 *Accounting for Derivative Instruments and Hedging Activities* ("SFAS 133"). SFAS 133, which was issued in 1998 and became effective in 2001, presented Fannie Mae with the potential for significant volatility in earnings and several operational challenges. For the Enterprise to avoid much of the potential earnings volatility caused by marking derivatives to fair value under SFAS 133, it elected to adopt hedge accounting under the new standard. However, qualifying for hedge accounting under SFAS 133 required changes to significant administrative, documentation, and system requirements for most entities. For an entity with a large and dynamic hedging program, like Fannie Mae, hedge accounting posed even greater challenges. Fannie Mae devised a hedge accounting approach in which the vast majority of its derivatives were treated as "perfectly effective"[221] hedges with the objectives of minimizing earnings volatility and simplifying operations. OFHEO has determined that Fannie Mae has misapplied GAAP (specifically, the hedge accounting requirements of SFAS 133) in pursuit of these objectives. The misapplications of GAAP are not limited occurrences, but appear to be pervasive and reinforced by management whose objective is to reduce earnings volatility at significant cost to employee and management integrity. The matters discussed herein raise serious doubts as to the validity of previously reported financial results, as well as adequacy of regulatory capital, management supervision, and overall safety and soundness of the Enterprise.

### *Background*

SFAS 133,[222] as amended and interpreted, provides the primary guidance under GAAP for companies' accounting and reporting for derivatives. The accounting framework in SFAS 133 brought significant changes to prior accounting practice and effectively superseded concepts such as synthetic accounting.[223] SFAS 133 requires that all freestanding and certain embedded derivatives be carried on the balance sheet at fair value. Changes in a derivative's fair value are included in earnings, unless the derivative is ***designated and qualifies*** for hedge accounting. Hedge accounting provides a means for a matching of the earnings effect of a derivative and the related designated hedged transaction, thereby mitigating the impact of marking-to-market the derivative under SFAS 133.

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[221] See discussion of "perfectly effective" hedge relationships in; The Assumption of Perfect Effectiveness, herein.

[222] Appendix II provides a summary of the basic provisions of SFAS 133.

[223] Synthetic accounting was the accounting treatment followed by many entities, including Fannie Mae, prior to SFAS 133. Paragraph 349 of SFAS 133 defines synthetic instrument accounting as follows: "Synthetic instrument accounting, which evolved in practice, views two or more distinct financial instruments (generally a cash instrument and a derivative instrument) as having synthetically created another single cash instrument. The objective of synthetic instrument accounting is to present those multiple instruments in the financial statements as if they were the single instrument that the entity sought to create."
Synthetic instrument accounting essentially allowed derivatives to be accounted for on an accrual basis together with the related hedged item, in order to "synthetically" replicate a fixed or floating rate instrument, as applicable.

Hedge accounting is elective. However, to qualify, certain stringent criteria must be satisfied. These requirements were outlined in a recent Securities and Exchange Commission ("SEC") speech by John James, Professional Accounting Fellow from the Office of the Chief Accountant at the SEC. Below is an extract from the speech which emphasizes the strict criteria necessary to receive hedge accounting:

> Many have complained that Statement 133 is not a principles-based standard and that its rules are too complex to follow. However, the principle in Statement 133 is fairly straightforward in that derivatives should be recorded on the balance sheet at fair value with changes in fair value reported in earnings. The complexity is mostly associated with achieving hedge accounting, which is optional under Statement 133. Thus, in order to achieve hedge accounting, the Board concluded that entities would be required to meet certain requirements at the inception of the hedging relationship and on an ongoing basis. These requirements include: contemporaneous designation and documentation of the hedging relationship, the entity's risk management objective and strategy for undertaking the hedge - including, identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how effectiveness will be assessed and measured. Additionally, Statement 133 requires an entity to perform a hedge effectiveness assessment at both the inception of the hedge and on an ongoing basis as support for the assertion that the hedging relationship is expected to be (or was) highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the designated hedging period.
>
> Those are the requirements. They were pretty well understood in and around the adoption date of Statement 133; however, as commonly happens as a standard matures, the staff has recently observed situations of "sloppy" documentation and aggressive interpretations of Statement 133's hedge accounting guidance. [224]

### *Implementation of SFAS 133 at Fannie Mae*

Prior to SFAS 133, Fannie Mae followed synthetic instrument accounting for debt instruments whereby cash flows were synthetically altered through the use of derivatives. As Fannie Mae was not a "mark-to-market" entity, the new accounting for derivatives under SFAS 133 would significantly affect the volatility of its financial results if hedge accounting were not applied. Some entities, such as broker-dealers and investment companies, account for most of or all of their assets and liabilities at fair value, with changes therein flowing through earnings (referred to as "mark-to-market" accounting). When such entities use derivatives to manage risk, they often achieve a natural offset in earnings due to the mark-to-market of both the derivatives and the assets/liabilities that give rise to the risk. Fannie Mae, as well as most banks and finance companies, apply a modified historical cost approach to accounting for most financial assets and

[224] Extract from John James, Professional Accounting Fellow from the Office of the Chief Accountant - US SEC, speech at the 2003 Thirty-First American Institute of Certified Public Accountants ("AICPA") National Conference on Current SEC Developments held in December 2003.

liabilities. Thus, the introduction of fair value accounting for derivatives under SFAS 133 had the potential to create significant earnings volatility unless hedge accounting was used to allow an offset to the earnings effect of marking the derivatives to market.

Fannie Mae faced significant challenges in qualifying for hedge accounting. Due to its extensive documentation and effectiveness calculation requirements, hedge accounting under SFAS 133 was most easily adopted by entities with simple, passive hedging approaches in which hedges are established and allowed to run their course. However, Fannie Mae's hedging approach was neither simple nor passive. The complex nature of funding its massive mortgage portfolio and managing the associated interest rate risk necessitated an active, dynamic hedging approach to respond to changing market conditions and portfolio re-balancing requirements. Such an environment adds significant complexity to the administrative and systems requirements to support hedge accounting. Furthermore, Fannie Mae's use of option-based derivative products further complicated the application of hedge accounting, due to additional complexities associated with such instruments.

***Determination to maintain the pre-SFAS 133 accounting***

Despite the challenges noted above, Fannie Mae had a strong desire to retain the status quo of accrual/synthetic instrument accounting. Fannie Mae's net interest margin reflects the spread between the income earned on its assets (interest income) and its cost of funding (interest expense). Synthetic instrument accounting provided relatively smoother accounting earnings and greater predictability of reported financial results, including Earnings Per Share ("EPS"). Fannie Mae's derivatives accounting policy makes several references to derivative transactions in which the intended result is for the accounting to continue to mimic synthetic instrument accounting even after the adoption of SFAS 133.

***Minimizing Earnings Volatility a Primary Objective***

Fannie Mae documents relating to its SFAS 133 implementation discuss minimizing earnings volatility and maintaining the simplicity of the Enterprise's operations as the primary objectives when Fannie Mae undertook the implementation of the standard. [225] Earnings volatility would naturally arise from those derivatives that did not qualify for hedge accounting and from any hedge ineffectiveness resulting from hedging relationships that qualified for hedge accounting. OFHEO acknowledges that minimizing earnings volatility and simplifying operations in connection with the adoption of SFAS 133 are not prohibited and that many companies likely had similar objectives in their implementation of the standard. However, as discussed further below, these goals have influenced the development of misapplications of hedge accounting.

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[225] Memorandum from Jonathan Boyles, Senior Vice President–Financial Standards and Corporate Tax Compliance, to Distribution, Subject: Background on SFAS 133 implementation, March 2, 2003, FMSE 078540 – 078542, in which Mr. Boyles stated that, "At the time of our implementation efforts there were several tenets that we [sic] drove our decisions regarding implementation and derivatives strategies. In the simplest terms, these tenets were: 1. Earnings volatility was to be minimized and if there were earnings volatility it should be as predictable as possible. 2. We were to leverage off existing systems as much as possible, 3. Operating earnings needed to be simple and easily understood."; and presentation document, "Examining Our Hedging Strategies-Post FAS 133," Tim Howard, Peter Niculescu, Linda Knight, Leanne Spencer, David Benson, Jonathan Boyles, Bill Quinn and Mary Lewers, May 9, 2003, FMSE 027242-027265, bullet three on page 2 of the presentation (FMSE 027243) states, "Goals when we adopted FAS 133: minimizing earnings volatility, leverage existing systems, keep operating earnings simple…"

These improper approaches included not assessing hedge effectiveness, not measuring hedge ineffectiveness when required, and applying hedge accounting to hedging relationships that do not qualify for such treatment.

***Derivatives Accounting Policies & Procedures***

Fannie Mae's accounting policies for derivatives post SFAS 133 are contained in the Derivatives Accounting Guidelines ("DAG"). The DAG represents Fannie Mae's effort to detail the potential derivative transactions that the Enterprise may enter into, the accounting to be followed for such transactions, and the impact the accounting has on earnings. The DAG serves as the foundation for Fannie Mae's derivative accounting. Interviews with Fannie Mae personnel indicate that these guidelines also formed the basis for system development efforts to support SFAS 133.

The DAG has the appearance of a comprehensive set of accounting policies. However, a close review of the guidelines revealed numerous instances of departures from hedge accounting requirements under SFAS 133. Jonathan Boyles, Senior Vice President – Financial Standards & Corporate Tax, is the head of accounting policy formulation at Fannie Mae, and had primary responsibility for the DAG's development. Mr. Boyles has referred to some of these matters as "known departures from GAAP".[226] Other members of Fannie Mae management refer to these matters as "practical applications" of GAAP.[227] These departures, or practical applications, had the effect of allowing Fannie Mae to apply hedge accounting and the assumption of perfect effectiveness[228] to numerous transactions in situations where such treatment was not appropriate without the necessary documentation and analysis.

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[226] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Accounting Standards and Corporate Tax, August 3, 2004, p. 64. In the interview, Mr. Boyles stated, "We have several known departures from GAAP in our adoption of FAS 133. We have cleared those with our auditors. We have reported to our auditors on an annual basis the effect of those. And they were comfortable when we adopted them, and they were comfortable over the last several years when we reported the results of that work."

[227] OFHEO Interview, Leanne Spencer, Controller, August 12, 2004, pp. 28-29. In the interview, Ms. Spencer made reference to a "practical application" of GAAP:

Q: Did KPMG ever request that you perform some ongoing measurement in order to determine whether a materiality threshold had been exceeded?

A: We have had had [sic], over the course of time, we have had had [sic] situations where we've looked at GAAP, we've said, how do you take this technical literature and how do you apply it to how Fannie Mae's business runs, and made a judgment, not Fannie Mae making a lone judgment, but in working with our external auditors and their concurrence that what I recall my words are practical application, how you take a technical piece of literature, and you try to overlay it into how a company does business and that we have periodically have several areas where you do back-testing.

[228] OFHEO Interview, Mary Lewers, Vice President—Financial Accounting, July 13, 2004, p. 132. In the interview, Ms. Lewers confirmed that perfectly effective hedges are those for which there is no explicit assessment or measurement of effectiveness.

Q: So, if you don't qualify for perfect effectiveness, you would use the long haul method.

A: Uh-huh.

Q: And does the long haul method include both assessment and measurement of effectiveness?

A: Yes, it does.

Q: So that would mean that for the perfectly effective hedges, there's no explicit assessment or measurement of effectiveness; is that correct?

A: That's a correct statement.

### *The Assumption of Perfect Effectiveness*

Consistent with Fannie Mae's desire to minimize earnings volatility and maintain simplicity of operations, a great deal of emphasis was placed on treating hedges as perfectly effective, whereby it is assumed that no ineffectiveness exists in a hedging relationship, and no assessment or measurement of effectiveness is performed. [229] In fact, Fannie Mae treats almost all of its hedging relationships as perfectly effective. [230] SFAS 133 does allow the assumption of no ineffectiveness, but only in very limited circumstances. However, in many instances, as discussed further below, Fannie Mae has disregarded the requirements of SFAS in its treatment of hedges as being perfectly effective. Accordingly, the Enterprise has not properly assessed and measured effectiveness as required by the standard. At December 31, 2003, Fannie Mae had a notional of $1.04 trillion in derivatives, of which a notional of only $43 million was not in hedging relationships.[231]

The importance given by management to an assumption of perfect effectiveness in hedging relationships is further highlighted by the fact that Fannie Mae's accounting policy required special management approval for derivatives requiring "long haul"[232] treatment. However,

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[229] OFHEO Interview, Janet Pennewell, Senior Vice President—Financial Reporting and Planning, June 15, 2004, p.197
Q: Do you believe or is it your understanding that an emphasis is placed by Fannie Mae on structuring their hedge strategies to attempt to achieve the "perfect hedge" or no ineffectiveness?
A: I believe that that was consistent with our objective early on. In fact, I believe that leading into the implementation of FAS 133 that we looked at the different derivatives that we were using with an objective of trying to use those derivatives and those hedging vehicles that we thought we could assume were perfectly effective. But I think it's not always the case.

[230] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 3, 2004, p. 45, in which Mr. Boyles stated that he would guess over 90% of Fannie Mae's hedges are perfectly effective at any point in time.
Q: That's what I'm talking about. In terms of what is actually on the books, not in terms of the transactions described in the policy, but what's on your books today or at any point in time. Generally how much of the portfolio would be treated as perfectly effective?
A: I would guess over 90 percent, but I don't see those reports.
OFHEO interview, Mona Patel, Senior Project Manager—Financial Accounting Group, September 8, 2004, pp. 118-119
Q: What percentage of your--of the derivatives portfolio would you say qualified for perfect effectiveness? […]
Q: Any estimates that you may have?
A: […]The majority of our linkages get perfectly effective hedge accounting except for a couple of long hauls or [sic] the population. So, anything that other [sic] long haul is all perfectly effective accounting.[…]
Q: And we are not trying to get a precise, but--precise number but just an approximation. Is it five? Is it a hundred? Is it two? I mean, just roughly, how many long-haul calculations tend to be performed on a given month?
A: Not a given month. There was none, like in one in April. If there are any, they're a handful.

[231] Fannie Mae December 31, 2003 10-K, Table 30 "Notional and Fair Value of Derivatives by Hedge Designation," p. 79. These balances exclude mortgage commitments accounted for as derivatives under SFAS 149. Note that the $43 million which were not in hedging relationships represent approximately 0.004% of the total $1.04 trillion notional amount of outstanding derivatives.

[232] OFHEO Interview, Mary Lewers, Vice President—Financial Accounting, July 13, 2004, p. 132. Fannie Mae designates hedge relationships in which it cannot assume perfect effectiveness. In these situations, SFAS 133 requires that Fannie Mae assess effectiveness and measure ineffectiveness to qualify for



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Fannie Mae requires no such special approval for hedges treated as perfectly effective -- thereby making perfect effectiveness the rule, and long haul treatment the exception. As noted above, there are specific requirements that must be met under SFAS 133 to treat hedges as perfectly effective. The complex nature of Fannie Mae's hedging approach makes meeting these requirements difficult. OFHEO believes that Fannie Mae did not place sufficient emphasis on policies, procedures and approval requirements to ensure that the proper accounting treatment was applied. Instead, their procedures focused on special review and approval of transactions that might cause earnings volatility or operational complexity.

Hedges that do not meet the criteria for being perfectly effective require an assessment of effectiveness that must be performed to qualify for hedge accounting. As noted above, OFHEO's analysis indicates that Fannie Mae has many hedging relationships that do not qualify as perfectly effective, yet have been treated as such. Since Fannie Mae has not performed a proper assessment of hedge effectiveness for such transactions, these transactions do not qualify for the hedge accounting treatment that they have been given. Instead, the proper accounting for such derivatives would be for their fair value changes to be recorded directly through earnings. OFHEO believes that the disqualification of hedge accounting for such a large number of transactions would have a significant impact on Fannie Mae's reported financial results, both prospectively and historically.

***Environment for Formulation of Derivatives Accounting Policy at Fannie Mae***

There are a number of issues that are important to understand as it relates to the environment in which Fannie Mae's derivatives accounting policies and practices were developed:

> **Financial Standards Group: Significant Reliance on Limited Resources** – The Enterprise relies heavily on its Financial Standards Group for advice on the application of accounting policy. There does not appear to be an environment conducive to questioning or challenging accounting decisions made by the Financial Standards Group. Fannie Mae's Office of Auditing also relies on the Financial Standards Group to formulate accounting policy for the Enterprise in accordance with GAAP. Although the Office of Auditing reports conclude that Fannie Mae's accounting for derivatives is in compliance with SFAS 133, the Vice President of Office of Auditing (A. Eilers) indicated in her testimony that the Office of Auditing verifies compliance with Fannie Mae policy as it is

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hedge accounting. This is commonly referred to as the long haul approach. Ms. Lewers confirmed this definition in her testimony.
Q: […]Are you familiar with the terminology that's used in the Derivative Accounting Guidelines known as the long haul method?
A: Yes, I am.
Q: And is the long haul method the method that is used for hedges that are not perfectly effective?
A: Yes. Long haul would be used in a situation in lieu of perfect effectiveness, if we didn't qualify for perfect effectiveness. […]
Q: And does the long haul method include both assessment and measurement of effectiveness?
A: Yes, it does.

established by the Financial Standards Group, and does not check for the policy's compliance with GAAP. [233]

Despite the significant influence wielded by the Financial Standards Group, it is comprised of relatively few personnel.[234] OFHEO believes the limited resources devoted to complex technical accounting matters has contributed to Fannie Mae's problems with SFAS 133 compliance.

**Lack of Adequate Understanding by Accounting Operations** –Accounting and treasury operations personnel that are responsible for the implementation of certain aspects of the standard lack an adequate understanding of SFAS 133. This lack of understanding is attributed to the groups' significant reliance placed on the Financial Standards Group. Testimony from various members of the Controller's organization and the Controller indicated that questions relating to the accounting for derivatives could only be answered by the Senior Vice President of the Financial Standards Group (J. Boyles). [235] OFHEO noted that individuals having responsibility for key aspects of the SFAS 133 accounting process (such as ensuring hedge designation occurs, or checking to ensure matching of critical terms) were not knowledgeable about how such activities met the requirements as set forth under GAAP. [236]

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[233] Audit Report, Subject: Derivatives Controls Audit, March 31, 2003, FMSE 102385-102391. The audit report conclusion states, "Controls are in place to capture derivative transactions, monitor counterparty risk, monitor FAS 133 compliance, and report accurate financial results."
Audit Memorandum from Joyce Phillip, Director of Office of Auditing, to Leanne Spencer, Subject: New Accounting Standards Review, February 17, 2004. This memorandum was provided by OFHEO staff and was not provided through the Fannie Mae Special Examination Production; therefore, no Bates number is available. The memorandum's conclusion states, "Fannie Mae's implementation of FAS 149, FIN 45 and FIN 46 is consistent with FASB requirements."
The conclusions reached in the two documents referenced above state that the Office of Auditing has verified compliance with GAAP. However, these conclusions are not consistent with Ann Eilers' testimony.
OFHEO interview, Ann Eilers, Vice President -- Office of Auditing, July 23, 2004, p. 29, where she stated, "As far as GAAP accounting, that's really the role of Financial Standards who runs -- you know, has a team of professionals who basically review GAAP accounting rules, and they would then work with KPMG. At the end of the day KPMG ultimately opines on GAAP. Internal audit would not do that. We basically opine on the controls around those processes."
[234] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 3, 2004, p. 10
Q: When Greg Ramsey came in, did the size of the group grow in terms of the people reporting to him, or when did you get from the four to the eight? I'm just trying to get a sense of timing.
A: Going from the four to the eight has been within the last 18 months.
[235] OFHEO interview, Mary Lewers, Vice President – Financial Accounting, July 13, 2004, p. 45, in which she stated, "Accounting Standards is what I would refer to as our expert advice regarding the translation of GAAP into appropriate policy….So I would define myself as someone who was learning this, but that the real sort of expert advance (sic) in terms of how to translate this into compliance with GAAP, it really rested within the Financial Standards team."

[236] OFHEO interview, Katarina Skladony, Senior Financial Analyst – Treasury Middle Office, August 26, 2004, pp. 144-146, in which she stated, among other things, that the Financial Standards Group did not make her aware of the requirements of SFAS 133.
Q: Ms. Skladony, are you aware that for getting hedge accounting, you have to have contemporaneous documentation?

**Disregard of FASB Decisions** – Like many entities, Fannie Mae engages in active efforts to influence the Financial Accounting Standards Board's ("FASB") rule making decisions, with a goal of advancing the accounting positions it views as most favorable to the Enterprise. SFAS 133 was no exception in this regard – according to documents obtained by OFHEO, Fannie Mae played an active role in lobbying the FASB both prior to the issuance of the standard and subsequently. In some instances, despite entreaties to the FASB by Fannie Mae for a desired derivative accounting treatment, the FASB rejected the requested treatment. At times, even though the FASB had rejected the requested treatment, Fannie Mae disregarded the FASB's guidance and accounted for their transactions the way they had originally proposed. This sheds some light on the culture and attitude within Fannie Mae – a determination to do things "their way."

One such instance relates to certain illustrative transactions included in SFAS 133's Implementation Guidance that were apparently initiated and drafted by the SVP of the Financial Standards Group (J. Boyles). These illustrative transactions addressed accounting for both "termouts"[237] and "offsetting swaps" discussed in this report. OFHEO understands the approach as originally proposed by Fannie Mae would have resulted in treatment of these transactions as perfectly effective hedges. The FASB ultimately rejected this treatment in the guidance ultimately published in SFAS 133. However, Fannie Mae disregarded this guidance and accounted for these types of transactions the way they had originally advocated.[238]

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FANNIE MAE LEGAL COUNSEL: With respect to FAS 133?
Q: Right.
A: I'm not familiar with FAS 133 requirements.
Q: Are you aware that you have to produce documentation at the time the trade is contemplated?
FANNIE MAE LEGAL COUNSEL: You say again "you." I'm just—
Q: You meaning she.
FANNIE MAE LEGAL COUNSEL: Do you understand that's a requirement of FAS 133? That's your question?
Q: Yeah.
FANNIE MAE LEGAL COUNSEL: Okay.
A: No. […]
Q: So you were not made aware by Financial Standards that contemporaneous documentation is required; is that correct?
A: That's correct.

[237] OFHEO understands the word "term-out" to be used by Fannie Mae generally to describe the replacement of discount notes with fixed rate notes or different floating rate borrowings.

[238] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 3, 2004, pp. 177-178. OFHEO notes that this particular example is Example 8 in paragraphs 153-161 of SFAS 133
Q: Was that the Example 8 in the appendix—
A: It was the Fed Funds' example. I don't remember the number. But when FAS 133, when we talked to the FASB, and when they wrote FAS 133, what they told us verbally was confirmed with what they had written--the two ways that they had talked—
Q: When you noticed that it was removed from FAS 133 subsequently, did you discuss it any further with the FASB?
A: We did not go back and discuss that with the FASB. We discussed that with our auditors.

**Responsibility for "Aggressive" Positions –** Accounting policy decisions are determined almost unilaterally by Jonathan Boyles and members of his Financial Standards team. As noted above, certain accounting positions taken by Fannie Mae are contrary to GAAP and at times described as "aggressive interpretations."[239] Taking SFAS 133 accounting positions characterized as aggressive or not in compliance with GAAP appears to be motivated by management objectives of minimizing earnings volatility and ensuring simplicity of operations. Based on information and testimony OFHEO has obtained, it appears that Jonathan Boyles has responsibility for accounting policy decisions made by Fannie Mae that resulted in the improper application of SFAS 133.

***Summary of Key Issues Identified***

There are several issues that have been identified by OFHEO, most of which represent misapplications of the hedge accounting requirements of SFAS 133. Given that the special examination is continuing, the items outlined below should not be considered an exhaustive list of issues identified in connection with Fannie Mae's application of SFAS 133. These broader issues, which affect a large number of Fannie Mae's derivative transactions, are discussed in greater detail in the remaining sections of this report:

**Issue 1:** Fannie Mae improperly assumes that derivatives continue to be perfectly effective hedges upon their re-designation into new hedging relationships. When existing derivatives are re-designated, they generally do not have a fair value of zero when the new hedging relationship is established. As such, they violate one of the requirements under SFAS 133 for the assumption of no ineffectiveness. This issue is prevalent for most derivatives associated with term-outs, which represent a large portion of Fannie Mae's derivatives portfolio.[240]

**Issue 2:** The accounting for offsetting derivatives was inappropriate from the adoption of SFAS 133 through the end of 2003. The Enterprise often entered into offsetting swaps rather than terminating an existing swap. The original swap and the offsetting swap were incorrectly treated as perfect cash flow hedges and their changes in fair value were recorded in Accumulated Other Comprehensive

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Q: So you did not change your accounting as a result of the amendment made by the FASB; is that correct? And this was before you applied FAS 133; is that correct? The amendment was made prior to you having applied FAS 133.
A: I believe it was. I forget the date.

[239] See Issue 3 herein: Application of Shortcut and Matched Terms Method, Additional Transaction Examples, Receive-Fixed Swaptions, for more details on the email from Jonathan Boyles referenced above, in which the term "aggressive interpretations" is used.

[240] Email from Pete Barbera to Jonathan Boyles, Subject: Inventory of FAS 133 transactions, June 2, 2004, produced via CD 8/11/04 in M Box. Attached to Mr. Barbera's email was a draft schedule titled "Analysis of the March 2004 Book." The draft analysis categorized approximately $960 Billion of Fannie Mae's notional outstanding derivatives by transaction type (per the DAG) and by hedge classification (CF, FV, DNQ and Other) as of the end of March 2004. The thirteen most frequently used transactions presented in Mr. Barbera's analysis match those presented in a letter by Jodie Kelley, Vice President and Deputy General Counsel, to Chris Dickerson, July 28, 2004, FMSE 00083. They are 1, 2, 3, 4, 8, 10, 11, 12, 13, 20, 52, 67 and 71. Of these, OFHEO has identified that 5 are term-out transactions and comprise approximately $240 billion of the over $960 billion of outstanding derivative notional balances at March 31, 2004.

Income ("AOCI"). Instead, hedge accounting should have been discontinued and changes in fair value should have been recorded in earnings. Effective the first quarter of 2004, Fannie Mae modified its accounting for these offsetting swaps, with the new accounting method being applied prospectively.[241]

**Issue 3:** Fannie Mae has incorrectly applied the "short-cut" method (or "matched terms" method) in a number of situations. The following are those discussed in this report:

- Receive-fixed swaptions hedging the fair value of debt are incorrectly accounted for as perfect hedges, even though ineffectiveness would generally be expected to exist in such relationships.
- Callable swaps hedging discount notes are incorrectly treated as perfectly effective without regard to the option value existing in the derivative but not in the hedged item.
- Perfect effectiveness in hedges of anticipated debt issuances has been assumed based upon a duration comparison which is not supported by SFAS 133.
- Swaps arising from the exercise of a swaption are treated as perfectly effective despite having a non-zero fair value at inception.
- The requirement for matching of reset dates (in order to assume perfect effectiveness) between the hedged item and the swap in cash flow hedges has been modified in the Enterprise's policy to permit up to a seven day reset date mismatch.
- The requirement for matching of maturity dates (in order to assume perfect effectiveness) between the hedged item and the swap in fair value hedges has been modified to permit up to a 90 day mismatch.

**Issue 4:** Beginning with its initial adoption of SFAS 133, Fannie Mae employed an erroneous methodology to account for changes in the time value and intrinsic value components of purchased interest rate caps. In November 2002, the Enterprise discovered the error, corrected its methodology, and applied the new methodology only to new interest rate caps prospectively. The accounting for previously existing caps was not corrected and previously reported accounting results were not evaluated for possible restatement. In its 2002 10-K, Fannie Mae described this as a refinement of its methodology rather than a correction of an error.

**Issue 5**: OFHEO has identified a number of problems with Fannie Mae's hedge documentation with respect to its compliance with hedge accounting requirements. In several examples reviewed by OFHEO, the documentation was ambiguous as to the nature of the hedging relationship or did not clearly identify the hedged risk, hedged item or its probability of occurrence – all required under SFAS 133 to meet the hedge accounting criteria. In addition, OFHEO noted instances of a lack of contemporaneous documentation, such as the occurrence

[241] Memorandum from Jonathan Boyles to Distribution, Subject: Revisions to the December 2003 DAG, March 13, 2004, FMSE 113686-113690.

of retroactive hedge designations and the lack of adequate documentation when a re-linkage (re-designation) occurs.

**Implications of Issues Identified**

From our review of documents, emails, testimony and initial interviews with Fannie Mae personnel, OFHEO has concluded that there has been an intentional effort by management to misapply the accounting rules as specified in the standard in order to minimize earnings volatility and simplify operations.

By improperly assuming perfect effectiveness for many of its hedges, Fannie Mae has failed to perform the proper assessment of effectiveness and measurement of ineffectiveness in these instances. Furthermore, the Enterprise has many deficiencies in its hedge designation documentation. Effectiveness assessment, ineffectiveness measurement and proper hedge documentation are critical pre-requisites to receive hedge accounting treatment under SFAS 133. Because the Enterprise has not met these criteria, it should not receive hedge accounting treatment for many of its derivatives. Instead, the proper accounting for such derivatives would be for their fair value changes to be recorded directly through earnings.

Prior to 2004, Fannie Mae improperly accounted for certain offsetting derivatives, treating them as hedges when they did not qualify as such. Additionally in 2001-2002, Fannie Mae improperly accounted for certain purchased interest rate caps which may have significantly misstated the Enterprise's earnings and AOCI during those years. These instances raise further questions about possible misstatements of prior years' financial results. These matters also raise concerns about Fannie Mae's financial reporting and disclosures:

- Fannie Mae was aware that their prior accounting treatment for offsetting derivatives was not consistent with GAAP. When this accounting treatment was changed in the first quarter of 2004, no mention was made of a possible misstatement of prior years' financial statements or the amounts of such prior misstatements. Fannie Mae disclosed in the first quarter 2004 10-Q that the impact of classifying certain derivatives as non-hedging was approximately $13 million on that quarter's pre-tax net income. [242] While the actual impact on prior periods is unclear, OFHEO believes it could have been larger, because the mark-to-market impact on earnings in the first quarter 2004 has been dampened by efforts to actively manage the undesignated derivatives portfolio. Irrespective of the amounts involved, this is an instance in which Fannie Mae knowingly applied improper accounting which furthered their objective of minimizing earnings volatility.

- In 2002, the Enterprise disclosed a change of methodology in its accounting for changes in time and intrinsic value of purchased interest rate caps. It did not disclose the improper accounting resulting from the earlier approach. OFHEO believes that Fannie Mae's disclosure in the 2002 10-K was not adequate to provide a reader with a complete understanding of the matter, or to enable them to discern that errors had occurred in prior periods. Fannie Mae did not address the correction of this error. Instead Fannie Mae changed its accounting for new transactions

[242] Fannie Mae March 31, 2004 10-Q, p. 26.

prospectively, and did not evaluate the impact on prior periods or transactions that existed at the time the change was made.

As of December 31, 2003, the balance in AOCI reflects $12.2 billion in deferred losses relating to cash flow hedges. [243] Furthermore, carrying value adjustments of liabilities relating to fair value hedges amounted to $7.2 billion as of that date.[244] The matters noted herein with respect to improper application of hedge accounting leads OFHEO to question the validity of the amounts reflected in AOCI; as well as amounts reflected as carrying value adjustments, at any point in time since the adoption of SFAS 133. For hedges which do not qualify for hedge accounting, fair value changes should be reflected in earnings in the period in which the value change occurred, with no offset to AOCI or hedged item carrying value. Additionally, the possible reclassification of these amounts into retained earnings could have a substantial impact on Fannie Mae's compliance with its regulatory capital requirements. In order to determine the actual impact of the matters discussed herein, a substantial investment of resources and management's commitment will be required.

[243] Fannie Mae December 31, 2003 10-K, p. 80.
[244] Fannie Mae December 31, 2003 10-K, p. 146.

### *Issue 1: Derivative Re-Designations*

Fannie Mae uses a variety of derivative instruments to hedge its interest rate risk. Due to the dynamic nature of Fannie Mae's portfolio, hedging instruments are regularly de-designated from old hedging relationships and re-designated into new hedging relationships as the portfolio changes. This section discusses Fannie Mae's assumption of perfect effectiveness in its hedging relationships when such re-designations occur.

**Background**

SFAS 133 requires an entity applying hedge accounting to perform an assessment to demonstrate a highly effective hedge relationship both at inception and on an on-going basis, unless the relationship meets the requirements of the short-cut method[245] or where the critical terms of the hedging instrument and the hedged items match[246] such that there will be no ineffectiveness in the hedge relationship and the changes in the fair values or cash flows of the hedged item are expected to completely offset those of the derivative. [247] The concept of hedge effectiveness is important under SFAS 133 in two respects:

- The assessment test is required in order to qualify for hedge accounting. It must be performed at the inception of a hedge relationship and throughout its life on at least a quarterly basis to demonstrate that the hedge has been, and is expected to continue to be, "highly effective." [248]
- Even though a hedge relationship may be deemed highly effective and qualify for hedge accounting, ineffectiveness may exist in the hedging relationship. Ineffectiveness represents the extent to which changes in the fair value of the derivative are not perfectly matched with the changes in fair values or cash flows of the hedged item. The ineffective portion of changes in the derivative's fair value must be recorded in earnings.

A perfect cash flow hedge has the effect of deferring the recognition of a change in the derivative's fair value in the income statement, by recording all changes in value in AOCI and recording no ineffectiveness in the income statement. A perfect fair value hedge results in changes in fair value of the derivative being offset by equal changes in fair value of the hedged item, resulting with zero ineffectiveness in the income statement. Fannie Mae's predominant approach is to assert that their hedge relationships are perfectly effective due to the matching of critical terms. We will refer to this as the "matched terms" approach.

**Summary of Issue**

Fannie Mae frequently de-designates and re-designates hedge relationships as it goes through the process of re-balancing its liability portfolio. In most instances, the re-designation is caused by a term-out, which is a phrase used by Fannie Mae generally to describe the replacement of discount notes with fixed rate notes or different floating rate borrowings. When a derivative is

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[245] FASB, SFAS 133, paragraph 68, as amended. This paragraph discusses the requirements of the shortcut method.

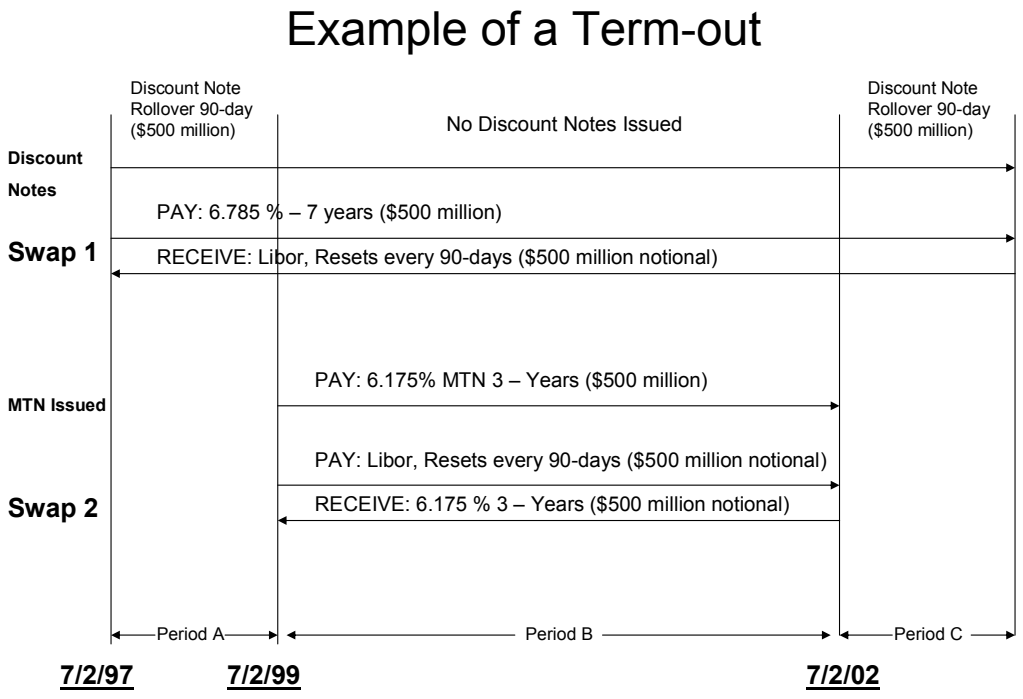
[246] FASB, SFAS 133, paragraph 65, as amended. The concept of matching of critical terms is discussed in this paragraph.

[247] FASB, SFAS 133, paragraphs 20 (b) and 28 (b), as amended, for fair value and cash flow hedges, respectively.

[248] FASB, SFAS 133, paragraphs 20 and 28, as amended, which relate to fair value and cash flow hedges, respectively.

re-designated due to a term-out, it is the beginning of a new hedging relationship. This requires an entity to evaluate the effectiveness of the new hedge relationship, including consideration of whether the matched terms approach may be applied. As discussed in greater detail below, one of the criteria that must be met in order to apply matched terms accounting is that the fair value of the hedging instrument at the inception of the hedging relationship be zero. When an existing derivative is re-designated, it would typically have a fair value that is not zero, due to market changes that have occurred since the instrument's inception. Thus, it is generally not possible to qualify for matched terms treatment upon the re-designation of a hedging instrument. Nonetheless, Fannie Mae continues to apply matched terms accounting when such situations occur. **It is OFHEO's conclusion that Fannie Mae has improperly applied matched terms accounting to derivatives that have been subject to re-designation in connection with term-out transactions. By incorrectly applying matched terms accounting, Fannie Mae has not only failed to measure the ineffectiveness associated with such relationships but they have failed to perform a proper hedge effectiveness assessment, which invalidates their ability to receive hedge accounting treatment.**

**Example 1.**
Below is an example of a term-out and its effect on the associated swap for purposes of illustrating a typical re-designation that Fannie Mae executes as part of their portfolio rebalancing.



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*Description of Transaction:*

- *On 7/2/1997, Fannie Mae issues $500M in Discount Notes ("DN") and enters into Swap #1 (treated as a "perfect" cash flow hedge of the forecasted interest payments on the discount notes). Swap #1 is a pay-fixed, receive-floating swap with a term of 7 years, the period of expected reissuance of DNs. For purposes of this example it is assumed that the swap's interest rate reset dates match the expected timing of DN reissuance and all other critical terms are matched in order to allow Fannie Mae to assume perfect effectiveness under SFAS 133.*
- *On 7/2/1999, Fannie Mae issues $500M 6.175% 3-yr Medium Term Note ("MTN") rather than reissuing $500M in DNs. At that time Fannie Mae also enters into swap #2. Swap #2 is a receive-fixed, pay-floating swap that matures in three years. Swap #2 is structured such that its cash flows offset those of swap #1 for the three year term of swap #2 (period B in the illustration), with the exception of a differential between the fixed rates of the two swaps, which remains constant during that period.*
- *Upon the maturity of the MTN, Fannie Mae expects to resume issuing $500M in DNs through the remainder of the original 7 year period (period C in the illustration).*
- *On 7/2/1999, Fannie Mae de-designates swap # 1 from its original hedge relationship and re-designates it, in combination with swap#2, as a "perfect" cash flow hedge of the anticipated rollover of $500M of DNs during a future period (period C, which is the period of time in which the MTN matures and a $500M DN is issued again). As of 7/2/1999, the re-designated swap #1 together with swap #2 is hedging a "forward starting" two year period that begins 7/2/2002.*

In Fannie Mae's DAG, the accounting treatment described for the re-designated hedge relationship set forth above, and other similar re-designations, is matched terms accounting. In many of the transaction examples involving term-outs and re-designations as set forth in the DAG, their descriptions indicate an assumption of no ineffectiveness. Based on OFHEO's interviews with Mr. Boyles and other accounting personnel, as well as our reading of the Enterprise's DAG, we understand that in such instances, Fannie Mae has applied the guidance in DIG Issue No. G9 *Cash Flow Hedges: Assuming No Ineffectiveness When Critical Terms of Hedging Instruments and Hedged Transaction Match in a Cash Flow Hedge* ("DIG Issue G9"), and paragraph 65 of SFAS 133, to assume perfect effectiveness. Moreover, we understand that in these circumstances Fannie Mae performs no assessment test and no measurement of ineffectiveness, which results in the earnings effect of these transactions being the same as the synthetic accounting treatment that Fannie Mae followed prior to SFAS 133. [249] OFHEO asserts that this accounting is not consistent with the requirements of SFAS 133.

[249] For example, "Termout Transaction #2" in Fannie Mae's DAG, states that "changes in fair value of the re-designated portion of Swap #1 and all of Swap #2 will be reported in [Accumulated] Other Comprehensive Income" and that "This accounting treatment will have the effect of keeping the original accrual rate in earnings equal to what would have been recognized under synthetic accounting treatment."

**Accounting Analysis**
Paragraph 65 of Statement 133 states:

> If the critical terms of the hedging instrument and of the entire hedged asset or liability (as opposed to selected cash flows) or hedged forecasted transaction are the same, the entity could conclude that changes in the fair value or cash flows attributable to the risk being hedged are expected to completely offset at inception and on an ongoing basis. For example, an entity may assume that a hedge of a forecasted purchase of a commodity with a forward contract will be highly effective and that there will be no ineffectiveness to be recognized in earnings if:
>
> a. The forward contract is for purchase of the same quantity of the same commodity at the same time and location as the hedged forecasted purchase.
> b. **The fair value of the forward contract at inception is zero.** [Emphasis added]
> c. Either the change in the discount or premium on the forward contract is excluded from the assessment of effectiveness and included directly in earnings pursuant to paragraph 63 or the change in expected cash flows on the forecasted transaction is based on the forward price for the commodity.

DIG Issue G9 further expands on the method of matched terms. It states an entity is still required to perform and document an assessment of hedge effectiveness at the inception of the hedging relationship and on an on-going basis throughout the hedge period, however subsequent assessments can be performed by ***verifying and documenting*** whether the critical terms of the hedging instrument and the forecasted transaction have changed during the period in review. Furthermore, the following excerpt from DIG Issue G9 should be noted:

> However, **if the critical terms of the hedging instrument or the hedged forecasted transaction have changed** [Emphasis added] or if there have been adverse developments regarding the risk of counterparty default, the entity must measure the amount of ineffectiveness that must be recorded currently in earnings pursuant to the guidance in Statement 133 Implementation Issue No. G7, "Measuring the Ineffectiveness of a Cash Flow Hedge under Paragraph 30(b) When the Shortcut Method Is Not Applied." **In addition, the entity must assess whether the hedging relationship is expected to continue to be highly effective (using either a dollar-offset test or a statistical method such as regression analysis).** [Emphasis added]

When Fannie Mae re-designates a derivative in the manner described in the example above, there has been a change in both the hedging instruments used as well as the hedged transaction. Thus, upon re-designation this represents a new hedge relationship.[250] Accordingly, the requirements of paragraph 65, to assume critical terms matching, need to be evaluated in connection with the newly designated hedge relationship. In the term-out example (Example 1), on the date of re-designation, Swap #1 would presumably have a fair value other than zero,

[250] As noted in the example, Fannie Mae starts with one swap hedging the rollover of existing and future discount notes. After the re-designation, it is using two swaps in combination to hedge anticipated issuance of discount notes in a future period.

whereas Swap #2 would presumably have a fair value of zero.[251] As a result of the combination of the Swap #1 and Swap #2 having a fair value not equal to zero, the hedge does not meet the requirements of paragraph 65(b) as stated above. In addition to being specifically listed in paragraph 65(b), the concept of a zero fair value at inception as a requirement for demonstrating a matching of critical terms is noted in DIG Issue G9 and is also a requirement for the shortcut method, which is a concept similar to the matching of critical terms.[252]

Example 8 in SFAS 133, set forth in paragraphs 153-161, contains an example transaction – Scenario 2 - that specifically illustrates this point. This transaction illustrates a situation very similar to a term-out, involving the re-designation of an existing swap in combination with another swap. Relevant excerpts of that example are as follows:

> MNO Company enters into an interest rate swap (Swap 1) and designates it as a hedge of the variable interest payments on a series of $5 million notes with 90-day terms. MNO plans to continue issuing new 90-day notes over the next five years as each outstanding note matures. The interest on each note will be determined based on LIBOR at the time each note is issued. Swap 1 requires a settlement every 90 days, and the variable interest rate is reset immediately following each payment. MNO pays a fixed rate of interest (6.5 percent) and receives interest at LIBOR. MNO neither pays nor receives a premium at the inception of Swap 1. The notional amount of the contract is $5 million, and it expires in 5 years.
>
> Because Swap 1 and the hedged forecasted interest payments are based on the same notional amount, have the same reset dates, and are based on the same benchmark interest rate designated under paragraph 29(h), MNO may conclude that there will be no ineffectiveness in the hedging relationship (absent a default by the swap counterparty).
>
> Scenario 2—Two Interest Rate Swaps Designated as a Hedge of Future Variable Interest Payments
>
> At the end of the second year of the 5-year hedging relationship, MNO discontinues its practice of issuing 90-day notes and issues a 3-year, $5 million note with a rate of interest that adjusts every 90 days to the prime rate quoted on that day. Swap 1 is no longer effective as a cash flow hedge because the receive-variable rate on the swap is LIBOR, and the prime rate and LIBOR are expected to change differently. Thus, the cash flows from the swap will not effectively offset changes in cash flows from the three-year note.
>
> Rather than liquidate Swap 1 and obtain a separate derivative to hedge the variability of the prime-rate-based interest payments, MNO enters into a pay-LIBOR, receive-prime basis swap. The basis swap has a $5 million notional amount and a 3-year term and requires a settlement every 90 days. **MNO designates Swap 1 and the basis swap in combination as the hedging instrument in a cash flow hedge of the variable**

[251] These presumptions are based on the nature of typical interest rate swaps, which start with a fair value of zero, and thereafter have a positive or negative fair value, depending upon changes in interest rates.
[252] OFHEO has observed that Fannie Mae's policies cite criteria similar to the SFAS 133 shortcut criteria as a basis for matching of critical terms. These can be found in the DAG section IV.20 for cash flow hedges and section VI.13 for fair value hedges. See DAG, FMSE 112567-113143.

> **interest payments on the three-year note.** [Emphasis added] On the three-year note, MNO pays interest at prime. On the basis swap, MNO receives interest at prime and pays interest at LIBOR. On Swap 1, MNO receives interest at LIBOR and pays interest at 6.5 percent. Together, the cash flows from the two derivatives are effective at offsetting changes in the interest payments on the three-year note. Changes in fair values of the two swaps are recognized in other comprehensive income and are reclassified to earnings when the hedged forecasted transactions (the variable interest payments) affect earnings (as required by paragraph 31).

SFAS 133, as originally drafted, also contained the following sentence at the end of the above example (paragraph 161):

> Because the two swaps in combination meet the conditions discussed in paragraph 68, MNO is permitted to assume no ineffectiveness and use the shortcut method illustrated in Example 5.

However, when SFAS 133 was amended by Statement of Financial Accounting Standards No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities, an amendment of FASB Statement No. 133*, ("SFAS 138"),[253] the above sentence was deleted. Paragraph 38 in SFAS 138's "Background Information and Basis for Conclusions" states:

> This Statement also deletes the last sentence of paragraph 161 **because the hedging instrument in Example 8 does not meet the criterion in paragraph 68(b) to qualify for the shortcut method. The hedging instrument does not have fair value of zero at inception of the hedging relationship.** [Emphasis added.]

This example and the subsequent correction made by SFAS 138 clearly indicates that under SFAS 133, re-designated derivatives do not qualify for shortcut or matched terms treatment if their fair value is other than zero at the time of the re-designation. **Accordingly, it is OFHEO's conclusion that Fannie Mae incorrectly applies matched terms accounting in the term-out example discussed previously as well as in numerous other term-out transactions described in its DAG. By incorrectly applying matched terms accounting, Fannie Mae has not only failed to measure ineffectiveness associated with such relationships but they have failed to perform a proper hedge effectiveness assessment, which invalidates their ability to receive hedge accounting treatment.**

Further, it should be noted that Fannie Mae's DAG includes guidance on assuming perfect effectiveness. OFHEO noted that Fannie Mae's internal guidance is consistent with the accounting literature with regard to the requirement that the fair value of the hedging instrument must be zero at the inception of the hedge relationship, as well as references to DIG Issue G9.[254] Thus, **Fannie Mae's assumption of perfect effectiveness upon a hedge re-designation is not only inconsistent with SFAS 133 guidance, it is inconsistent with Fannie Mae's own internal accounting guidance. The DAG also requires a**

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[253] SFAS 138 was issued in June 2000 and amended SFAS 133 for certain technical matters prior to the effective adoption date of SFAS 133 by Fannie Mae.

[254] Fannie Mae DAG pp. IV.20 – IV.24 for cash flow hedges and VI.13 - IV.15 for fair value hedges. See DAG, FMSE 112652-112656.

**quantitative assessment of effectiveness to qualify for hedge accounting, as well as measurement of ineffectiveness, when matched terms criteria are not met.[255] Although, these requirements are documented in the DAG, Fannie Mae has not performed such assessments and measurements for hedges involving re-designated derivatives.**

**Implications**

The improper accounting for re-designations as described above impacts a substantial portion of Fannie Mae's derivatives portfolio. Based on our review of Fannie Mae's DAG, many of the re-designated hedge relationships as described therein would not qualify as perfect hedges for reasons similar to those outlined for the transaction discussed in Example 1. Although further information needs to be gathered to gain a full understanding of the magnitude of these errors, OFHEO understands that as much as 50-75% of Fannie Mae's derivatives portfolio may have been subject to re-designations at some point in time.[256] Additionally, in testimony to OFHEO, the senior financial analyst in the Treasury Middle Office stated that hedge effectiveness assessment and ineffectiveness measurement is performed for only a very small number of hedge relationships relative to the total portfolio, and all others are assumed to be perfectly effective.[257] Because a proper effectiveness assessment is apparently not performed for the re-designated hedge relationships, they would not qualify for hedge accounting under SFAS 133. Such transactions would thus be properly accounted for on a "non-hedge" basis, meaning fair value changes are recorded directly to earnings.

During an interview with Mr. Boyles, he stated that Fannie Mae was aware that the sentence referenced above ["Because the two swaps in combination meet the conditions discussed in combination meet the conditions discussed in paragraph 68, MNO is permitted to assume no ineffectiveness and use the shortcut method illustrated in Example 5"] was deleted by SFAS 138. He further stated that Fannie Mae had performed an analysis prior to its adoption of SFAS 133 to evaluate the impact of the change, and based on the results of this analysis, decided to continue using the assumption of no ineffectiveness and therefore ignoring the change made in SFAS 138. Mr. Boyles stated that the difference between assuming perfect effectiveness and

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[255] Fannie Mae DAG p. IV.25 for cash flow hedges and VI.16 for fair value hedges. See DAG, FMSE 112657,112768, respectively. OFHEO observes that Fannie Mae's DAG calls for the use of a cumulative dollar offset test (80-125% is regarded as highly effective) to assess effectiveness in situations where the "long haul" method is required. Long haul method refers to situations in which neither the shortcut nor matching of critical terms method is applicable and an assessment of hedge effectiveness and measurement of ineffectiveness is required.

[256] Internal notes prepared by OFHEO, Re: Interview with Laura Simmons—Treasury Office Operations, May 20, 2004. In the interview she indicated that 50%-75% of the portfolio of derivatives is potentially re-linked.

[257] OFHEO interview, Katarina Skladony, Senior Financial Analyst-Treasury Middle Office, August 26, 2004, p. 150

A: As I recall, as of the end of the last quarter, there were no transactions for which you would have to use hypothetical derivative method for ineffectiveness calculation.

Q: So were there no long haul calculations being performed for the last quarter?

A: There were no cash flow hedges that would require long haul calculation.

See Mona Patel testimony in; The Assumption of Perfect Effectiveness, herein, for more details relating to the number of long hauls performed.

the amount of ineffectiveness measured using the long haul method was minor.[258] In the same interview, he represented that he believed that any ineffectiveness that was ignored by Fannie Mae in term-out transactions was immaterial based on the analysis performed. He also indicated that he no longer had the analysis as he had discarded it, along with several other items, when he moved offices.[259] Mr. Boyles also acknowledged that there was no quarterly or annual review of the ineffectiveness resulting from term-out transactions.

In a subsequent interview, Mr. Boyles stated that a recent analysis had been performed using information as of June 30, 2004. He informed OFHEO that this analysis was performed as a direct result of some of the issues that were raised by OFHEO as part of this special examination. He also stated that the amount of cumulative ineffectiveness resulting from re-designated derivatives was approximately $50 million. Fannie Mae's auditor, KPMG, had posted a "review difference" for this amount.[260] OFHEO obtained a summary analysis (which had no supporting documentation attached) which was used to project the ineffectiveness calculation across the entire population. OFHEO also participated in a conference call with Fannie Mae in which representatives of the Enterprise attempted to explain the methodology that was followed in completing the analysis.[261] Mr. Boyles stated that the revised projected economic

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[258] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 3, 2004, pp. 212-213
Q: […]So when this change was made as a result of FAS 138, is our understanding correct that a conscious decision was made to continue to apply the treatment irrespective of this change?
A: When 138 was released we also saw that sentence deleted. The background information refers to this as not qualifying for the shortcut method. It did not say that the--in the matching concept, that the--one of the critical terms was the beginning value starting with zero. This only refers to--and the criteria relates to the shortcut method. […] We also did some analysis that I believe I mentioned earlier, that we showed our auditors, as it relates to this transaction, that showed that difference between going long haul and assuming no ineffectiveness to be minor.

[259] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 3, 2004, pp. 225-226
Q So was that what your example was, an example of not applying matched terms but actually doing long haul?
A: […]The analysis that we did was the analysis as it relates to if I'm going to take the income amount out of OCI, and if I'm going to record the ineffectiveness as expense, and book both of them to the income statement, that that analysis showed those amounts to be immaterial difference. And so the accrual that will normally occur will capture those differences. And that's what the policy reflects.
[…]A:[…]Several years ago when I took over the Tax Department, I switched offices, and almost everything related to the adoption of 133 I threw in the trash[…]and so I could not find it in my analysis. […]

[260] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 24, 2004, p. 106
Q: Was the difference, a $50 million difference, proposed as an adjustment by KPMG or was that not proposed?
A: It was a review difference for them. […]
A: The audit isn't done so it's not an audit adjustment. But the review was completed for the quarter so it would have been a review adjustment for them.

[261] Handwritten notes from conference call held between Fannie Mae and OFHEO, September 7, 2004. Fannie Mae explained the analysis that was performed and the approach the Enterprise took to project out the sample across the entire population. Fannie Mae was represented by Leanne Spencer, Controller; Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax; Mark Wiener, Vice President of Risk Management; and Jodie Kelley, Associate General Counsel.

impact of the analysis was a loss of $27 million[262] and that Fannie Mae's external auditor was comfortable with the number. While the matter is still under study, our initial conclusion is that the analysis procedures performed were not adequate to support Fannie Mae's conclusion for the following reasons: [263]

- The analysis was based on a sample of 40 hedge transactions and attempts to extrapolate these results to the entire population of affected transactions, rather than performing a calculation for each affected transaction. We do not believe an accurate estimate can be made using such an extrapolation.
- Fannie Mae only evaluated cumulative ineffectiveness as of a point in time, ignoring the fact that the amount of ineffectiveness recorded in earnings on a period-to-period basis will fluctuate.
- As noted earlier, an assessment of effectiveness is required to be performed retrospectively and prospectively on a quarterly basis to qualify for hedge accounting. The analysis referenced above only addressed measurement of ineffectiveness. In the call with OFHEO, Mr. Boyles represented that the Enterprise had also performed a regression analysis as of June 30, 2004 on a select number of derivative transactions out of the 40 transactions that were included in the sample. Such an after-the-fact test does not meet SFAS 133 requirements.

In order to gain an understanding of the potential ineffectiveness that can result from a term-out transaction, OFHEO performed an analysis using an illustrative $500 million notional swap that is assumed to be subject to a term-out similar to the Example 1 Term-out described above. This analysis used actual market data to illustrate the accounting effect of such a transaction if ineffectiveness is properly measured. See Appendix III. OFHEO's analysis indicates that, while cumulative ineffectiveness can be small (or even zero) at a given period end, it can result in millions of dollars of ineffectiveness affecting earnings on a period-to-period basis for a single hedge relationship. Furthermore, our illustration indicates that if an effectiveness assessment test had been properly performed in accordance with Fannie Mae's policy, the hedge relationship could fail the 80% to 125% correlation test.[264] This would preclude the application of hedge accounting in periods in which the test failed. The following graph is summarized from OFHEO's analysis and illustrates the periodic earnings volatility that can occur when ineffectiveness is properly measured (assuming the hedge relationship qualifies for hedge accounting).

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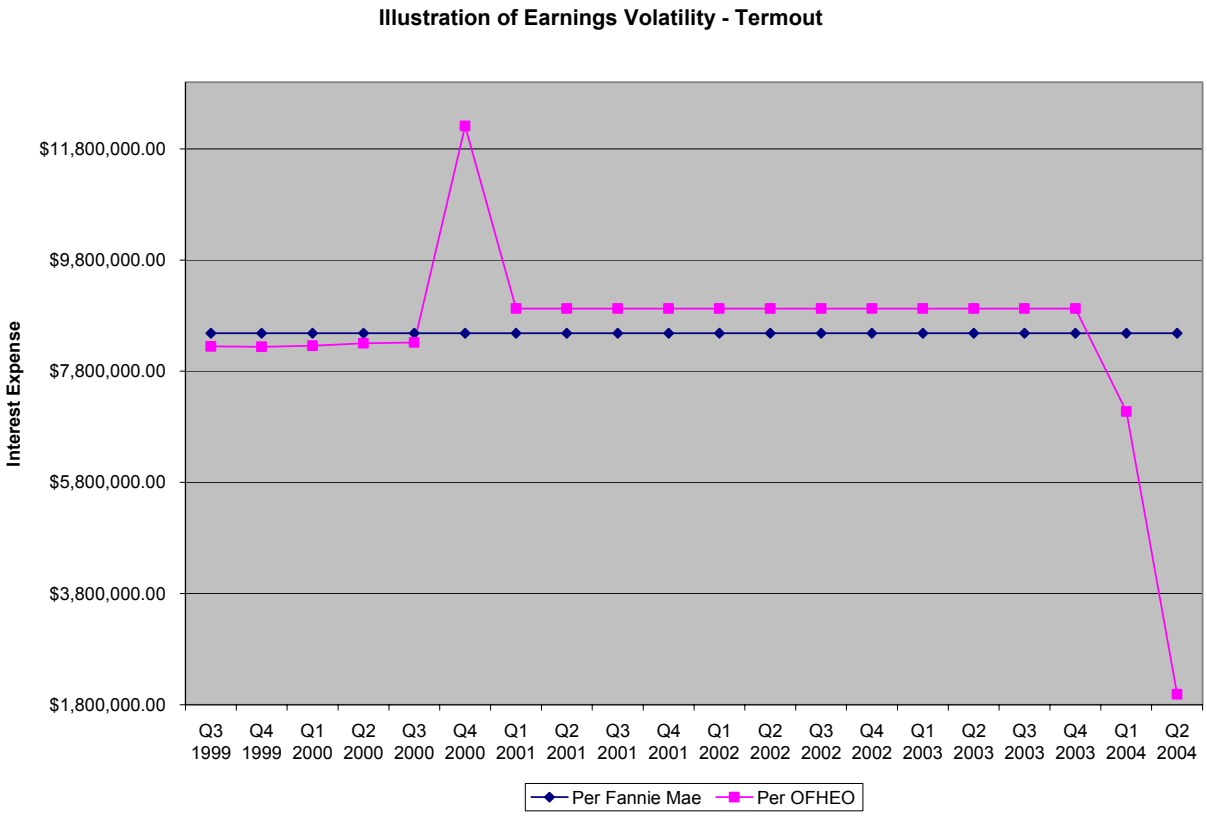
[262] Handwritten notes from conference call held between Fannie Mae and OFHEO, September 7, 2004. Fannie Mae was represented by Leanne Spencer, Controller; Jonathan Boyles, Senior Vice President – Financial Standards; and Corporate Tax; Mark Wiener, Vice President of Risk Management; and Jodie Kelley, Associate General Counsel. It is OFHEO's understanding from the call that the revised projected economic impact from the analysis was determined by Fannie Mae to be $27 million.

[263] OFHEO had requested all information that was used to prepare the analysis and develop the expectations. Fannie Mae mentioned in the call referenced above that they have been working on pulling together the information and supporting schedules that supports the analysis. This information was originally requested via a subpoena dated August 18, 2004.

[264] Fannie Mae's DAG, as well as SEC guidance, requires a dollar offset ratio between the hedging instrument and hedged item to fall between 80% and 125% in order to meet the "highly effective" requirement to qualify for hedge accounting. See section II.15-17 Hedge Effectiveness Analysis of the DAG (FMSE 112604-112606).




As noted above, further information and an in-depth analysis will be required to determine the proper treatment of each of Fannie Mae's hedging strategies and actual impact of these matters in relation to Fannie Mae's total derivatives portfolio for past financial statement periods. However, even without any further analysis, OFHEO contends that this matter has significant implications to Fannie Mae's financial statements given the frequent use of term-outs and the significant earnings impact. The impact that would result from recording changes in fair values of such derivatives through earnings could be in the billions of dollars.



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### *Issue 2: Accounting for Offsetting Derivatives*

Fannie Mae enters into offsetting swaps in which an existing swap (typically a pay-fixed, receive-floating swap) is effectively cancelled by a second swap with offsetting terms (i.e., pay-float, receive-fixed). This section discusses Fannie Mae's accounting treatment of these transactions and specifically the Enterprise's application of cash flow hedge accounting.

**Background**

SFAS 133 describes a cash flow hedge as follows: "An entity may designate a derivative instrument as hedging the exposure to variability in expected future cash flows that is attributable to a particular risk. That exposure may be associated with an existing recognized asset or liability (such as all or certain future interest payments on variable-rate debt) or a forecasted transaction (such as a forecasted purchase or sale)."[265] Thus, the essence of a cash flow hedge is to offset the variability in cash flows of the hedged item.

Furthermore, SFAS 133 requires that an entity discontinue cash flow hedging **prospectively** if any one of the following occurs:[266]

- Any of the criteria to qualify for hedge accounting are no longer met.
- The derivative expires or is sold, terminated or exercised.
- The entity removes the designation of the cash flow hedge.

After a cash flow hedge has been discontinued, the effective portion of the derivative's net gain or loss shall remain in AOCI and be reclassified to earnings at the time the hedged transaction affects earnings, unless the hedged transaction is deemed probable of not occurring, in which case any gains or losses would be immediately be reclassified from AOCI to earnings.[267]

**Summary of Issue**

As discussed under Issue 1: Derivative Re-Designations, Fannie Mae frequently goes through the process of "re-balancing" its liability portfolio. In this process, it often enters into new swaps and other derivatives, many of which are used to offset existing derivatives either fully or partially. In many cases, this relates to a "term-out" which, as described earlier, is generally the replacement of discount notes with fixed rate notes or other borrowings. Certain term-outs result in a situation in which a hedged exposure no longer exists, for instance when short-term floating rate debt is replaced with long-term fixed rate debt and the variability of future interest payments has been eliminated. When this occurs, the swap is no longer matched to an exposure, leaving Fannie Mae with the choice of terminating the swap, offsetting it with another swap, or re-designating it to another exposure. Assuming no other exposure exists to which the swap can be re-designated, Fannie Mae's typical approach has been to enter into an offsetting swap to effectively terminate the hedging relationship. When this has occurred, Fannie Mae's past practice has been to continue to account for both swaps as a cash flow hedge, which is not consistent with SFAS 133 requirements. **It is OFHEO's conclusion that Fannie Mae has inappropriately applied hedge accounting in these circumstances. When the floating rate debt has been termed-out cash flow hedge accounting must cease because the**

[265] FASB, SFAS 133, paragraph 28.
[266] FASB, SFAS 133, paragraph 32.
[267] FASB, SFAS 133, paragraphs 32 and 33.



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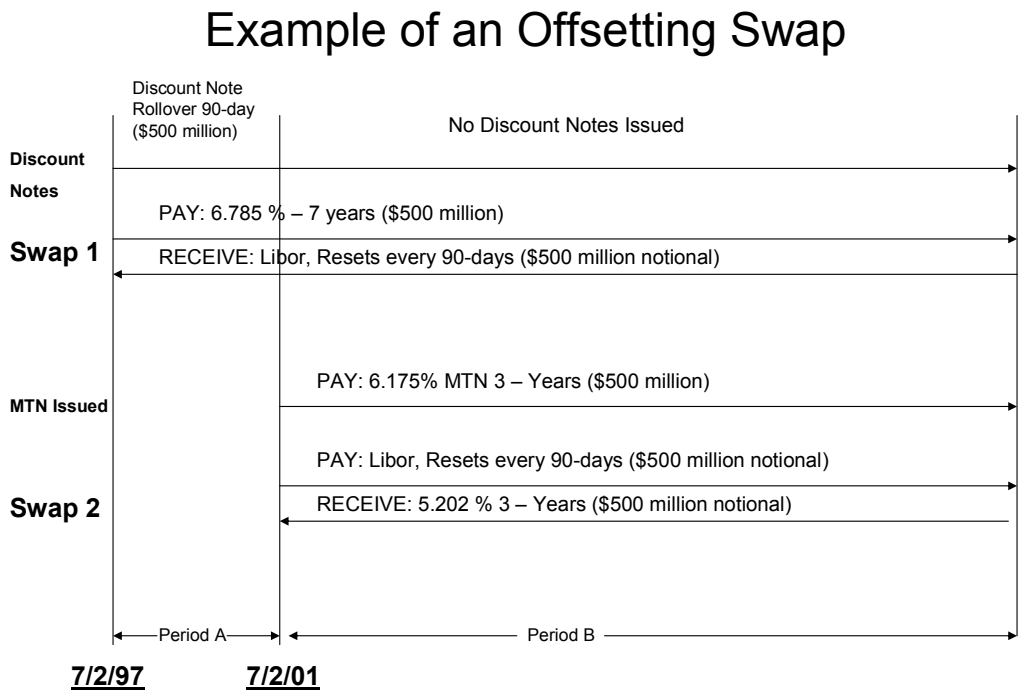
**hedged exposure no longer exists. The two offsetting swaps should both be recorded at fair value with changes in their fair values recorded in earnings. Although the swaps offset one another, there should still be a net mark-to-market impact because the rate on the swaps' fixed legs (one pay, one receive) would differ.**

**Example 2.**
Below is an example of a situation in which an offsetting swap is used by Fannie Mae in connection with a term-out.




*Description of Transaction:*

- *On 7/2/97, Fannie Mae issues $500M in DNs and enters into Swap #1 (treated as a perfect cash flow hedge of the forecasted interest payments on the discount notes). Swap #1 is a pay-fixed, receive-floating swap with a term of 7 years, the period of expected reissuance of DNs. For purposes of this example, it is assumed that the swap's interest rate reset dates match the expected timing of DN reissuance and all other critical terms are matched in order to allow Fannie Mae to assume perfect effectiveness under SFAS 133.*
- *On 7/2/01, Fannie Mae issues a $500M 6.175% 3-yr MTN to replace a rollover of $500M in DNs and enters into swap #2. Swap #2 is a receive-fixed, pay-floating swap that matures in 3 years which coincides with the maturity of the MTN and the end of the original 7 year hedge period. Swap #2 serves to completely offset the effect of Swap #1 except that the two swaps have different fixed interest rates because they were entered into at different times. The net result of the two swaps is a fixed stream of cash flows over their remaining lives, representing the difference in their respective fixed rates.*



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- *Fannie Mae continues to treat both Swap#1 and Swap#2 as a perfect cash flow hedge over their remaining lives and as such all changes in the swaps' fair values are reflected in AOCI and reclassified into earnings as the interest settlements on the swaps accrue.*

In Fannie Mae's DAG, they describe the above accounting treatment as "…a practical interpretation of the Statement to treat this as a cash flow hedge rather than two speculative hedges..." It states further that "This accounting will have the effect of keeping original accrual rate in earnings equal to what would have been recognized under synthetic accounting treatment."[268] OFHEO asserts that this treatment is not consistent with the requirements of SFAS 133.

**Accounting Analysis**

OFHEO concludes that the accounting treatment described in the above example is not compliant with the requirements of SFAS 133. As noted above, cash flow hedge accounting is applied when there is an exposure to variable cash flows. In Example 2, the exposure to variable cash flows was eliminated when the issuance of discount notes was replaced with a fixed rate MTN. Thus, at that time cash flow hedge accounting should have been discontinued for swap #1, consistent with the requirements of paragraph 32 of SFAS 133. Both swap #1 and swap #2 should have been marked-to-market through earnings from that point forward and treated as non-hedging derivatives. This conclusion is supported in SFAS 133 by "Example 8 – Scenario 1", set forth in paragraphs 153-158, excerpted as follows:

> MNO Company enters into an interest rate swap (Swap 1) and designates it as a hedge of the variable interest payments on a series of $5 million notes with 90-day terms. MNO plans to continue issuing new 90-day notes over the next five years as each outstanding note matures. The interest on each note will be determined based on LIBOR at the time each note is issued. Swap 1 requires a settlement every 90 days, and the variable interest rate is reset immediately following each payment. MNO pays a fixed rate of interest (6.5 percent) and receives interest at LIBOR. MNO neither pays nor receives a premium at the inception of Swap 1. The notional amount of the contract is $5 million, and it expires in 5 years.
>
> Because Swap 1 and the hedged forecasted interest payments are based on the same notional amount, have the same reset dates, and are based on the same benchmark interest rate designated under paragraph 29(h), MNO may conclude that there will be no ineffectiveness in the hedging relationship (absent a default by the swap counterparty).
>
> Scenario 1—Two Undesignated Interest Rate Swaps
>
> At the end of the second year of the 5-year hedging relationship, MNO discontinues its practice of issuing 90-day notes. Instead, MNO issues a 3-year, $5 million note with a fixed rate of interest (7.25 %). Because the interest rate on the three-year note is fixed, the variability of the future interest payments has been eliminated. **Thus, Swap 1 no longer qualifies for cash flow hedge accounting** [Emphasis added]. However, the net gain or loss on Swap 1 in accumulated other comprehensive income is not reclassified to earnings immediately. Immediate reclassification is required (and

[268] This language can be found under example transaction #43 in the DAG, FMSE 113073.



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> permitted) only if it becomes probable that the hedged transactions (future interest payments) will not occur. The variability of the payments has been eliminated, but it still is probable that they will occur. Thus, those gains or losses will continue to be reclassified from accumulated other comprehensive income to earnings as the interest payments affect earnings (as required by paragraph 31).
>
> Rather than liquidate the pay-fixed, receive-variable Swap 1, MNO enters into a pay-variable, receive-fixed interest rate swap (Swap 2) with a 3-year term and a notional amount of $5 million. MNO neither pays nor receives a premium. Like Swap 1, Swap 2 requires a settlement every 90 days and reprices immediately following each settlement. The relationship between 90-day interest rates and longer term rates has changed since MNO entered into Swap 1 (that is, the shape of the yield curve is different). As a result, Swap 2 has different terms and its settlements do not exactly offset the settlements on Swap 1. Under the terms of Swap 2, MNO will receive a fixed rate of 7.25 percent and pay interest at LIBOR.
>
> **The two swaps are not designated as hedging instruments and are reported at fair value** [Emphasis added]. The changes in fair value are reported immediately in earnings and offset each other to a significant degree.

The excerpt above from SFAS 133 clearly indicates that there is no basis for applying hedge accounting after the DN's are replaced with MTNs because the variability in cash flows previously being hedged no longer exists. Furthermore, OFHEO observes that by applying hedge accounting to the two offsetting swaps, Fannie Mae was effectively hedging a derivative with another derivative, which is not permitted by SFAS 133. Paragraph 29(d) of SFAS 133 describes one of the criteria that must be met for a forecasted transaction to be designated as a hedged item in a cash flow hedge as follows:

> The forecasted transaction is not the acquisition of an asset or incurrence of a liability that will subsequently be remeasured with changes in fair value attributable to the hedged risk reported currently in earnings. If the forecasted transaction relates to a recognized asset or liability, the asset or liability is not remeasured with changes in fair value attributable to the hedged risk reported currently in earnings.

A derivative is an asset or liability that is remeasured with changes in fair value reported in earnings; therefore, it is not eligible as a hedged item in a cash flow hedge relationship.

In March 2004, shortly after the commencement of OFHEO's special examination, Fannie Mae made a decision to de-designate or terminate certain hedging relationships that were classified as perfect cash flow hedges.[269] OFHEO understands that these hedging relationships included

[269] Memorandum from Jonathan Boyles to distribution, Subject: Revisions to the December 2003 DAG, March 13, 2004, FMSE 113686-113690. The memorandum states, "Effective January 1, 2004, any plain vanilla PF and RF swaps that are linked with matching terms will be treated as DNQ derivatives with both sides marked to market through earnings."

those strategies that combined a receive-fixed swap with a pay-fixed swap effectively canceling the pay-fixed swap (as illustrated in Example 2) and those that combined a pay-fixed swaption with a receive-fixed swaption. These relationships were previously treated as perfect cash flow hedges. Effective as of January 1, 2004, these swaps are being marked to market through earnings and are not receiving hedge accounting treatment. According to the 10-Q for the first quarter of 2004, the impact on earnings of marking to market these derivatives was a pre-tax loss of approximately $13 million.[270] OFHEO noted that this change in accounting treatment has been done prospectively. Fannie Mae has made no acknowledgement that its prior accounting was incorrect. Accordingly, OFHEO believes that they have not properly quantified the financial statement impact on prior periods.

**It is OFHEO's conclusion, based on the accounting analysis above, that these offsetting swaps were not valid hedging relationships under SFAS 133 and should not have received hedge accounting once the term-out occurred.** OFHEO discussed the accounting change with Jonathan Boyles to determine whether he believed Fannie Mae's prior accounting was correct. Mr. Boyles stated that he did not believe the prior accounting was in error, but he did believe it could be viewed as "aggressive."[271] Mr. Boyles indicated both in his memorandum and in our discussions that the reasons for the accounting change were primarily operational in nature. However, it should be noted that when asked to identify the exposure being hedged or the hedged item in these transactions, Mr. Boyles could not recall the exposure being hedged.[272] It is OFHEO's belief that Fannie Mae may have made the change in policy as a direct response to the special examination.

**Implications**

It appears that the derivative positions to which this issue relates have represented a reasonably significant portion of Fannie Mae's derivatives portfolio in prior periods. The magnitude is apparent from the Enterprise's March 31, 2004 10-Q, which shows that derivatives with notional and fair value balances of $51 billion and negative $1.6 billion, respectively, were treated as non-hedging instruments.[273] At December 31, 2003 the same derivatives balances were $43 million and $0.[274] OFHEO's understanding is that this change is primarily attributable to offsetting derivatives for which the accounting was changed in the first quarter of 2004. As noted earlier, Fannie Mae disclosed that the income statement effect of this change in the first quarter of 2004 was approximately $13 million. In initial discussions with Fannie Mae, OFHEO was led to believe that this amount might be an approximation of the potential earnings impact if the proper accounting method had been applied in prior periods. In discussions with OFHEO, Mr. Boyles expressed the view that Fannie Mae's practical interpretation of SFAS 133 would not

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[270] Fannie Mae March 31, 2004 10-Q, p. 26.

[271] Internal notes prepared by OFHEO, Re: Interview with Jonathan Boyles, Senior Vice President—Financial Accounting Standards and Corporate Tax, May 20, 2004.

[272] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 24, 2004, pp.177-178

Q: What was the exposure that was being hedged?

A: The exposure that was being hedged in this instance was the--I have to go back and think about it--I don't recall now. Going back, I don't recall what the exposure that was being hedged in this.

[273] Fannie Mae March 31, 2004 10-Q, Table 20: Notional and Fair Value of Derivatives by Hedge Designation, p. 27.

[274] Fannie Mae March 31, 2004 10-Q, Table 20: Notional and Fair Value of Derivatives by Hedge Designation, p. 27.

have resulted in a material difference had a strict adherence to SFAS 133 been followed for such transactions, and that the $13 million result in the first quarter of 2004 demonstrated this.

However, based on a review of several e-mails as well as an interview with Katarina Skladony, Senior Financial Analyst in Fannie Mae's Treasury Middle Office, OFHEO discerned that the earnings impact of derivatives that have been marked as non-hedging is actively monitored and managed by the Treasurer's group.[275] The following email from Cheryl DeFlorimonte illustrates Fannie Mae's response to the increased population of DNQ[276] derivatives resulting from the policy change:[277]

> In an effort to monitor and manage the earnings impact of the intentional DNQs, TMO was requested to generate a weekly report showing the change in the market value and the interest accrual relating to these DNQ swaps. It is my understanding that currently, TMO is not in a position to obtain weekly accruals for these DNQs from their system. As such, TMO has proposed that they provide the earnings impact report on a monthly basis until the required system enhancement is made…

This information led OFHEO to believe that the $13 million recognized in earnings in the first quarter is the result of the discontinuation of hedge accounting for those derivatives that were in offsetting positions as well as certain derivatives that had previously been in valid hedge relationships but were intentionally de-designated with the intention of minimizing the earnings impact of the offsetting derivatives. The "DNQ" book is apparently being actively managed and monitored to ensure that the earnings impact is minimal. The emails indicate that specific directions have been given to the technology group requesting the development of a weekly report to facilitate managing the earnings impact of non-hedge derivatives.

There are several points to note resulting from the above discussion. First, the Enterprise had employed improper accounting in prior periods, presumably in order to avoid the earnings volatility that might result from proper accounting treatment. There was no basis under SFAS 133 to defer the mark-to-market of the offsetting derivatives in AOCI. Secondly, Fannie Mae's

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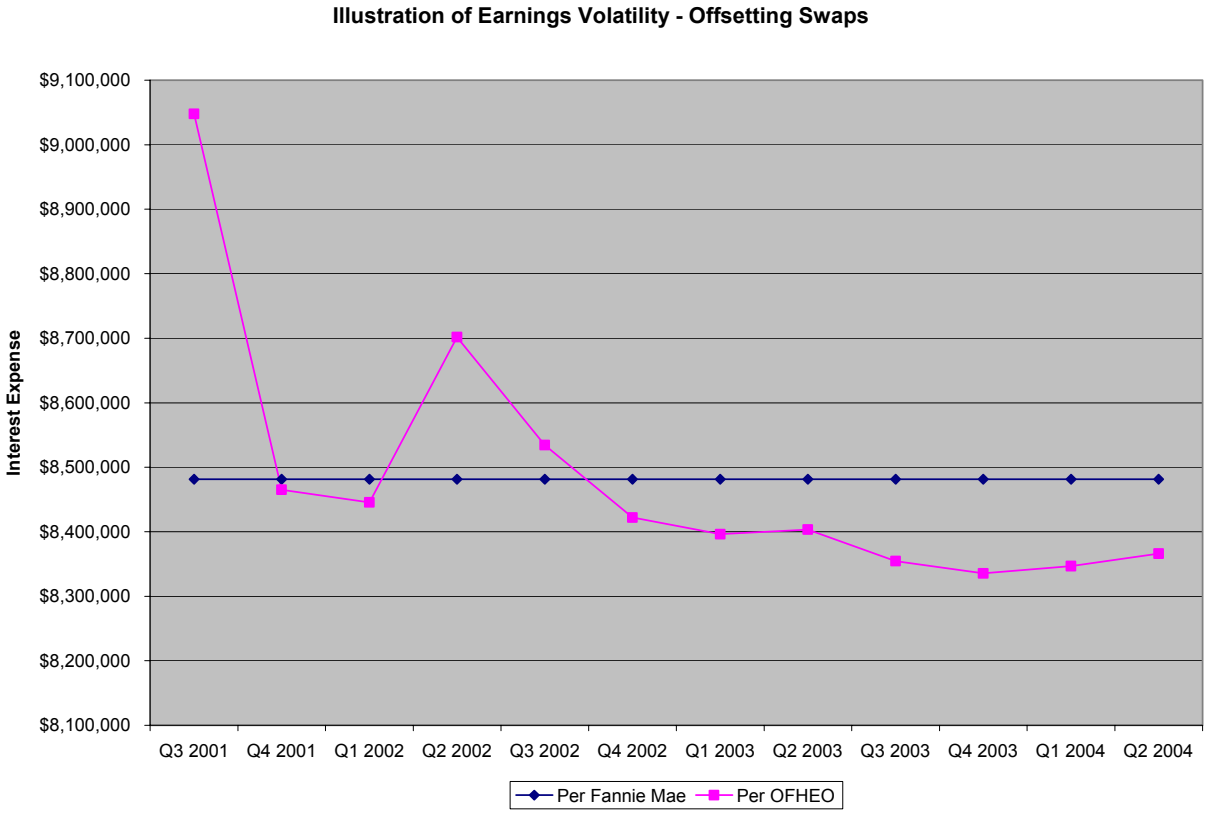
[275] OFHEO interview, Katarina Skladony, Senior Financial Analyst – Treasury Middle Office, dated August 26, 2004, pp. 31-37 31, where she stated, "The DNQ project was initiated by the change in the accounting policy earlier this year that as a result of this, there were a number of transactions for which the hedge accounting guidelines changed in terms of how they're going to be reported, how the change of their market value will be reported, and since it included a fairly extensive number of trades, it was determined that there has to be a better process, a more comprehensive process, to make sure that, you know, all those transactions are properly identified and reported…Again, I believe that the project is a joint project between the Controller and the Treasurer's."
Q: Are you given any instructions from the front office and Treasurer's to specifically DNQ particular trades?
A: Yes, they have given me instructions such as that.

[276] DNQ is the terminology used by Fannie Mae to designate those derivative transactions that "do not qualify" for hedge accounting.

[277] Email from Cheryl DeFlorimonte to David Benson and Janet Pennewell, copy to Paul Salfi and Laura Simmons, Subject: Report on Earnings Impact from DNQs, February 27, 2004. This email is the 5th email in a chain of emails. The latest email (top of page) is an email from David Benson to Laura Simmons, Janet Pennewell, Cheryl DeFlorimone, copies to Paul Salfi, Katarina Skladony among others, Subject: Report on Earnings Impact from DNQs, March 1, 2004, produced via CD on 8/11/2004 in box M.

first quarter 2004 disclosure of the earnings impact of DNQ derivatives is not indicative of the potential earnings impact that would have been recognized had the proper accounting treatment been applied in prior periods. In order to evaluate the true impact on past earnings, Fannie Mae would have to perform a detailed historical analysis for all such hedge relationships and quantify the impact of applying the proper accounting treatment.

In order to gain an understanding of the potential earnings impact of marking-to-market the offsetting swaps, with changes in fair value being recorded through earnings, OFHEO performed an analysis using an illustrative transaction and historical market data. This illustrative transaction involved a $500 million, seven year pay fixed swap that was subsequently offset with a receive-fixed swap. See Appendix IV. The analysis indicates that for an individual swap, the earnings effect of marking the two swaps to market through earnings, together with the amortization of prior AOCI amounts, may in fact largely offset one another, but still result in earnings volatility. However, the impact for actual transactions may vary, depending upon the terms of the instruments involved, actual market conditions and the size of the offsetting swap portfolio. In contrast, Fannie Mae did not mark the two swaps to market, but reflected them in earnings on an accrual basis, making the earnings impact much more predictable. The following graph is summarized from OFHEO's analysis and illustrates the periodic earnings volatility that can result when the proper accounting is applied to offsetting swaps.




Fannie Mae's treatment of offsetting swaps is one of many instances in which the Enterprise has employed improper accounting, apparently in order to avoid the earnings volatility that might result from proper accounting treatment. Furthermore, explicit guidance for this type of transaction was provided by the FASB (in Example 8 in SFAS 133), in large part due to Fannie Mae's active discussions with the FASB. However, despite this guidance, Fannie Mae chose to do the accounting "their way" which provides some insight into the culture and attitudes within the Enterprise.

### *Issue 3: Application of Shortcut and Matched Terms Methods*

Fannie Mae's use of hedge accounting relies heavily on the assumption that the vast majority of its hedging relationships are perfectly effective and that accordingly no effectiveness assessment or measurement of ineffectiveness needs to be performed for such relationships. This section discusses Fannie Mae's application of the matched terms method and the assumption of perfect effectiveness.

**Background**

As discussed earlier, hedge accounting under SFAS 133 requires both an assessment of hedge effectiveness (initial and on-going) in order to qualify for hedge accounting treatment, as well as measurement of the ineffective portion of the hedge through earnings. An exception is granted for certain hedging relationships involving interest rate swaps, which qualify for what is known as the "shortcut" method. If the shortcut criteria are met, an entity is permitted to assume that the hedging relationship is perfectly effective and thus perform no assessment of effectiveness and no measurement of ineffectiveness. The criteria to qualify for the shortcut method are summarized as follows:[278]

Conditions applicable to both fair value hedges and cash flow hedges:

a) The notional amount of the swap matches the principal amount of the interest-bearing asset or liability being hedged
b) The fair value of the swap at the inception of the hedging relationship is zero (or if applicable, reflects the fair value of an embedded call option in the swap which mirrors a call option in the hedged item).
c) The formula for computing net settlements under the interest rate swap is the same for each net settlement.
d) The interest-bearing asset or liability is not prepayable (unless it contains an embedded call or put option that is mirrored in the terms of the swap).
dd) The index on which the variable leg of the swap is based matches the benchmark interest rate designated as the interest rate risk being hedged for that hedging relationship.
e) Any other terms in the interest-bearing financial instruments or interest rate swaps are typical of those instruments and do not invalidate the assumption of no ineffectiveness.

Conditions applicable to fair value hedges only:

f) The expiration date of the swap matches the maturity date of the interest-bearing asset or liability.
g) There is no floor or ceiling on the variable interest rate of the swap.
h) The interval between repricings of the variable interest rate in the swap is frequent (generally three to six months or less).

Conditions applicable to cash flow hedges only:

[278] FASB, SFAS 133, paragraph 68. Information is summarized from this paragraph.

i) All interest receipts or payments on the variable-rate asset or liability during the term of the swap are designated as hedged, and no interest payments beyond the term of the swap are designated as hedged.
j) There is no floor or cap on the variable interest rate of the swap unless the variable-rate asset or liability has a floor or cap. In that case, the swap must have a floor or cap on the variable interest rate that is comparable to the floor or cap on the variable-rate asset or liability. (For this purpose, comparable does not necessarily mean equal. For example, if a swap's variable rate is LIBOR and an asset's variable rate is LIBOR plus 2 percent, a 10 percent cap on the swap would be comparable to a 12 percent cap on the asset.)
k) The repricing dates match those of the variable-rate asset or liability.

SFAS 133 also provides that if the critical terms of the hedging instrument and of the hedged asset, liability or forecasted transaction are the same, the entity could conclude that changes in fair value or cash flows attributable to the risk being hedged are expected to completely offset at inception and on an on-going basis.[279] As a result, the entity would apply matched terms accounting. In this case there would be no ineffectiveness to record and the effectiveness assessment would consist of confirming that the critical terms are matched at inception and continue to be matched over the life of the hedge.

While the shortcut and matched terms methods appear to be similar, there are subtle but important differences in these methods:

- Under the shortcut method, the entity is allowed to *assume* no ineffectiveness in the hedging relationship, even though some ineffectiveness may exist if it were actually measured.
- Under the matched terms method, a conclusion is reached that there *is no ineffectiveness.* Thus, if the entity were to perform the measurement, no ineffectiveness would result.
- The shortcut method applies only to hedges involving interest rate swaps and existing debt instruments, whereas the matched terms method is not restricted to specific instrument types.

**Summary of Issue**
**Fannie Mae incorrectly assumes perfect effectiveness for many of its hedge relationships. Its definitions of matched terms and shortcut criteria are not consistent with the requirements of SFAS 133. Accordingly, Fannie Mae does not perform an effectiveness assessment or measurement of ineffectiveness as required, and many of its hedging relationships therefore should not qualify for hedge accounting treatment.**

**Accounting Analysis**
Fannie Mae's DAG sets forth requirements for assuming perfect effectiveness, which do not comply with SFAS 133 in several respects as discussed below:

[279] FASB, SFAS 133, paragraph 65, as amended.



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*The Seven-Day Rule:* Fannie Mae's DAG allows reset dates to be mismatched by plus or minus seven days in cash flow hedging relationships and still assume perfect hedge effectiveness.[280] SFAS 133 only permits an assumption of no ineffectiveness if shortcut criteria are met or if critical terms of the derivative instrument exactly match those of the hedged item. In all other cases, effectiveness assessments and ineffectiveness measurements must be performed. This is supported by DIG Issue No. E4 *Hedging—General: Application of the Shortcut Method* ("DIG Issue E4"), which states, in part:

> Question 1: Can the shortcut method be applied if most but not all of the applicable conditions in paragraph 68 are met?
>
> Question 1 Response: No. The shortcut method can be applied only if all of the applicable conditions in paragraph 68 are met. That is, all the conditions applicable to fair value hedges must be met to apply the shortcut method to a fair value hedge, and all the conditions applicable to cash flow hedges must be met to apply the shortcut method to a cash flow hedge. A hedging relationship cannot qualify for application of the shortcut method based on an assumption of no ineffectiveness justified by applying other criteria. [Emphasis added]…

The response to question 1 goes on to say:

> The verb match is used in the specified conditions in paragraph 68 to mean *be exactly the same or correspond exactly.*

Furthermore, paragraph 65 of SFAS 133 applies only if "the critical terms of the hedging instrument and of the … hedged forecasted transaction are the **same**…" [Emphasis added]. **Fannie Mae's use of the seven-day rule precludes it from applying shortcut or matched terms accounting to cash flow hedges for which reset dates are not exactly matched. Because Fannie Mae does not perform an effectiveness assessment or measurement of ineffectiveness for such hedge relationships, they do not qualify for hedge accounting unless the reset dates are matched exactly.**

Fannie Mae concedes that the plus or minus seven days policy is a departure from GAAP.[281] However, Fannie Mae asserts that they perform an annual analysis to determine what the

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[280] Fannie Mae DAG p. IV.22, FMSE 112654.

[281] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Accounting Standards and Corporate Tax, August 3, 2004, pp. 64-66. In the interview, Mr. Boyles stated "We have several known departures from GAAP in our adoption of FAS 133. We have cleared those with our auditors. We have reported to our auditors on an annual basis the effect of those. And they were comfortable when we adopted them, and they were comfortable over the last several years when we reported the results of that work.[…] As it relates to the plus or minus seven days, that came down to the realization in the business that we--from a business perspective we issue discount notes on an auction basis, on a weekly basis. And at times those interest rate swaps would reprice on a Monday, but we're going to issue debt on a Wednesday—[…]. And it sometimes might be on a Friday. And then, on average, it's going to be at zero, but any individual one might be off by a couple of days. And so we built this practical application as it relates to the resetting of those, partially because all of that ineffectiveness is going to roll through as you make your payments and partially because it's just the way the business is run. And so we tried to make that very narrow, that time frame in which they're allowed to do the relinkages in that."

income statement impact would be of measuring ineffectiveness that would result due to the mismatch in repricing dates had they not assumed these hedges to be perfectly effective. This analysis is prepared primarily to represent to KPMG that the difference on earnings resulting from assuming perfect effectiveness versus performing a measurement of ineffectiveness is not material. There is no hedge effectiveness assessment performed or specified in hedge documentation, as required by SFAS 133. Jonathan Boyles stated that due to Fannie Mae's assumption of no ineffectiveness, an assessment of hedge effectiveness is not necessary. OFHEO believes it is contradictory on the one hand, to acknowledge that there is ineffectiveness in the hedging relationship (which the Enterprise calculates for the external auditors) and on the other hand to assert that no assessment is required due to "assumed" perfect effectiveness.

Fannie Mae performs two analyses, the "average approach" and the "absolute value approach". An internal memorandum explains the quantitative approaches that Fannie Mae utilizes as follows:

> The first set of quantitative analysis ("average approach") incorporates the idea that there is offset between movements in LIBOR associated with pay-fixed swap funding needs which occur before a Benchmark Bill issuance and movements in LIBOR associated with pay-fixed swap funding needs which occur after a Benchmark Bill issuance. The second set of quantitative analysis ("absolute value approach") does not incorporate this idea of offset and assumes that changes in LIBOR always move against us, who we believe represents a "worst case" scenario and is highly unlikely.[282]

Both approaches, however, ignore any ineffectiveness resulting from differences in reset dates in the future. The analyses performed calculate ineffectiveness resulting only from differences in historical reset dates.

SFAS 133, DIG Issue No. G7, *Cash Flow Hedges: Measuring the Ineffectiveness of a Cash Flow Hedge under Paragraph 30(b) When the Shortcut Method Is Not Applied* ("DIG Issue G7"), prescribes three methods for measuring ineffectiveness for cash flow hedges that are not eligible for the shortcut method: (1) change in variable cash flows method, (2) hypothetical derivative method, and (3) change in fair value method. The analysis performed by Fannie Mae in their quantitative evaluation of ineffectiveness does not conform to the prescribed methods in SFAS 133, and as such, may produce a different ineffectiveness result than if it had been performed using a proper method. **Thus, OFHEO contends that not only is Fannie Mae's accounting for these transactions inconsistent with SFAS 133 requirements, but also their attempt to quantify the unrecorded ineffectiveness is not consistent with SFAS 133 guidelines for performing such measurements.**

*The 90-Day Rule:* Fannie Mae's DAG allows maturity dates of the hedging instrument and the hedged item to be mismatched by plus or minus 90 days in fair value hedging relationships and

[282] Memorandum from Ilan Sussan to the Files, Subject: Assessing the Income Statement Impact of Applying the Plus or Minus Seven Day Policy to Fannie Mae's Average Pay-Fixed Swap Book, December 17, 2003, FMSE 032657-032658.

still assume perfect hedge effectiveness.[283] As discussed in relation to the seven-day rule, SFAS 133 only permits an assumption of no ineffectiveness if shortcut criteria are met or if critical terms of the derivative instrument exactly match those of the hedged item. As noted above, one of the criteria to assume perfect effectiveness for fair value hedges is that the maturities of the hedged item and the hedging instrument should be the same. **Fannie Mae's inclusion of the 90-day rule in its policy permits the Enterprise to apply a shortcut or matched terms approach when it does not meet the requirements under SFAS 133. Applying hedge accounting to such transactions without performing an effectiveness assessment or measurement of ineffectiveness is not permissible under SFAS 133.**

Jonathan Boyles noted that he could not recall how or why the 90-day rule was created or if it has been used by Fannie Mae in any of its transactions.[284] Further research is required to determine whether this aspect of the policy has been applied in practice and the magnitude of its impact.

*Duration Matching:* Fannie Mae's DAG allowed the Hedge Desk to assume no ineffectiveness in hedge relationships as long as the duration of the hedging instrument and the hedged item were matched, within certain parameters. OFHEO asserts that because the durations and other critical terms of the instruments were closely, but not perfectly matched, there should have been some resulting ineffectiveness in the relationship, requiring measurement and assessment procedures. In March 2004, Fannie Mae discontinued the use of duration matching as a method to assess the effectiveness of hedging anticipated debt issuances. Effective the beginning of the first quarter of 2004, the Enterprise began measuring and accounting for hedge ineffectiveness.[285] Mr. Boyles acknowledged that this was a departure from GAAP.[286] As such, an analysis had historically been performed on an annual basis to determine if the amounts that would have been recorded by using the long haul method would be material. Management's justification for using such an approach is that they believed "from an economic

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[283] Section VI.14 of the DAG outlines the criteria required to assume no ineffectiveness for fair value hedges. Item 1 states "The expiration date of the swap matches the maturity date of the interest-bearing asset or liability that is being hedged within 3 months" (FMSE 112766).

[284] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 3, 2004, p. 103, in which he states "I don't recall why we have that plus or minus three months in the policy, what was the genesis of that. But presumably it was because we felt that that plus or minus three months was immaterial. I'm not aware that that's used because in a typical termout they will match the terms in a typical termout."

[285] Memorandum from Jonathan Boyles to the File, Subject: Revisions to the December 2003 DAG, March 13, 2004, FMSE 113686-113690.

[286] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Accounting Standards and Corporate Tax, August 3, 2004, pp. 64-65. In the interview, Mr. Boyles stated, that "We have several known departures from GAAP in our adoption of FAS 133. We have cleared those with our auditors. We have reported to our auditors on an annual basis the effect of those. And they were comfortable when we adopted them, and they were comfortable over the last several years when we reported the results of that work."

Q: As it relates to 133. You said there were several departures from GAAP.

A: The purpose there was really twofold: one, we felt like in the case of the duration shortcut, we felt--if you think about duration, duration is a sensitivity of an instrument's--of the instrument to interest rates. And so, you know, FAS 133 built in the concept of a shortcut so you can match notionals and match maturities and repricing dates and assume no ineffectiveness when really a better economic hedge would be to match duration, not notionals…

standpoint, the correlation from matching durations between the anticipated debt and actual debt to be issued is better than just matching notional and payment/reset dates." [287] In 2001 and 2002, such amounts were considered to be immaterial by Fannie Mae; however, in 2003 the amount was approximately $12 million, which prompted the discontinuation of duration matching effective January 1, 2004. Duration matching is another instance where Fannie Mae has distorted the provisions of SFAS 133 to assume perfect effectiveness, though not warranted.

*Use of Shortcut Criteria as a Basis for Matched Terms Accounting:* The term "shortcut accounting" was noted in many instances within Fannie Mae's documentation, including the DAG, hedge designation documents and emails between Fannie Mae employees. In addition, Fannie Mae's policy requirements for assuming perfect effectiveness are based on SFAS 133's shortcut criteria, which was confirmed through an interview with Jonathan Boyles.[288] However, Fannie Mae employees have stated that they do not utilize the shortcut method as referenced in paragraph 68 of SFAS 133, and that the term "shortcut" is "loosely" used by Fannie Mae employees to describe the matched terms method, per SFAS 133 paragraph 65.[289]

Even though the special exception provided by the FASB for use of shortcut criteria is only permitted for interest rate swaps,[290] Fannie Mae's policy applies this criteria to other types of derivatives as well based on its position that such criteria results in perfect effectiveness and if those criteria are met, matched terms accounting can be applied.[291] However, OFHEO believes

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[287] Memorandum from Jonathan Boyles to the File, Subject: Revisions to the December 2003 DAG, March 13, 2004, FMSE 113686-113690.

[288] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 3, 2004, p. 77.
Q: Also with respect to these conditions that are used to assume no ineffectiveness, would it be fair to say that these are based upon the shortcut criteria that are outlined under FAS 133, paragraph 68, which I assume you're familiar with?
A: Mm-hmm, I believe they would be based on that.
p. 85
Q: […]so for fair value hedges, would you agree that these criteria are based on the shortcut criteria in FAS 133?
A: Yes, I believe they're based on the shortcut criteria.

[289] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 3, 2004, p. 88.
Q: […]So I guess after considering what E4 says, I'd again ask you how Fannie Mae's application of shortcut is consistent with GAAP.
FANNIE MAE LEGAL COUNSEL: When you're saying shortcut, are you talking about shortcut under 133 or what they sometimes loosely refer to as shortcut?
Q: I'm talking about how the company applies the criteria in its policy for assuming perfect effectiveness and how that's consistent with the criteria we've just looked at based on DIG Issue--
A: I would not have expressed Fannie Mae's policy to be applying the shortcut method but to be applying the terms matching.[…]

[290] SFAS 133 paragraph 68 and DIG Issue E4, question 2.

[291] Fannie Mae DAG, page IV.24, states the following with respect to cash flow hedges: "Fannie Mae also hedges the variability in cash flows by entering into certain option contracts, including caps (for liabilities), floors (for assets), and pay-fixed swaptions (for Discount Notes). Fannie Mae must meet the same criteria outlined above to assume that a hedge will be entirely effective at offsetting the hedged transaction's variability in cash flows." See FMSE 112656. Furthermore, Fannie Mae DAG page VI.15 states the following with respect to fair value hedges: "Fannie Mae also hedges the variability in fair values by entering into certain option contracts, including receive-fixed swaptions. The instrument underlying the



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that in some cases, particularly fair value hedges, ineffectiveness can exist in a hedging relationship even though criteria similar to shortcut are met. For transactions not subject to the shortcut method, other items can cause ineffectiveness and must be considered in determining whether matched terms accounting can be applied.[292] Thus, in order to assume perfect effectiveness for a hedging relationship that does not meet the shortcut criteria, an entity would need to perform a calculation to demonstrate that no ineffectiveness exists. This point is described by DIG Issue E4 which states, in part:

> Although a hedging relationship may not qualify for the shortcut method, the application of regular fair value hedge accounting may nevertheless result in recognizing no ineffectiveness. For example, the characteristics of the hedged item and the hedging derivative may, in some circumstances, cause an entity's **calculation** [Emphasis added] of the change in the hedged item's fair value attributable to the hedged risk to be an amount that is equal and offsetting to the change in the derivative's fair value. In those circumstances, because there is no ineffectiveness that needs to be reported, the result of the fair value hedge accounting would be the same as under the shortcut method.

Based on the guidance discussed above, it is inappropriate for Fannie Mae to apply the short-cut criteria to derivatives other than interest rate swaps as a basis for matched terms accounting. Such treatment would only be supported if a calculation demonstrates that those criteria do, in fact, result in perfect offset between the hedging instrument and the hedged item. **Fannie Mae has not demonstrated that its application of matched terms accounting results in perfect effectiveness and has not performed an effectiveness assessment or measurement of ineffectiveness for such hedge relationships. Accordingly, they do not qualify for hedge accounting.**

**Additional Transaction Examples**

The following are additional examples of hedge accounting transactions for which perfect effectiveness has been incorrectly assumed yet permitted in the DAG. These examples are not a complete list of all the sample transactions contained in the DAG for which OFHEO believes the accounting policy is incorrect. The selected transactions discussed below highlight some of the frequently used transactions that have been identified as problematic during the course of the examination.

1. Receive-fixed swaption hedging a medium term note
2. Callable swap hedging discount notes
3. Discount notes hedged with funding swaps[293] and received fixed swaptions

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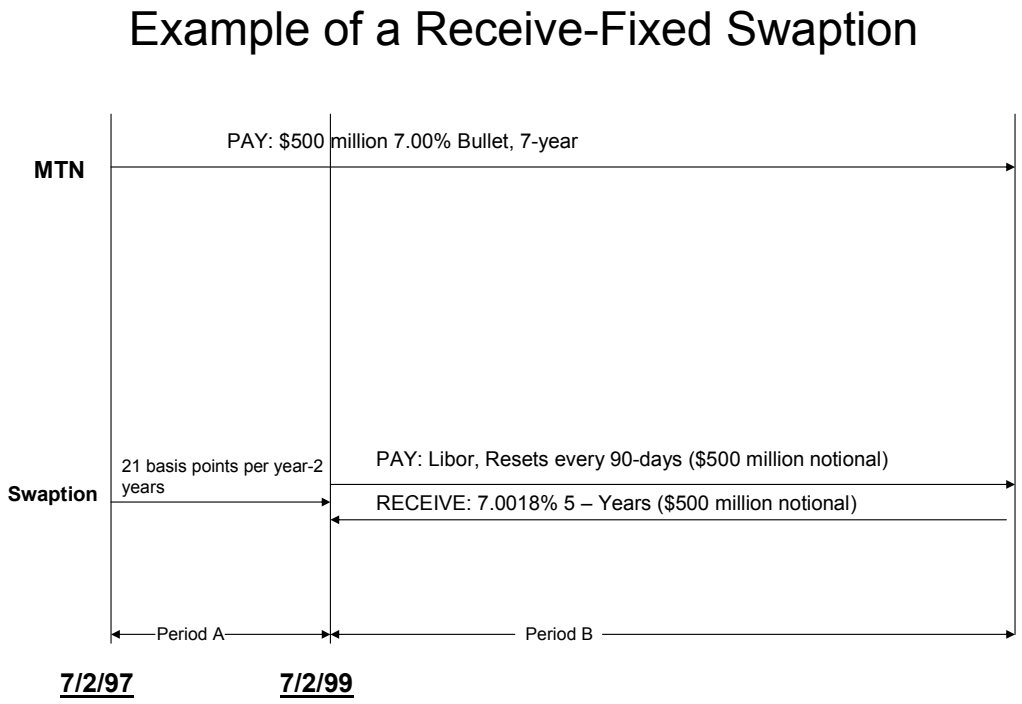
option contract (i.e., receive-fixed swap) and the debt being hedged must meet the same criteria outlined above to assume that a hedge will be perfectly effective at offsetting the hedged transaction's change in fair value if and when the option is exercised." See FMSE 112767. OFHEO understands the references to "same criteria outlined above" to refer to the criteria outlined for interest rate swaps earlier in the DAG.

[292] Such items may include differences between the fixed rates of the hedging instrument and hedged item, intervals between interest reset dates on the hedging instrument, or changes in creditworthiness of the derivative counterparty, for example. These matters are not considered under the "shortcut" method.

[293] For purposes of this report, a funding swap is defined as a pay-fixed swap.

### *1. Received-Fixed Swaption Hedging a Medium Term Note*




***Description of Transaction:***

- *On 7/2/97, Fannie Mae issues $500M in bullet debt with a 7-year maturity and enters into a swaption that gives Fannie Mae the option to enter into a receive-fixed pay-variable swap on 7/2/1999. The underlying swap is out-of-the money at the inception of the hedge, meaning its fixed rate is lower than current market rates. The underlying swap (and thus the option) will gain value as rates fall, providing protection against increases in the fair value of its debt obligation as rates fall. The option is a European style option, meaning it is exercisable at its expiration date and Fannie Mae elects to pay for the option over the two year option period. The cost is 21 basis points per year.*
- *Fannie Mae recognizes changes in the time value component of the option through earnings over the life of the option (in this case, 2 years).* [294]

[294] This election is made pursuant to SFAS 133, paragraph 63. An option's value is comprised of two elements, time value and intrinsic value. Intrinsic value represents the extent to which the option is "in the money" based on a comparison of market interest rates to the option's strike rate. Time value represents the remaining value attributed to the option contract by the market. Conceptually, time value can be viewed as the value attributed to the probability that the option could move further into the money during its life. Paragraph 63 permits companies to exclude the time value component of options and only focus on the intrinsic value in assessing effectiveness. If the time value is excluded in a valid fair value hedging relationship, then it will be recorded through earnings. The effective portion of the intrinsic value will also



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- *Changes in the intrinsic value of the swaption (the value attributable to the underlying swap becoming "in the money") during Period A will be recognized in earnings along with an equal and offsetting adjustment for the change in fair value of the debt in period A. Fannie Mae treats the intrinsic value portion of the swap as being "perfectly effective."*
- *When the swap is exercised, Fannie Mae treats the new swap as a perfect fair value hedge of the change in fair values of the bullet debt during period B. As such, changes in the fair value of the swap will be recognized in earnings along with an equal and offsetting adjustment for the change in fair value of the debt in Period B.*

**Hedge Accounting Issues:**
The above transaction is one of Fannie Mae's thirteen most frequently used transactions.[295] In the above example Fannie Mae synthetically creates callable debt. In accounting for this transaction, Fannie Mae is a) improperly assuming no ineffectiveness during the option period (period A), and b) improperly assuming no ineffectiveness when the swaption is exercised in period B.

**Issue A**
In this transaction, Fannie Mae is assuming perfect effectiveness based on the assumption that critical terms are matched using "short-cut like" criteria for matching of terms. However as noted earlier, the short-cut method does not apply to instruments other than swaps (such as swaptions). Thus, in order to assume perfect effectiveness, there must be a demonstration that the fair values of the hedging instrument and the hedged item do, in fact, offset one another (see earlier discussion of DIG Issue E4). In a hedging relationship such as the one illustrated above, it is likely that there would be some ineffectiveness due to differences in the fixed rate of the underlying swap versus that of the MTN, and possibly other factors. OFHEO understands that Fannie Mae has not performed a calculation to support their claim of perfect effectiveness and has not specified any such calculation methodology in their DAG or related documentation. **As such Fannie Mae has not properly measured and assessed effectiveness for such transactions and is not in compliance with the hedge accounting requirements of SFAS 133.**

Furthermore, based on a review of the hedge designation documentation and the DAG, these documents fail to define the hedged risk in such a way to specify that the option is a one-directional hedge (i.e., to be effective as a hedge, the hedged risk would need to be defined in such a way to indicate that it provides protection against fair value changes due to decline of rates below a certain level). Fannie Mae's DAG and related designation documentation for such transactions merely describe the swaption as hedging fair value changes in the debt. With the hedged risk defined in this way, there is no basis for expecting the change in the swaption intrinsic value to perfectly offset the change in fair value of the bullet debt, because the swaption intrinsic value can fluctuate only in one direction (experiencing a gain only) whereas the value of the bullet debt can fluctuate in both directions (experiencing either gain or loss). SFAS 133 specifically requires documentation of the nature of the hedged risk and how the

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be recorded in earnings with an offsetting amount reflected in earnings as a fair value adjustment of the hedged item.

[295] Letter from Jodie Kelley, Fannie Mae Vice President and Deputy General Counsel to Chris Dickerson, OFHEO, dated July 28, 2004, FMSE1 00083, in which Ms. Kelley lists Fannie Mae's thirteen most frequent transactions.

derivative's effectiveness in offsetting that risk will be addressed. Such a description of the hedged risk is also critical to facilitating a calculation of the change in fair value of the debt attributable to the risk being hedged which would be necessary to support an effectiveness calculation as discussed above. **Fannie Mae has not properly documented the hedged risk associated with this hedging relationship and thus is not in compliance with SFAS 133's hedge accounting requirements.**

**Issue B**

If the swaption is exercised by the Enterprise, it would typically do so because the swaption is "in-the-money," meaning the underlying swap has a positive value. When the swaption is exercised and the swap is entered into, the assumption of no ineffectiveness cannot be made due to the swap's positive fair value at the start of the new hedging relationship (which would become a two-directional hedge, mitigating both fair value gains and losses in the debt).[296] As discussed earlier in this report, paragraphs 65 and 68 of SFAS 133 require the fair value of the hedging relationship at inception to be zero in order to assume perfect effectiveness. Therefore, in order to qualify for hedge accounting, assessment and measurement of effectiveness using the long haul method would be required. **Fannie Mae does not perform an assessment and measurement of effectiveness for swaps entered into in connection with the exercise of swaptions. Therefore, such transactions do not qualify for hedge accounting under SFAS 133.**

In our discussions with Fannie Mae about their accounting for swaptions, they expressed the view that their accounting was appropriate under SFAS 133. Yet in an email dated April 17, 2001, from Jonathan Boyles to several members of management, Mr. Boyles discusses a proposal made by the FASB relating to the accounting treatment for the time value of options. In the email, Mr. Boyles describes Fannie Mae's accounting for transactions involving receive-fixed swaptions as "aggressive." It states:

> …the accounting treatment we currently utilize for our receive-fixed swaptions is aggressive (we have KPMG's approval) and not one we would want to flash in front of the FASB for comment or the treatment could get worse... [297]

When Mr. Boyles was asked about his reference to Fannie Mae's swaption accounting as "aggressive," he was unable to recall why he had characterized it as such. [298]

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[296] The exercise of the swaption constitutes the termination of the original hedging relationship per paragraph 25b of SFAS 133 which states that hedge accounting is discontinued when the "derivative expires or is sold, terminated or exercised." As such, a newly designated hedge relationship must be established for the swap entered into upon exercise.

[297] Email from Jonathan Boyles to several members of management, April 17, 2001, Subject: Recent FASB Proposal on the time value of options, FMSE 096460-096462.

[298] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 3, 2004, p. 184.

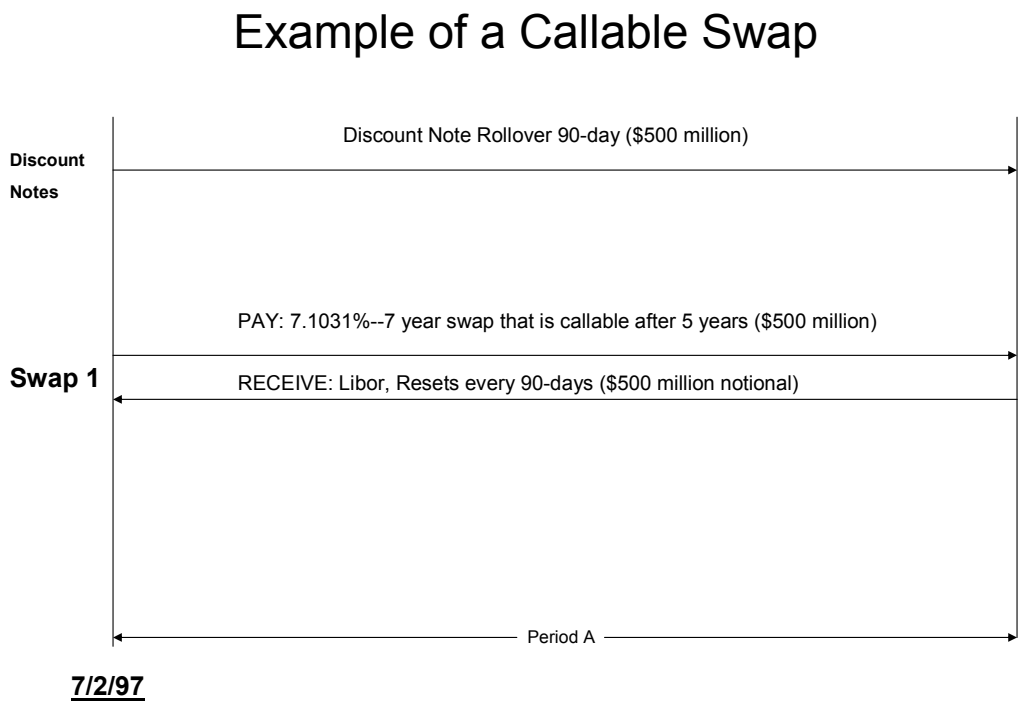
Q: Jonathan, do you recall what you meant by your "accounting treatment for receive-fixed swaptions is aggressive"?

A: I don't recall what I would have meant by that. I don't know why I would have called it that because I'm not sure I would view it as aggressive.[…]

**Conclusion:**

It is OFHEO's conclusion that Fannie Mae incorrectly applies matched terms accounting and assumes no ineffectiveness in the receive-fixed swaption example, both before and after the swaption is exercised. In addition, as a result of incorrectly applying matched terms accounting, Fannie Mae failed to perform an assessment of hedge effectiveness, the absence of which precludes Fannie Mae from qualifying for hedge accounting for such transactions. The aggressive interpretation of matched terms is consistent with Fannie Mae's objectives of minimizing earnings volatility and simplifying operations.

### *2. Callable Swap Hedging Discount Notes*




***Description of Transaction:***

- *On 7/2/97, Fannie Mae issues $500M in DNs and simultaneously enters into Swap #1, which matures after 7 years.*
- *Swap #1 is callable after 5 years. This results in its gaining value as rates rise, but only losing value to a limited degree as rates fall and the call feature becomes "in-the-money."*
- *Fannie Mae treats Swap #1 as a perfect cash flow hedge during the period which it is outstanding.*
- *Changes in the fair value of Swap #1 will be recognized by Fannie Mae in AOCI in periods where Swap #1 is outstanding. Amounts in AOCI will be reclassified into earnings in the same periods during which the forecasted transaction occurs, through recognition of interest accruals and settlements on the swap.*

**Hedge Accounting Issues:**

There are several issues related to the above shown transaction [Example of a callable swap]. In accounting for the transaction, Fannie Mae: a) assumes no ineffectiveness although the call option embedded in the swap is not mirrored in the discount notes; b) is inappropriately recording both the intrinsic *and* time value in AOCI; and c) is improperly documenting their hedge strategy by failing to outline that the strategy is one-directional.

**Issue A**

Fannie Mae is treating the callable swap as a perfect cash flow hedge of the forecasted interest payments associated with the anticipated reissuance of existing and future discount notes. However, the call option in the swap is not mirrored in the hedged item. As discussed in previous sections of the report, paragraphs 65 and 68 of SFAS 133 require the critical terms of the swap to match those of the underlying hedged item in order to assume no ineffectiveness, including the call option feature.[299] Conceptually, the hedge relationship cannot be assessed as perfectly effective because the change in fair value of the swap is expected to be different than changes in cash flows of the discount notes due to the additional value of the option, which is not present in the discount notes. Generally, in order to qualify for hedge accounting, it would be necessary to separate the derivative's time and intrinsic value components, as discussed in Issue B. **Fannie Mae's assumption of perfect effectiveness for the entire change in fair value of the derivative is not consistent with the hedge accounting requirements of SFAS 133**.

**Issue B**

By including all changes in the derivative's fair value in AOCI, Fannie Mae is in essence assessing effectiveness using the entire value (both intrinsic and time value) of the instrument, and treating it as perfectly effective. For all other option based derivatives, Fannie Mae separates the time and intrinsic value in assessing and measuring effectiveness. When OFHEO questioned Mr. Boyles on the rationale for not separating the time value from the intrinsic value in assessing effectiveness for callable swaps, he stated that the Enterprise was following the guidance in DIG Issue G20 *Cash Flow Hedges: Assessing and Measuring the Effectiveness of a Purchased Option Used in a Cash Flow Hedge* ("DIG Issue G20[300]"). However, the December 2003 DAG does not make any reference to the fact that Fannie Mae had adopted DIG Issue G20, which requires specific designation language to that effect. [301] Additionally, DIG Issue G20

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[299] FASB, SFAS 133, paragraph 68 (e).

[300] DIG Issue G20 states that when designating a purchased option as hedging the variability in cash flows, the assessment of effectiveness can be based on total changes in the option's cash flows (that is, the assessment will include the hedging instrument's entire change in fair value—its entire gain or loss), rather than documenting that the assessment of effectiveness will be based on only the changes in the hedging instrument's intrinsic value as permitted by paragraph 63(a) of FAS 133.

[301] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 24, 2004, pp. 186-187

Q: I'd like to just get back to transaction number 32, the callable swap, and I guess the question is what were you doing--you mentioned you were applying G20. Where in the policy is it stated that you're applying G20 in your derivatives accounting guidelines?

A: It does not--I mean we'll be more explicit in our next version in the end of 2004, but the policy and the practices of G20.

states that it applies to "purchased options and combinations of only options." This language indicates that DIG Issue G20 does not apply to swaps containing embedded options. Furthermore, the initial version of the DAG, released prior to the issuance of DIG Issue G20, included the same accounting for this transaction that is being followed today. Thus, an assertion that this accounting treatment is based on DIG Issue G20 is unsupported.[302] Finally, in May 2004, we noted drafts of potential changes to Fannie Mae's DAG indicating that Fannie Mae was considering separating the time and intrinsic value for callable swaps. [303] **Fannie Mae's inclusion of both time and intrinsic value changes of the callable swap in AOCI is not consistent with the requirements of SFAS 133 or the Enterprise's own practices for other options based strategies.**

**Issue C**

Based on OFHEO's review of the hedge designation documentation and the DAG, these documents fail to define the hedged risk in such a way to specify that the option is a one-directional hedge (i.e., to be effective as a hedge, the hedged risk would need to be defined in such a way to indicate that it provides protection against cash flow changes due to increases in rates but only against declines in rates below a certain level – that at which the call feature is "in-the-money"). Fannie Mae's DAG and related designation documentation for such transactions merely describe the callable swap as hedging cash flows attributable to interest payments on discount notes. With the hedged risk defined in this way, there is no basis for expecting the change in the swap's fair value to perfectly offset all changes in cash flows of the discount notes, because the swap fair value would experience gains as rates rise, but would only experience losses to a limited degree as rates fall; whereas the cash outflows of the discount notes can both increase and decrease as rates rise or fall. SFAS 133 specifically requires documentation of the nature of the hedged risk and how the derivative's effectiveness in offsetting that risk will be addressed. Such a description of the hedged risk is also critical to facilitating a calculation of the change in hedged cash flows attributable to the risk being hedged in order to support an effectiveness calculation. **Fannie Mae has not properly documented the hedged risk associated with this hedging relationship and thus is not in compliance with SFAS 133's hedge accounting requirements.**

Fannie Mae was apparently aware that this accounting treatment was aggressive in 2000, one year before the adoption of SFAS 133. In an email, Kim Stone, a former employee of Fannie Mae and manager in the Financial Accounting Standards Group, wrote: "As it is, using the cancelable swap under the short-cut method is very aggressive." [304]

**Conclusion:**

It is OFHEO's conclusion, based on the accounting analysis above, that Fannie Mae's accounting for the callable swaps as perfect hedges, as well as the recognition of the entire option value in

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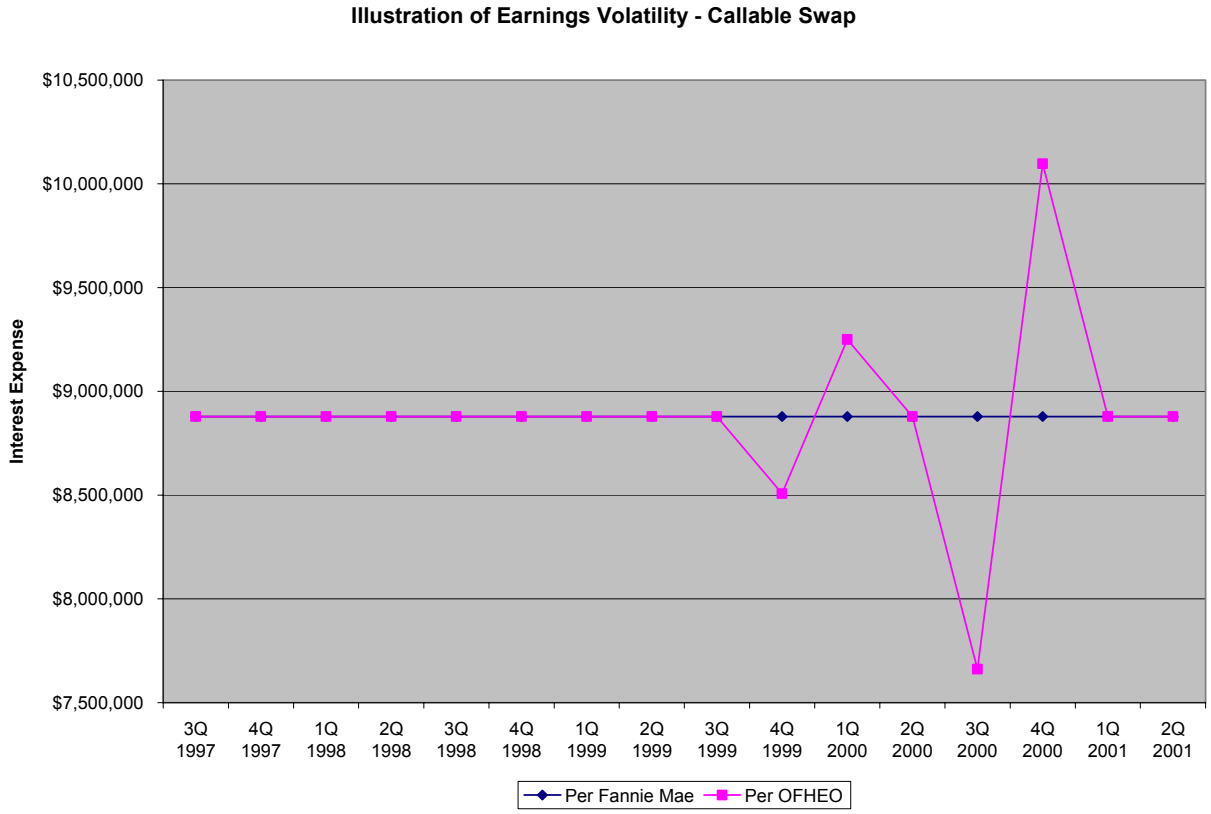
[302] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 24, 2004, p. 187
Q: What were you doing prior to G20 being effective?
A: We were doing the same accounting treatment.

[303] Email from Ilan Sussan, Financial Standards, to various individuals at KPMG including as an attachment *"DAG – PowerPoint Slides",* 5/24/2004, produced via CD 8/11/04 in M box.

[304] Email from Kimberly Stone, former manager in Financial Accounting Standards, to Joseph Rosenberg, August 10, 2000, FMSE 078731-078732.

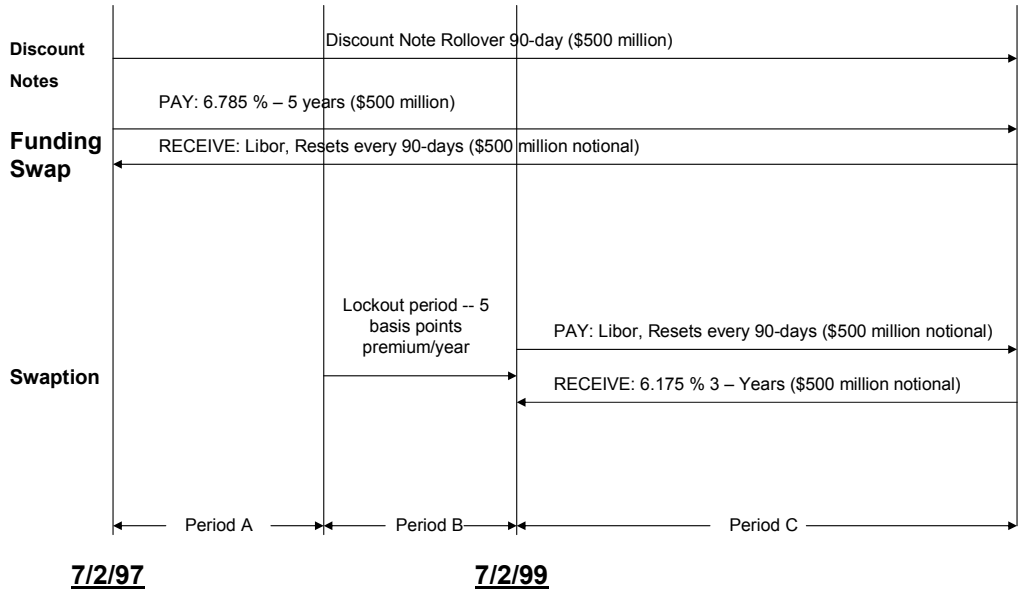
AOCI, is inappropriate. As is the case in other examples discussed herein, there was no assessment of hedge effectiveness performed, and thus, Fannie Mae should not have received hedge accounting.

For purposes of illustrating the earnings impact of not assuming perfect effectiveness, but instead measuring and recognizing ineffectiveness correctly, OFHEO prepared an illustrative transaction using actual market data to show its potential impact on earnings using a $500 million callable swap. The complete analysis can be found at Appendix V. Per OFHEO's analysis, the dollar-offset approach required by Fannie Mae's DAG for assessing effectiveness indicates that this hedging relationship could fail to qualify for hedge accounting. [305] The amount of ineffectiveness varies from quarter to quarter which would have led to additional volatility in earnings. If the hedge is not deemed highly effective (within the 80% to 125% range), hedge accounting should be terminated as of the last date the derivative was considered to be highly effective. Additionally, even if the hedge did qualify as being highly effective, the amount of ineffectiveness could fluctuate from quarter to quarter causing additional volatility in earnings. This is illustrated by the following graph, which is summarized from OFHEO's analysis.




[305] Fannie Mae's DAG, as well as SEC guidance, requires a dollar offset ratio between the hedging instrument and hedged item to fall between 80% and 125% in order to meet the "highly effective" requirement for hedge accounting, FMSE 112604-112606.

### *3. Discount Notes Hedged with Funding Swaps and Received-Fixed Swaptions*




***Description of Transaction:***

- *On 7/2/1997, Fannie Mae issues $500 million in DNs and simultaneously enters into a pay-fixed funding swap in which they receive LIBOR.*
- *In period B, they enter into a swaption which gives Fannie Mae the option to enter into a receive-fixed swap on 7/2/1999. The cost of the option is 5 basis points per year.*
- *Fannie Mae would exercise the option if the LIBOR swap rate falls below the fixed rate on the underlying receive-fixed swap (i.e., the swaption is "in-the-money"). This would partially offset the loss on the funding swap and lower Fannie Mae's effective debt cost. This combined transaction is similar economically to using a callable swap.*
- *The combination of the receive-fixed swaption (intrinsic value only) and the funding swap would be treated by Fannie Mae as a cash flow hedge of future DN issuances. Fannie would assume no ineffectiveness because the critical terms of the combined derivatives are deemed to match the hedged debt. Changes in the time value of the option would be recorded in earnings.*
- *If the swaption is exercised, the two offsetting swaps would be treated as a perfect cash flow hedge during period C.*

***Hedge Accounting Issues:***

Several issues exist in the above shown transaction, most of which are similar to the issues discussed in the previous transactions. In reviewing Fannie Mae's accounting for this type of transaction, OFHEO noted the following issues with respect to the application of hedge accounting:

a. Fannie Mae separates the time and intrinsic value components of the option which is inconsistent with their treatment of the callable swap discussed above, even though the transactions are economically similar. While this treatment appears proper for this transaction, it highlights the improper treatment of time value associated with the callable swap.
b. The combined swap and swaption are treated as perfectly effective once the swaption is entered into, although the funding swap has a fair value other than zero at the inception of this new hedging relationship. As noted for other strategies described within this report, the non-zero intrinsic value of the combined instruments at inception of the hedging relationship precludes the ability to assume perfect effectiveness for this strategy.
c. The DAG and related documentation fail to document that the hedging strategy is one-directional due to nature of the option values. This issue was also noted with respect to the receive-fixed swaption and callable swap transactions discussed in this report, and violates the hedge accounting documentation requirements of SFAS 133.
d. Upon exercise of the swaption, Fannie Mae in the past continued to treat two offsetting swaps as cash flow hedges in combination, even though they do not serve to mitigate cash flow variability associated with the discount notes (because the cash flows of the two swaps offset one another). This is similar to the issue discussed relating to offsetting swaps in this report (Issue #2). This practice was discontinued by Fannie Mae in the first quarter of 2004.

***Conclusions:***

Based on the accounting analysis above, OFHEO has concluded that Fannie Mae's accounting for the pay-fixed swap and the receive-fixed swaption in combination as a perfect hedge is not justified under SFAS 133. Additionally, since no hedge assessment is performed, the hedge relationship should not qualify for hedge accounting. The offsetting swaps resulting from the exercise of the swaption should not have received hedge accounting in past periods and instead their changes in fair value should have been marked to market through earnings. Finally, the documentation of the risk hedged by the combined swap and swaption does not adequately reflect the nature of the hedging relationship and further calls into question Fannie Mae's hedge accounting for such transactions.

**Implications**

Fannie Mae's inappropriate assumption of no ineffectiveness based on its application of the short-cut or matched terms approaches set forth in its DAG and as discussed herein calls into question the accounting treatment for a significant portion of the Enterprise's derivatives portfolio. The approaches employed by Fannie Mae have not only served to reduce the earnings

volatility and lessened the operational complexity associated with the application of SFAS 133, but have potentially misstated the Enterprise's financial results in a significant way. The transactions discussed in this section for which accounting problems have been identified are among the most common strategies employed by the Fannie Mae.

While OFHEO has not quantified the effects of the misstatement on current or past periods resulting from the improper application of the short-cut or matched terms approach, from a qualitative perspective, as stated earlier, almost all of Fannie Mae's hedges receive short-cut treatment, or assume no ineffectiveness. Of the thirteen most frequent hedging transactions identified by Fannie Mae, issues relating to the concept of no ineffectiveness have been identified for seven of such transactions. As of December 31, 2003, amounts deferred in AOCI due to cash flow hedge accounting were negative $12.2 billion,[306] and carrying value adjustments of hedged items in fair value hedges amounted to approximately $7.2 billion. [307] As a result of the invalidation of hedge accounting, a significant portion of these amounts could be reversed and put into earnings. However, the determination of the exact amounts of any earnings adjustments and the periods in which they should be effected will require a substantial amount of analysis, time and resources on the part of the Enterprise.

[306] Fannie Mae December 31, 2003 10-K, p. 80.
[307] Fannie Mae December 31, 2003 10-K, p. 146.

### *Issue 4: Interest Rate Caps*

**Background**

Fannie Mae purchases interest rate caps to hedge exposures to increases in interest rates on its discount notes or floating rate borrowings. Under SFAS 133, Fannie Mae applies cash flow hedge accounting to the caps and is therefore required to fair value the caps at each reporting date. To the extent effective, fair value changes are recorded in AOCI, and the ineffective portion is recorded in earnings.

To illustrate the mechanics of a purchased cap, assume Fannie Mae issues floating rate debt and does not wish to pay interest exceeding 5%. Fannie Mae can purchase an interest rate cap with a strike rate of 5% to hedge the variability in cash flows from the floating rate debt attributed to rising interest rates. In the event interest rates rose to 7%, the counterparty to the derivative agreement would pay Fannie Mae the difference of 2% (7% - 5% representing the difference between strike and current interest rate), leaving Fannie Mae with an effective interest cost of 5%.

The cap is a series of individual options on interest rates for each quarterly or monthly period in the contract (referred to as "caplets"). An option's value is comprised of two elements, time value and intrinsic value. Intrinsic value represents the extent to which the cap is "in-the-money" based on a comparison of market interest rates to the cap's strike rate. Time value represents the remaining value attributed to the option contract by the market. Conceptually, time value can be viewed as the value attributed to the probability that the option could move further into the money during its life.

In Fannie Mae's application of hedge accounting, changes in intrinsic value are deemed to represent the "effective" portion of the hedge. This is because increases in the intrinsic value of the cap serve to offset related increases in forecasted interest payments on hedged borrowings. As such, Fannie Mae records changes in the intrinsic value component through AOCI, deferring their recognition in earnings until the future interest payments occur and affect earnings. Changes in the time value component are recorded directly to earnings as they occur.

SFAS 133 does not specify a single methodology to be used in allocating an instrument's value between time and intrinsic components. One methodology is to compare the cap strike rate to the current "spot" interest rate and derive a resulting intrinsic value for the entire cap agreement (in Fannie Mae terminology the "Trader Approach"). An alternate methodology would be to calculate the intrinsic value of each individual caplet by comparing the cap strike rate to the respective point on the forward curve (in Fannie Mae terminology the "Zero Volatility Approach"). In both approaches, the time value would represent the difference between the total fair value of the cap[308] and its calculated intrinsic value. While either method may be deemed acceptable, the two methods yield different results. Thus, one method must be

[308] The total fair value of the cap would be derived from an appropriate option pricing model.

consistently applied. For example, a cap may have zero intrinsic value under the Trader Approach because the strike rate is higher than the current market interest rate. However, in a typical upward sloping yield curve, that same cap may have some intrinsic value under the Zero Volatility Approach because the forward rates relating to the later periods of the term are higher than the strike rate.

As described above, when interest rate caps are purchased, an upfront premium is paid. To make future determinations of changes in time and intrinsic values for accounting purposes, it is necessary to allocate the initial value of the option premium between time and intrinsic value components.

**Summary of Issue**

Until the fourth quarter of 2002, Fannie Mae treated the entire upfront premium payment as time value because the strike rate was above the current interest rate at the time of purchase. The Enterprise used the Trader Approach to determine intrinsic value at the inception of a cap contract. However, for subsequent calculations at each reporting date, Fannie Mae calculated intrinsic value using the Zero Volatility Approach. As a result, during the time from adoption of SFAS 133 (January 2001) through the third quarter of 2002, **Fannie Mae was applying an inconsistent methodology in its determination of time and intrinsic value.** Because many of the caps purchased by Fannie Mae had intrinsic value at the time of purchase under the Zero Volatility Approach, yet had no intrinsic value at inception under the Trader Approach, this inconsistent methodology resulted in misstatements of changes in time value and intrinsic value reported in earnings and AOCI, respectively.

The misstatement that occurs when this inconsistent methodology is applied can be illustrated by the following simple example. Assume an interest rate cap is purchased for $1,000,000 and its value is further broken down as follows under the two approaches:

| | **Trader Approach** | **Zero Volatility Approach** |
|---|---|---|
| Time Value | $1,000,000 | $ 500,000 |
| Intrinsic Value | 0 | 500,000 |
| Total Value at inception | 1,000,000 | 1,000,000 |

In addition, assume that the above options were purchased near quarter-end and that as of the quarter-end reporting date, there had been no change in interest rates or in the total fair value of the cap contract. Under either approach, if applied consistently, there would be zero change in the option time value or intrinsic value, and no gain or loss recorded through earnings or AOCI.

However, when the inconsistent approach applied by Fannie Mae is used at the quarter-end reporting period, the following result would be reflected:

| | **Time Value** | **Intrinsic Value** |
|---|---|---|
| Ending Value – Zero Volatility Approach | $ 500,000 | $ 500,000 |
| Beginning Value – Trader Approach | 1,000,000 | 0 |
| Change in Value | (500,000) | 500,000 |

As a result, Fannie Mae would have recorded a loss in earnings for change in time value of $500,000 and a gain in AOCI for change in intrinsic value of the same amount, when in fact there was no change in the instrument's value. Furthermore, because no change in interest rates had occurred, there would have been no change in the forecasted interest payments that were being hedged by the caps. As such there would be no basis under SFAS 133 to record a gain in AOCI as there had been no corresponding change in the underlying hedged item. OFHEO has determined that the above accounting for the cap represents an error in the application of SFAS 133.

As a result of using the Trader Approach at inception and the Zero Volatility Approach on subsequent reporting dates, Fannie Mae was overstating its option premium expense as well as gains recorded in AOCI due to changes in intrinsic value. It appears that the largest impact of this treatment would have been in the quarter in which a cap contract is executed, due to the immediate premium expense and AOCI gain that would be recognized relating to the inception intrinsic value. There would also be an effect on earnings in periods later in the life of the cap contracts (to which the original intrinsic value relates), as the inception intrinsic value gains are reclassified into earnings as payments are made on the cap.

In the fourth quarter of 2002, Fannie Mae changed its accounting for the premium paid at inception for interest rate caps.[309] Effective October 1, 2002, Fannie Mae began to allocate the initial premium paid to both time value and intrinsic value, using the Zero Volatility Method. This change was implemented prospectively, that is for new caps purchased after September 30, 2002.[310] Fannie Mae concluded in an internal memorandum addressing this issue that they believed that this change qualified as a change in accounting analogous to that described in paragraphs 23 and 24 of APB 20.[311]

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[309] Fannie Mae December 31, 2002 annual report on form 10-K, Notes to Financial Statements, Significant Accounting Policies, p. 113.

[310] Information has been obtained from the following sources:

1. Fannie Mae December 31, 2002 annual report on form 10-K, Notes to Financial Statements, Significant Accounting Policies, p. 113.
2. Memorandum from Jonathan Boyles to File with Distribution, Subject: Proposal to Change Fair Value Estimate of IV/TV Decompositions for Caps, January 29, 2003, FMSE 055014-055016.
3. OFHEO interview, Jonathan Boyles, Senior Vice President—Financial Accounting Standards and Corporate Tax, August 24, 2004, pp. 211, 214

Q: [...]it was being treated prospectively. You didn't go back and correct some of the, your prior periods?

A: We didn't feel there was a need to correct because we deemed it to be a change in estimate, so we refined our estimation process. Now our describe that in our disclosures[…]

Q: […]when talking about the effect of th [sic] change in running an analysis, did anyone go and perform analysis what would be the impact on the quarterly basis had the consistent estimation methodology been used throughout the life of an option?

A: I don't recall. I believe there was a lot of analysis done at the time[...]

[311] Memorandum from Jonathan Boyles to File with Distribution, Subject: Proposal to Change Fair Value Estimate of IV/TV Decompositions for Caps, January 29, 2003, FMSE 055014-055016, in which Mr. Boyles stated, "In addition, even though we think this change should be analogized to paragraphs 23 and 24 of APB-20, if one were to conclude that this is a change in estimate the accounting treatment would be the same."

It is OFHEO's belief that the accounting change made by Fannie Mae is correcting an inconsistent application of a methodology and not a change in methodology to calculate fair values and therefore should be treated as a correction of an error. As illustrated in the example above, the inconsistent application results in a misstatement of amounts recorded in both AOCI and earnings. A correction of an error would require the prior period financial statements to be restated.

**Accounting Analysis**

APB 20's scope includes changes in accounting principles, accounting estimates, or reporting entity. It also covers reporting of a correction of an error in previously issued financial statements.

***Is it a Change in Accounting Principle?***

Paragraph 7 of APB 20 states that a change in accounting principle "results from adoption of a generally accepted accounting principle different from the one used previously for reporting purposes." This statement includes not only accounting principles and practices but also the methods of applying them, or when choosing from among two or more generally accepted accounting principles, such as two amortization/depreciation methods, alternative methods of revenue recognition under long-term contracts, or alternative inventory pricing methods.

The above change did not entail a choice of a new generally accepted accounting principle different from the one previously applied. Rather, it represented a change to correct an inconsistency in prior application. It therefore **should not be considered a change in accounting principle.**

***Is it a Change in Accounting Estimate?***

A change in accounting estimate is due to the occurrence of new events, as more experience is acquired, or as additional information is obtained. Paragraph 11 of APB 20 highlights a change in estimate affected by a change in accounting principle. "Changes of this type are often related to the continuing process of obtaining additional information and revising estimates and are therefore considered as changes in estimates for purposes of applying this Opinion."

The change in the way Fannie Mae used to account for the premium at inception did not result from the occurrence of new events or as more experience was acquired or as additional information was obtained. It was based upon an apparent realization that the prior methodology was causing incorrect financial statement results. It therefore **cannot be considered a change in estimate.**

***Is it an Error in Financial Statements?***

Paragraph 13 of APB 20 states "Errors in financial statements result from mathematical mistakes, mistakes in the application of accounting principles, or oversight or misuse of facts that existed at the time the financial statements were prepared. In contrast, a change in accounting estimate results from new information or subsequent developments and accordingly from better insight or improved judgment."

In OFHEO's view, Fannie Mae's change in methodology resulted from a previous oversight or an inconsistent application of accounting principles. Fannie Mae's old methodology resulted in amounts recorded in AOCI when no corresponding change had occurred in the forecasted hedged item, which is clearly inconsistent with the cash flow hedge accounting provisions of SFAS 133. The offset to the error in AOCI is a misstatement in option premium expense. Therefore, the above change should have been **treated as a correction of an error**, resulting in the correction and re-statement of prior periods' financial statements.

***Fannie Mae's interpretation of the relevance of APB 20***

Fannie Mae treated the above change to be similar to that of a change in a method of amortization as discussed under paragraph 23 of APB 20. They accounted for the change in accordance with the guidance in paragraph 24 of APB 20, which relates to a new method of amortization applied to newly acquired assets. Paragraph 24 states that the Enterprise should use the new method "for all additional new assets of the same class but continue to use the previous method for existing balances of previously recorded assets of that class. For that type of change in accounting principle, there is no adjustment of the type outlined in paragraphs 19-22[312], but a description of the nature of the change in method and its effect on income before extraordinary items and net income of the period of the change, together with the related per share amounts, should be disclosed."

The excerpt below from Fannie Mae's 2002 10-K sets forth Fannie Mae's disclosure of the change in methodology.

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

[312] These paragraphs discuss the recording of a cumulative effect of a change in accounting principle, the disclosure of pro-forma effects of retroactive application, and a change in depreciation method for previously recorded assets.

***Reporting a Correction of an Error***
Reporting a correction of an error in the financial statements of a prior period discovered subsequent to their issuance should be reported as a prior period adjustment (paragraph 36 of APB 20). In addition, APB 9, *Reporting the Results of Operations*, states "when comparative statements are presented, corresponding adjustments should be made of the amounts of net income (and the components thereof) and retained earnings balances (as well as of other affected balances) for all of the periods reported therein, to reflect the retroactive application of the prior period adjustments."

**Implications**
The implications of treating the above change prospectively as a change in accounting rather than a correction of an error is that the earnings and OCI amounts have been misstated for the years 2001, 2002 and likely for 2003 and possibly later periods depending upon the original maturity of the cap contracts and the future periods to which the inception intrinsic value relates.

The table below has been extracted from a memorandum from Jonathan Boyles and provides some indication of the potential dollar impact. [313] However, OFHEO contends it does not provide one with an accurate measure of the quarterly impact on earnings or AOCI.

| | | New Methodology | | Old Methodology | |
|---|---|---|---|---|---|
| Purchase Period | Purchase Premium* | Intrinsic Value* | Time Value* | Intrinsic Value* | Time Value* |
| *2001* | 248.0 | 128.7 | 119.3 | 0 | 248.0 |
| *2002* | 1055.0 | 544.0 | 511.0 | 0 | 1055.0 |
| *2002: Q4*** | 489.7 | 257.8 | 231.8 | 0 | 489.7 |

* *All figures in millions of dollars*
*** The New methodology was first implemented in Q4, 2002.*

Using the 2002 information presented above for discussion purposes, it appears that options were purchased prior to the fourth quarter for an initial premium of $565.3 million ($1,055 million less $489.7 million). [314] Based on the amounts listed under the column titled New Methodology, approximately $286.2 million ($544 million - $257.8 million) should have been recorded as intrinsic value and $279.2 million ($511 million - $231.8 million) should have been recorded as time value during the first three quarters of 2002. This means that when applying the Old Methodology, option premium expense was overstated by $286.2 million in the quarters when these options were purchased, and accumulated AOCI gains/losses were overstated/understated by the same amount. Interest expense would also be understated in the future periods to which the inception intrinsic value relates. The specific periods affected would need to be determined based upon the terms of the individual cap contracts.

[313] Memorandum from Jonathan Boyles to File with Distribution, Subject: Proposal to Change Fair Value Estimate of IV/TV Decompositions for Caps, January 29, 2003, FMSE 055014-055016. The table is on page 3 of the document (FMSE 055016).
[314] As stated in the table, the new methodology was implemented starting in the fourth quarter of 2002.

Additionally, Fannie Mae's 10-K describes the change as a prospective change to a "preferred method" [315] of accounting. However, in a memorandum written by Jonathan Boyles in 2003,[316] he refers to the matter as an inconsistency in approaches. Mr. Boyles reference to the inconsistencies in the memorandum has not been disclosed in the 10-K. In fact, the disclosure discusses a refinement in methodology[317] and makes no reference to the inconsistent application of methods, which OFHEO believes represents an accounting error.

***The above analysis and discussion show that Fannie Mae has incorrectly accounted for and reported a correction of an error in its financial statements.*** This is yet another example of how Fannie Mae has corrected errors in their accounting for derivatives only on a prospective basis. The impact on specific periods is unclear. Further detailed information and detailed instrument-by-instrument analysis will be required to make a precise determination of the complete financial statement impact on all periods affected.

[315] Fannie Mae December 31, 2002 annual report on form 10-K, Notes to Financial Statements, Summary of Significant Accounting Policies, Derivative Instruments and Hedging Activities, p. 113.

[316] Memorandum from Jonathan Boyles to File with Distribution, Subject: Proposal to Change Fair Value Estimate of IV/TV Decompositions for Caps, January 29, 2003, FMSE 055014-055016, in which Mr. Boyles stated, "As the dollar amount of our cap purchases has grown over time, this inconsistency in approaches has led to growing differences in our decomposition of IV/TV."

[317] Fannie Mae December 31, 2002 annual report on form 10-K, Notes to Financial Statements, Summary of Significant Accounting Policies, p. 113, states, "During the fourth quarter of 2002, we refined our methodology for estimating the initial time value of interest rate caps at the date of purchase and prospectively adopted a preferred method that resulted in a $282 million pre-tax reduction in purchased options expense and increased our diluted earnings per share for 2002 by $.18."

### *Issue 5: Hedge Accounting Documentation Issues*

The importance of designation, documentation and risk management is emphasized by the FASB in the basis for conclusions of SFAS 133. Paragraph 385 states:

> The Board decided that concurrent designation and documentation of a hedge is critical; without it, an entity could retroactively identify a hedged item, a hedged transaction, or a method of measuring effectiveness to achieve a desired accounting result. The Board also decided that identifying the nature of the risk being hedged and using a hedging derivative consistent with an entity's established policy for risk management are essential components of risk management and are necessary to add verifiability to the hedge accounting model.

The designation and documentation requirements were acknowledged by Franklin Raines in "Answers from the CEO," [318] in which he stated:

> The hedge accounting treatment for each individual transaction is determined -- and documented in writing -- before we enter into the transaction. And it cannot subsequently be changed.
>
> *—Franklin Raines, Answers from the CEO*

**Background**

SFAS 133, paragraphs 20(a) and 28(a) for fair value and cash flow hedges respectively, require an entity to document at inception of the hedge the following:

(1) management objective and strategy for entering into the hedge;
(2) identification of the hedging instrument;
(3) the risk being hedged; and
(4) how hedge effectiveness will be assessed.

In addition to the above criteria, paragraph 28(a) (2) of SFAS 133, which applies to cash flow hedges, goes on to state that the level of detail that must be documented at the inception of the hedge regarding identification of the forecasted transaction must be "with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction."

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[318] Fannie Mae website, Answers from the CEO. Fannie Mae describes this section of its website as follows, "This section of our Web site is designed to help visitors better understand the company's approach to the issues we face. As part of our continuing effort to be best-in-class in corporate governance and transparency, Chairman and Chief Executive Officer Franklin D. Raines is committed to answering investors' most frequent questions about Fannie Mae's business. This section provides plain talk about how we operate to provide liquidity to the homeownership markets." The answer shown is in response to the following question, "Why do you have confidence that you have done your derivatives accounting properly?"
http://www.fanniemae.com/ceoanswers/derivativesaccounting.jhtml

Fannie Mae's documentation of a hedge relationship in support of hedge accounting for transactions entered into by the Long Term Funding Desk includes the following:[319]

- Termsheets describing the hedging instrument and the hedged item
- The linkage of the derivative with the hedged item (as reflected in the "DEBTS" system)
- The transaction descriptions for permitted hedging strategies in the DAG

Termsheets are produced at the time a derivative is entered into the system. The termsheets identify if the hedge relationship qualifies for hedge accounting. Additionally, when the derivative qualifies for hedge accounting, the termsheet identifies the hedged item, the hedging relationship, the type of hedge and how effectiveness will be measured. The DAG indicates that the termsheet forms the initial hedge designation documentation for derivatives entered into by the Long-term Funding Desk. The linkage in the DEBTS system associates the derivative with the hedged item. The transaction descriptions in the DAG attempts to include all potential hedging strategies that Fannie Mae may enter into and describes the accounting that should be followed for each such strategy.

Katarina Skladony, a Senior Financial Analyst in Fannie Mae's Treasury Middle Office, is responsible for ensuring that the derivatives and hedged item are properly linked to a hedged item within DEBTS. The termsheets, which are generated once the derivative is entered into and verified by the back office, serve as the initial documentation of the hedge relationship.[320] OFHEO understands there is no reconciliation performed between the termsheet and the ultimate hedge linkage in DEBTS. Ms. Skladony also indicated that the final determination of the nature of the hedging relationship (fair value or cash flow) and the hedged item is made by the Controller's Financial Accounting group and not by Treasury Middle Office.[321] The ability for

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[319] OFHEO interview, Jonathan Boyles, Senior Vice President of Accounting Standards and Corporate Tax, August 24, 2004, p. 138, where he stated that: "We have viewed, for our documentation, we have viewed a combination of termsheets, our accounting policy manual, and the transcription in our systems linkages in combination as all of the documentation, so you can look at those, and you'll see what the linked items are, you'll see what the accounting is, you'll see if the risk is being hedged, you'll see the terms matching pieces in there."

[320] OFHEO interview, Katarina Skladony, Senior Financial Analyst – Treasury Middle Office, August 26, 2004, p.10, where she stated that, "[…]the back office verifies the securities and produces the initial term sheet that includes the hedge designation. The back office then distributes this documentation to the Controllers[…].

[321] OFHEO interview, Katarina Skladony, Senior Financial Analyst – Treasury Middle Office, August 26, 2004, pp. 78-79
Q: …Is that the normal process that Controllers make the decision whether it's a cash flow hedge or a fair value hedge?
A: Correct.
Q: In all instances?
A: Correct.
Q: And how often do they do that?
A: They do it on monthly basis when we pass them on, all the relinkage files. […]
Q: Up until when Controllers make that determination that it's a cash flow hedge or a fair value hedge, is there no determination whether it's a cash flow hedge or a fair value hedge?
A: When the dynamic links are created, the determination is not made what type of hedge it is. That is determined by Controllers FAS 133 system from when that information is passed to that system. […]
Q: Does Controllers also make the determination that the trade is DNQ?
A: Correct.

Accounting to change the ultimate treatment of a hedge's designation is not consistent with the standard's requirements for concurrent designation and documentation noted above.

The Financial Accounting Group is the business owner of the FAS 133 (accounting) system and is responsible for recording accounting entries relating to the system. Ms. Mona Patel, Senior Project Manager – Financial Accounting Group, indicated that the FAS 133 system receives information from DEBTS on a daily basis. A program is run in the FAS 133 system at the end of the month to determine the hedge classification (cash flow hedge or fair value hedge) based on the terms of the derivatives received from DEBTS. There is no reconciliation between the hedge classification as determined on the term sheet and that in the FAS 133 system.

If there is a change in linkage in DEBTS, the hedge classification may change. Based on the interview with Ms. Patel, if the hedge classification changes for a particular derivative from the prior month, the FAS 133 system assumes that the change in hedge classification is effective from the start of the month even though the linkage may have changed on the last day of the month.[322] As part of the month-end FAS 133 accounting process and prior to posting of journal entries, the Financial Accounting Group runs an exception report which identifies all derivatives that do not qualify for hedge accounting. This report is sent to Treasury who will review the report and evaluate whether any changes should be made to the linkages. Treasury advises the Financial Accounting Group of changes to linkages as a result of those derivatives that are on the exception list which may qualify for hedge accounting. These retroactive changes in linkages are inconsistent with the contemporaneous documentation requirements of SFAS 133.

**Summary of Issues**

There are several instances where OFHEO believes the hedge documentation is inadequate and does not meet requirements of SFAS 133 to qualify for hedge accounting. The inadequacies are categorized as follows:

- Ambiguity of hedging relationship
- Hedged risk not properly defined
- Hedged item not specifically identified in certain fair value hedges
- No termsheet produced for re-linkages
- Designation not contemporaneous
- Unclear definition and probability of hedged transaction in cash flow hedges
- Retroactive linkage of hedging instruments with hedged items

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[322] OFHEO interview, Mona Patel, Senior Project Manager – Financial Accounting Group, September 8, 2004, pp. 52-53
Q: So, what would be the entry that you would pose [sic] for the entire month?
A: Okay. The system would pose [sic] prior month as a cash flow hedge, so it would book the market value over to either a gain or a loss on the balance sheet as derivatives in a gain or a loss, and the offset would be to OCI, other comprehensive income. Next month, that swap is a fair value hedge so the system would report again the derivatives in a gain or loss, and it would also record--it would also adjust the debt basis. So, the derivatives would be recorded as a gain or loss and offset to the P&L, and you would also adjust your debt basis offset to the P&L.
Q: So, would it be for the entire change in fair value from the first of the month of the month through June 30th in the swap value and in the debt or the hedged item value debt for the entire month, even though the link changed only mid-month.
A: Yes.

***Ambiguity of hedging relationship***
In our review of termsheets generated by DEBTS we noted that certain termsheets contained ambiguous hedge designation language. For instance, in some cases the term sheet designates the same derivative as both a cash flow and a fair value hedge. An example of this is in a term-out transaction similar to the one described under Issue 2: Derivative Re-Designations.[323] In such situations, OFHEO noted term sheets that described a debt swap[324] as a fair value hedge of the MTN issued at the beginning of period B, and also a cash flow hedge (in combination with swap #1) of the forecasted issuance of DN's in period C. Such a dual designation is not permitted under SFAS 133, which requires specific identification of the hedged item at the inception of the hedging relationship.

OFHEO understands that the linkage between the hedged item and the hedging instrument in the DEBTS system is done through an automated process whereby the system "finds" a combination of derivatives and debt instruments that can be linked together in a hedging relationship. In the term-out example, the ambiguous documentation would allow DEBTS to assign the debt swap to either a fair value or a cash flow hedge relationship and still appear to be consistent with the hedge designation on the term sheet. It also appears that this ambiguous designation approach would allow linkages between derivatives and hedged items to be changed after the fact and still appear to be "consistent" with the original designation documentation.

***Hedged risk is not accurately defined***
In instances involving option products, OFHEO has noted the hedge documentation does not appropriately identify the hedged risk. For example, as discussed earlier in relation to hedges using receive-fixed swaptions, the termsheets describe the strategy as one that synthetically converts fixed rate debt to floating, and the hedged risk as changes in fair value of the debt attributable to the benchmark interest rate. However in reality, Fannie Mae is only protected against changes in fair value due to a decline in interest rates below a certain level, and the fixed rate debt is only synthetically converted to floating rate if and when the swaption is exercised. In these cases, the documentation fails to properly identify the hedged risk as required to receive hedge accounting under SFAS 133. Similar deficiencies in documentation of the hedged risk exist for strategies involving pay-fixed swaptions and callable swaps

***Hedged item not specifically identified in certain fair value hedges***
OFHEO also noted that when Fannie Mae uses receive-fixed swaptions in fair value hedges of fixed rate debt, its policy is not to identify the debt instrument being hedged until the option becomes "in-the-money." This approach is not consistent with the requirement in paragraph 21(a) of SFAS 133 that the hedged item be "specifically identified as either all or a specific portion of a recognized asset or liability or of an unrecognized firm commitment." It also appears inconsistent with Fannie Mae's assertion of perfect effectiveness for such transactions, since it is impossible to make such a determination without identifying the terms of the hedged item.

[323] Referred to as "Term-out transaction #2" in the DAG. FMSE 112990-112991.
[324] For purposes of this report, a debt swap is defined as a receive-fixed swap.

***Absence of termsheets for re-linkage***
Fannie Mae regularly "re-links" its derivatives and hedged items, which often represents the designation of a new hedge relationship prospectively under SFAS 133. When derivatives are re-linked in this manner there is no termsheet created to document the new hedge relationship that has been established. Since re-linking derivatives is a recurring practice at Fannie Mae, and the DAG indicates that termsheets serve as a primary hedge designation document, OFHEO believes that a significant number of hedge relationships may not have the appropriate documentation to qualify for hedge accounting under SFAS 133.

***Designation not contemporaneous***
As mentioned above, it appears that the final determination of the hedge relationship is made by the Controller's Department upon review of information populated in the SFAS 133 system from DEBTS. This information is updated approximately monthly. This seems to indicate that the hedge relationship is not final and is potentially subject to change until reviewed by the Controllers group. This would appear to be inconsistent with the contemporaneous designation requirements of SFAS 133. Additionally, no termsheets are produced at the time of relinkage and the only hedge documentation that is available is the linkage in the DEBTS system. The absence of a termsheet could allow Fannie Mae to make retroactive changes to the linkages in DEBTS without any audit trail of changes.

Additionally, Fannie Mae's DAG and operating practices allow them seven days to identify and document the hedged item. This practice is inconsistent with the requirements of contemporaneous hedge documentation. To illustrate the practices followed by Fannie Mae, the following is an excerpt from an email from Paul Salfi, Director of the Financial Standards Group, to Jonathan Boyles discussing the fact that Fannie Mae has seven days to document a hedge relationship.[325] It states the following:

> We have a situation where Treasurer's wants to override automated linkages of DNQ basis swaps to PF swaps to avoid long haul on the combination. Instead, they want to keep the basis swaps DNQ and the PF swaps with termouts such that the combination is perfectly effective. The questions are when is the effective date of the original linkages of basis swaps and PF swaps and do we give them a grace period of 7 days to correct the error.
>
> Below are my thoughts on what the guidance should be that I wanted to run by you:
>
> Since my understanding is that our policy has been to link derivatives within 7 days of settlement to attempt to get hedge accounting for the derivative, we have seven days from the reset dates of the PF swaps to correct the error made by DEBTS. My understanding is that DEBTS linked basis swaps that

[325] Email from Paul Salfi to Jonathan Boyles, copy to Ilan Sussan, Subject: Re: 315SWD441_linkage_analysis.xls – Please approve link changes, April 21, 2004, produced via CD 8/11/04 in Box M. This email is the 3rd in a chain of emails. The most recent email (on top) is an email from Paul Salfi to Jonathan Boyles, April 22, 2004, subject: same as above.

> were DNQ to PF swaps effective on the PF reset dates below, but that we did not want this linkage.
>
> If we correct the linkages within 7 days of the PF reset dates below, we would honor the new designations not the ones on 4/12 to be effective beginning on the PF reset dates below. The PF swaps had adequate funding through the PF reset dates below, so the PF reset dates below are considered to be the effective date of the original designations as this the beginning point from which the PF swaps needed to get hedge accounting. The basis swaps would be DNQ under the new designations.

***Unclear definition and probability of hedged transaction in cash flow hedges***

A number of Fannie Mae's hedging strategies represent cash flow hedges relating to interest rate risk associated with existing and forecasted issuance of DNs. In many situations, DNs are subsequently replaced ("termed-out") with other forms of borrowings, such as fixed or floating rate MTNs. Fannie Mae's DAG contemplates the occurrence of term-outs by virtue of the transaction descriptions contained therein, many of which are examples of various forms of term-outs. When a term-out occurs, Fannie Mae's practice is to continue to retain any accumulated hedge gains or losses in AOCI because future interest payments are still expected to occur.[326] The nature of Fannie Mae's funding and hedging strategy and in particular the regular occurrence of term-outs have certain implications regarding hedge accounting under SFAS 133, namely:

- How the hedged transaction has been defined in the designation documentation -- specifically whether such designation is made "broadly" to encompass interest payments generally on a portfolio that consists of DNs as well as instruments that may subsequently replace them, or whether the designation is "specific" to DNs only;
- Whether the hedged transaction (as defined) is deemed probable of occurring which is a requirement to qualify for cash flow hedge accounting both at inception and on an ongoing basis; and
- Whether a term-out or similar transaction indicates that the hedged transaction (as defined) is deemed "probable of not occurring" which would mean that: a) any amounts accumulated in AOCI should be reclassified into earnings; and b) the ability to apply hedge accounting to similar hedge relationships would be called into question.

The implications of these issues are summarized in the following endnote excerpt from DIG Issue G13 *Cash Flow Hedges: Hedging the Variable Interest Payments on a Group of Floating-Rate Interest-Bearing Loans ("DIG Issue G13"):*

> How the hedged forecasted transaction is designated and documented in a cash flow hedge is critically important in determining whether it is probable that the hedged forecasted transaction will occur. In the cash flow hedge in Example 8, **had the hedged forecasted transaction been narrowly**

[326] Even though the DNs are no longer issued, they have been replaced with another interest-bearing debt instrument. This treatment is pursuant to Example 8, Scenario 2 in SFAS 133, and in particular, paragraph 160.



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> **limited to the interest payments on specific future debt issuances rather than on the five-year borrowing program** [Emphasis added], the failure to engage in those future debt issuances would cause the related derivative net gain or loss in OCI to be immediately reclassified into earnings pursuant to paragraph 33 because it would have been probable that the hedged forecasted transactions would not occur. Furthermore, that failure, if part of a pattern of having hedged forecasted transactions cease being probable of occurring, would call into question both an entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions, pursuant to paragraph 494.

The accounting treatment applied by Fannie Mae, as well as the transaction examples documented as part of its DAG, appear to imply an approach of "broad" designation to future interest payments, rather than a specific or narrow designation to interest on DNs only. However, OFHEO has observed the following elements of Fannie Mae's hedge accounting documentation and approach that appear to be inconsistent with an approach of broad designation:

- Term sheets representing the inception hedge designation documentation refer specifically to DNs and ***not*** a broad designation to include interest payments on other borrowings, such as MTNs, resulting from a term-out.
- Within DEBTS, derivatives are "linked" to ***specific*** DNs for purposes of designating the relationship and matching of terms (and in most cases, for asserting perfect effectiveness). This is ***inconsistent*** with a broad designation scheme. OFHEO understands that when broad designation approaches are used for hedging of short-term borrowings, standard industry practice is that matched terms or "short-cut" like approaches are not used. Instead, effectiveness is assessed and measured based on the derivatives' relationship with the reset and other characteristics of the entire portfolio (or portion thereof being hedged) and not based on specific debt instruments.

This ambiguity in Fannie Mae's documentation has serious implications for its cash flow hedge accounting associated with DNs. If the assertion is made that a narrow designation scheme is being used, the occurrence of term-outs would require that amounts accumulated in AOCI be reclassified to earnings when the term-out occurs, and would call into question the ability to apply cash flow hedge accounting to such transactions in the future due to the frequency of term-outs. Conversely, if the assertion is made that a broad designation scheme is used, the treatment of hedges as perfectly effective based on matching to specific DN issuances would be invalid and would disqualify hedge accounting due to the lack of an appropriate assessment of effectiveness.

Furthermore, Fannie Mae's DAG and related documentation do not appear to explicitly address the matter of probability of forecasted transactions (irrespective of whether they have been defined in a broad or specific manner). Because forecasted transactions must be deemed probable to qualify for cash flow hedge accounting, an analysis should be performed and periodically updated to support this assertion, based on factors such as business plans, forecasted growth of the mortgage and debt portfolios, sources of future funding, etc. Based on

the information obtained and reviewed by OFHEO, it is unclear how Fannie Mae has addressed this requirement.

***Retroactive linkage of hedging instruments with hedged items***

Through the special examination of Fannie Mae, OFHEO has noted instances in which Fannie Mae has retroactively re-linked a hedging instrument to a hedged item in order to qualify for special hedged accounting treatment. Retroactive re-linkage to obtain special hedge accounting is not permitted by SFAS 133. The retroactive linkages appear to have occurred for several reasons including:

- re-linking a derivative to a different hedged item due to a failed correlation analysis with the original hedged item,
- re-linking a derivative to an eligible hedged item due to an erroneous system linkage to an ineligible hedged item, and
- re-linking a derivative to a different hedged item at the request of the front office in order to achieve the trader's original intent.

In the March 31, 2003 Derivatives Controls Audit, the Fannie Mae Office of Audit conclusion recommended that the controls over the re-linkage of derivatives to debt and other derivatives needed to be clarified.[327] In the report it stated:

> This may occur when the hedged debt is called or when a derivative is termed-out. We noted that procedures for re-linking derivatives are not well documented, and review and approvals are not robust.
>
> Specifically, we noted that the Hedge Accounting guidelines do not address the process for linkages and type [sic] types of re-linkages allowed. We noted one instance in which a derivative was re-linked to a debt instrument retroactively to reduce the amount of hedge ineffectiveness at month end. Although the financial statement impact was minimal, retroactive re-linkages do not conform to FAS 133 requirements.

As a response, a memorandum was drafted in October of 2003 by the Financial Accounting Standards group outlining Fannie Mae's procedures with respect to the manual re-linking of term-outs.[328] However, the memorandum did not address retroactive linkages or re-linkages. In an interview with Katarina Skladony in which retroactive re-linkages were addressed, the witnesses testified that situations in which retroactive re-linkages were made were rare[329]. The

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[327] Derivatives Controls Audit Report, Office of Auditing, March 31, 2003, Paul Jackson, Audit Director, FMSE 102385-102391.

[328] Memorandum written by Paul Salfi to File with Distribution, Subject: Manual ReLinking of Termouts: Procedures, Documentation, and Examples, October 15, 2003, FMSE 027422-027426.

[329] OFHEO interview, Katarina Skladony, Senior Financial Analysis-Treasury Middle Office, August 26, 2004, p. 23

A: In this case, a trader asked me to find out whether such an option even exists. It's not a standard rule that in all the circumstances we always go and make change for the system. We determine, you know, whether such a change is appropriate in the first place, and if it's not appropriate, then we don't make a change.

Q: How often does something this happen?

A: It does not happen often. I think that this would be a fairly rare situation.

following emails were identified by OFHEO during its examination, of instances in which retroactive re-linkages have occurred at Fannie Mae.

In an email dated 1/6/2004 from Katarina Skladony to Mona Patel and copying several individuals in Treasury Middle Office, Front Office and Financial Reporting, Ms. Skladony makes a retroactive re-linkage per the request of a trader from the front office.[330] The email states:

> Enclosed spreadsheet shows the proposed linkage changes in order to bring the termout linkages in line the [sic] trader's intent at the time of buyback. I highlighted in yellow the linkages that need to be reversed and restored. In addition, I typed in blue all additional linkages that need to be broken.

In the same chain of emails, a message on the same day from Linda Knight to several individuals including Laura Simmons, Donald Sinclair and Katarina Skladony, Ms. Knight stated:[331]

> I just spoke to Janet Pennewell who confirmed the guidance from yesterday. Controllers just finished meeting with Peat who concurs with this guidance. We can go ahead and change linkages to the traders intent at the time of the buyback. That means we can establish the links that were intended from Don Sinclair's spreadsheet on 12/16…Finally, Peat confirmed that we cannot change the spreadsheet so we cannot adjust anything related to spreadsheet mistakes…

The excerpt above illustrates that Fannie Mae had treated the front office documentation created by Donald Sinclair (the spreadsheet referred above) as hedge designation documentation in an effort to correct an accounting linkage error. As mentioned earlier, per Jonathan Boyles, Fannie Mae's hedge designation documentation consists of "a combination of termsheets, our accounting policy manual, and the transcription in our systems linkages...". [332]

Also as noted earlier, termsheets are not prepared for documentation of re-linkages and there is no other formally established means for hedge designation upon a re-linkage. This makes a retroactive re-linkage such as the one described above questionable since there is no formal document that can be referred to as the proper source of hedge designation. Instead, Fannie Mae made the designation based on a spreadsheet that was represented as the "trader's intent." Had there been a termsheet in place to establish the re-linkage, such document would presumably have represented the trader's intent and there would be no question about the proper course of action. Absent a formal document used for designation of the hedge relationship upon a re-linkage, the ability exists to retroactively change designations in order to

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[330] Email from Katarina Skladony to Laura Simmons, Donald Sinclair with a copy to Mona Patel, January 6, 2004, Subject: Corrected Termout Linkages due to 12/18/03 Buyback – PLS APPROVE, produced via CD 8/11/04 in M box.

[331] Email from Linda Knight to Laura Simmons, David Benson, Donald Sinclair, Ursula Schaefer, Nadine Bates, Katarina Skladony; Copes to Janet Pennewell and Peter Niculescu, January 1, 2004, Subject: Buybacks, produced via CD 8/11/04 in M box.

[332] OFHEO interview, Jonathan Boyles, Senior Vice President – Financial Standards and Corporate Tax, August 24, 2004, p.138.

achieve a desired accounting result. This is not permitted under SFAS 133. Paragraph 385 of SFAS 133 states:

> The Board decided that concurrent designation and documentation of a hedge is critical; without it, **an entity could retroactively identify a hedged item, a hedged transaction, or a method of measuring effectiveness to achieve a desired accounting result**… [Emphasis added.]

In a 2001 email from Katarina Skladony to Mona Patel, Ms. Skladony stated:

> Please note that I am going to make the below manual change in linkage for 313SWI540. The 50M link 313SWI540 – 313SWD758 was qualified for long haul method. However, in the process of effectiveness calculation Don had a problem to reach 80-120% correlation range and asked me to seek alternative linkage to 313SWI540. I found 313SWD979 reset determination dates of which and 313SWI540 meet the 7 day window requirement and thus qualify for the short cut method."[333]

This above excerpt illustrates that retroactive re-linking was being applied to hedges in order to achieve hedge accounting treatment in situations in which the hedge effectiveness criteria (through a correlation analysis) was not met. This is clearly an example of retroactive designation in order to achieve a desired accounting result and is not permitted under SFAS 133 per the reference above.

**Implications**

The numerous documentation issues described above appear to have serious implications for Fannie Mae's hedge accounting. Many of these matters relate to routine, commonly occurring transactions at Fannie Mae. Under SFAS 133, the lack of adequate, contemporaneous hedge designation documentation precludes a company from qualifying for hedge accounting. This has been reiterated by the SEC staff.[334] Failure to receive hedge accounting means the fair value changes for such derivatives should be recorded through the income statement without receiving any offset, or matching with, the earnings affect of the hedged item. Given the billions of dollars of mark-to-market value of Fannie Mae's derivatives and the fact that the vast majority of them are currently receiving hedge accounting, the potential impact of these documentation issues on Fannie Mae's reported financial results and regulatory capital appears to be substantial.

[333] Email from Katarina Skladony to Mona Patel and Prasad Chintamaneni with a copy to Donald Sinclair, March 5, 2001, Subject: 313SWI540 switch from long haul to short cut, FMSE 100488-100490.
[334] See reference to December 2003 speech of John James in background section of this report.

## ACCOUNTING OVERSIGHT

As part of the special examination of Fannie Mae, OFHEO reviewed the following four aspects of the Enterprise's financial reporting practices: (1) accounting policy development, (2) accounting policy review, (3) segregation of duties and (4) key person dependency. OFHEO concentrated examination efforts on evaluating the roles and responsibilities of the executives in the Controller's Department and the related controls that support the integrity of the financial reporting process. OFHEO believes that a lack of proper segregation of duties exists within Fannie Mae's Controller's Department which has created an environment that is not conducive for developing safe and sound financial reporting practices. AICPA Statement on Auditing Standards 1 (SAS 1) offers the following guidance on the responsibility of management for adopting sound accounting policies:

> Management has the responsibility for adopting sound accounting policies, for maintaining an adequate and effective system of accounts, for the safeguarding of assets, and for devising a system of internal control that will, among other things, help assure the production of proper financial statements. The transactions which should be reflected in the accounts and in the financial statements are matters within the direct knowledge and control of management. The auditor's knowledge of such transactions is limited to that acquired through his examination. Accordingly, the fairness of the representations made through financial statements is an implicit and integral part of management's responsibility. The independent auditor may make suggestions as to the form or content of financial statements or he may draft them in whole or in part, based on management's accounts and records. However, his responsibility for the statements he has examined confined to the expression of his opinion on them. The financial statements remain the representations of management.[335]

Fannie Mae, accounting policy recommendations are the responsibility of Jonathan Boyles. During testimony, Tim Howard explained that the accounting policy development process is such that the SVP for Financial Standards has the authority to recommend a specific policy, the Controller has the responsibility and authority for approving accounting policy, and the CFO has the general responsibility for the adopted accounting policies.[336] Based on evidence reviewed during the Special Examination, OFHEO believes that the accounting policy development process within the Controller's Department lends itself to the formation of accounting policies that are aggressive in nature and which do not comport with a strict interpretation of GAAP as promulgated by the Financial Accounting Standards Board (FASB).

In addition, OFHEO identified critical resource shortages and a lack of technical accounting expertise within the Controller's Department which resulted in key person dependencies.

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[335] American Institute of Certified Public Accountants (AICPA) 2002 *Codification of Auditing Standards and Procedures,* Statement of Auditing Standards No. 1, Section 110.02. New York, NY: AICPA.

[336] OFHEO Interview, Mr. Tim Howard, August 5, 2004, p. 21

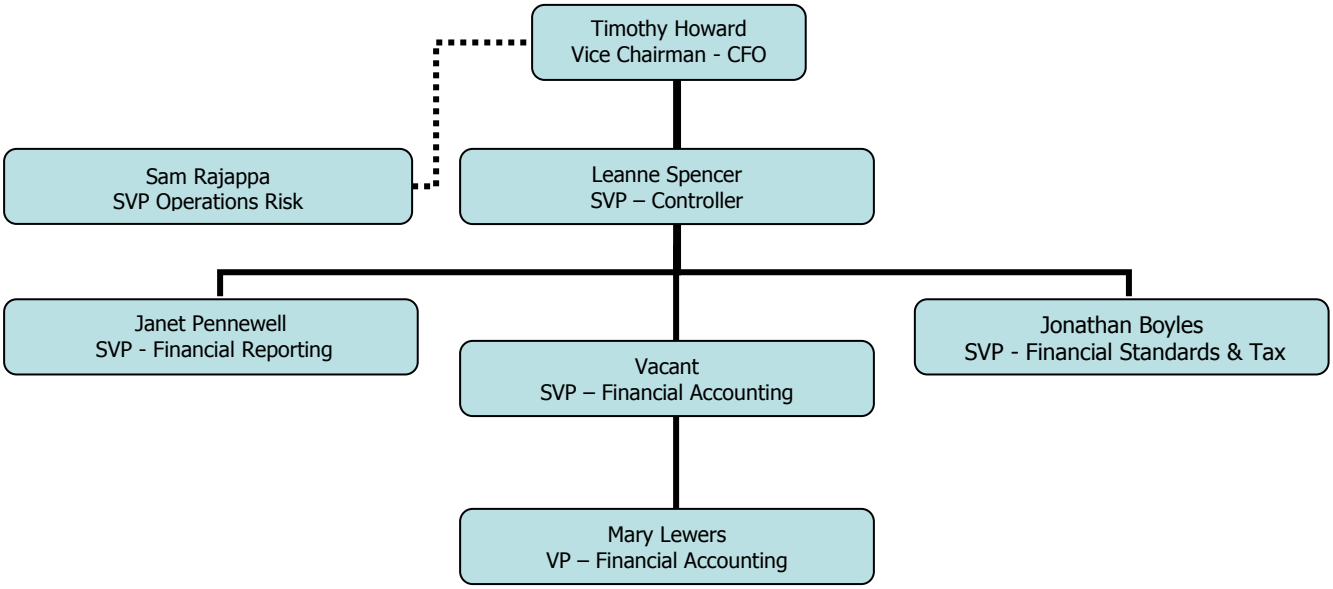
Q: Who has the authority for formulating accounting policy at Fannie Mae?

A: Jonathan [Boyles] has the authority for recommending a specific accounting policy. Leanne [Spencer] has line responsibility for what policy is actually adopted. And I have general responsibility for ensuring that the process works well and produces a quality result.

OFHEO believes that these weaknesses resulted in an environment that impeded independent thinking and encouraged an inadequate level of policy and procedure development and documentation. A basic component of good corporate risk oversight is a sound internal control environment supported by a prudent system of "checks and balances" between the risk taking and control functions of an organization. Necessary components of this are both an independent risk management and audit function. Also, those responsible for the transacting or risk-taking business should not responsible for the settlements, financial reporting or recording of the transactions into the Enterprise's books and records. [337]

### *Accounting Policy Development*

The financial reporting responsibilities at Fannie Mae reside in the Controller's Department and ultimate responsibility for certification of the financial statements lies with Franklin Raines, Chairman of the Board and Chief Executive Officer (CEO), Tim Howard, Vice Chairman and Chief Financial Officer (CFO) and Leanne Spencer, Senior Vice President and Controller. The Controller's Department, relative to the areas under review, is organized as follows:




Fannie Mae's accounting policy development process begins in the Financial Standards group under the purview of Jonathan Boyles. Financial Standards has the corporate responsibility to recommend accounting policy for Fannie Mae. Jonathan Boyles explained that new accounting policies originate primarily from two sources. First, the Financial Standards group follows new accounting rules as they develop at the FASB, EITF and SEC. If it is determined that the new standards will have an impact on Fannie Mae's business, then Financial Standards will draft accounting policy for recommendation to the Controller. Secondly, the Financial Standards group receives requests from the business units to review new and/or proposed business products developed at Fannie Mae, and Financial Standards will develop accounting policy for

[337] Group of Thirty, Enhancing Public Confidence in Financial Reporting, Washington DC, 2003, p. 14. "Financial control and risk management must be fully independent of the risk taking side."

recommendation to the Controller. The Controller is then responsible for reviewing the proposed policies for compliance with GAAP and ensuring that the financial accounting practices implemented are done so in a safe and sound manner.

During the Special Examination, OFHEO found no evidence of formal written procedures which govern the development of accounting policy at Fannie Mae. In fact, when questioned about documentation of the accounting policy development procedures, Jonathan Boyles indicated that he was not aware if any existed:

> Q: Jonathan, is there a formal procedure for that to take place?
> A: I'm not sure what you mean by a formal procedure.
> Q: A formal procedure for the business unit to contact you.
> A: There's a policy that they're supposed to contact me.
> Q: Is that in writing anywhere?
> A: I don't know that it's in a policy manual out to people. I don't know that it's in writing or not.[338]

OFHEO believes that maintaining formal accounting policy development procedures is necessary to meet management's responsibility for adopting sound accounting policies and devising a system of internal control that will help assure the production of proper financial statements, as outlined in SAS 1. The lack of written policy development procedures results in a disorganized process and the improper development of Enterprise's policy.

In fact, OFHEO noted that the development of the *Purchase Premium and Discount Amortization Policy*, a critical accounting policy for the Enterprise, was directed by Mr. Tim Howard, with significant involvement by Ms. Leanne Spencer and other members of the Controller's Department. However, the policy was developed without input from the Financial Standards group. During testimony, Jonathan Boyles commented on Financial Standards' involvement in the policy as follows:

> Q: Are you familiar with this document [Purchase Premium and Discount Amortization Policy]?
> A: Yes.
> Q: Is this document a policy of the Enterprise for amortizing purchase premium and discount?
> A: I believe this policy, this document is a procedures document for amortization.
> Q: And would you describe this procedures document as being distinct from a policy document?
> A: Yes, I would. I would consider this two different things.
> Q: Now this is maintained outside of your accounting policy manual; correct?
> A: Correct.
> Q: Now did you approve this document?
> A: I don't recall approving this document.
> Q: Do you recall reviewing this document at the time that it was adopted?
> A: I don't recall reviewing this document at the time it was adopted.[339]

[338] OFHEO Interview, Jonathan Boyles, August 3, 2004, pp. 11-12.
[339] OFHEO Interview, Jonathan Boyles, August 24, 2004, pp. 7-8.

It should be noted that although during testimony Jonathan Boyles specifies that the document represents procedure rather than the Enterprise's policy, Fannie Mae provided the *Purchase Premium and Discount Amortization Policy* referenced above in response to an OFHEO subpoena requesting the Enterprise's accounting policies related to SFAS 91.

This occurrence highlights the disorganization that results when clearly defined policy development procedures are not in place. Moreover, upon review of the *Purchase Premium and Discount Amortization Policy*, Jonathan Boyles indicated that aspects of that policy do not comport with GAAP:

> Q: I'd like to refer you then to the last page or second page of this document [Purchase Premium and Discount Amortization Policy], FMSE 074524, and I wanted to specifically ask about two policy provisions.
> A: Uh-huh
> Q: And these policy provisions are both indicated in the last paragraph. Do you want to read that last paragraph again?...
> A: Okay.
> Q: The first sentence of this paragraph states: If our catch-up moves beyond one within two percent of combined portfolio net interest in guaranty fee income, we will book monthly "on-top" adjustments that bring us back to within the plus or minus one percent range within our three-year planning period. Is that a provision that you recollect discussing with the outside auditors, KPMG?
> A: I don't recall discussing that provision.
> Q: Is that a provision that you had approved at all?
> A: I don't recall approving it.
> Q: Okay. In your opinion is that provision permitted under Generally Accepted Accounting Principles?
> A: No, I don't believe that would be allowed.
> Q: Then there is, I'd like to direct your attention to the last sentence.
> A: Uh-huh
> Q: States that –I'm sorry—the last two sentences state: Should our catch-up ever exceed two percent of the combined portfolio interest and guaranty fee income, however, we will bring it back to within the one to two percent range within a six month period. After that time, we will continue our monthly "on-tops" to return the catch-up to the plus or minus one-year range within a three-year horizon. Is that policy provision—let me rephrase that. Do you recall having discussed that policy with the outside auditors?
> A: I don't recall discussing this second page with the outside auditors.
> Q: Okay.
> A: As I mentioned earlier, I was surprised when I saw it in April or May.
> Q: Would the policy—I'm sorry—would that provision in that paragraph, in your opinion, be in accordance with Generally Accepted Accounting Principles?
> A: No, I don't believe it would be. I don't believe anything on this—that I'm aware of—on the second page has ever been implemented in practice.[340]

[340] OFHEO Interview, Jonathan Boyles, August 24, 2004, pp. 11-13.



Special Examination of Fannie Mae
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OFHEO contends that the lack of formal policy development procedures within the Controller's Department resulted in the formation of accounting policies that are not consistent with GAAP.

During our examination, OFHEO identified other instances, related to the accounting policies for hedge accounting under SFAS 133, in which aspects of the policy did not comport with a strict compliance with GAAP. During testimony, Jonathan Boyles characterized these instances as "known departures from GAAP," and claimed that they represented a practical application of the accounting standards:

> Q: With respect to the overall approach and the concept of assuming no ineffectiveness, do you believe that there are situations in which Fannie Mae is applying that when it's not consistent with the guidance in FAS 133?
> A: We have several known departures from GAAP in our adoption of FAS 133. We have cleared those with our auditors. We have reported to our auditors on an annual basis the effect of those. And they were comfortable when we adopted them, and they were comfortable over the last several years when we reported the results of that work.
> Q: What were the reasons for you not applying GAAP in its strict conformity?
> A: As is relates to what?
> Q: As it relates to 133. You said there were several departures from GAAP.
> A: The purpose there was really twofold: one, we felt like in the case of the duration shortcut, we felt—if you think about duration, duration is a sensitivity of an instrument's –of the instrument to interest rates. And so, you know, FAS 133 built in the concept of a shortcut so you can match notionals and match maturities and repricing dates and assume no ineffectiveness when really a better economic hedge would be to match duration, not notionals. If somebody on the business side wanted to eliminate interest rate risk, they wouldn't necessarily match up notional or maturity. They would match up durations. Those durations would get you that. When we developed the duration shortcut, we felt like it was in the spirit of 133 while not exactly to the letter, and so we built that into our adoption of 133 because we felt like that was within the tenets of 133 of a match, and then on an annual basis, we would report back to our auditors and the management what the effect of – had we gone long haul on those transactions and not taken the duration shortcut, what that effect would have been on earnings.[…][341]

However, testimony of the CFO indicates that he was not apprised of these "known departures from GAAP" that existed within the Enterprise's accounting policies:

> Q: Do you believe that all elements of the Enterprise's accounting policies are consistent with Generally Accepted Accounting Principles?
> A: Yes, I do.
> Q: And would you have held that belief as well for the last several years?
> A: Yes.[342]
> Q: We understand from Jonathan Boyles' testimony that the company identified certain instances in which the company's accounting practices or policies depart from GAAP. Is that consistent with your understanding?
> A: No, It's not.

[341] OFHEO Interview, Jonathan Boyles, August 3, 2004, pp.64-65.
[342] OFHEO Interview, Timothy Howard, August 5, 2004, p.53.

> Q: And he's never informed you of instances where – that he would characterize as known departures from GAAP?
> A: I have not heard that term.[343]

In this instance, the lack of formal accounting policy development procedures has led to a breakdown in communication regarding the Enterprise's accounting policies compliance with regulatory standards. OFHEO noted that this instance is particularly egregious given the CFO's responsibility for certifying the financial statements with the SEC. The lack of communication between Financial Standards and the CFO is a result of the internal control weaknesses that result in the absence of written accounting policy development procedures.

Additionally, a review of evidence gathered during the Special Examination highlighted instances in which personnel within Financial Standards characterized aspects of the Enterprise's hedge accounting policies as being aggressive. In an email dated August 10, 2000 with the subject line, *Receiver Swaption + Bullet Swap = Cancelable Swap?*, a former Senior Project Manager within the Financial Standards group writes:

> "We could not analogize the combination of the bullet swap and the swaption to be treated like the cancelable swap and qualify for the shortcut method. As it is, using the cancelable swap under the shortcut method is very aggressive."[344]

In a subsequent email dated April 17, 2001 to several members of management, including Tim Howard and Leanne Spencer, with the subject line, *Recent FASB proposal on the time value of option*, Mr. Boyles writes:

> "Secondly, the accounting treatment we currently utilize for our received fixed swaptions is aggressive (we have KPMG's approval) and not one we would want to flash in front of the FASB for comment or the treatment could get worse."[345]

During testimony, the CFO expressed a level of awareness and tolerance for the aggressive nature of the Enterprise's accounting policies:

> Q: Has any company officer or employee ever informed you that the company's accounting policies or interpretation of accounting policies was aggressive?
> A: Certain policies, not in the plural but in the singular, have been described as such at various times. And again, I don't view that as alarming or inappropriate.[346]

However, based on evidence reviewed during the Special Examination, OFHEO believes that the Audit Committee of the Board of Directors was not apprised, at the time they were

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[343] OFHEO Interview, Timothy Howard, August 5, 2004, pp. 59-60.
[344] Email from Kimberly Stone, to Joseph Rosenberg, and cc to Jonathan Boyles, Donald Sinclair, Warren Fitzgibbon and Mary Lewers, dated August 10, 2000, Subject: Receiver Swaption + Bullet Swap = Cancelable Swap ?, FMSE 078731-078732.
[345] Email from Timothy Howard to Jonathan Boyles and cc to Leanne Spencer, Tom Lawler, Peter Niculescu, Linda Knight, Jayne Shontell, Janet Pennewell, Hal Gann, Mary Lewers, Richard Swick, Kimberly Stone, Richard Stawarz, dated April 17, 2001, Subject: Recent FASB proposal on the time value of options, FMSE 096460-096461.
[346] OFHEO Interview, Timothy Howard, August 5, 2004, pp. 49-50.

implemented into the Enterprise's accounting policies, of these "known departures from GAAP" and instances where the Enterprise adopted aggressive accounting policies. During testimony, when questioned regarding whether the accounting policies characterized as being aggressive were reported to the Audit Committee, Tim Howard responded as follows:

> Q: Has Jonathan Boyles ever informed you that the company's accounting policies or interpretation of accounting policy were aggressive?
> A: I'm almost certain he has, but I can't recall a specific instance.
> Q: Would you ever then inform the Audit Committee of the board of such an opinion held by your Financial Standards head?
> A: No, because again, I don't view the label aggressive accounting as being a bad thing. It is descriptive of relative positioning compared to the GAAP line. That's why I want to find out more about the specific incidents. And if it's uncomfortably close to the line, we will change it. It's not take it to the board. It's don't do it.
> Q: Have you ever informed the board or Audit Committee of the board of such an opinion held by your Financial Standards Department head?
> A: Not to my recollection.[347]

OFHEO believes that the control weaknesses identified in the accounting policy development process at Fannie Mae have allowed the formation of accounting policies that are aggressive in nature and which do not comport with GAAP. Additionally, OFHEO contends that the lack of formal policy development procedures has resulted in a breakdown in communication regarding the Enterprise's policies compliance with regulatory standards and less than full disclosure to the Audit Committee of the Board of Directors.

In addition to the weaknesses that exist within the control environment surrounding the accounting policy development process, evidence suggests that for the period under review, the Enterprise did not maintain a complete and updated database of accounting policies which could be easily accessed by Fannie Mae personnel. During testimony, the Controller asserted that the general structure for maintaining accounting policies at Fannie Mae is in the Financial Accounting Policy Guide, which is periodically updated and posted to the Enterprise's intranet. However, during the examination, OFHEO identified instances in which critical accounting policies were maintained outside of the designated online database for accounting policy and outside of the offline Financial Accounting Policy Guide. In order for the accounting policies to be effective, it is imperative that the business units who rely on the guidance to evaluate proper performance of business operations, have access to a complete accounting guide listing all of the Enterprise's accounting polices and procedures.

### *Accounting Policy Review*

The internal review of proposed accounting policies is performed by the Controller. During testimony, the CFO confirmed that it is ultimately the Controller's responsibility to decide which policies to approve and implement. The CFO further explained that he views the Controller's position as an "internal check" on the Financial Standards group.[348] During our examination,

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[347] OFHEO Interview, Timothy Howard, August 5, 2004, pp. 50-51.
[348] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 19-20

OFHEO noted that while the Controller has the responsibility for reviewing proposed accounting policies for compliance with GAAP, she is not a Certified Public Accountant (CPA). The accounting policy development process as currently practiced is circular as the Controller relies on the Financial Standards group to provide guidance on whether or not accounting policies conform to regulatory standards. The effective result of the process as described is that the Financial Standards group develops and also approves accounting policy.

Furthermore, during testimony, the CFO indicated that in situations where the Controller has a difference of opinion from the accounting policy recommendation developed by Financial Standards, the matter is brought to him for a final decision:

> Q: Since Jonathan provides recommendations to Leanne, I assume implicit in her authority is the ability to evaluate those recommendations, but ultimately establish policy she judges to be appropriate, which may in fact deviate from Jonathan's recommendations.
> A: In theory that could happen. What's occurred in practice, for as long as I can remember, is when that is the case, Leanne does not make those decisions without consultation with me, which is—that's something that I have put in to practice as a, I think, good process check. Again, if you have a recommendation for the subject matter expert, that his or her supervisor—there's a difference of a point of view, there's an issue there. And one of the things that I am good at doing in the company is ferreting out the merits and drawbacks of resolving issues in different ways. So I am invariably asked to participate in the process. And then whatever the final judgment is, I will likely be involved in it.
> Q: And I assume that that's actually happened, that it's not just hypothetical?
> A: Yes, it has. Again, if you ask me for specific recollections, I would probably rack my memory to come up with one. But it doesn't just work that way in the controller's area. It works that way in all areas that I oversee. That's the one way I think I add some benefit, by holding the various responsibilities I've got.[349]

It should be noted that the CFO is also not a CPA nor does his technical background include accounting related experience. OFHEO does not believe that the accounting policy development review process is sufficient to function as a "check" on the propriety of accounting policies as it relates conformity with GAAP.

OFHEO questioned the Controller about the process that she undertakes to ensure that the Enterprise's accounting policies are in compliance with GAAP. The Controller responded that

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Q: How would you describe the distinction of responsibilities between Financial Standards headed up by Jonathan [Boyles], and then alternatively, Leanne Spencer and the Controller's Group that she oversees?
A: Well, Jonathan is the subject matter expert on accounting policies, so he is the person that we look to for not only advice but decisions around how to implement the various financial standards requirements. Leanne is supervisor, overseer. She is a internal check on Jonathan, and in my role as sitting on top of the overall department, I look first to Jonathan for his subject matter expertise, do rely on Leanne's thoroughness in engaging on issues and her sense for when an issue needs to come to my attention, and frequently issues are brought up to me, both to inform me, and in some cases to seek my counsel on decisions. So that's how I think about it. Jonathan's the subject matter expert, and Leanne is an engaged participant in the process.

[349] OFHEO Interview, Timothy Howard, August 5, 2004, pp. 24-26.

she relies on the advice of the external auditor in determining whether the accounting policies comply with regulatory standards:

> Q: How do you assure yourself that the company's policies are in accordance with GAAP?
> A: I hire technical experts to staff the Financial Standards Unit, and then I liberally use our external auditors and our external auditors' national office to review policy and to have check-offs on the policy, and we really are in a mode to where we check with them frequently, and we want to make sure we don't have habits where we move forward and then inform them of what we did. Our habits are have them along with us, and be with us along the way as we are looking at items of a policy nature.[350]

As noted above, SAS 1 states that it is the responsibility of management to develop sound accounting policies as the primary responsibility for the financial statements rests with management. Part of that responsibility includes devising a system of internal control that will, among other things, help assure the production of proper financial statements. The standard also describes the scope of an auditor's activity: "As part of their audit, they will assess the accounting principles used. However the auditor's responsibility for the statements he/she has examined is confined to the expression of his/her opinion of them. The financial statements remain the representation of management."[351] It is the responsibility of management to ensure that the Enterprise maintains the internal expertise to properly develop, approve, and implement accounting policy.

The testimony of the CFO, Controller, Vice President of Financial Accounting, Director of Financial Accounting, and the head of the Office of Auditing, all referred to KPMG as the final arbiter of the Enterprise's compliance with GAAP.[352] This provides insight into management's "liberal use"[353] of its external auditors as the first check on the appropriateness of the Enterprise's accounting policies. However, it is ultimately the responsibility of management to determine sound accounting policies for the Enterprise[354] – the burden of management can not be shifted to the external auditor. OFHEO views the Enterprise's reliance on the external auditor to determine the propriety of accounting policy as an indication of a lack of adequate

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[350] OFHEO Interview, Leanne Spencer, August 12, 2004, pp. 24-25.
[351] American Institute of Certified Public Accountants (AICPA) 2002 *Codification of Auditing Standards and Procedures,* Statement of Auditing Standards No. 1, Section 110.02. New York, NY: AICPA.
[352] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 19-20
Q: How would you describe the distinction of responsibilities between Financial Standards headed up by Jonathan [Boyles], and then alternatively, Leanne Spencer and the Controller's Group that she oversees?
A: Well, Jonathan is the subject matter expert on accounting policies, so he is the person that we look to for not only advice but decisions around how to implement the various financial standards requirements. Leanne is supervisor, overseer. She is a internal check on Jonathan, and in my role as sitting on top of the overall department, I look first to Jonathan for his subject matter expertise, do rely on Leanne's thoroughness in engaging on issues and her sense for when an issue needs to come to my attention, and frequently issues are brought up to me, both to inform me, and in some cases to seek my counsel on decisions. So that's how I think about it. Jonathan's the subject matter expert, and Leanne is an engaged participant in the process.
[353] OFHEO Interview, Leanne Spencer, June 22, 2004, p. 24-25.
[354] American Institute of Certified Public Accountants (AICPA) 2002 Codification of Auditing Standards and Procedures, Statement of Auditing Standards No. 1, Section 110.02. New York, NY: AICPA.

technical expertise within the Controller's Department. OFHEO believes that although the Controller has the ultimate responsibility for approving accounting policies at Fannie Mae, the processes as practiced rely heavily on the SVP of Financial Standards and the external auditor to determine compliance with GAAP. OFHEO asserts that the accounting policy review process does not provide a sufficient internal independent verification of recommended policy and does not provide reasonable assurance that the accounting policies adopted by the Enterprise are in compliance with GAAP.

Additionally, OFHEO noted that although internal audit procedures indicated that test work was performed to assess compliance with regulatory standards, the Office of Audit (OA) does not conduct an independent review of accounting policies to determine compliance with GAAP. According to the CFO, Internal Audit has no role in determining whether or not Fannie Mae's accounting policies are consistent with GAAP. The CFO asserts that the role of the OA is to evaluate the internal controls of accounting processes relative to the internal policy:

> Q: What is Internal Audit's responsibility for evaluating the company's accounting policies?
> A: Their primary responsibility is to do audits to ensure that the policies are followed by those they govern in a fashion consistent with our [internal] standards.[355]

As it relates to the review of accounting policies, the CFO does not look to the OA to review the Enterprise's accounting policies for propriety under GAAP; he instead looks to the outside auditor. Sam Rajappa, Senior Vice President of Operations Risk (Director of the Office of Audit) confirmed that his team does not provide any review of the Enterprise's accounting policies relative to GAAP:

> Q: Are audit procedures directed at determining whether or not the company has been in compliance with GAAP?
> A: Audit procedures are directed at auditing to the standards established by Financial Standards and approved by KPMG.[356]

Fannie Mae's organizational structure and accounting policy development review process has created material deficiencies in the Enterprise's ability to effectively review financial accounting policies. OFHEO determined that as a result of the lack of technical skill of the executives who serve as a control check of the policy development process, management over relies on the SVP of Financial Standards and the external auditor to perform this key function. OFHEO believes that the policy development review process, as currently practiced, does not adequately fulfill management's responsibilities, which has resulted in the development of accounting policy that is aggressive in nature and an environment that acquiesces to the development of policies that do not comport with a strict interpretation of GAAP.

### *Segregation of Duties*

OFHEO examined the roles and responsibilities of the executives in the Controller's Department and the related controls that support the integrity of the financial reporting process. During the

[355] OFHEO Interview, Timothy Howard, August 5, 2004, p.36.
[356] OFHEO Interview, Sam Rajappa, June 17, 2004, p.10.



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examination, OFHEO noted several instances in which the executives in the Controller's Department lacked a proper segregation of duties. One example of this is the lack of segregation of duties regarding the amortization of deferred price adjustments. OFHEO believes that these instances represent critical conflicts of interest and are not conducive for developing safe and sound financial reporting practices. Statements on Auditing Standards 55 (SAS 55) issued by the Auditing Standards Board (ASB) "provides guidance on the independent auditor's consideration of an entity's internal control structure in an audit of financial statements in accordance with generally accepted auditing standards," as follows:

> **Control Procedures**
> 11. Control procedures are those policies and procedures in addition to the control environment and accounting system that management has established to provide reasonable assurance that specific entity objectives will be achieved[…]
>
> - Segregation of duties that reduce the opportunities to allow any person to be in a position to both perpetrate and conceal errors or irregularities in the normal course of his duties – assigning different people the responsibilities of authorizing transactions, recording transactions, and maintaining custody of assets[…][357]

The standard emphasizes the importance of segregating responsibilities of individuals who are in a position to authorize and record transactions in establishing a strong control environment around financial reporting.

*Chief Financial Officer (CFO)*

OFHEO noted that the CFO has a myriad of responsibilities, which include risk management, the retained portfolio, the accounting function, investor relations, treasury, and financial reporting and he also has responsibility for evaluating and making compensation recommendations for the Head of the Office of Auditing, Mr. Sam Rajappa. When asked to describe his current position at Fannie Mae, the CFO responded as follows:

> Q: I want to start off with just some questions related to your background and experience. Can you describe your current position at Fannie Mae?
>
> A: Boy, how much time do we have? [Laughter.]
>
> A: My title is vice chairman and chief financial officer. As vice chairman I have a fairly wide range of corporate strategy oversight management responsibilities, part of a four-person Office of the Chairman includes Frank Raines, the chairman and the chief operating officer and Tom Donilon, who's executive vice president for law and policy.
>
> Beyond that, I also serve informally as the Enterprise's chief risk officer. Back, I guess, in November of 2000 Frank asked me to take on those responsibilities, and we effectuated that by moving the credit policy function out of the reporting, the chief operating officer reporting to me, and that gave me direct reports of all people who

[357] American Institute of Certified Public Accountants (AICPA) 2002 *Codification of Auditing Standards and Procedures,* Statement of Auditing Standards No. 55. New York, NY: AICPA.

> either set risk policy or did risk analytics. So that's a second level of responsibilities I have.
>
> I direct the person who manages our on-balance sheet mortgage portfolio. That's Peter Niculescu. Prior to November of 2002 I had direct oversight responsibility for the three functions that composed that business, the portfolio strategy function, the mortgage acquisition function, and the Treasurer's Office. In November that passed to Peter, but I retain active involvement as a overseer of the business.
>
> As chief financial officer I have the accounting control function, with Leanne Spencer heading that up, reporting to me. In addition to financial reporting, we also do business planning, tax, and accounting policy. Investor Relations reports to me directly.
>
> A small group called Corporate Financial Strategies, headed by Tom Lawler, who I believe you talked to, serves as a standard setter and the group that ensures that we're looking at risk consistently across the company. Tom reports to me.
>
> And finally I have, indirect or dotted line reporting from the auditor. Sam Rajappa reports directly to the chairman of the audit committee, but for the last I think year and a half, maybe two years, he has reported on a dotted line basis to me. Previously he also reported to our chief operating officer.
>
> So that covers the range of responsibilities I currently have. Like in the past I've had others, but not significantly different from what I have now.[358]

The CFO indicated a wide range of functions that fall within his purview of responsibility, several of which potentially impair the CFO's independence. According to the best practices outlined in, *Enhancing Public Confidence in Financial Reporting*, written by the Group of Thirty, "financial control and risk management must be fully independent of the risk taking business."[359] The Group of Thirty is comprised of members from both the public and private sectors and academia. The Group issues guidance on economic, financial, and policy development. In fact, during his testimony, Mr. Howard stated that he is currently serving as a member of The Group of Thirty:

> Q: Have you yourself been involved in meetings with standard setters, accounting standard setters such as the SEC or FASB to discuss the company's accounting policies?
> A: Both. I've been a number of meetings with FASB board members, including the chairman, and also been to the SEC. And one other thing I'll mention that falls into that category is there is an outfit called the Group of 30, that you may or may not have heard of. It's a group of basically international financial policy makers that are the board of a nonprofit headquartered here in Washington. Last year they decided to do something they've never done before which is attack accounting policy, and they put together a steering committee.

[358] OFHEO Interview, Tim Howard, August 5, 2004, pp. 6-8.
[359] *Enhancing Public Confidence in Financial Reporting,* The Group of Thirty, Washington, D.C., p.14.



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> The chairman of the board of trustees is Paul Volcker, who I've known for some time. Paul asked me to serve on the task force to look at the issue of fair value versus historical cost for international financial institutions. But Bob Herrs [ph] was on that as a observer, Susan Bies from the Fed, Jim Leisenring from the IASB. So that's an accounting policy group. I also head that interaction. We met three times in the course of putting together our report, twice in New York and once in London.[360]

As part of his responsibility for the retained portfolio, the CFO has the authority to approve transactions related to mortgage acquisitions and derivatives. He also has the authority to set risk management strategies which are used to develop the financial forecast. Additionally, he has the authority to determine how the financial transactions are reported in the financial statements. This lack of segregation of duties is inappropriate and contradicts the following public statement made by Franklin Raines, Fannie Mae's CEO:

*"Those entering into business transactions and accountable for business results do not determine the accounting of those transactions."*[361]
*– Franklin D. Raines*

OFHEO asserts that commensurate in the CFO's responsibility is the ability to set a financial target through his duties as Vice Chairman and the ability to meet the financial target via his duties as CFO.

Best practices necessitate controls that ensure the independence of management. In addition, while executive compensation for management is ultimately the responsibility of the Compensation Committee of the Board of Directors, the CFO significantly influences the evaluation and makes compensation recommendations for the head of the OA. OFHEO contends that this reporting line is inappropriate.

*Senior Vice President – Financial Reporting and Planning*

During discussions with Janet Pennewell, Senior Vice President – Financial Reporting and Planning, OFHEO noted a similar conflict of interest corresponding to her roles and responsibilities. When asked to describe her current responsibilities, Janet Pennewell indicated that she is responsible for forecasting the financial statements as well as financial reporting:

> Q: So in 1999 you took on the responsibilities in Financial Reporting that you—describe what happened in 1999 again, if you would.
> A: Sure. In 1999 I was promoted to Vice President, and before my promotion I was in charge of the business planning function, which resides within the Controller's Department, and when I was promoted to Vice President in 1999, also took on responsibility for financial reporting and for financial accounting.
> Q: In 1998 were your responsibilities in the business planning function quite a bit different from what you started doing in 1999?

[360] OFHEO Interview, Tim Howard, August 5, 2004, pp. 39-40.
[361] See, Answers from the CEO: Why do you have confidence that you have done your derivative accounting properly?," http://fanniemae.com/ceoanswers/derivativesaccounting.jhtml.



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> A: I retained the responsibility for the business planning function, but then took on additional, significant additional responsibility.
> Q: Right. So in 1998 would you have had any responsibility for forecasting income?
> A: Yes. That's what—that's what the Business Planning Group does. It forecasted essentially profit and loss statement, balance sheets for the company as a whole, out of our three or four-year planning horizon, and also for our business areas.[362]

OFHEO asserts that this dual role presents a significant conflict of interest. Janet Pennewell, in her role as SVP of Financial Reporting and Planning, has the ability to affect the amounts of reported net income in order to achieve planned results.

During testimony, Janet Pennewell further described that her responsibilities included modeling the purchase premium and discount amortization as well as recording the amortization to the financial statements:

> Q: So some of the—in forecasting income back in 1998 you also—would you have also had some oversight over the tracking of premium and discount amortization?
> A: In—not officially. We began, my team and myself, began to get involved peripherally in the tracking of premium—the modeling of premium and discount amortization in maybe mid 1998, and then the responsibility for the modeling necessary to come up with the level yield factors was transferred to my area officially in 1999.[363]

Having the dual responsibility of modeling the amortization and reporting amortization results to the financial statements under the authority of a single individual is a major control weakness that undermines the integrity of the financial reporting process.

*Director of Financial Reporting*

In addition, OFHEO noted that a single individual is responsible for the modeling, reporting and accounting for SFAS 91. During his testimony, Jeffrey Juliane, Director of Financial Reporting, explained his responsibilities related to the purchase premium and discount amortization process as follows:

> Q: Can you walk us through your employment at Fannie Mae?
> A: I came on at Fannie Mae. I was working in the corporate planning area in charge of the mortgage portfolio forecast, worked extensively with the mortgage portfolio area in terms of generating their quarterly forecast numbers and stayed. That was my primary focus for the first year of employment there.
>
> At that point in time, we had Jonathan Boyles' area was responsible for doing FAS 91 calculations. We identified a need to increase the expertise in that area. Then it came underneath me in Q1 of 1999, so at that point in time I had a combined role of doing a corporate plan from the portfolio perspective as well as doing FAS 91 forecasting or FAS 91 accounting.

[362] OFHEO Interview, Janet Pennewell, June 15, 2004, pp. 8-9.
[363] OFHEO Interview, Janet Pennewell, June 15, 2004, p. 9.



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> That stayed that way until mid-2000 and then I moved over to be a part of the financial reporting team where I was in charge of new product development from the accounting perspective as well as FAS 91. That stayed that way until toward the end of 2001 when I got asked to help do accrual accounting implementation on a STATs system as well as doing FAS 91….
>
> Q: And who do you report to?
> A: I formally report to Mary Lewers.
> Q: And you say formally?
> A: (Witness nods)
> Q: Can you explain that?
> A: For—I've always had a dotted-line relationship with Janet, especially when it comes to FAS 91 related activities.
> Q: That would be Janet Pennewell?
> A: Yes.[364]

Jeffrey Juliane is currently responsible for both modeling the purchase premium and discount amortization amount as well as recording that amortization amount to the financial statements. This is a control weakness that subverts the soundness of the financial reporting process as there is no independent check on the amortization modeling, forecasting and reporting processes. Again, OFHEO asserts that Jeffrey Juliane's dual responsibility of calculating the modeled amortization results and recording amortization for purposes of financial reporting represents a conflict of interest and undermines the integrity of the modeling process.

*SVP of Operations Risk (Head of Internal Audit)*

During testimony, OFHEO noted that Sam Rajappa, Senior Vice President – Operations Risk, serves as the head of the Office of Audit (OA) and reports to the CFO. OFHEO concludes that the OA should independently report to the Audit Committee of the Board of Directors and not to management such as the CFO. Based on evidence gathered during the Special Examination, OFHEO believes that Sam Rajappa does not have independence from the CFO. During testimony, the CFO indicated that he has "indirect or dotted line reporting from the auditor." Tim Howard qualified the statement by noting that, "Sam Rajappa reports directly to the chairman of the Audit Committee, but for the last I think year and a half, maybe two years, he has reported on a dotted line basis to me. Previously he also reported to our chief operating officer."[365] Although the CFO characterized his reporting responsibility as that of a "dotted line," OFHEO noted that the CFO participates in the annual performance evaluation and makes compensation recommendations for Sam Rajappa:

> Q: Who does Mr. Rajappa's performance review?
> A: I write it, but I do it with very significant input from Tom Gerrity, the chairman of the Audit Committee.
> Q: Similarly, for your direct reports, do you also perform their evaluation?
> A: Yes, I do.

[364] OFHEO Interview, Jeffrey Juliane, June 8, 2004, pp. 8-10.
[365] OFHEO Interview, Tim Howard, August 5, 2004, p. 8.



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> Q: Are you also involved in making compensation recommendations for these individuals?
> A: Yes. Although for people at the senior vice president level and above, we do it collaboratively. We have a group of executives we call our senior leadership team, which is the Office of the Chairman and six other executive vice presidents, who meet as a group, and talk about the performance of all of our senior officers, and we make the compensation decisions collectively. I will make a recommendation to the group about the compensation of each of my officers, but the compensation is ultimately determined by the results of the discussions that take place at the senior leadership team meeting.
> Q: Would you also make the compensation recommendation for Sam Rajappa as well?
> A: I do, but that is also determined by the group as a whole.[366]

OFHEO believes that Sam Rajappa should report directly to the Audit Committee of the Board of Directors. The position should be independent from the CFO. The current organizational structure which gives the CFO the authority to evaluate and affect compensation decisions for the head of the OA critically impairs the independence of the OA.

OFHEO also believes that the current roles and responsibilities of the executives within the Controller's Department do not meet management's responsibility to "sufficiently segregate duties in order reduce the opportunities to allow any person to be in a position to both perpetrate and conceal errors or irregularities in the normal course of his duties,"[367] as outlined in SAS 55. As a result, the current control environment is not structured to promote safe and sound financial reporting practices. It should be noted that this conflict of interest and underdeveloped segregation of duties was formally noted on several occasions by the Office of Audit, including in their July 9, 2003 Amortization Audit Report.[368]

Moreover, OFHEO contends that OA failed to follow standards established by the Institute of Internal Auditors (IIA) for evaluating risk exposures relating to impairments of auditor independence and objectivity. IIA standards on individual objectivity provide the following guidance regarding impairments to internal auditor independence:

> Internal Auditors should refrain from assessing specific operations for which they were previously responsible. Objectivity is presumed to be impaired if an internal auditor provides assurance services for an activity for which the internal auditor had responsibility within the previous year.[369]

During testimony, Sam Rajappa indicated that prior to serving in his current role as the head of Internal Audit, he held the position of Controller for the Enterprise:

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[366] OFHEO Interview, Tim Howard, August 5, 2004, p. 13.
[367] American Institute of Certified Public Accountants (AICPA) 2002 *Codification of Auditing Standards and Procedures,* Statement of Auditing Standards No. 55. New York, NY: AICPA.
[368] The Fannie Mae Audit Report issued by the Office of Auditing on the Amortization Audit dated July 9, 2003 states the following: "We noted key-person dependencies in both the data and modeling processes. A limited number of individuals have a strong understanding of the amortization processes. Improved policies over these areas would provide better support for procedures performed and would reduce key person dependencies." FMSE 023745-023752.
[369] The Institute of the Internal Auditors' Standards for the Professional Practice of Internal Auditing, Attribute Standards – 1130.A1



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Q: Mr. Rajappa, could you describe your current responsibilities at Fannie Mae?
A: Yes, I am Senior Vice President for Operations Risk now, and I head up the internal audit function, and I have a staff of 57 auditors, including me.
Q: And how long have you had those responsibilities?
A: I've been in this job since January of 1999.
Q: And what is your prior employment history and responsibilities with Fannie Mae?
A: I was the Controller from 1994 through end of 1998.
Q: And how long have you had those responsibilities?
A: I've been in this job since January of 1999.[370]

Based on Sam Rajappa's testimony, it appears that for the fiscal year 1999, the OA function did not meet IIA standards relative to auditor independence. As Sam Rajappa served as the Controller for the period of 1994 thru 1998 and subsequently acted as the head of the Internal Audit function, he was given the authority to audit his own work, which represents a major conflict of interest.

### ***Key Person Dependency***

Information obtained during the examination demonstrates that critical shortages of qualified accounting specialists existed within the Controller's Department during the period under review. The shortage of staff and technical accounting expertise created key person dependencies for crucial accounting policy development areas. The problem was exacerbated as Fannie Mae was challenged with fulfilling the necessary requirements to complete registration with the Securities and Exchange Commission (SEC), while also complying with an increasing number of accounting standards that impacted their business.

*The Financial Standards Group*

The Financial Standards group, which is headed by Jonathan Boyles, is presently staffed with 8 employees. During testimony, Jonathan Boyles indicated that his Financial Standards staff doubled to reach its current number during the past 18 months.[371] Jonathan Boyles explained that he started as a manager in 1994, at which point in time the Financial Standards group consisted of himself and one direct report:

Q: Could you describe what the progression of your positions and job responsibilities have been during that time?

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[370] OFHEO Interview, Sam Rajappa, June 17, 2004, p. 7.

[371] OFHEO Interview, Mr. Jonathan Boyles, August 3, 2004, pp. 9-10
Q: So what was the size of the group when you started?
A: When I started there were two managers and a director. When my boss moved on there were – I was acting head of the department as a manger, and I had one person reporting to me. After I got promoted I replaced my head count essentially, and for a while there were two people reporting. I don't remember the years, but, you know, got approval for a third. And then gradually got a fourth. And then this past year we hired Greg Ramsey as the lead Vice President.
Q: When Greg Ramsey came in, did the size of the group grow in terms of the people reporting to him, or when did you get from the four to the eight? I am just trying to get a sense of timing.
A: Going from the four to the eight has been within the last 18 months.

A: Sure. I started in 1994 as a manager in the Financial Standards Department. I was promoted to Director of the Financial Standards Department around 1997. I was promoted to Vice President, Financial Standards Department 2001, I believe. And I was promoted to Senior Vice President of Financial Accounting Standards and Corporate Tax in 2004….[372]

Q: So what was the size of the group when you started?
A: When I started there were two managers and a director. When my boss moved on there were--I was acting head of the department as a manager, and I had one person reporting to me. After I got promoted I replaced my head count essentially, and for a while there were two people reporting. I don't remember the years, but, you know, got approval for a third. And then gradually got a fourth. And then this past year we hired Greg Ramsey as the lead Vice President.[373]

It should be noted that SFAS 133 became effective for fiscal years beginning after June 15, 1999; Fannie Mae voluntarily registered its common stock with the SEC effective March 31, 2003, filing reports for the FY2002 financial statements; and SFAS 149 became effective for contracts entered into or modified after June 30, 2003.

In addition to developing accounting policy for the Enterprise, the SVP of Financial Standards and Tax also devotes some of his energies to corporate tax issues. Jonathan Boyles is also called upon to prepare analyses such as due diligence support for counterparties and reviews of investee companies. Financial Standards is also responsible for drafting the language that appears in the publicly filed 10K and 10Q statements and the Administrative Finance Report. Additionally, the group is often required to do special projects such as reviewing accounting issues related to Freddie Mac. Financial Standards regularly provides management with analyses comparing Freddie Mac's financial disclosures to their own in order to highlight issues of concern or explain differing financial statement presentations.[374]

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[372] OFHEO Interview, Jonathan Boyles, August 3, 2004, p. 7.
[373] OFHEO Interview, Jonathan Boyles, August 3, 2004, pp.9-10.
[374] OFHEO Interview, Mr. Jonathan Boyles, August 3, 2004, pp. 12-14
Q: So, in addition to being involved in providing accounting guidance, and you know, could you describe what the full extent of your responsibilities are?
A: The full extent of my responsibilities, as it relates just to accounting policy?
Q: You can start with that, and then – it sounds like you have other responsibilities too. I'd like to hear that too.
A: Right. As it relates to accounting policy, my responsibilities are to provide the accounting policy to the departments within the company and to the Financial Reporting Department. We also provide training to the company if there's a need for accounting training, whether it's on old existing rules or on something new. That will go not just for what affects Fannie Mae, but oftentimes we'll do training on what affects our customers but may not have a direct impact on the company. My role is to provide that guidance to those who are responsible for implementing the guidance, and I act as a consultant and get brought in where necessary. I mean, "I" in that regard, I mean me and my team.
Q: And other responsibilities besides accounting –
A: Other responsibilities that we do, I often get asked to do special projects within the company. We have occasionally bought into, during the dot.com craze, several investments in companies that were in the mortgage market, and that we had an interest in the technology. Me or my team would do due diligence, financial due diligence on those companies as part of the decision-making process, would report up through those who would make that decision. We do due diligence on counter-party risk. We'll go out to

Given the technical accounting support necessary for Fannie Mae to comply with regulatory requirements for implementing the new standards from the FASB and registering its common stock with the SEC along with its regular operational activities, OFHEO believes that Fannie Mae management failed to adequately staff the Financial Standards function to sufficiently meet these requirements. In fact, the Controller commented on the need to increase staffing for the Financial Standards group as part of Jonathan Boyles' 2002 Performance Review:

> I believe FAS 149 knocked us off our horse which had begun to canter. We are only slowly building momentum. In hindsight, and I know you agree, Paul [Salfi] was not nearly strong enough to lead this huge effort. We recognized this and we are taking action to staff your organization appropriately and to add a strong head of accounting policy.[375]

OFHEO believes that management across business operations was aware of the lack of accounting expertise within the Controller's Department.[376] However, management appears to have been slow taking action to remedy the situation.

In addition, based on evidence reviewed during our examination, OFHEO determined that there is limited technical accounting expertise at Fannie Mae, as the SVP of Financial Standards is heavily relied upon for all matters accounting related at the Enterprise. OFHEO noted that executives within the Controller's Department exhibit only a "high level" understanding of the relevant GAAP standards that support the Enterprise's accounting policies.

*Controller*

When questioned regarding the Enterprise's accounting treatment of interest only (IO) and principal only (PO) securities, Leanne Spencer deferred her comments to Jonathan Boyles citing

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my companies as part of a broader team. We'll do the financial due diligence where others will look at other risks of our counter-parties, and we do other special projects like that, most things as it relates to Freddie Mac and Freddie Mac's accounting gets done out of my department. My department's also responsible for drafting the 10K, the 10Q, and it's responsible for drafting the administrative finance report, both of those.

[375] Performance Review, Jonathan Boyles, by Leanne Spencer, 2002 (FMSE 220363).

[376] The 2003 Performance Evaluation from Tim Howard to Leanne Spencer, dated December 30, 2003, states the following: "The one consistent development theme in the survey was the resource issue. It was mentioned somewhere in the survey by each of the four peers who reviewed you: "she needs to fill out her team and invest more in her functions." "I think the area for development is in realizing how much the world has changed and needing to get ahead of those changes in terms of her organization, resource levels and other investments needed for today's controllership function." "She needs more depth in certain functions." "The fact that her staff is overworked and under such extreme resource pressure is apparent." And one of your direct reports said: "I believe she has a pride issue that prevents her from asking for more help and as a result, she doesn't have more time to actually perform her management duties. Because she runs such a lean shop her employees also don't have much time to develop her skills or attend training." I know you're on top of his now, but as the survey indicates, both you and I let this get a little further along than we should have without raising it up on our priority lists – which our peers clearly noted." FMSE 220315-220318

that she did not have an understanding of the GAAP standards which validate the Enterprise's accounting treatment:

> Q: We're going to talk a little bit about Fannie Mae's accounting for IO and PO securities. Now we understand from some of the previous discussions we've had that the company's policy is to account for IO and PO securities on a combined basis; is that correct?
> A: I have a limited recollection of this area, so I would not represent myself as having expertise in this matter. But I am aware of IO/POs combined. I believe we have talked to you about this before.
> Q: Do you – are you familiar with the criteria that the company uses for making that decision in terms of combining IOs/POs from an accounting standpoint?
> A: I have a high level understanding, but I wouldn't have a detailed – I wouldn't have a detailed understanding.
> Q: Who would have a detailed understanding?
> A: The SVP of Financial Standards, and traders in the portfolio business who he would be interacting with.
> Q: So would you have an understanding of what basis in GAAP was used to get to that conclusion?
> A: I would not.[377]

As the corporate Controller is considered a critical member of the management team at Fannie Mae, OFHEO finds her inability to comment on the regulatory accounting standards which govern the Enterprise's accounting policy unacceptable. Particularly in light of the CFO testimony that he viewed it as ultimately the Controller's responsibility to decide which accounting policies to approve and implement.

Evidence reviewed as part of the Special Examination indicated that the Controller's function was also overworked and had persistent resource issues during the period under review. In the Controller's 2001 performance review, the CFO made the following comment regarding workload management and staff development within the Controller's Department.

> Once we get overloaded, things slip. They don't get done as thoroughly, with the degree of coordination, or in the right priority as would be the case otherwise.[378]

The Controller's 2002 performance report echoed the 2001 report. The CFO urged the Controller to focus on staff development and coaching.[379] Also, the CFO noted the following feedback from fellow officers regarding the lack of resources in the Controller's function. A survey revealed that the lack of resources in the Controller's Department

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[377] OFHEO Interview, Ms. Leanne Spencer, August 12, 2004, pp. 68-70.
[378] 2001 Performance Review: Leanne Spencer, by Timothy Howard (FMSE 220309).
[379] The 2002 Performance Evaluation from Tim Howard to Leanne Spencer, dated December 30, 2002, states the following: "Truth to be told, Leanne, it was your subordinates' comments about your attention to their development needs that caused me to hesitate to recommend you for "SE" consideration this year, notwithstanding the phenomenal year you had on the results side. If you get your people development skills up, you should be able to waltz across the SE goal line." FMSE 220311-220314.



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was identified across business functions and these comments were noted in Leanne Spencer's 2003 annual performance review:

> "She needs to fill out her team and invest more in her functions."
>
> "I think the area for development is in realizing how much the world has changed and needing to get ahead of those changes in terms of her organization, resource levels and other investments in today's controllership function."
>
> "She needs more depth in certain functions."
>
> "The fact that her staff is overworked and under such extreme resource pressure is apparent."
>
> "Because she runs such a lean shop her employees also don't have much time to develop their skills or attend training."[380]

Interviews with other executives within the Controller's Department revealed a similar limited knowledge of accounting standards and indicated a significant reliance on Financial Standards regarding technical accounting matters.

*Vice President for Financial Accounting*

During testimony, Mary Lewers, Vice President of Financial Accounting, indicated that she has been employed at Fannie Mae for 21 years working in various financial accounting positions. Mary Lewers noted that the responsibility to produce accurate financial statements rests with others. She insisted that her responsibility is limited to accounting operations and ensuring that "…the transactions are processed and that the accounting is appropriate as per the guidance that would have been provided to my team."[381]

> Q: So, with respect to these various areas then, is it your group's responsibility to ensure that the transactions are accounted for properly in accordance with generally accepted accounting principles?
> A: The responsibility of my group would be to work alongside the Financial Standards group. The Financial Standards group would establish the Fannie Mae's policy for Accounting. And so then the individuals on my team would be; their responsibility is to manage the processes and to ensure that our accounting is in compliance with that policy.[382]

OFHEO noted that she characterized her current level of knowledge as limited regarding amortization of purchase premium, insisting that she is still working on developing an

[380] 2003 Performance Review: Leanne Spencer, by Timothy Howard (FMSE 220317).
[381] OFHEO Interview, Mary Lewers, July 13, 2003, pp. 15-16.
[382] OFHEO Interview, Mary Lewers, July 13, 2003, p.20.

understanding of the broader concepts behind FAS 91.[383] Mary Lewers testified that she is becoming familiar with this area for which she currently has the responsibility to manage. She was assigned these duties in 2003.

When questioned regarding aspects of the Enterprise's hedge accounting policies and its compliance with GAAP, Mary Lewers asserted that she relies on Financial Standards to determine compliance with regulatory standards:

> Q: Do you believe it is in compliance with FAS 133, the specific discussion that we've just had in terms of having just a second swap at the inception of the second hedge relationship be equal to zero?
> A: I have been--I'll go back to kind of what I said earlier. FAS 133 is a very technical area of accounting, and it's one that I rely upon the expert advice of the Financial Standards Group to establish our policy, and that my understanding of our policy is that we assess the fair market value of zero at the beginning of each of these hedge instruments that we enter into and that that's the point where we apply that test.
> Q: So does that mean--is your answer implying that you think it's consistent with FAS 133? ...
> A: And I'll go back to that I have found that FAS 133 is a very complicated area of accounting, and it's one that I look to get expert advice on how to interpret--the interpretation into our policy, and so I rely upon the information supplied to me by Accounting Standards, and that that appears to be appropriate accounting to me based on that advice.
> Q: You're a CPA yourself, right?
> A: Yes, I am.
> Q: Have you given these issues a great deal of thought yourself?

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[383] OFHEO Interview, Ms. Mary Lewers, July 13, 2004, pp. 241-243
Q: Ms. Lewers, I think we spoke to you earlier about your involvement in the amortization process on another date. I just wanted to clarify some of that quickly today. Could you tell us what your involvement and responsibility is with respect to the process of calculating amortization?
A: Are you referring to FAS 91?
Q: Yes.
A: Historically, my involvement with FAS 91 has been a very limited component of this accounting. In that accounting I had responsibility for what used to be PDS, became PDI, and the iPDI, which was a system that tracked balances and that received factors from another system, and then the PDS/PDI/iPDI, that system would take balances, apply factors, and then generate an amortization amount that would then be booked to the general ledger. And so that piece of the FAS 91 process was my area of responsibility.
Q: And has that changed at all over time?
A: In the past, I think about last summer maybe, the organization – we did some reorganization of individuals, and so the individuals who have responsibility for this area now reports in to me. And so I'm in what I would call a transition phase in that I have been learning and working developing an understanding of the broader concepts behind FAS 91. But that effectively Janet Pennewell has really been more the supervisor in charge of this area.
Q: I guess in the past year you've been becoming more involved in the process. Is that a fair statement?
A: Well, I haven't really devoted much time to it until the last few months, and my – so I'm not – I have not mastered this subject area.
Q: As of today, if there was an important management decision to be made regarding the process of amortization, would you be involved in that decision?
A: I would probably be involved in hearing the discussion that went on, but I would not be the one making the decision.



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> A: I spend a fair amount of time on this, but I have to also remind everyone that this is not my only area of responsibility, and that my responsibility covers a broad range of accounting topics. This is an area that--so it's one of several areas that I work with, and it's one that has--it's a very technical area and it's one that--there are people in the company, in Fannie Mae, who work on this on a more day-to-day basis than myself.
> Q: FAS 133 is one of the company's critical accounting policies, is that correct?
> A: Yes, it is[384]

OFHEO believes that the Vice President for Financial Accounting does not have sufficient knowledge of the technical accounting requirements related to SFAS 91 and SFAS 133 to adequately perform her duties. Based on Mary Lewers' testimony, it appears that she takes no responsibility for ensuring that the accounting policies that are being implemented are in compliance with GAAP and over relies on the Financial Standards group for interpretation of the accounting standards.

OFHEO noted that staffing shortages also exist in the Controller's department related to FAS 133 accounting. In a memorandum dated February 2, 2004, from Cheryl DeFlorimonte, Director, Accounting and Audit, the situation was described as a crisis:

> This memo serves to bring to your attention, my concern about the limited resources that are currently in place to meet ongoing FAS 133 production challenges, as well as to spearhead the re-engineering initiative.
>
> With one and a half business analysts currently assigned to FAS 133, monthly production operations is in crisis. This situation has been exasperated by the recent DNQ policy change. As a result of this change, there are additional data requirements for monthly processing, new reconciliations and validations, manual overrides and additional manual journal entries. Further, we continue to flush out additional issues associated with this recent policy change.
>
> Coupled with these production challenges, is the increasing demand on our limited resources to spearhead the FAS 133 re-engineering project. Currently, with total resources of one and a half business analysts and a part time contractor to undertake both production and the re-engineering project, we are at high risk for slippage on both fronts. In fact, both activities cannot be successfully performed with the present resources….[385]

### *Conclusion*

OFHEO believes that Fannie Mae failed to adequately exercise their duty to develop sound accounting policies at Fannie Mae. The Enterprise failed to develop an internal control system to ensure that accounting policy was sufficiently developed and reviewed. A combination of heavy workload, weak technical skills and a weak review environment contributed to the development of key person dependencies. Fannie Mae relies on just a few individuals to make key decisions, particularly those related to accounting policy development. A cornerstone of

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[384] OFHEO Interview, Mary Lewers, July 13, 2003, pp.152-153.
[385] Memorandum attached to email from Cheryl DeFlorimonte to Leanne Spencer, Subject: FAS 133 Resources, dated February 2, 2004, DeFlorimonte 08112203

sound corporate oversight is the control structure itself. The board of directors and management are responsible for promoting high ethical and integrity standards, and for establishing a culture within the organization that emphasizes and demonstrates to all level of personnel the importance of internal controls.

It is management's responsibility to ensure that Fannie Mae operates in a safe and sound manner and has proper segregation of duties, an adequate level of controls to support its key business processes, and clear and appropriate accounting policies. In addition, it is management's responsibility to ensure that key control function personnel are competent and qualified to execute their daily responsibilities.[386] OFHEO contends that the CFO, as the primary manager for key financial reporting and accounting areas, failed in providing adequate oversight to key control and reporting functions within the Enterprise. In addition, he developed and rewarded[387] a staff that collectively does not possess the skills necessary to ensure that Fannie Mae has proper accounting policies, adequate resources to support proper implementation of such policies, and an effective system of internal controls.

[386] Both the Group of Thirty and the Basel Committee on Banking Supervision both emphasize it is management's responsibility to ensure that key control function personnel are competent and qualified to execute their daily responsibilities.
Group of Thirty Report, *Enhancing Public Confidence in Financial Reporting*, Washington DC 2003, p. 14.
Bank for International Settlements, Basel Committee on Banking Supervision, *Framework for the* Evaluation of Internal Control Systems, January 1998, p. 11.
[387] *Id.,* p. 12. The Committee on Banking Supervision also states that, "In reinforcing ethical values, banking organizations should avoid policies and practices that may inadvertently provide incentives or temptations for inappropriate activities. Examples of such policies and practices include undue emphasis on performance targets or other operational results, particularly short term ones; high performance-dependent compensation rewards; ineffective segregation of duties or other controls may offer temptations to misuse or conceal poor performance; and insignificant or overly onerous penalties for improper behaviors.

## APPENDIX I

### Estimation Methods Used for Modeling the Catch-Up

*A. Background*

In assessing the methods and discipline applied by Fannie Mae for determining prepayments used to calculate the catch-up, **OFHEO has concluded that Fannie Mae 1) designed and applied estimation methods, and 2) selected assumptions used in the calculation of the catch-up, for the improper purpose of managing its current and prospective financial results. In addition, OFHEO has determined that Fannie Mae applied methodologies for determining prepayment assumptions that were alternatively different for the retrospective adjustment and prospective amortization required under SFAS 91.**

In order to calculate the quarterly adjustment necessary to recognize a constant effective yield required by SFAS 91, the Enterprise needed to calculate the estimated life of the mortgage loans and securities associated with the deferred price adjustments to be amortized. The estimated life of such mortgage assets is a function of expectations regarding the likelihood of consumers to prepay their mortgages, which itself is a function of future interest rates. If future interest rates decline, then consumers would likely be disposed to refinance mortgages they have previously financed at higher rates. Alternatively, if future rates increase, there would be a reduced incentive to refinance since doing so would only result in the consumer obtaining a higher rate mortgage.

The propensity of consumers to refinance is intuitively understood by many. However, the methods for forecasting future interest rates, and determining the impact of these forecasts on the rate at which consumers will prepay their mortgages, is better understood by finance professionals or economists with experience in such modeling. While these professionals themselves may disagree on the specific assumptions and models that may be used to forecast prepayments, there are nevertheless methods, and an accepted discipline in applying those methods, that most such professionals would agree on**. The methods used by Fannie Mae were less sophisticated than the Enterprise had the capability to support, and furthermore produced flawed results.**

The December 2000 policy codified the methodology by which each quarter's catch-up amount would be estimated;

> The catch-up position is calculated using the average of five interest rate scenarios – the base rate together with the four sensitivity runs that encompass a 95% confidence interval around that base rate (currently +/- 60 and 120 basis points[388]).[389] The base rate will normally be consistent with the rate that is used

[388] Basis point (bps) is defined as one hundredth of a percentage point (0.01%).

[389] While the policy to this day specifies that the scenarios around the base rate will be +/- 60 and +/- 120, the interest rate scenarios applied around the base were changed to +/- 50 and +/- 100 immediately after the policy was adopted for the calculation of the Q1 2001 amortization estimate. This range of scenarios was consistently applied for the period 2001 through to the current period in 2004.

in our most current business plan. However, if circumstances exist that cause us to use a different a different rate path we will document the rationale for the rate path used. At all times the base rate and the standard sensitivities will encompass a 95% confidence interval around the rate that was used.

In providing commentary regarding the functionality of amortization modeling software the Enterprise was using, Ms Janet Pennewell also commented on management's views concerning the use of the multiple interest rate scenarios[390] (also referred to as "rate paths") described in the amortization policy:

> Q: […] Ms. Pennewell, do you recall any discussion around the ability of BancWare to manipulate factors to produce an array of recognition streams?
> A: Yes.
> Q: And can you elaborate on that?
> A: Sure. At this point your previous question, we talked about a group of us working on how to enhance our models and begin thinking about formalizing a policy for our premium and discount. And again, our thinking really was that you have a current interest rate pattern today, and our recognition was that FAS 91 requires you to try to project what you think the average life of your mortgages is going to be. Obviously, that first requires that you can project what interest rates are going to be, and then within that interest rate path know what prepayments are going to be so that you can get a correct effective life to calculate your constant effective yield.
> And we recognized that we weren't very good at projecting where interest rates were going to be, and even if we could accurately project where interest rates were going to be, that we--that there was then a range of very reasonable prepayment assumptions that would fit with that interest rate projection.
> And so we were in the process of saying, well, we don't want to run one scenario with one interest rate assumption and fool ourselves into thinking that that with precision is, is exactly what our catch-up position is. And so we were beginning the process of figuring out how to put together a policy that would address a couple very key pieces of assumption risk, namely, our ability to forecast interest rates, and our ability to, within an interest rate path, to, with precision to project what prepayments were going to be, and to want to have a modeling tool that gave us the flexibility to potentially, say, use BancWare run 5, 10 different scenarios, maybe in different interest rate paths that might capture the kind of variation that you really would expect to happen in interest rates, and then average them together.
> So BancWare, initially, is my recollection, was set up to say you kind of put in one path of interest rates, and then whatever catch-up number that produces, that you would—the assumption in BancWare was that you would record that to income. Instead we thought what we needed was not just one path of interest rates, but again a range of paths of interest rates where we may want to average them together, recognizing the lack of precision that's inherent in projecting interest rates and prepayments.
> And so then we needed a model that would then give us the flexibility to not just book our entries or produce our factors--because the BancWare and then later AIMS is a system that we used to calculate what--calculate factors that allow us to record the

[390] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, pp. 21-24



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constant effective yield. Those factors the actually get fed into another system which actually calculates the amount that would get booked through the general ledger.

Anyway, so, in order to produce a good set of factors we needed a model that didn't just, say, give me one interest rate path and produce one set of factors. We needed the ability to, as I said, capture a range of assumptions and adjust the factors to reflect that range of assumptions.

*B. Development of Amortization Estimation Methods*

The first written recommendation by the amortization policy analysis group concerning the modeling of interest rates and prepayments was contained within the September 23, 1999 memorandum[391] to Tim Howard from Janet Pennewell. This memorandum noted that while amortization was estimated and recorded using a single flat rate path, the Enterprise used multiple rate paths (up 75 bps, up 150 bps, down 50 bps and down 100 bps) for the purposes of forecasting earnings. The memorandum went on to state the recommendation that the multiple rate paths used for forecasting, also be used for the purposes of estimating and recording deferred price adjustment amortization.[392] This memorandum further recommended that the forecast be determined using "a probability weighted average of the base plus four standard scenarios."[393]

Another memorandum[394] to Tim Howard, dated December 16, 1999, recommended that the up and down scenarios be established by determining the respective +/- one standard deviation[395] (1 std.) and +/- two standard deviation (2 std.) rate paths. The memorandum further recommended the specific statistical weighting to be assigned to each of the rate paths; weighting values of 30% for the base rate path, 20% for both the up and down 1 std. rate paths, and 15% for the up and down 2 std. rate paths. Other analysis[396] also included within the memorandum suggested that the ranges used for the up and down 1 and 2 standard deviation rate paths be the up 75bp, down 50bp and up 150bp, down 100bp rate paths referenced in the September 23rd memorandum.

While finance professionals and economists may disagree on the specific probabilities associated with upward or downward movements in interest rates, they would most certainly agree that significant (2 standard deviation) upward or downward movements in interest rates are less likely to occur than more modest (1 standard deviation) upward or downward movements. In addition, many finance professionals would also agree that a 1 or 2 standard deviation *upward* movement would be inherently larger than a 1 or 2 standard deviation

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[391] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 23, 1999, Subject: Policy on Purchase Premium/Discount Management. FMSE-SP 000106-000109

[392] As far as OFHEO can determine, the Enterprise did not use multiple rate paths to determine the estimate of deferred price adjustments amortization – or catch-up – until after it formally adopted its accounting policy for 'purchase premium and discount amortization' in December 2000

[393] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 23, 1999, Subject: Policy on Purchase Premium/Discount Management, FMSE-SP 000106-000109.

[394] Memorandum from Ms. Janet Pennewell and Mr. Jeff Juliane to Mr. Tim Howard dated December 16, 1999, Subject: Catch-up Policy. FMSE 217559-217569.

[395] Standard deviation is a statistical measure of the historical volatility and generally a measure of the extent to which numbers are spread around their average.

[231] Memorandum from Ms. Janet Pennewell and Mr. Jeff Juliane to Mr. Tim Howard dated December 16, 1999, Subject: Catch-up Policy. FMSE 217567.

*downward* movement. While this last point is debatable, it is clear that thus far in their thinking, Fannie Mae also agreed with this conclusion.

A memorandum[397] dated April 5, 2000 from Mr. Jeff Juliane to Ms. Leanne Spencer provided a first quarter updated 2000-plan analysis of the catch-up. This analysis utilized probability weighted rate paths to project catch-up amounts for the years 2000 to 2003, using the five interest rate scenarios, but instead modified the up and down 1 and 2 standard deviation movements to be a consistent basis point magnitude of +/- 60bps and +/- 120 bps respectively representing a change from the Enterprise's earlier forecasting assumptions.

On May 8th 2000, another memorandum[398] from Mr. Jeff Juliane now recommended that a simple average -rather than a probability weighted mean- of the five rate paths be used. Analysis included with this memorandum provided equal weights to each of the rate scenarios. The effect of this change was to reduce slightly the estimate of positive (income) catch-up for each of the current and subsequent years.

Another memorandum dated June 21, 2000, from Mr. Jeff Juliane to Mr. Tim Howard describes the impact of an alternative estimation method known as mean reversion. Mean reversion is a statistical term to describe, in this instance, a tendency that interest rates in the +/- 120bp 'shock' scenarios would trend back or revert to a "rolling five year average." This assumption had an additional modest impact to reduce the estimate of positive (income) catch-up over the forecast horizon to December 2003. In the memorandum, Mr. Juliane noted the following:

> It is worth noting that the mean catch-up difference between the Freddie[399] mean reversion technique and our standard sensitivity methodology is not that large, $61.1 million at December 2003. This is due to the natural hedge that is occurring between our core book of business and the REMIC and GFEE books of business. [400]

Still another memorandum,[401] dated September 15, 2000, from Ms. Janet Pennewell to Mr. Tim Howard provided another analysis of estimated catch-up over a forecast horizon through to December 2003. This analysis showed an even larger decrease in the estimate of positive (income) catch-up through to 2003, of approximately $261.4 million over the June 21, 2000 analysis. This analysis differed from previous ones in that the use of short-term constant

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[397] Memorandum from Mr. Jeff Juliane to Ms. Leanne Spencer, dated April 5, 2000, Subject: Amortization Sensitivities, FMSE-SP 000236 – 000238.

[398] Memorandum from Mr. Jeff Juliane to distribution, dated May 8, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217527 to FMSE 217531. The distribution list includes Mr. Tom Lawler, Ms. Leanne Spencer, and Mr. Rene LeRouzes.

[399] This was referred to as the "Freddie Method" because the Enterprise had understood it to be the methodology employed by Freddie Mac. OFHEO's procedures did not extend to determining if this method was ever employed by Freddie Mac

[400] Memorandum from Mr. Jeff Juliane to Mr. Tim Howard, dated June 21, 2000, Subject; Amortization Policy Runs, FMSE 217521 – FMSE 217526.

[401] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 15, 2000, Subject: Amortization Policy, FMSE-SP 000016 to FMSE-SP 000028. The distribution list includes Ms. Leanne Spencer, Mr. Jeff Juliane, and Mr. Tom Lawler.

prepayment rates (CPRs) was extended from 3 months to 24 months. This had the effect of reducing the estimate of positive catch-up (income).[402]

The table below shows the progressive change in forecasted catch-up under the different methods described in the previously noted memorandum:

| Date | 5-Apr-00 Analysis | 8-May-00 Analysis | 21-Jun-00 Analysis | 15-Sep-00 Analysis | Difference 4/5 to 9/15 |
|---|---|---|---|---|---|
| December-00 | $183.0 | $179.3 | $122.9 | $88.8 | ($94.2) |
| December-01 | $222.0 | $219.0 | $184.3 | $125.5 | ($96.5) |
| December-02 | $258.0 | $255.0 | $242.6 | $165.1 | ($92.9) |
| December-03 | $292.2 | $290.7 | $297.3 | $206.3 | ($85.9) |
| **Base rate path used** | 8.65% | 8.65% | 8.06% | 8.40% | |
| **Book used** | Jan-00 | Jan-00 | Apr-00 | May-00 | |
| Reference | FMSE-SP 000237 | FMSE 217529 | FMSE 217523 | FMSE-SP 000018 | |

OFHEO has concluded that the Enterprise sought to maintain a positive level of catch-up when the amortization policy was formulated in 2000. OFHEO also believes that the effort of continual iterative analysis, and subsequent choices in methodology made by Fannie Mae management, reflected a consciously determined objective to understate the amount of estimated catch-up itself to better facilitate 1) shifting income between reporting periods (from 2000 to 2001) or 2) converting earnings that would otherwise be subject to volatility to earnings that would be recognized in a more stable pattern. The contention that income was shifted from 2000 to 2001 will be demonstrated by other actions taken by management as described in Section D of the Report.

The methodological choice to migrate from a probabilistically determined mean catch-up to one determined by calculating a simple mean is not grounded in any sound statistical or finance theory. Moreover, calculating a simple mean did not reduce the effort or complexity of estimating the catch-up in any meaningful way. Furthermore, while modifying the up and down rate paths - so that they were equal in their basis point magnitude - is a defensible simplifying accounting convention; it is clear that the Enterprise had a previously established view on, as well as capability to support, what management previously regarded as better practice. Third, while mean reversion was not incorporated as a standard convention of the Enterprise's estimation methodology, management nevertheless adopted – as part of the December 2000 policy – the ability to use a different rate path. This flexibility extended to choosing not only the level of interest rates used in the base rate path, but also other assumptions regarding interest rate behavior. The manifestation of this flexibility included assumptions made by management – in the estimate of Q2 2003 deferred price amortization - regarding their expectation that interest rates would rise from historic lows back to higher levels. In this

[402] Untitled, undated document from Mr. Tim Howard to Ms. Janet Pennewell labeled "Notes for Janet" states "Lost $78 million in catch up due to methodology change (short term CPR's were changed from 3 months to 24 months) to slow down the recognition of discount into income in request to reducing the positive catch-up and transferring income into outer years." FMSE-SP 002590

instance, the employment of this discretionary assumption allowed management to increase income in a measured way. The ability to exercise such judgment in determining rate paths was even better than mean reversion because it could be employed at the discretion of management.

*C. Use of Multiple Rate Paths*

Beyond the specific assumptions used to develop the multiple rate paths, the use of multiple rate paths *itself* had two further significant effects on the estimate of deferred price amortization:

1. Fannie Mae was generally asymmetrically exposed to changes in interest rates insofar as the income statement impact of deferred price adjustment amortization was concerned. Asymmetrical exposure means that the financial impact to the Enterprise of interest rate movements in one direction is greater than the impact of rate movements of similar magnitude in the other direction. In 2000, and for most other subsequent periods, downward movements in interest rates affected the Enterprise's net income greater than upward movements of similar magnitude. This effect is illustrated by the following analysis of data taken from the sensitivity modeling results for the forecast of December 2000 catch-up included in the September 15, 2000 memorandum:

| Rate Path Scenario | Estimated Catch-up | Deviation From Base |
|---|---|---|
| **Up 120 bps - 9.6%** | $139.9 | $18.5 |
| **Base - 8.40%** | $121.4 | - |
| **Down 120 bps - 7.2%** | ($2.5) | ($123.9) |

*Source: Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dtd 9/15/200, FMSE-SP 000018.*

As can be seen from the above analysis, the income statement impact of $123.9 million in expense of the down 120bps scenario is much more dramatic than the $18.5 million income statement impact to income of the up 120bps scenario. This asymmetrical effect of interest rate moves on deferred price adjustment amortization was consistent with the Enterprise's typical portfolio profile. This effect and profile was well understood by management.[403]

[403] An undated memorandum titled "Suggested Amortization Strategy" states the following: "On the second issue, I would recommend that the desired level of the catchup at any given time be equal to the average of the "up 120bp" catchup estimate, the "down 120 bp" catchup estimate, and the "base" catchup estimate, assuming the base catchup estimate were zero. Given the asymmetric nature of our catchup – the catchup usually becomes more negative when rates go down that [sic than] it becomes positive when rates go up, following the asymmetric response of prepayments to changes in interest rates – this recommendation would imply that our target catchup level will usually be somewhat positive." The memorandum also contains handwritten notes indicating "from Tom April 00," which was confirmed by testimony provided by Mr. Tim Howard to be referring to Mr. Tom Lawler. FMSE 217556-217557

The consequence of using multiple rate paths to determine an estimate of average catch-up was that the estimated amount of catch-up would be lower (during this time period) than if just the base rate path was used. The analysis below, using Fannie Mae sensitivity modeling for the forecast of December 2000 catch-up included in the various memoranda referenced previously, illustrates this effect further.

| Rate Path Scenario | 5-Apr-00 Analysis | 8-May-00 Analysis | 21-Sep-00 Analysis |
|---|---|---|---|
| Base Path - Est. Catch-up | $160.1 | $160.1 | $96.2 |
| Mean - Est. Catch-up | $146.1 | $142.3 | $70.1 |
| Difference | ($14.0) | ($17.8) | ($26.1) |
| Method Applied | Weighted Avg. | Simple Avg. | Simple Avg. |
| Reference: | FMSE-SP 000237 | FMSE-217529 | FMSE-SP 000018 |

In her testimony cited previously, Ms. Pennewell explained the rationale for using multiple rate paths:

> Anyway, so, in order to produce a good set of factors we needed a model that didn't just, say, give me one interest rate path and produce one set of factors. We needed the ability to, as I said, capture a range of assumptions and adjust the factors to reflect that range of assumptions.[404]

In fact, however, Fannie Mae *did not* use the multiple rate paths to establish the prospective estimated life over which deferred price adjustments would be amortized. Mr. Jeff Juliane confirmed this in his testimony:

> Q: Would the – I think – you testified earlier the base scenario would be the one that would be used for the factor change that would occur the month after the quarter end? Is that correct?
> A: That's correct. [405]

In later testimony during that same interview:

[404] OFHEO Interview, Ms. Janet Pennewell, June 15, 2004, p. 24
[405] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 141-142
Q: I think you justified [sic. testified] earlier that the base-rate scenario would be the one that would be used for the factor change that would occur the month after the quarter end; is that correct?
A: That is correct.

Q: So the question I have is what impact would the multiple scenarios have on the factors used to amortize premium and discount balances going forward?
A: Can I ask you back what I think you're asking?
Q: Uh-huh.
A: Are you asking, to the extent what are the nonbase runs, how do those nonbase runs impact the factors?
Q: Going forward, yes.
A: Currently, they don't.
Q: So, if the multiple scenarios are based upon the uncertainty of future interest rates, but they really don't affect the amortization in the future, then what is the multiple scenarios used for?
A: Let me step back. They impact the prospective recognition of amortization to the extent that the five runs lead us to be outside of compliance with policy and take an on-top. We also have identified this as a requirement in our current rebuild of the AIMS system, so we are now – I don't know if you guys have heard this yet, we are getting re-engineered right now, and we're going to have a system called MARS, Modeling And Reporting System. And when we do rate changes, it's going to be based upon all five scenarios.
It was an operational implementation thing that we couldn't do it when we went with AIMS. It was something that we discussed, but we couldn't operationally implement it when AIMS went live.[406]

The multiple rate scenarios of future interest rates, therefore, only impacted the retrospective (historical) element of the amounts required to be recognized by SFAS 91. Effectively, Fannie Mae was applying different estimated lives in the calculation of deferred price adjustment amortization. One set of estimated lives – based upon a methodology that resulted in lower estimates of catch-up than the base rate path would have suggested – for the determination of the current quarter's retrospective adjustment, and another set of estimated lives – based solely upon the base rate path – for the determination of the rate of prospective amortization.

2. The use of the multiple rate paths also had the effect of *reducing* the volatility of the retrospective adjustment required under SFAS No. 91. This effect is demonstrated in the graphs provided in the section titled "Historical Analysis of Accounting for Deferred Price Amortization." The reason for this is that the change in quarterly catch-up, from period to period, is going to be greater if that change is based upon fluctuations in one rate path, versus the fluctuation in multiple rate paths that are averaged together. When five rate paths are averaged, the resultant impact from change to one rate path is likely to be partially offset from the resultant impact of change to a different rate path. In that regard, deferred price adjustment amortization - using a multiple rate path estimation method – is going to be less affected by fluctuations in rates, than it will be by sustained upward or downward trends in rates.

   The behavior of results produced by the Enterprise's method for estimating deferred price adjustment amortization was also understood by management. Mr. Tim Howard commented on this:[407]

[406] OFHEO Interview, Mr. Jeff Juliane, August 31, 2004, pp. 144-145.



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Q: Do you have a sense for how frequently the modeled estimate would exceed a plus or minus 1-percent threshold?
A: The modeled estimate? The calculated catch-up amount?
Q: Yes.
A: No, I don't. It will do that when interest rates are trending more often than when they're simply volatile at random-

**OFHEO has concluded that the use of multiple rate paths facilitated the shifting of income from 2000 to 2001 and also served to reduce the volatility of the current quarter's retrospective adjustment of deferred price adjustment amortization for all reporting periods.**

*D. The Application of Estimation Methods in 1999 and 2000*

**OFHEO's conclusion that Fannie Mae management purposefully selected methods to understate the estimate of catch-up for prospective periods is corroborated by the Enterprise's actions in applying estimation methods during the time frame coincident with the development of those methods.**

Except where specifically noted otherwise, the following information[408] was provided to OFHEO by Fannie Mae. In addition, certain information has been specifically highlighted (circled) and referenced.

[407] OFHEO Interview, Mr. Tim Howard, August 5, 2004, pp. 158-159.
[408] Document titled "Fannie Mae PDA Catch-Up." Typed notation indicates "Forwarded to Peat on 10/06/00." Handwritten notation indicates "to KPMG 10/6/00." FMSE-SP 002434

| Period | PDAMS | REMICS | Unapplied On-Tops | Corporate Total | Fannie Mae Current Coupon[1] | 30 Yr Fixed Rate Mortgage | FRM CPR Based on | Basis Point Difference[2] |
|---|---|---|---|---|---|---|---|---|
| Dec-98 | (178.2) | (298.0) | 276.5 | (199.7) | | | | |
| Jan-99 | (76.7) | (74.5) | 17.9 | (133.3) | 6.28 | 6.79 | 6.75 | 0.04 |
| Feb-99 | (95.1) | (73.0) | 34.8 | (133.3) | 6.69 | 6.81 | 6.75 | 0.06 |
| Mar-99 | (66.7) | (78.7) | 32.5 | (112.9) | 6.64 | 7.04 | 7.00 | 0.04 |
| Apr-99 | (69.0) | (81.3) | 46.6 | (103.7) | 6.66 | 6.92 | 7.00 | (0.08) |
| May-99 | (73.9) | (81.3) | 60.5 | (94.7) | 6.99 | 7.15 | 7.00 | 0.15 |
| Jun-99 | (53.7) | (144.6) a | 66.7 | (131.6) | 7.21 | 7.55 | 7.25 | 0.30 |
| Jul-99 | (55.7) | (142.5) | 75.9 | (122.3) | 7.52 | 7.63 | 7.25 | 0.38 |
| Aug-99 | (56.3) | (121.6) | 82.9 | (95.0) | 7.69 | 7.88 | 7.25 | 0.63 |
| Sep-99 | 2.5 | (68.5) | 88.9 | 22.9 | 7.45 | 7.90 | 7.90 b | 0.00 |
| Oct-99 | 2.6 | (66.2) | 99.8 | 36.2 | 7.46 | 7.85 | 7.90 | (0.05) |
| Nov-99 | 4.4 | (66.2) | 121.9 | 60.1 | 7.60 | 7.74 | 7.90 | (0.16) |
| Dec-99 | 6.7 | (59.0) | 136.3 | 84.0 | 7.80 | 7.91 | 7.90 | 0.01 |
| | | | | | | | | 0.00 |
| Jan-00 | (14.6) | (48.0) | 127.6 | 65.0 | 8.10 | 8.21 | 8.05 | 0.16 |
| Feb-00 | (20.4) | (48.0) | 127.6 | 59.2 | 8.01 | 8.33 | 8.05 | 0.28 |
| Mar-00 | (20.0) | 23.6 c | 127.6 | 131.2 | 7.96 | 8.24 | 8.05 | 0.19 |
| Apr-00 | (44.9) | 60.7 | 119.7 | 135.5 | 8.08 | 8.15 | 9.00 d | (0.85) |
| May-00 | (46.0) | 64.8 | 111.9 | 130.7 | 8.24 | 8.45 | 9.00 e | (0.55) |
| Jun-00 | (59.2) | 48.0 | 104.1 | 92.9 | 7.92 | 8.52 | 8.40 f | 0.12 |
| Jul-00[3] | (56.5) | 57.0 | 96.3 | 96.8 | 7.94 | 8.29 | 8.40 | (0.11) |

**1** *source: www.ubs.com*

**2** *Computed by determining the difference between the rate provided in the column labeled '30 Yr Fixed Rate Mortgage' and the rate provided in the column labeled 'FRM CPR Based on'*

**3** *Fannie Mae did not provide OFHEO with a similar analysis for periods subsequent to July 2000.*

The above information provides the actual catch-up calculated historically by Fannie Mae and the related underlying interest rate assumptions. As can be seen, the relationship between 1) the interest rate upon which prepayment rates ("CPR"[409]) were based, and 2) the rate identified by the Enterprise as the 30 year fixed rate mortgage ("FRM"), is tenuous. The basis point difference between these two rates varies and, furthermore, the basis point difference is also sometimes negative and sometimes positive. In addition, it is clear that the CPR rate used for forecasting is held steadier by management than the FRM rate would otherwise suggest. Lastly, the Fannie Current Coupon Rate[410] is also provided for comparison purposes as well. Changes in the Fannie Mae Current Coupon Rate correlate more closely to the FRM rate, than the FRM rate correlate to the CPR rate. At a minimum, Fannie Mae's selection of interest rate assumptions does not seem to have been determined in a systematical and objective method.

The following is an analysis of certain specific actions that Fannie Mae management took with regard to setting the CPR rate. It should be understood, however, that OFHEO is conducting further review of the catch-up estimation rate setting process for periods both before and after 1999 and 2000.

[409] CPR stands for Constant Prepayment Rate.

[410] The pass-through coupon in the mortgage-backed securities (MBS) market trading at or nearest to - but not exceeding - par.

***June '99 (Note a):*** In June of 1999, the Enterprise had increased the percent of the REMIC book which could be modeled to support the calculation of the constant effective yield required under SFAS No. 91. However, the modeling of a greater portion of the REMIC book had had an adverse impact on the catch-up. According to a memorandum[411] dated July 15, 1999, the incremental impact on the catch-up of the additional REMIC's was approximately $72.5 million additional expense. When all other factors are considered, including a rate change from 7.00% to 7.25%, the negative catch-up associated with the REMIC book increased by $63.3 million. This brought the estimate of the total negative catch-up back over $100 million to negative $131.6 million.

***September '99 (Note b):*** Three months later, the Enterprise's catch-up had swung from the negative $131.6 million to a positive catch-up of $22.9 million – a large swing of $154.5 million of unrecognized positive income. $21 million[412] of this swing can be accounted for by the modeling of additional REMICS. The remainder of the increase is due to the 'in-use'[413] rate change from 7.25% to 7.90%.

As previously noted, it is difficult to draw precise conclusions from the relationship between 30 year fixed mortgage rate and the 'in use' rate used to estimate prepayments. On the one hand, the change between the August versus the September 30 year mortgage rate was only 2 basis points. On the other hand, the 30 year fixed mortgage rate had in fact risen 86 basis points since March 1999, when the 'in use rate' was at 7.00%. However, a memorandum[414] from Mr. Jeff Juliane, dated one month before the September 2000 catch-up estimate was prepared, provides his perspective on the rate change:

> In the upcoming month, we will be initiating a rate change from our current 7.25% level to our Q3 Forecasted Rate Path of 7.90%. We would expect the quarterly change and subsequent slowdown in prepayment speeds to allow for further earnings flexibility and a subsequent improvement in the near term.

***March '00 (Note c):*** The estimated catch-up for March '00 was determined in April '00. A memorandum[415] from Mr. Jeff Juliane to Ms. Leanne Spencer, dated April 5, 2000, states that:

> "The Q1 sensitivities include the impact of process enhancements for REMICs, which now support the modeling of approximately 93% of the underlying book. This added approximately $63.5 million additional catch-up income, and an average catch-up improvement of $30.1 million throughout the forecast horizon."

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[411] Memorandum from Mr. Jeff Juliane/ Rene LeRouzes to distribution, dated July 15, 1999, Subject: PDAMS/REMIC Results (May Book). Distribution included Ms. Janet Pennewell. FMSE-SP 003089 – FMSE-SP 003092

[412] Memorandum from Jeff Juliane/Rene LeRouzes to distribution, dated October 15, 1999, Subject: PDAMS/REMIC Results (August Book), distribution included Ms. Janet Pennewell. FMSE-SP 000328

[413] 'In-use rate' is a Fannie Mae term that refers to the rate being used to estimate prepayments.

[414] Document titled 'Fannie Mae PDA Catch-up'. Typed notation indicates forwarded to Peat on 10/06/00. Handwritten notation indicates "to KPMG 10/6/00." FMSE-SP 002434

[415] Memorandum from Jeff Juliane/Rene LeRouzes to distribution, dated October 15, 1999, Subject: PDAMS/REMIC Results (August Book), distribution included Ms. Janet Pennewell, FMSE-SP 000327-000330

The modeling of the additional REMICS also had the effect of increasing the March 2000 catch-up to a positive (income) $131.2 million – above the informal pre-policy catch-up threshold.[416] The impact on estimated catch-up for prospective years is demonstrated on two schedules of sensitivity analysis that were attached to the April 5, 2000 memorandum.[417] The first schedule shows the Year 2000 sensitivity analysis using the January book with 93% REMICS modeled, while the second schedule shows the Year 2000 sensitivity analysis using the previous October book with 76% REMICS modeled. A comparison between these two schedules shows the average catch-up improvement $30.1 million throughout the forecast horizon associated with the increased REMIC modeling, as well as an additional increase in catch-up due to the increasing rate environment:

| Date | 5-Apr-00 76% Remics | 5-Apr-00 93% Remics | Difference |
|---|---|---|---|
| Dec-00 | $115.5 | $183.0 | $67.5 |
| Dec-01 | $168.2 | $222.0 | $53.8 |
| Dec-02 | $215.8 | $258.0 | $42.2 |
| Dec-03 | $261.2 | $292.2 | $31.0 |
| **Base rate path used** | 8.05% | 8.65% | |
| **Book used** | Oct-00 | Jan-00 | |
| Reference | FMSE-SP 000237 | FMSE-SP 000238 | |

Recall that at the end of 1998 Fannie Mae was confronted with the challenge of a larger than anticipated estimated current loss, of which approximately $200 million was deferred to subsequent periods. The situation now presenting itself to the Enterprise was the circumstance of a large unrecognized current period income, along with the expectation of greater forecasted unrecognized income (positive catch-up) over its planning horizon.

Coincidentally, the analysis in the April 5th memorandum[418] was also the analysis whereby Fannie Mae changed its proposed catch-up estimation method to utilize up and down rate paths of similar magnitude. Had this change in estimation method not been made, the forecast of future positive catch-up would have been even greater.

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[416] OFHEO Interview, Ms. Leanne Spencer, June 22, 2004, p. 61
Q: You said before there was roughly a hundred million dollar threshold.
A: I said that previously in when we were talking about inherent limitations of the model, what the model could do and couldn't do, that our auditors understood those limitations, and that it was an unwritten policy that was not documented, but it was an established practice we had in operating on our auditors that a plus or minus 100 million represented the acknowledgement of the imprecision that exists in this estimation process in connection with our model.
[417] *Id.,* memorandum from Mr. Jeff Juliane to Ms. Leanne Spencer, dated April 5, 2000, Subject: Amortization Sensitivities. FMSE-SP 000236–000238.
[418] *Id.,* FMSE-SP 000237.

***April '00 (Note d):*** The estimated catch-up for April '00 was determined in May '00. A memorandum[419] from Jeff Juliane, dated May 23, 2000, notes that "Management has determined to implement a rate change with the April Book." If the challenge however was large unrecognized income and large estimates of forecasted catch-up raising the 'in use' rate would seem to make these challenges larger. One factor, that offset the effect of increase in the base rate, was a change in the book. This offsetting impact as well as the change to the book was highlighted in an undated document titled 'Notes for Janet – Explanation of results' in a section of the document referencing a rate change from 8.05% to 9.0%, it states:

> Picked up $75 million in catch-up due to rate change and lost $30 million in catch-up due to change in book (recognizing too much discount into income). The amount of discount added from October of 1999 through April of 2000 was $1.4 billion dollars.[420]

Further mitigating the impact – on both current period as well as forecasted prospective catch-up - of the decision to increase the 'in use' rate, was another decision, also reflected in the May 23rd memorandum, to recognize $54.3 million of income. This had the effect of reducing both the current period catch-up as well as the forecasted catch-up.

Lastly, also coincident with the decision to raise rates, was the further decision – reflected in the May 8th memorandum[421] - to use an un-weighted simple average rather than a probabilistically weighted mean of the multiple rate paths.

***May '00 (Note e):*** The estimated catch-up for May '00 was determined in June '00. A memorandum[422] dated June 16th from Rene LeRouzes highlights managements decision to recognize still more income. The memorandum states: "the Q2 sensitivities include $15.7 million of applied on-tops (GFEE: $3.7 million, NII: $12.0 million) booked as of May." Accordingly, another memorandum,[423] dated June 26th provides a catch-up summary analysis showing the reduction of $70 million ($54.3 million from ***note d***, plus $15.7 million as indicated in this note) from both the current period as well as the forecasted catch-up. However, the catch-up May '00 remains at $130.7 million, well in excess of the $100 million mark.

***June '00 (Note f):*** The estimated catch-up for June '00 was determined in July '00. The challenge of too high a level of forecasted catch-up in subsequent years continued to be

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[419] Memorandum from Mr. Jeff Juliane/ Mr. Rene LeRouzes to distribution, dated May 23, 2000, Subject: PDAMS/REMIC Results (March Book), FMSE-SP 000299 to FMSE-SP 000302. Distribution includes Ms. Janet Pennewell.

[420] Undated document titled: Notes for Janet – Explanation of results. This document was provided to OFHEO by Ms. Janet Pennewell, pursuant to OFHEO's subpoena for information issued to her. The full reference indicated reads; 'Picked up $75 million in catch-up due to rate change and lost $30 million in catch-up due to change in book (recognizing too much discount into income). The amount of discount added from October of 1999 through April of 2000 was $1.4 billion dollars.' FMSE-SP 002590

[421] Memorandum from Mr. Jeff Julianne to distribution, dated May 8, 2000, Subject: Amortization/Catch-up Management Process, FMSE 217527 to FMSE 217531. Distribution includes Mr. Tom Lawler, Ms. Leanne Spencer, and Mr. Rene LeRouzes.

[422] Memorandum from Rene LeRouzes to distribution, dated June 16, 2000, Subject; Q2-2000 Catch-up Sensitivities. Distribution included Mr. Tim Howard, Mr. Tom Lawler, Ms. Leanne Spencer and Ms. Janet Pennewell. FMSE-SP 002608-002609.

[423] Memorandum from Mr. Jeff Juliane/Mr. Rene LeRouzes to distribution, dated June 26, 2000, Subject; PDA/REMIC Results (April Book). Distribution includes Ms. Janet Pennewell. FMSE-SP 002611-002612.

addressed in earnest. Analysis prepared on July 10th contrasts one scenario with a 9.00% 'in use' base rate path, and a flat rate curve,[424] with another scenario that used a 8.40% 'in use' base rate path, and a curve that used lower short-term interest rates for the first 24 months of the rate curve. The difference between these two methodologies was significant:

| Date | Q2 2000 Version 1 | Q2 2000 Version 2 | Difference |
|---|---|---|---|
| Dec-00 | $155.2 | $88.8 | ($66.40) |
| Dec-01 | $198.8 | $125.8 | ($73.00) |
| Dec-02 | $238.1 | $165.1 | ($73.00) |
| Dec-03 | $275.1 | $206.3 | ($68.80) |
| **Method** | Mtg rate flat | 24 mos. Sht term rates | |
| **Base rate path used** | 9.00% | 8.40% | |
| **Book used** | April '00 Book | May '00 Book | |
| *Reference* | *FMSE-SP 002822* | *FMSE-SP 002591* | |

The estimation method using short-term rates for the first 24 months of the rate curve had the effect of reducing the estimate of unrecognized income for all prospective periods. This estimation method was also the method formally recommended by the working group to Tim Howard in the memorandum[425] dated September 15, 2000. Furthermore, Fannie Mae in fact also changed the 'in use' base rate path for the estimation of the June '00 catch-up from 9.00% to 8.40%. In addition to lowering the forecast of catch-up for prospective years, the change also addressed the other challenge of high (above 100 million) current period catch-up. Accordingly, the quarterly catch-up decreased approximately $38 million to $92.9 million.

Although it is somewhat difficult to evaluate, the decision to lower the base rate path by 60 basis points to 8.40%, seems to be too large a decrease to be explained by the interest rate environment alone. Fannie Mae's own analysis of catch-up and 'in use' rates used to determine prepayments, shows that 30 year fixed mortgage rates in fact *rose* to 8.52% from 8.45%. Alternatively, OFHEO's analysis of interest rates shows that rates did indeed decline, but not by enough to justify the full amount of the decrease. OFHEO's analysis shows that the 10 year treasury and Fannie Mae Current Coupon declined by only 32bps and 34bps respectively.

Perhaps the rationale for both the change in estimation method as well as the decline in the 'in use' base rate path is also provided by the undated document[426] titled 'Notes for Janet – Explanation of results.' In a different section of the document referencing a rate change from 9.0% to 8.4% it states:

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[424] Fannie Mae's catch-up estimation method heretofore utilized a flat rate curve.
[425] Memorandum from Ms. Janet Pennewell to Mr. Tim Howard, dated September 15, 2000, Subject: Amortization Policy, FMSE-SP 000016-000028. Distribution includes Ms. Leanne Spencer, Mr. Jeff Juliane, and Mr. Tom Lawler.
[426] Undated document titled: Notes for Janet – Explanation of results. FMSE-SP 002590

Lost $20 million in catch-up due to rate change and picked up $30 million in catch-up due to change in book (recognizing to little discount into income). Lost $78 million in catch up due to methodology change (short term CPR's were changed from 3-months to 24-month) to slow down the recognition of discount into income in request to reducing the positive catch-up and transferring income into the outer years.

*E. Conclusion*

**Fannie Mae's formulation, selection and application of estimation methods seems to have been made for the purposes of achieving desired results rather than for achieving good faith estimates of the highest quality. Furthermore, the estimation methods were not consistently applied to both the retrospective adjustment, and prospective amortization required by SFAS 91. Lastly, the selection of market rate assumptions was not made in an objective and consistent manner. Instead, priority was given to the financial statement impact of these assumptions.**

## APPENDIX II

### *Summary of SFAS 133, Accounting for Derivatives and Hedging Activities*

The hedge accounting framework in SFAS 133 results in a matching of the earnings effect of the change in fair value (or cash flows) of the derivative and that of the hedged item, by offsetting them against one another in the same accounting period. As hedge accounting is elective, companies are able to designate a derivative as a hedging instrument at any time and apply hedge accounting prospectively as long as the related criteria are satisfied. Qualifying for hedge accounting is important to many entities because of this matching effect that it provides in the income statement.

Under SFAS 133, hedges can be classified as fair value hedges or cash flow hedges. The objective of a fair value hedge is to use a derivative to mitigate the variability in the fair value of the hedged item. In a fair value hedge, both the changes in the fair value of the hedging derivative and the changes in the fair value of the hedged item (usually an asset or a liability) attributable to changes in the risk being hedged are recorded in earnings.[427] Effectiveness for a fair value hedge is determined as the extent to which the changes in the fair value of the hedging instrument offset the changes in the fair value of the hedged item attributable to the risk being hedged. The net difference represents the hedge ineffectiveness. The objective of a cash flow hedge is to mitigate the variability of cash flows relating to a hedged item (usually a forecasted transaction) using a derivative. In a cash flow hedge, changes in the fair value of the hedging instrument are recorded in AOCI for the effective portion of the hedge, while the ineffective portion is recorded immediately in earnings. Amounts accumulated in AOCI are reclassified from AOCI to earnings in the period in which the hedged item affects earnings.[428]

Hedge accounting is permitted only if the derivative is highly effective in hedging the identified hedged risk associated with the hedged transaction at inception and throughout the term of the hedging relationship.[429] That is, in order to qualify for hedge accounting, the changes in the fair value or cash flows of a hedged item attributable to the risk being hedged must be expected to be largely offset by the related changes in the fair value of the hedging instrument. This expectation must be updated at least quarterly.[430] Additionally, a hedger is required to support its expectation by either qualitative or analytical means referred to as an effectiveness "assessment." SFAS 133 provides the hedger flexibility in identifying the methodologies used in assessing the effectiveness of these hedges; however, the methodologies selected must be reasonable and applied consistently to all similar hedges. Such methodologies must also be specified in documentation prepared at the inception of the hedge and may not be changed retroactively.

SFAS 133 recognizes that a certain level of hedge inefficiency exists in almost every hedging relationship, even those that are deemed to be highly effective. That inefficiency, referred to as hedge ineffectiveness, may result because of differences in tenors, indices, repricing dates,

[427] FASB, SFAS 133, paragraph 22.
[428] FASB, SFAS 133, paragraph 31.
[429] FASB, SFAS 133, paragraphs 20 (b) and 28 (b) for fair value and cash flow hedges.
[430] FASB, SFAS 133, paragraphs 20 (b) and 28 (b) for fair value and cash flow hedges.



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credit worthiness, liquidity, etc. between the hedging derivative and the hedged item. *To the extent hedge ineffectiveness exists, it must be measured and recorded in earnings immediately*. Thus, at least on a quarterly basis, an entity is required to measure the ineffectiveness in the hedge and report it immediately in the financial statements. SFAS 133 prescribes the methodologies that should be used to measure the ineffectiveness in hedging relationships, and such methodologies may differ from those used to assess the effectiveness of that relationship. Accounting prior to the effective date of SFAS 133 ignored hedge ineffectiveness.

In addition to the assessment test, documentation of the hedging relationship is critical to qualify for hedge accounting. As part of the hedge designation, the hedger must identify, at a minimum, the following information:[431]

- The nature of the risk being hedged and a description of the hedging instrument and the hedged item
- A description of how the hedging instrument's effectiveness in offsetting the change in fair value or cash flows will be assessed and measured
- A description of how the designated hedging relationship is consistent with the established risk management practices.

SFAS 133 requires that this information be documented concurrently with the designation of the hedge to avoid accounting abuses. Once the designation and documentation is complete for an individual hedging relationship, hedge accounting will be afforded prospectively for that specific relationship. There can be no retroactive designation of any hedging relationships.

[431] FASB, SFAS 133, paragraphs 20 (a) and 28 (a) for fair value and cash flow hedges, respectively.

## APPENDIX III

### *Example of a Term-out Transaction*

**Description of Transaction:**

• On 7/2/1997, Fannie Mae issues $500M in DNs and enters into Swap #1. Swap #1 is a pay-fixed, receive-floating swap with a term of 7 years, the period of expected reissuance of DNs. For purposes of this example it is assumed that the swap's interest rate reset dates match the expected timing of DN reissuance and all other critical terms are matched in order to allow Fannie Mae to assume perfect effectiveness under SFAS 133.
• On 7/2/1999, Fannie Mae issues $500M 6.175% 3-yr MTN rather than reissuing $500M in DNs. At that time Fannie Mae also enters into swap #2. Swap #2 is a receive-fixed, pay-floating swap that matures in 3 years. Swap #2 is structured such that its cash flows offset those of swap #1 for the three year term of swap #2, with the exception of a differential between the fixed rates of the two swaps, which remains constant during that period.
• Upon the maturity of the MTN, Fannie Mae expects to resume issuing $500M in DNs through the remainder of the original 7 year period.
• As of 7/2/1999, the re-designated swap #1 together with swap #2 is hedging DNs to be issued over a "forward starting" two year period that begins 7/2/2002.

**Hypothetical Derivative**

- Since the hedged transactions represent discount notes to be issued in a "forward starting" period, as noted above, OFHEO believes a hypothetical forward starting pay-fixed swap should be used for purposes of measuring hedge ineffectiveness based on the guidance provided in DIG Issue G7 and for assessing effectiveness using the dollar offset method.
- The forward starting swap ("hypothetical derivative") is assumed to be on market terms (such that the fair value is zero) as of 7/2/99 (the inception of the new hedging relationship), with a forward starting date of 7/2/02, and maturity date of 7/2/04, consistent with the period in which future interest payments are hedged.
- In order to measure and assess effectiveness, changes in the fair values of the hedging instruments (swap#1 and #2 combined) are compared to changes in the fair value of the hypothetical derivative.
- The terms of the two swaps and the hypothetical derivative are summarized as follows:



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| Swap #1 | | Swap #2 | | Hypothetical Swap #3 | |
|---|---|---|---|---|---|
| Notional | 500,000,000 | Notional | 500,000,000 | Notional | 500,000,000 |
| Pay | 6.7850% | Receive | 6.1750% | Pay | 6.6999% |
| Receive | LIBOR | Pay | LIBOR | Receive | LIBOR |
| Trade Date | 6/30/1997 | Trade Date | 6/30/1999 | Trade Date | 6/30/1999 |
| Effective | 07/02/1997 | Effective | 07/02/1999 | Effective | 07/02/2002 |
| Maturity | 07/02/2004 | Maturity | 07/02/2002 | Maturity | 07/02/2004 |
| FixPayFreq | Semi-annual | FixPayFreq | Semi-annual | FixPayFreq | Semi-annual |
| FltPayFreq | Quarterly | FltPayFreq | Quarterly | FltPayFreq | Quarterly |

**Analysis:** See Next Page for Explanatory Notes.

| | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Date | Swap#1 CLEAN | Swap#2 CLEAN | A + B | Hypothetical Swap#3 CLEAN | Period Change in C | Period Change in D | E - F | E/F (period dollar offset) | Cumulative Change in Hedge (1&2) | Cumulative Change in Hypothetical Swap#3 | I/J (cum. dollar offset) | Cumulative OCI | Cumulative Ineffect-ivenss (P&L) | Period OCI Entry | Period P&L Ineffect-iveness Entry | Prior Hedge OCI Amortization | Net P&L |
| - | 06/30/1997 | 0 | | | | | | | | | | | | | | | | |
| 1 | 09/30/1997 | (9,521,840) | | | | | | | | | | | | | | | | |
| 2 | 12/31/1997 | (16,632,572) | | | | | | | | | | | | | | | | |
| 3 | 03/31/1998 | (18,385,686) | | | | | | | | | | | | | | | | |
| 4 | 06/30/1998 | (21,234,550) | | | | | | | | | | | | | | | | |
| 5 | 09/30/1998 | (43,037,438) | | | | | | | | | | | | | | | | |
| 6 | 12/31/1998 | (34,911,044) | | | | | | | | | | | | | | | | |
| 7 | 03/31/1999 | (23,050,566) | | | | | | | | | | | | | | | | |
| 8 | 06/30/1999 | (8,953,548) | - | (8,953,548) | - | | - | | | | | | | | | | | |
| 9 | 09/30/1999 | (5,110,527) | (1,748,228) | (6,858,755) | 1,411,246 | 2,094,793 | 1,411,246 | 683,547 | 148.4% | 2,094,793 | 1,411,246 | 148.4% | 1,411,246 | 683,547 | 1,411,246 | 683,547 | (447,677) | 235,870 |
| 10 | 12/31/1999 | 3,327,731 | (7,518,361) | (4,190,629) | 3,388,930 | 2,668,126 | 1,977,684 | 690,442 | 134.9% | 4,762,918 | 3,388,930 | 140.5% | 3,388,930 | 1,373,989 | 1,977,684 | 690,442 | (447,677) | 242,764 |
| 11 | 03/31/2000 | 8,685,601 | (10,273,290) | (1,587,689) | 5,320,495 | 2,602,940 | 1,931,565 | 671,375 | 134.8% | 7,365,859 | 5,320,495 | 138.4% | 5,320,495 | 2,045,364 | 1,931,565 | 671,375 | (447,677) | 223,698 |
| 12 | 06/30/2000 | 7,178,852 | (9,422,879) | (2,244,028) | 4,036,143 | (656,339) | (1,284,351) | 628,012 | 51.1% | 6,709,520 | 4,036,143 | 166.2% | 4,036,143 | 2,673,377 | (1,284,351) | 628,012 | (447,677) | 180,335 |
| 13 | 09/29/2000 | (1,055,865) | (4,554,754) | (5,610,619) | 58,410 | (3,366,591) | (3,977,733) | 611,143 | 84.6% | 3,342,929 | 58,410 | 5723.2% | 58,410 | 3,284,519 | (3,977,733) | 611,143 | (447,677) | 163,465 |
| 14 | 12/29/2000 | (13,446,023) | 1,971,108 | (11,474,914) | (6,413,309) | (5,864,296) | (6,471,719) | 607,423 | 90.6% | (2,521,367) | (6,413,309) | 39.3% | (2,521,367) | - | (2,579,777) | (3,284,519) | (447,677) | (3,732,196) |
| 15 | 03/30/2001 | (24,658,180) | 8,770,759 | (15,887,421) | (11,464,170) | (4,412,507) | (5,050,861) | 638,354 | 87.4% | (6,933,873) | (11,464,170) | 60.5% | (6,933,873) | - | (4,412,507) | - | (447,677) | (447,677) |
| 16 | 06/29/2001 | (20,589,573) | 9,656,575 | (10,932,998) | (7,189,426) | 4,954,423 | 4,274,744 | 679,679 | 115.9% | (1,979,450) | (7,189,426) | 27.5% | (1,979,450) | - | 4,954,423 | - | (447,677) | (447,677) |
| 17 | 09/28/2001 | (39,108,456) | 13,280,986 | (25,827,470) | (22,751,233) | (14,894,472) | (15,561,807) | 667,336 | 95.7% | (16,873,922) | (22,751,233) | 74.2% | (16,873,922) | - | (14,894,472) | - | (447,677) | (447,677) |
| 18 | 12/31/2001 | (33,476,184) | 10,365,191 | (23,110,993) | (20,790,673) | 2,716,477 | 1,960,560 | 755,916 | 138.6% | (14,157,445) | (20,790,673) | 68.1% | (14,157,445) | - | 2,716,477 | - | (447,677) | (447,677) |
| 19 | 03/29/2002 | (26,870,835) | 5,237,763 | (21,633,072) | (20,048,413) | 1,477,921 | 742,260 | 735,661 | 199.1% | (12,679,524) | (20,048,413) | 63.2% | (12,679,524) | - | 1,477,921 | - | (447,677) | (447,677) |
| 20 | 06/28/2002 | (34,700,899) | 227,618 | (34,473,281) | (33,617,300) | (12,840,209) | (13,568,888) | 728,679 | 94.6% | (25,519,733) | (33,617,300) | 75.9% | (25,519,733) | - | (12,840,209) | - | (447,677) | (447,677) |
| 21 | 09/30/2002 | (41,285,067) | - | (41,285,067) | (40,553,564) | (6,811,786) | (6,936,263) | 124,477 | 98.2% | (32,331,519) | (40,553,564) | 79.7% | (32,331,519) | - | (6,811,786) | - | (447,677) | (447,677) |
| 22 | 12/31/2002 | (38,000,308) | - | (38,000,308) | (37,370,431) | 3,284,759 | 3,183,133 | 101,626 | 103.2% | (29,046,760) | (37,370,431) | 77.7% | (29,046,760) | - | 3,284,759 | - | (447,677) | (447,677) |
| 23 | 03/31/2003 | (33,405,434) | - | (33,405,434) | (32,878,576) | 4,594,873 | 4,491,855 | 103,019 | 102.3% | (24,451,887) | (32,878,576) | 74.4% | (24,451,887) | - | 4,594,873 | - | (447,677) | (447,677) |
| 24 | 06/30/2003 | (27,799,169) | - | (27,799,169) | (27,374,944) | 5,606,266 | 5,503,632 | 102,634 | 101.9% | (18,845,621) | (27,374,944) | 68.8% | (18,845,621) | - | 5,606,266 | - | (447,677) | (447,677) |
| 25 | 09/30/2003 | (20,720,113) | - | (20,720,113) | (20,401,152) | 7,079,056 | 6,973,792 | 105,264 | 101.5% | (11,766,565) | (20,401,152) | 57.7% | (11,766,565) | - | 7,079,056 | - | (447,677) | (447,677) |
| 26 | 12/31/2003 | (13,853,676) | - | (13,853,676) | (13,640,999) | 6,866,437 | 6,760,154 | 106,283 | 101.6% | (4,900,128) | (13,640,999) | 35.9% | (4,900,128) | - | 6,866,437 | - | (447,677) | (447,677) |
| 27 | 03/31/2004 | (7,096,170) | - | (7,096,170) | (6,989,183) | 6,757,506 | 6,651,816 | 105,690 | 101.6% | 1,857,378 | (6,989,183) | -26.6% | - | 1,857,378 | 4,900,128 | 1,857,378 | (447,677) | 1,409,700 |
| 28 | 06/30/2004 | (156,247) | - | (156,247) | (153,902) | 6,939,923 | 6,835,281 | 104,642 | 101.5% | 8,797,301 | (153,902) | -5716.2% | - | 8,797,301 | - | 6,939,923 | (447,677) | 6,492,246 |
| 29 | 07/02/2004 | - | - | - | - | 156,247 | 153,902 | 2,346 | 101.5% | 8,953,548 | - | | - | 8,953,548 | - | 156,247 | 0 | 156,247 |
| | | | | | | | | | | | | | TOTAL P&L==========> | | | 8,953,548 | (8,953,548) | - |



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**Explanatory Notes:**

- The columns labeled as A and B represent the fair values of the pay-fixed (swap #1) and receive-fixed swap (swap #2), respectively for each quarter-end.
- Column C represents the combined fair value of swaps #1 and #2.
- Column D reflects the fair value of the hypothetical swap for each quarter-end.
- The fair values in the analysis represent "clean" fair values. These clean fair values exclude the interest accrued on the swaps. Fair values have been calculated based on actual market rates for the dates presented.
- The columns labeled E and F represent the quarterly change in fair value for the swaps and the hypothetical swap, respectively.
- Column H represents the period-to-period[432] dollar offset ratio, provided for informational purposes. This ratio represents the change in value of the hedging instruments as a percentage of the change in value of the hedged item (represented by the hypothetical instrument) for each quarterly period. The period-to-period dollar offset ratio is one way of assessing the effectiveness[433] of the hedging relationship (another is to use cumulative dollar offset ratio, as discussed below). For purposes of assessing whether a hedge is highly effective, the ratio should be between 80%-125%. If the ratio falls outside the range, the hedge does not qualify for hedge accounting, if the period-to-period method is used.
- Columns I and J represent the cumulative change in fair value of the swaps and the hypothetical swap, respectively, since the inception of the re-designated hedge relationship (7/2/99).
- Column K represents the cumulative dollar offset ratio. This represents the change in value of the hedging instruments as a percentage of the change in value of the hedged item since the inception of the hedging relationship. As noted above, cumulative dollar offset is another way in which to assess hedge effectiveness. The DAG identifies the cumulative dollar offset method as Fannie Mae's approved method to assess hedge effectiveness. Had Fannie Mae utilized the cumulative dollar offset approach for assessing effectiveness, the swaps would have failed to qualify for hedge accounting at the end of the first quarter of the hedging relationship (9/30/99).[434] If Fannie Mae were to later attempt to qualify for hedge accounting it would need to "re-start" its cumulative calculation beginning with a new inception date. Such calculations are not presented in the example.
- Column L indicates the cumulative balance in AOCI and is adjusted to reflect the lower of the absolute cumulative changes in fair value since inception between the hypothetical swap and the actual swap.
- Column N represents the change in AOCI from quarter to quarter.

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[432] A "period" in these examples refers to a quarter.

[433] The method chosen to assess effectiveness must be elected and documented at inception of the hedging relationship per paragraph 62 of SFAS 133 and DIG Issue E8 *Hedging—General: Assessing Hedge Effectiveness Of Fair Value And Cash Flow Hedges Period-By-Period Or Cumulatively under a Dollar-Offset Approach.*

[434] Note that Fannie Mae would also have been required to perform an assessment of effectiveness at the inception of the hedge relationship. As noted, Fannie Mae's DAG specifies the use of dollar offset for its assessment test, however, it is unclear how that test is to be applied at the inception of the hedge.

- Column O represents the amount of overhedge, i.e. amount by which the periodic change in fair value of the actual swaps (column E) is greater than the periodic change in AOCI (Column N). This amount is the ineffectiveness that is recorded in P&L for the quarter.
- Column P represents the prior period AOCI amortization into earnings (the balance in AOCI relating to the funding swap prior to re-designation is amortized into earnings over the original life of the swap). For the purposes of this example, the amortization has been calculated ratably.
- Column Q is the net P&L effect that would result from these entries.
- This analysis assumes that all interest payments and accruals on the swaps would also be recorded in interest expense, consistent with Fannie Mae's method. Thus, column Q represents the net difference between OFHEO and Fannie Mae methodologies.

**Implications of this Analysis:**
Fannie Mae does not perform the above calculations when a term-out occurs. Instead, they account for both swaps as being perfectly effective hedges and incorrectly record the changes in fair value of the swaps in AOCI. The result of accounting for these swaps as perfectly effective hedges is that the earnings effect is reflected on an accrual basis over the lives of the swaps, avoiding any volatility arising from the changes in fair values of the swaps. The analysis OFHEO has prepared presents the entries that would also be required in addition to the accrual entries recorded under Fannie Mae's approach, if the accounting were properly applied.

The following observations can be made as a result of this analysis:
- Column Q reflects the net difference in earnings that would be recorded if ineffectiveness had been properly measured, assuming the hedge passed the effectiveness test (see point below). Note that even if the hedge were deemed highly effective, there would be periodic earnings volatility, sometime in the millions of dollars, if the proper accounting treatment were applied.
- Fannie Mae's DAG provides for an assessment of effectiveness using the dollar offset approach. The above analysis indicates that this particular swap would fail such a hedge effectiveness test and therefore not qualify for hedge accounting for at least some of the periods during the term of the hedge. This would require all changes in fair value of the derivatives to be recorded in earnings during such periods.

**Conclusion:**
If Fannie Mae accounted for the term-out transactions in accordance with GAAP, there would have been significant volatility in earnings caused by ineffectiveness and/or the failure of hedge relationships to qualify for hedge accounting, based on the dollar offset assessment test they define in their policy.

**APPENDIX IV**

***Example of an Offsetting Swap***

**Description of Transaction:**

- On 7/2/97, Fannie Mae issues $500M in DNs and enters into Swap #1. Swap #1 is a pay-fixed, receive-floating swap with a term of 7 years, the period of expected reissuance of DNs. For purposes of this example it is assumed that the swap's interest rate reset dates match the expected timing of DN reissuance and all other critical terms are matched in order to allow Fannie Mae to assume perfect effectiveness under SFAS 133.
- On 7/2/01, Fannie Mae issues a $500M 6.175% 3-yr MTN to replace rollover of $500M DN and enters into swap #2. Swap #2 is a receive-fixed, 5.202%, pay-floating swap that matures in 3 years which coincides with the maturity of the MTN and the end of the original 7 year hedge period. Swap #2 serves to completely offset the effect of swap #1 except that the two swaps have different fixed interest rates because they were entered into at different times. The net result of the two swaps is a fixed stream of cash flows over their remaining lives, representing the difference in their respective fixed rates.
- The terms of the two swaps are summarized as follows:

| **Swap #1** | | | **Swap #2** | |
|---|---|---|---|---|
| Notional | 500,000,000 | | Notional | 500,000,000 |
| Pay | 6.7850% | | Receive | 5.2020% |
| Receive | LIBOR | | Pay | LIBOR |
| Effective | 07/02/1997 | | Effective | 07/02/2001 |
| Maturity | 07/02/2004 | | Maturity | 07/02/2004 |
| FixPayFreq | Semi-annual | | FixPayFreq | Semi-annual |
| FltPayFreq | Quarterly | | FltPayFreq | Quarterly |

**Analysis:** See Next Page for Explanatory Notes.

| # | Date | A<br>Swap#1<br>CLEAN | B<br>Swap#2<br>CLEAN | C<br>Period Change<br>in Swap #1 | D<br>Period Change<br>in Swap #2 | E<br>C + D<br>Net P&L | F<br>Prior Hedge OCI<br>Amortization | G<br>Period P&L<br>Impact |
|---|---|---|---|---|---|---|---|---|
| - | 06/30/1997 | 0 | | | | | | |
| 1 | 09/30/1997 | (9,521,840) | | | | | | |
| 2 | 12/31/1997 | (16,632,572) | | | | | | |
| 3 | 03/31/1998 | (18,385,686) | | | | | | |
| 4 | 06/30/1998 | (21,234,550) | | | | | | |
| 5 | 09/30/1998 | (43,037,438) | | | | | | |
| 6 | 12/31/1998 | (34,911,044) | | | | | | |
| 7 | 03/31/1999 | (23,050,566) | | | | | | |
| 8 | 06/30/1999 | (8,953,548) | | | | | | |
| 9 | 09/30/1999 | (5,110,527) | | | | | | |
| 10 | 12/31/1999 | 3,327,731 | | | | | | |
| 11 | 03/31/2000 | 8,685,601 | | | | | | |
| 12 | 06/30/2000 | 7,178,852 | | | | | | |
| 13 | 09/29/2000 | (1,055,865) | | | | | | |
| 14 | 12/29/2000 | (13,446,023) | | | | | | |
| 15 | 03/30/2001 | (24,658,180) | | | | | | |
| 16 | 06/28/2001 | (21,967,722) | - | | | | | |
| 17 | 09/28/2001 | (39,111,008) | 18,407,588 | (17,143,286) | 18,407,588 | 1,264,302 | (1,830,644) | (566,342) |
| 18 | 12/31/2001 | (33,476,184) | 14,619,596 | 5,634,824 | (3,787,992) | 1,846,832 | (1,830,644) | 16,188 |
| 19 | 03/29/2002 | (26,870,835) | 9,880,730 | 6,605,350 | (4,738,865) | 1,866,484 | (1,830,644) | 35,841 |
| 20 | 06/28/2002 | (34,700,899) | 19,321,190 | (7,830,065) | 9,440,460 | 1,610,395 | (1,830,644) | (220,248) |
| 21 | 09/30/2002 | (41,285,067) | 27,682,822 | (6,584,168) | 8,361,632 | 1,777,464 | (1,830,644) | (53,180) |
| 22 | 12/31/2002 | (38,000,308) | 26,287,794 | 3,284,759 | (1,395,028) | 1,889,731 | (1,830,644) | 59,088 |
| 23 | 03/31/2003 | (33,405,434) | 23,608,545 | 4,594,873 | (2,679,250) | 1,915,624 | (1,830,644) | 84,980 |
| 24 | 06/30/2003 | (27,799,169) | 19,910,748 | 5,606,266 | (3,697,796) | 1,908,470 | (1,830,644) | 77,826 |
| 25 | 09/30/2003 | (20,720,113) | 14,789,064 | 7,079,056 | (5,121,685) | 1,957,371 | (1,830,644) | 126,727 |
| 26 | 12/31/2003 | (13,853,676) | 9,898,954 | 6,866,437 | (4,890,109) | 1,976,328 | (1,830,644) | 145,684 |
| 27 | 03/31/2004 | (7,096,170) | 5,106,751 | 6,757,506 | (4,792,204) | 1,965,302 | (1,830,644) | 134,659 |
| 28 | 06/30/2004 | (156,247) | 112,629 | 6,939,923 | (4,994,122) | 1,945,801 | (1,830,644) | 115,158 |
| 29 | 07/02/2004 | - | - | 156,247 | (112,629) | 43,618 | (21,967,722) | (43,618) |
| | | | | **TOTAL P&L==========>** | | **21,967,722** | | |


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**Explanatory Notes:**

- The columns labeled as A and B represent the quarter-end clean fair values of the initial pay-fixed swap (swap #1) and the offsetting, receive-fixed swap (swap #2), respectively.
- The columns labeled C and D represent the quarterly change in fair value for swap #1 and swap #2, respectively.
- Column E represents the Net P&L from the mark-to-market of the two swaps.
- Column F represents the amortization from AOCI to earnings relating to the previously existing hedge relationship.
- Column G represents net P&L for the period after taking into account the amortization of the balance from AOCI into earnings.

**Implications of this Analysis:**

It is OFHEO's understanding that from a hedge accounting perspective, Fannie Mae enters into swap #2 to offset swap #1. Although there is no remaining exposure to be hedged, Fannie Mae accounts for these swaps as perfectly effective hedges. The changes in fair value for both swaps, the original pay-fixed swap and the offsetting receive-fixed swap, are recorded in AOCI. The result of accounting for these swaps as perfectly effective hedges is that the earnings effect is reflected on an accrual basis over the lives of the swaps, avoiding any volatility arising from the changes in their fair values. The analysis OFHEO has prepared presents the entries that would also be required in addition to the accrual entries recorded under Fannie Mae's approach, if the accounting were properly applied.

The following observation is made as a result of this analysis:

- Column G reflects the net difference in earnings that would be recorded if the proper accounting were applied.

**Conclusion:**

If, after the execution of the offsetting swap, Fannie Mae had accounted for the pay-fixed swap and the offsetting receive swap in accordance with GAAP and recorded the changes in fair value of the swaps in earnings, it would have resulted in volatility in earnings.

## APPENDIX V

### *Example of a Cancelable Swap*

### Description of Transaction:

• On 7/2/1997, Fannie Mae issues $500M in DNs and enters into Swap #1. Swap #1 is a pay-fixed, receive-floating swap with a term of 7 years, the period of expected reissuance of DNs. For purposes of this example it is assumed that the swap's interest rate reset dates match the expected timing of DN reissuance and all other critical terms are matched in order to allow Fannie Mae to assume perfect effectiveness under SFAS 133.

### Hypothetical Derivative

- Since the hedged transactions represent discount notes to be issued over a seven year period, OFHEO believes a seven year hypothetical non-cancelable swap should be used for purposes of measuring hedge ineffectiveness based on the guidance provided in DIG Issue G7, and for assessing effectiveness using the dollar offset method. [435]
- The hypothetical non-cancelable swap is assumed to be on market terms (such that the fair value is zero) as of 7/2/97 (the inception of the new hedging relationship), with a start date of 7/2/97, and maturity date of 7/2/04, consistent with the period over which the discount note issuances are hedged.
- In order to measure and assess effectiveness, changes in the fair values of the hedging instrument (swap#1) is compared to changes in the fair value of the hypothetical derivative.

| **Swap #1** | | | **Swap #2 (Non-Callable Hypothetical)** | |
|---|---|---|---|---|
| Notional | 500,000,000 | | Notional | 500,000,000 |
| Pay | 7.1031% | | Pay | 6.7850% |
| Receive | LIBOR | | Receive | LIBOR |
| Effective | 07/02/1997 | | Effective | 07/02/1997 |
| Maturity | 07/02/2004 | | Maturity | 07/02/2004 |
| FixPayFreq | Semi-annual | | FixPayFreq | Semi-annual |
| FltPayFreq | Quarterly | | FltPayFreq | Quarterly |
| Callable On | 07/02/2001 | | Callable On | n/a |

[435] Fannie Mae has elected not to separate the time and intrinsic value components of the callable swap and has not identified optionality in the transaction being hedged. As such, the hypothetical is a swap with no option feature.

**Analysis:** See Next Page for Explanatory Notes.

| # | Date | A<br>Swap#1<br>CLEAN | B<br>Swap#2<br>CLEAN | C<br>Period Change in Swap #1 | D<br>Period Change in Swap#2 | E<br>C/D<br>(period dollar offset) | F<br>G/H<br>(cumulative dollar offset) | G<br>Cumulative OCI | H<br>Period OCI Entry | I<br>Period P&L Ineffect-iveness Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| - | 06/30/1997 | (0) | 0 | | | | | | | |
| 1 | 09/30/1997 | (6,856,921) | (9,521,840) | (6,856,921) | (9,521,840) | 72.0% | 72.0% | (6,856,921) | (6,856,921) | 0 |
| 2 | 12/31/1997 | (11,312,269) | (16,632,572) | (4,455,348) | (7,110,733) | 62.7% | 68.0% | (11,312,269) | (4,455,348) | - |
| 3 | 03/31/1998 | (12,815,287) | (18,385,686) | (1,503,018) | (1,753,114) | 85.7% | 69.7% | (12,815,287) | (1,503,018) | - |
| 4 | 06/30/1998 | (14,271,875) | (21,234,550) | (1,456,588) | (2,848,864) | 51.1% | 67.2% | (14,271,875) | (1,456,588) | - |
| 5 | 09/30/1998 | (28,200,079) | (43,037,438) | (13,928,204) | (21,802,888) | 63.9% | 65.5% | (28,200,079) | (13,928,204) | - |
| 6 | 12/31/1998 | (20,280,281) | (34,911,044) | 7,919,798 | 8,126,394 | 97.5% | 58.1% | (20,280,281) | 7,919,798 | - |
| 7 | 03/31/1999 | (14,169,710) | (23,050,566) | 6,110,571 | 11,860,477 | 51.5% | 61.5% | (14,169,710) | 6,110,571 | - |
| 8 | 06/30/1999 | (5,146,137) | (8,953,548) | 9,023,573 | 14,097,018 | 64.0% | 57.5% | (5,146,137) | 9,023,573 | - |
| 9 | 09/30/1999 | (2,308,078) | (5,110,527) | 2,838,060 | 3,843,021 | 73.8% | 45.2% | (2,308,078) | 2,838,060 | - |
| 10 | 12/31/1999 | 3,698,686 | 3,327,731 | 6,006,764 | 8,438,258 | 71.2% | 111.1% | 3,327,731 | 5,635,809 | 370,955 |
| 11 | 03/31/2000 | 6,931,412 | 8,685,601 | 3,232,725 | 5,357,870 | 60.3% | 79.8% | 6,931,412 | 3,603,680 | (370,955) |
| 12 | 06/30/2000 | 5,854,847 | 7,178,852 | (1,076,564) | (1,506,749) | 71.4% | 81.6% | 5,854,847 | (1,076,564) | - |
| 13 | 09/29/2000 | 1,217,927 | (1,055,865) | (4,636,920) | (8,234,716) | 56.3% | -115.3% | - | (5,854,847) | 1,217,927 |
| 14 | 12/29/2000 | (1,732,822) | (13,446,023) | (2,950,749) | (12,390,158) | 23.8% | 12.9% | (1,732,822) | (1,732,822) | (1,217,927) |
| 15 | 03/30/2001 | (2,498,793) | (24,658,180) | (765,971) | (11,212,158) | 6.8% | 10.1% | (2,498,793) | (765,971) | - |
| 16 | 06/29/2001 | (175,990) | (20,469,902) | 2,322,803 | 4,188,279 | 55.5% | 0.9% | (175,990) | 2,322,803 | - |

**Assume swap is canceled as the option was in the money**


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**Explanatory Notes:**

- The columns labeled as A and B represent the quarterly clean fair values of the actual and hypothetical swap, respectively.
- The hypothetical swap is created to mirror the terms of the discount notes being hedged. The clean value excludes the interest accrued on the swaps.
- The columns labeled C and D represent the quarterly change in fair value for swap #1 and swap #2, respectively.
- Column E represents the period-to-period dollar offset ratio; provided for informational purposes.
- Column F represents the cumulative dollar offset ratio. The dollar offset ratio is a measure of the degree to which a hedging instrument (callable swap) has been effective in offsetting the change in fair value of the hedged item (discount notes, represented by the hypothetical swap). For purposes of assessing whether a hedge is highly effective, the ratio should be between 80%-125%. If the ratio falls outside the range, the hedge does not qualify for hedge accounting. The DAG identifies the cumulative dollar offset method as Fannie Mae's approved method to assess hedge effectiveness. Had Fannie Mae utilized the cumulative dollar offset approach for assessing effectiveness, the swaps would have failed to qualify for hedge accounting at the end of the first quarter of the hedging relationship (9/30/97).[436] If Fannie Mae were to later attempt to qualify for hedge accounting it would need to "re-start" its cumulative calculation beginning with a new inception date. Such calculations are not presented in the example.
- Column G indicates the cumulative balance in AOCI and is adjusted to reflect the lower of the absolute cumulative changes in fair value since inception between the hypothetical and the actual swap.
- Column H represents the change in AOCI from quarter to quarter.
- Column I represents the amount of overhedge, i.e. amount by which the periodic change in fair value of the actual swap (column C) is greater than the periodic change in AOCI (column H).
- Fannie Mae does not perform the above calculation and assumes that the entire change in fair value should be posted to AOCI.

**Implications of this Analysis:**

Fannie Mae does not perform the above calculations when executing a callable swap to hedge discount notes from a hedge accounting perspective. Instead, they account for the callable swap as being "perfectly effective" and incorrectly record the changes in fair value of the swap in AOCI. The result of accounting for the swap as perfectly effective is that the earnings effect is reflected on an accrual basis over the life of the swap, avoiding any volatility arising from the changes in fair values of the swaps. The analysis OFHEO has prepared presents the entries that would also be required in addition to the accrual entries recorded under Fannie Mae's approach, if the accounting were properly applied.

The following observations can be made as a result of this analysis:

[436] Note that Fannie Mae would also have been required to perform an assessment of effectiveness at the inception of the hedge relationship. As noted, Fannie Mae's DAG specifies the use of dollar offset for its assessment test, however, it is unclear how that test is to be applied at the inception of the hedge.

- Column I reflects the net difference in earnings that would be recorded if ineffectiveness had been properly measured, assuming the hedge passed the effectiveness test (see point below). Note that even if the hedge were deemed highly effective, there would be periodic earnings volatility, sometimes in the millions of dollars, if the proper accounting treatment were applied.
- Fannie Mae's DAG provides for an assessment of effectiveness using the cumulative dollar offset approach. The above analysis indicates that this particular swap would fail such a hedge effectiveness test and therefore not qualify for hedge accounting for at least some of the periods during the term of the hedge. This would require all changes in fair value of the derivatives to be recorded in earnings during such periods.

**Conclusion:**

If Fannie Mae accounted for the callable swap as described above, which is consistent with how the hedge was designated, there would have been significant volatility in earnings caused by ineffectiveness and/or the failure of hedge relationships to qualify for hedge accounting. Had Fannie Mae designated the relationships differently, and separated the time and intrinsic value, it is possible that hedge accounting could have been achieved, though volatility would have still resulted from having recorded time value changes in earnings.