Introduction

This examination module applies to the examinations of Fannie Mae and Freddie Mac (the Enterprises). Most residential mortgages in the United States (U.S.) are securitized, rather than held in portfolio as whole loans by the original lender. Securitized loans are pooled in a separate legal trust created for that purpose, which then issues mortgage-backed securities (MBS) and remits ("passes through") mortgage payments to the MBS investors, net of mortgage servicing fees and other expenses. These MBS are actively traded and held by a range of fixed income investors.

Securitization is central to the U.S. mortgage finance system and the Enterprises exist to provide liquidity to the secondary market. In the agency MBS market, the Enterprises (or Ginnie Mae) provide guarantees of the timely payment of principal and interest on the MBS they issue. In other words, the Enterprises, not the investor, bear the credit risk on the MBS they issue. Investors bear the prepayment risk that borrowers will prepay their mortgages and prepayment risk is the primary source of differences in value among agency MBS.

Only mortgages that meet certain size and credit quality criteria are eligible for inclusion in pools of mortgages underlying MBS guaranteed by Fannie Mae and Freddie Mac. Loans that meet the Enterprises' size and credit standards are known as "conforming loans"; those that exceed legal size restrictions are known as "jumbo" loans. Jumbo loans are securitized by private financial institutions and do not receive a government credit guarantee. Non-agency MBS (known as private-label MBS) are generally backed by loans that do not meet the Enterprises' underwriting standards.

MBS Markets—To Be Announced (TBA) and Specified Pools

In the TBA market, two parties agree on a price for delivery of a given volume of agency MBS at a specified future date. The characteristic feature of a TBA trade is that the actual identity of the securities to be delivered at settlement is not specified on the trade date. Instead, participants agree on only six general parameters of the securities to be delivered: issuer, maturity, coupon, price, par amount, and settlement date.

In contrast, in the "specified pool" market, the identity of the pool to be delivered is specified at the time of the trade, much like other securities markets. While many of the specified pools are not eligible for TBA trading, others trade outside the TBA market for other reasons. For example, the pool may be backed by loans with more favorable prepayment characteristics, from an investor's point of view, allowing them to achieve a higher price, as described below.

All TBA-eligible securities have a "pass-through" structure whereby mortgage principal and interest payments are forwarded to security-holders on a pro rata basis, with no separation into tranches or structuring of cash flows. Agency MBS are issued as pass-throughs in part

because the strength of the guarantee requires no additional credit enhancement by establishing a hierarchy of claims.

Mechanics of a TBA Trade

The detailed conventions that have developed around TBA trading are contained in the "good delivery guidelines" published by the Securities Industry and Financial Markets Association (SIFMA) in its publication *Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities*. SIFMA is an industry trade group whose members include broker-dealers and asset managers. These conventions began developing as Ginnie Mae pioneered the MBS market in the 1970s, and became more detailed and formal in the ensuing decades.

Trade day. The buyer and the seller establish the six trade parameters listed above. TBA trades generally settle within three months, with volumes and liquidity concentrated in the two nearest months. To facilitate the logistics of selecting and delivering securities from the sellers' inventory, SIFMA sets a single settlement date each month for each of several types of agency MBS. Thus, depending on when it falls in the monthly cycle of settlements, the trade date will usually precede settlement by between two and 60 days.

Two days before settlement. No later than 3:00 p.m. two business days prior to settlement ("48-hour day"), the seller provides the buyer with the identity of the pools it intends to deliver on settlement day.

Settlement day. The seller delivers the securities specified two days prior and receives the cash specified on the trade date. Amid the trading, lending, analysis, selection, and settling of thousands of individual securities each month, operational or accounting problems can arise, the resolution of which relies on a detailed set of conventions developed by SIFMA.

"Cheapest to Deliver" Pricing

TBAs trade on a "cheapest to deliver" basis. On settlement day, the seller selects which MBS in their inventory to deliver to the buyer. The seller has a clear incentive to deliver the lowest-value securities that satisfy the terms of the trade. (Differences in value across securities are driven by pool characteristics affecting prepayment risk, such as past prepayment rates, or the geographic composition of the pool). This incentive is well understood by the TBA buyer, who therefore expects to receive a security of lower value than the average security. This is an example of a widespread market phenomenon known as "adverse selection." Reflecting this, the original trade price will be correspondingly lower, all else equal. However, all else is not equal, because the "cheapest to deliver" discount also generates a liquidity benefit that has a countervailing effect of raising the security's market value compared to the price it would trade at in the less liquid specified pool market.

Temporary Fungibility and TBA Liquidity

TBA trading effectively applies a common cheapest-to-deliver price level to an intrinsically diverse set of underlying securities. While this practice also occurs in the Treasury futures market, this convention of homogenized prices seems more counterintuitive when applied to agency MBS, because of the greater heterogeneity of the underlying securities. Together, the securitization process and the TBA market transform what is a fundamentally heterogeneous universe of individual mortgages (with myriad credit and prepayment characteristics) into groups of fungible – and therefore liquid – fixed-income instruments. This fungibility is only temporary, because after settlement the buyer observes additional characteristics about the specific pools, which provide information about prepayment behavior and influence value.

The TBA market facilitates transacting in large trade sizes by allowing loans of sizes of \$100,000 to \$400,000 to be aggregated into pools of up to \$10 million and traded in amounts of as much as \$100 to \$200 million with a high degree of liquidity. The number of distinct security identifier codes (CUSIPs) involved is also revealing. For trading purposes, all TBAs with the same six parameter values are treated as if aggregated into a single CUSIP, but once those trades settle, each security is attached to one of up to several hundred CUSIPs identifying individual— and no longer fungible — securities. While the mortgage pooling process reduces millions of mortgages to tens of thousands of MBS, TBA trading further streamlines the market to only about 10 to 20 different sets of contracts for each maturity point (30-year, 20-year, and 15-year mortgages).

Similar to the MBS pooling process itself, TBA trading simplifies the analytical and risk management challenges for participants in agency MBS markets. Rather than attempting to value each individual security, participants need only analyze the more tractable set of risks associated with the parameters of each TBA cohort. This helps encourage market participation from a broader group of investors, notably foreign central banks, and a variety of mutual funds and hedge funds, translating into a greater supply of capital for financing mortgages, and thus lower rates for homeowners.

The treatment of TBA pools as fungible is sustainable in part because a significant degree of actual homogeneity is present among the securities deliverable into any particular TBA contract. The most obvious source of commonality is the Enterprises' guarantee of the cash flows of mortgage principal and interest, which significantly reduces the investor's exposure to credit risk. However, the Enterprises' standardization of underwriting and securitization practices also contributes meaningfully to homogeneity as well. At the loan level, the standardization of lending criteria for loans eligible for agency MBS limits the variation among the borrowers and properties underlying the MBS. At the security level, homogenizing factors include the geographic diversification incorporated into the pooling process, the limited number of issuers, and the simple structure of pass-through security features.

Adverse Selection Without Market Failure

Because of the incentives associated with cheapest-to-deliver pricing, not all eligible MBS pools actually trade on a TBA basis. Higher-value pools (those with the most advantageous prepayment characteristics from an investor's point of view) can command a higher price in the less liquid specified pool market. Specified pool trading (as well as the use of stipulations, or "stips") is more common for seasoned pools than for newly issued pools, reflecting their lower prepayment risk and therefore higher value. However, specified pools are much less liquid precisely because they are not fungible. Most agency MBS trading occurs through the TBA market because the liquidity value of TBA trading generally more than compensates for any adverse selection discount implied by the "cheapest to deliver" pricing. In part, this is because the significant level of homogeneity in the underwriting and pooling process limits the variation in value amongst securities deliverable into a given TBA contract. Paradoxically, the limits on information disclosure inherent in the TBA market actually increase this market's liquidity by creating fungibility across securities and reducing information acquisition costs for buyers of MBS.

Hedging and Financing Mortgages Through TBAs

TBAs also facilitate hedging and funding by allowing lenders to pre-arrange prices for mortgages that they are still in the process of originating, thereby, hedging their exposure to interest rate risk. Lenders frequently give successful mortgage applicants the option to lock in a mortgage rate for a period of 30 to 90 days. Lenders are exposed to the risk that the market price fluctuates in the period between when the rate-lock is set and the time the loan is eventually sold in the secondary market. The ability to sell mortgages forward through the TBA market hedges this risk for originators. This is critical for originators who offer applicants fixed-rate loan terms before a mortgage actually closes, and facilitates the final negotiations of house purchases and the overall viability of the 30-year fixed-rate mortgage as a business line.

While this interest-rate risk could also be hedged with other types of instruments, TBAs are a superior hedging instrument because they more directly offset the risks associated with a mortgage. The price movements of Treasury futures, for instance, can diverge significantly from those of MBS for a number of reasons, including different sensitivities to interest rates. Mortgage options are more expensive than TBAs, less liquid, and only available for short time horizons (mortgage options are therefore used to hedge rate-locks rather than prepayment or market risk long-term). Lenders should pass on at least some of the cost savings of a superior hedging instrument to mortgage applicants.

Securities Registration and TBA Trading

The TBA market, as it currently operates, is possible because of Fannie Mae's and Freddie Mac's exemption from the securities registration requirements of the Securities Act of 1933

(the Securities Act). This exemption allows the Enterprises to offer and sell newly-issued agency MBS (including in TBAs) without having to file registration statements with the Securities and Exchange Commission (SEC). In contrast, public offers and sales of newly-issued private-label MBS are subject to the registration requirements of the Securities Act.

Sales of newly issued agency MBS via TBA trading would not be possible without such an exemption from registration for agency MBS because, at the time of a TBA trade, the securities that will eventually be delivered often do not exist. Even if they do exist, the buyer is not told the identity of the specific securities that will be delivered until two days before settlement, which is usually significantly after the trade date itself. Indeed, for many MBS delivered to fulfill TBA contracts, the underlying mortgages have not even been originated as of the trade date (enabling the unique hedging functions described in the previous section). The inability to identify securities to be delivered at the time of trade would violate the prospectus delivery requirements of the Securities Act of 1933 related to sales of securities if not for the Enterprises' exemptions. In practice, while offers and sales of agency MBS are exempt from SEC registration requirements, the agencies do publicly disclose information about the composition of each pool. This includes the average loan-to-valuation (LTV) ratio, debt to income ratio, borrower credit score, the number and value of mortgages from each U.S. state, the distribution of mortgage coupon rates, and broker versus non-broker origination channels. Nevertheless, at the time of trade, the buyer of a TBA lacks access to any of this information, because it does not know which security it will receive.

Regulatory Environment

The primary authorities governing, or relevant to, securitization-related activities and risk management practices are set forth below. The examiner should ensure that the application of such authorities to an Enterprise has been considered by the Enterprise and its legal counsel.

1. Federal statutes enforced by the Federal Housing Finance Agency (FHFA)

The Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended (12 USC 4501 *et seq.*), provides FHFA with supervisory and examination authority over Fannie Mae and Freddie Mac.

Fannie Mae Charter Act (12 USC 1451 et seq.) defines Fannie Mae's permissible activities.

Freddie Mac Corporation Act (12 USC 1716 et seq.) defines Freddie Mac's permissible activities.

2. Rules and Regulations of the FHFA (or predecessor agency the Office of Federal Housing Enterprise Oversight)

12 CFR part 1236 (Prudential Management and Operations Standards) describe FHFA supervisory expectations and requirements for the regulated entities (including Fannie Mae and Freddie Mac) to adopt effective policies and procedures covering a variety of areas. The standards include (1) Internal Controls and Information Systems; (2) Independence and Adequacy of Internal Audit Systems; (3) Management of Market Risk Exposure; (4) Management of Market Risk – Measurement Systems (models), Risk Limits Stress Testing, and Monitoring and Reporting; (5) Adequacy and Maintenance of Liquidity and Reserves; (6) Management of Asset and Investment Portfolio Growth; (7) Investments and Acquisitions of Assets; (8) Overall Risk Management Processes; (9) Management of Credit and Counterparty Risk; and (10) Maintenance of Adequate Records. The securitization business touches on all of these Standards and it is critical that the regulated entities properly establish the necessary framework.

12 CFR part 1720 (Safety and Soundness), Appendix A Policy Guidance (Minimum Safety and Soundness Requirements) establishes operational and managerial requirements in areas such as asset underwriting and credit quality, internal controls, audit, and board and management responsibilities and function.

12 CFR part 1710 (Corporate Governance), establishes requirements for, among other things, the conduct and responsibilities of the board of directors (12 CFR 1710.15) and compliance and risk management programs and compliance with other laws (12 CFR 1710.19).

- 3. Fannie Mae and Freddie Mac MBS Requirements and Related Business Materials. Fannie Mae and Freddie Mac make available extensive materials on their respective corporate websites that describe requirements and terms of business for their securitization business. Those materials include, for example, master trust agreements, MBS prospectuses, and reference documents that describe the securitization process.
- 4. Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. L. 111-203, 124 Stat. 1376 (2010)). The Dodd-Frank Act, among other things, imposed new requirements on the asset securitization process and requires FHFA, the SEC, the Federal banking agencies and the Secretary of Housing and Urban Development to prescribe rules to require that a securitizer retain an economic interest in a portion of the credit risk for any asset that it transfers, sells, or conveys to a third party, Many of the regulations required by Dodd-Frank have not been implemented and are in the proposal stage as of the date of this module. Examiners need to review the final rules paying attention to applicable rules addressing Dodd-Frank Act provisions such as:
 - Title III-Transfer of Powers to the Comptroller of the Currency, the FDIC, and the Board of Governors, Sections 364-375 of Subtitle E-Technical and Conforming Amendments
 - Title IV-Regulations of Advisers to Hedge Funds and Others

- Title V-Insurance
 - o Part I-Nonadmitted
 - o Part II-Reinsurance
- Title VII-Wall Street Transparency and Accountability
 - Subtitle A-Regulation of Over-the-Counter Swaps Markets, Part II Regulation of Swap Markets
 - o Subtitle B- Regulation of Security-Based Swap Markets
- Title VIII-Payment, Clearing, and Settlement Supervision
- Title IX-Investor Protections and Improvements to the Regulation of Securities
 - o Subtitle B-Increasing Regulatory Enforcement and Remedies
 - o Subtitle C-Improvements to the Regulation of Credit Rating Agencies
 - o Subtitle E-Accountability and Executive Compensation
 - Subtitle I-Public Company Accounting Oversight Board, Portfolio Margining and Other Matters
- Title X-Bureau of Consumer Financial Protection (all subtitles and sections)
- Title XIII-Pay It Back Act
 - Section 1304 Amendments to the Housing and Economic Recovery Act of 2008
 - o Section 1305 FHFA report
- Title XIV- Mortgage Reform and Anti-Predatory Lending Act (all subtitles and sections)
- 5. Securities Industry and Financial Markets Association (SIFMA) publication; Uniform Manual for the Clearance and Settlement of Mortgage-Backed Securities and Other Related Securities. This SIFMA publication contains trading, clearance, and settlement guidelines representing common industry practices.

Issues Specific to the Enterprises

Fannie Mae and Freddie Mac exist to, among other things, provide ongoing assistance to the secondary market for residential mortgages. As part of this assistance, they help maintain a liquid and stable secondary mortgage market. The Enterprises are a conduit between mortgage originators and investors principally through insuring the timely payment of principal and interest of MBS. (Freddie Mac refers to their MBS as participation certificates (PCs). These securitizations generally come in two transaction types; swapping collateral for securities and securitizing loans held in portfolio. These securities may be in two forms: pass-through and structured (both prepayment and credit tranched).

When FHFA placed the Enterprises in conservatorship in September 2008, the Enterprises (acting through FHFA, as conservator) entered into senior preferred stock purchase agreements (PSPAs) with the U.S. Department of Treasury. The PSPAs are designed to ensure that the Enterprises maintain positive net worth. The PSPAs also impose a number of requirements and restrictions on the Enterprise, including a requirement that he Enterprises

reduce the size of their retained portfolios by 15 percent each year (the most recent amendment to the PSPAs, in August 2012, accelerated the rate of portfolio reduction from 10 to 15 percent). As a result, the Enterprises have reduced their purchases of whole loan mortgages for investment purposes while increasing their securitization activities through their loan conduits. Moreover, both Enterprises have legacy whole loan portfolios which, where possible, they have been securitizing to enhance liquidity. Both Enterprises also have legacy securities, both agency and non-agency.

Mortgage Loans Swapped for Mortgage-Backed Securities

The primary method of securitization for the Enterprises is the exchange, or swap, of collateral loans for securities. Under this securitization method, large originators electronically transmit to Fannie Mae or Freddie Mac a collection of mortgages for securitization. Automated loan attributes review programs are used by the Enterprises to determine if the characteristics of the loans submitted meet Enterprise requirements. If they do, a guarantee fee is determined based on the current contract with the originator. The loans are securitized into a MBS pool or PC, which is assigned a unique pool identification number and returned to the originator. The originator can then sell the bond, or hold it as an investment more liquid than the underlying mortgages. For smaller originators, Fannie Mae or Freddie Mac will purchase loans outright for cash through the "cash window." The Enterprises often create multi-originator securities with these loans. These swap trades are typically cleared through the Federal Reserve Board's FedWire. Only certain structured transactions are cleared through the Depository Trust and Clearing Corporation (DTCC).

Fannie Mae's delegated underwriting and servicing (DUS) program for the multifamily business is similar to single-family where originators swap a single multifamily loan for a Fannie Mae guaranteed DUS security.¹ One of the key features of the DUS program is a loss-sharing arrangement with the seller. Freddie Mac does not have a comparable program.

Both Enterprises provide for the resecuritization of MBS and PCs in a pass-through security. Fannie Mae Megas and Freddie Mac Giants are pools of previously issued MBS or PCs (or even previously issued Megas or Giants) that pass through the aggregate principal and interest payments on the underlying bonds. This is done to consolidate CUSIPs, improve liquidity and reduce operational complexity.

For collateralized mortgage obligations (CMOs), Giants and Megas, the owners of the pools or PCs send the Enterprises the structure of the CMOs. The Enterprises swap the individual MBS or PCs into multi-tranche CMOs or single-tranche Giants and Megas. Most CMOs are structured to allow investors to purchase prepayment protection or take a view on the speed of prepayments. (CMOs are further discussed below under "Structured Transactions.")

¹ Due to the larger loan size, DUS is a single loan securitization while single family is multiple loans.

Fannie Mae and Freddie Mac also securitize loans out of their portfolios. The out-of-portfolio securitizations are similar to other swap transactions, but the securities are usually sold by the Enterprises through the forward mortgage markets.

Structured Transactions

The Enterprises also securitize loans by structuring mortgage cash flows into several tranches. The largest agency structured products are collateralized mortgage obligations, which include real estate mortgage investment conduits (REMICs) that distribute the cashflows of loans or pass-through securities in a manner other than pro-rata, and are guaranteed by the Enterprises. Strip mortgage-backed securities (SMBS) are structured transactions in which the principal and interest cash flows of the underlying MBS pools are stripped off and directed to principal-only and interest-only bonds. Similar to MBS/PC Swap transactions, the Enterprises act as trustee of the securities. Investors, while taking prepayment or extension risk, are protected from credit (or principal loss) risk.

For CMOs, REMICs, and SMBS, the owners of the MBS pools or PCs develop and provide Fannie Mae or Freddie Mac with the structure of the transaction. The Enterprise then swaps the MBS pools or PCs (or, for whole-loan REMICs, unsecuritized mortgages) into the multi-tranche CMO, REMIC, or SMBS. Most CMOs are structured to allow investors to purchase prepayment or extension protection, or take a view on the direction of interest rates and the related prepayments or extension.

The other form of CMO cash-flow engineering is the structuring of principal payments to redistribute principal loss risk into senior-subordinated structures. Senior-subordinated structures are the most popular credit-enhancement technique for private-label securities. The cash flows generated by the underlying assets are allocated with different priority to classes of different seniority. The senior-subordinated structure consists of several tranches, from the most senior to the most subordinated (or junior). The subordinated tranches function as protective layers of the more senior tranches. The class of highest seniority has first right on the available principal cash flows. This structural protection is called the waterfall structure. The priority for the cash flows comes from the top, while the distribution of the losses rises from the bottom. If an asset in the pool defaults, losses thus incurred are allocated bottom up (from the most junior to the most senior tranche). The senior tranche is usually rated AAA and unaffected unless losses exceed the amount of the subordinated tranches. The senior-subordinate structure is used by all privately issued residential and commercial mortgage-backed securities. Other credit-enhancement techniques, such as the use of reserve funds and over-collateralization, can be used in addition to or in place of the senior-subordinate structure; however, securities guaranteed by the Enterprises tend not to employ these methods.

In the senior-subordinated structure, an Enterprise may guarantee only the senior principal payment position. For example, currently Freddie Mac issues senior-subordinated bonds in

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their multi-family "K" deals and guarantees only the senior tranche. Both Fannie Mae and Freddie Mac have previously guaranteed senior portions of private label deals.

Examination Guidance

The workprogram for the Securitizations examination module is detailed below. If this module is included in the examination scope, the examiner must perform worksteps sufficient in coverage to document the basis for conclusions on the quantity of risk and quality of risk management pertaining to this area. Transaction testing is mandatory and the examiner must evidence sufficient worksteps from Section 4, *Testing*, to support the findings and conclusions from this examination module.

In determining the extent of review and testing to be conducted in completing each examination, the examiner should take into account applicable FHFA off-site monitoring or analysis reports, such as analyses on the quality and effectiveness of corporate governance practices, financial condition and performance, economic and housing industry conditions, internal controls, and audit coverage relating to the institution's securitization activities.

NOTE: Text in (*italics*) referenced in a workstep represents illustrative guidance that serves as suggestions for specific inquiry.

1. Scope of Examination Work Performed

- 1) Review past reports of examination for outstanding issues or previous problems related to securitizations.
- 2) Review applicable FHFA off-site monitoring or analysis reports, and workpapers produced as part of on-going monitoring, related to securitizations.
- 3) Assess the status of outstanding Matters Requiring Attention or Violations pertaining to securitizations.
- 4) Review internal audit reports for outstanding issues relating to securitizations.
- 5) Review minutes of meetings of the board of directors and relevant board and management committees for any issues regarding securitizations.
- 6) Identify and evaluate the Enterprise's strategy for securitizations. What are the risks and benefits of that business model?

- 7) Review the corporate objectives contained in the corporate scorecards approved by the FHFA as conservator. Determine if the business model and practices used by the Enterprise for securitization are consistent with FHFA's broader strategic objectives, the corporate scorecards, and the need for secondary mortgage market liquidity and stability.
- 8) Review and evaluate board minutes to determine if the board has been fully engaged in the policymaking and strategic planning related to securitization.
- 9) Evaluate any significant changes related to securitizations that have been implemented since the last examination or are being considered that may affect the Enterprise's risk profile.
- 10) Evaluate if the securitization of securities or loans out of portfolio create additional credit risk or reduce the ability of the Enterprise to manage risk already on the balance sheet.
- 11) Evaluate if investor reporting as part of trustee services is appropriate and compliant with current laws and regulation.
- 12) For senior-subordinated securitization structures, evaluate if the subordination levels are sufficient to significantly protect the Enterprise from paying principal and interest payments to investors and prevent consolidation.
- 13) Evaluate if the fee pricing of trustee services is appropriate.
- 14) Review and evaluate the operational capabilities for the trust and settlement services.

Summarize the work performed in the examination of the enterprise's securitization practices. To the extent there were modifications to the originally planned scope based on concerns identified during the examination, document those changes and the reasons for such changes.

2. Description of Risks

- 1) Review and evaluate the Enterprise's risk management, or similar policy, to determine and identify what, if any, risk limits are established and how they are monitored.
- 2) Review and evaluate the Enterprise's requirements for securitization, trustee services, fees, and pricing.
- 3) Review departmental policies and procedures and determine if they are current, relevant, sufficiently detailed, and consistent with the Enterprise's policies and regulations.
- 4) Perform a compliance review of FHFA (including OFHEO) regulations and guidelines that are relevant to securitization operations.
- 5) Review and evaluate the Enterprise's practices for managing risk through the use of credit enhancements.
- 6) Review and evaluate the Enterprise's practices for managing risk through the calculation of credit enhancements and/or subordination.
- 7) Determine how the Enterprise monitors delinquencies to assess its ability to satisfy its guarantee obligations.
- 8) Evaluate the quality control program implemented by the Enterprise.
- 9) Determine if the Enterprise has procedures to assess and monitor its risk exposure to special servicer providers in multifamily securitizations.
- 10) Determine if the Enterprise has established procedures in the event of an operational failure.
- 11) Determine if the Enterprise has established policies and procedures for monitoring third party vendors, including service providers.
- 12) Determine if the Enterprise has any limits in place for special servicers of multifamily securitizations. If so, evaluate the process for determining the limits and how the limits are monitored and reported.

3. Risk Management

Risk Identification Process

- 1) Based on worksteps performed under **Description of Risks**, assess and conclude on the adequacy of the organization's risk identification process.
- 2) Determine if the Enterprise has implemented sufficient procedures to identify, monitor, and manage the credit and operational risk issues related to securitization.

Organizational Structure

- 1) Identify the key personnel and their primary duties, responsibilities, and technical expertise to determine if resources are effectively deployed to execute the Enterprise's securitization strategies.
- 2) Evaluate the staffing and skill level, segregation of duties, and cross-training of personnel to determine if resources are sufficient to execute the Enterprise's securitization strategies.
- 3) Evaluate coordination between departments such as risk management, information technology, treasury and cash management, and accounting to determine if mortgage-backed securities are created in an efficient and effective manner.
- 4) Evaluate the board of directors' committee structure to determine if they are effective in helping the full board to understand the level of risk in the securitization and trust services.
- 5) Evaluate management committees and delegated authorities to determine if they are effective in identifying and reporting the level and trends of risk in the securitization and supporting appropriate decision-making authority.
- 6) Determine if background criminal and credit investigations are performed on personnel prior to hiring.

Policy and Procedure Development

1) Review any new securitization products and services to determine if internal controls are sufficient to ensure compliance with applicable policies and regulations. Note: The Enterprises are prohibited by FHFA from initiating any new business activities at this time.

- 2) Review a sample of loan purchases for multifamily securities to determine if the loan acquisition process is consistent with the Enterprise's charter and program requirements. Consider:
 - a) Loan valuation;
 - b) Credit enhancements; and
 - c) Purchase price.

Risk Metrics

- 1) Evaluate risk metrics established related to securitization. Conclude whether such metrics consider all aspects of potential risk to the organization from securitization activities.
- 2) Determine if risk metrics are consistent with the risk appetite of the organization.
- 3) Evaluate the adequacy of the board and management's efforts to ensure compliance with risk metrics.

Reporting

- 1) Determine if management identifies all potential risks to the Enterprise resulting from securitization activities and monitors these risks.
- 2) Determine if internal control weaknesses that could potentially affect financial reporting have been identified, assessed, and disclosed.
- 3) Evaluate whether reporting is accurate and comprehensive. Are the Enterprise's financial performance and compliance with policies, procedures, and regulatory requirements properly reviewed and monitored?
- 4) Determine if ongoing reporting evaluates the Enterprise's compliance with established risk metrics.
- 5) Coordinate with the examiner responsible for completing the Financial Reporting workprogram to assess accuracy of general ledger entries associated with securitization. Consider recordings of:
 - a) Delivery commitments and trust payments;
 - b) Payments to investors based on the guarantee; and
 - c) Reporting of multifamily loans being managed by special servicers.

6) Obtain and review reports issued in accordance with Statement on Standards for Attestation Engagements No. 16 (formerly known as SAS 70 reports) for service organizations whose services could affect the Enterprise's financial statements and

condition.

Internal/External Audit

- 1) Evaluate the adequacy of the scope, testing, and workpapers completed by internal audit. Determine if procedures include testing for cases of fraud.
- 2) Evaluate the adequacy of the scope and testing completed by external audit and determine the status of corrective actions for findings.
- 3) Evaluate the effectiveness of the evaluations conducted pursuant to the Sarbanes-Oxley Act of 2002 that identify the key risks and controls pertaining to financial reporting and potential fraud. Evaluate procedures implemented to periodically attest to the adequacy of the control environment.
- 4) Evaluate the adequacy of the objectives and scopes of reviews performed by outside consultants and determine the status of management's actions regarding recommendations. Review the actions taken in response to consultant recommendations.

Information Technology

- 1) Identify and assess the automated and manual systems and applicable controls for processing securitization transactions, including:
 - a) Trust payment systems;
 - b) Pass-through swap systems;
 - c) Structuring/reverse engineering system;
 - d) Subordination modeling system;
 - e) Authorized users;
 - f) Financial modeling systems, including pricing models;
 - g) Utilization of spreadsheets;
 - h) Tracking delinquencies and foreclosures; and
 - i) Business continuity and recovery.
- 2) Determine if the Enterprise's information systems are adequate to support its goals and strategies.
- 3) Determine if the Enterprise has developed and tested a business continuity plan.

Compliance

- 1) Determine if the Enterprise has complied with pertinent regulations and regulatory guidance.
- 2) Determine if the Enterprise has complied with applicable FHFA Prudential Management and Operations Standards.
- 3) Evaluate the efforts of the board and management to ensure compliance with policies and procedures related to the Enterprise's securitization programs.
- 4) Evaluate compliance with any conditions imposed by FHFA as part of the approval of a new business activity related to securitization.

4. Testing

- 1) Follow-up on previous examination findings and evaluate management's efforts to implement corrective actions.
- 2) Determine if management effectively corrected deficiencies noted by internal audit.
- 3) Select a sample of loan reviews to determine if the Enterprise's quality control process is effective. Determine if the process includes procedures to detect and report fraud.
- 4) Select a sample of loans swapped for pass-through securities. Evaluate and conclude on the Enterprise's adherence to established risk metrics. Specific examples of areas that might be tested include, but are not limited to, the following:
 - a) Determine if restrictions exist upon access to the pricing and credit enhancement/subordination models or, in their absence, compensating controls to ensure proper authorization for transactions such as dual control, limitations upon system access or function capabilities, and managerial review;
 - b) Determine if the loan used for the securities swap process is consistent with Federal Housing Finance Agency regulations and securitization program requirements;
 - c) Review changes to loan underwriting requirements as published in AllRegs and insure the automated quality control programs reflect these changes;
 - d) Evaluate service organizations' internal controls through a review of the applicable SSAE 16 report;
 - e) Determine if document custody operations comply with securitization program requirements;
 - f) Determine if payments to investors as part of trust services are properly reconciled;

- g) Determine if policies, procedures and methodologies for premium amortization and grouping of loan pools is in compliance with the FASB requirements (consult with personnel from the FHFA Office of the Chief Accountant and examiner or analyst assigned to review Financial Reporting); and
- h) Determine if record retention procedures that pertain to automated and manual records have been established.

5. Conclusions

- 1) Summarize conclusions for all examination work performed, including work performed by other FHFA staff as it relates to the regulated entity's securitization function. Develop a memorandum articulating the risks to the institution resulting from the securitization practices and the regulated entity's management of those risks. The memorandum should describe the basis of conclusions reached and summarize the analysis completed. Within the memorandum, discuss the types of risk the regulated entity is exposed to (e.g., market, credit, operational); the level of risk exposure; the direction of risk (stable, decreasing, increasing); and the quality of risk management practices (strong, adequate, weak). A memorandum must be prepared irrespective of whether the examiner's assessment is positive or negative.
- 2) Conclude on the responsiveness to previous examination findings. Evaluate the adequacy of the regulated entity's response to previous examination findings and concerns.
- 3) Develop findings and prepare findings memoranda, as appropriate. Based on examination work performed, develop findings communicating concerns identified during the examination. Findings should identify the most significant risks to the institution and the potential effect to the regulated entity resulting from the concerns identified. Such documents should describe a remediation plan specifying the appropriate corrective action to address examination concerns and establish a reasonable deadline for the regulated entity to remediate the finding. Communicate preliminary findings to the EIC. Discuss findings with regulated entity personnel to ensure the analysis and findings are free of factual errors.
- 4) Develop a list of follow-up items to evaluate during the next annual examination. In addition to findings developed in the steps above, include concerns noted during the examination that do not rise to the level of a finding. Potential concerns include issues the Enterprise is in the process of addressing, but require follow-up work to ensure actions are completed appropriately. In addition, potential concerns should include anticipated changes to the Enterprise's practices or anticipated external changes that could affect the Enterprise's securitization practices.

Workprogram

1. Scope of Examination Work Performed

Workpapers must document the examination activities undertaken to evaluate potential risks related to securitizations.

2. Description of Risks

- Identify areas of concern related to securitizations
- Assess current risks and trends in the risk to the organization related to securitizations
- Evaluate changes within the organization or industry affecting risk
- Evaluate the regulated entity's own risk-identification practices and conclude on their adequacy

3. Risk Management

- Assess and conclude on the adequacy of the organization's risk identification process
- Assess and conclude on the overall adequacy of internal controls, including an evaluation of:
 - o The Enterprise's organizational structure
 - o Policy and procedure development for securitizations
 - o Appropriateness of risk metrics established for securitizations
 - o Reporting by management and the board
- Assess and conclude on the internal and external audit of risks
- Assess and conclude on the adequacy of information technology and controls related to securitizations
- Assess and conclude on the adequacy of the organization's efforts to ensure:
 - o Compliance with laws, regulations and supervisory guidance
 - o Compliance with the organization's policies and procedures

4. Testing

• Complete testing, as appropriate, to assess adherence with examination standards

5. Conclusions

- Summarize conclusions for all examination work performed related to securitizations
 - o Conclude on the level of risk to the organization
 - o Include an assessment of the adequacy of an organization's monitoring of risk and establishment of internal controls to mitigate risk
- Conclude on responsiveness to examination findings from previous examinations
- Develop examination findings, as appropriate
- Identify areas requiring follow-up examination activities or monitoring