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Servicer Evaluation: Freddie Mac

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Ranking Overview				
Servicing category	Overall ranking	Subrankings		
		Management and organization	Loan administration	Outlook
Commercial master	ABOVE AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	Stable
Financial position				
SUFFICIENT				

Rationale

S&P Global Ratings' ranking on Freddie Mac Multifamily Asset Management and Operations (AMO) is ABOVE AVERAGE as a commercial mortgage loan master servicer. On Aug. 2, 2019, we affirmed the ranking (please see "Freddie Mac ABOVE AVERAGE Commercial Mortgage Loan Master Ranking Affirmed; Outlook Is Stable," published Aug. 2, 2019). The outlook for the ranking is stable.

Our ranking reflects AMO's:

- Experienced and tenured senior management team;
- Effective and comprehensive employee training and development program;
- Historically low levels of multifamily mortgage loan delinquency rates;
- Integrated and effective technology systems;
- Comprehensive subservicer (Seller/Servicer) oversight program;
- Sound audit and control environment, albeit with a longer-than-average internal audit cycle compared with those of most servicers;
- Homogenous multifamily property portfolio, with limited exposure to other commercial property types;
- Financial support and implicit guarantee from the U.S. government; and
- Continued position under the conservatorship of the Federal Housing Finance Agency (FHFA), with an uncertain future.

Since our prior review (see "Servicer Evaluation: Freddie Mac," published April 19, 2018), the following changes and/or developments have occurred:

- The FHFA issued its 2019 Conservatorship Scorecard (CS), leaving the annual multifamily lending cap at \$35 billion, the same level as 2018; such cap does not include loans related to green, affordable, and certain underserved housing segments.
- The "serviced by others" portfolio increased to \$82 billion as of Dec. 31, 2018, from \$73 billion as of Dec. 31, 2017, and the traditional K-Deal (i.e., capital market execution) portfolio balance increased to approximately \$199 billion as of Dec. 31, 2018, from nearly \$172 billion as of Dec. 31, 2017.

- As of Dec. 31, 2018, AMO was the appointed master servicer on 33 nontraditional K-Deals for a total of \$10.4 billion in unpaid principal balance (UPB), 57 small-balance securitized transactions for a total of \$16.5 billion in UPB, six Q-Deals (for a total UPB of \$1.9 billion, and eight "other" transactions for a total UPB of \$4.4 billion.
- The executive vice president (EVP) of multifamily was promoted to the president of Freddie Mac in September 2018, and was subsequently promoted to CEO of the company in July 2019, following the retirement of the former CEO.
- The senior vice president of underwriting was promoted to EVP of multifamily effective in November 2018.
- The senior director of special servicing was promoted to vice president (VP) of asset management in April 2018, overseeing special servicing, REO, surveillance, asset performance and compliance, and insurance.
- The former VP of servicer and client management now heads the strategic transformation efforts and reports to the EVP of multifamily.
- The senior director of surveillance left the company in June 2018 with his duties being absorbed within asset management by an internal candidate being promoted to senior director.
- The company initiated a five-year digital transformation plan, engaging a consultant to work with them to increase responsiveness, optimize data, allow for portable access and ease the user experience.
- The company created a new AMO training task force which will create new on-site training opportunities and provide resources for individual training opportunities.

The outlook is stable, which reflects our view that the company is expected to continue as a fully capable master servicer for commercial mortgage loans. Freddie Mac Multifamily AMO has established processes and systems and a demonstrated ability to administer the Freddie Mac Multifamily mortgage loan portfolio.

Although housing finance reform and the future existence and/or role of Freddie Mac has been under discussion internally within Freddie Mac and externally within various levels of the U.S. government recently, we expect that it will remain business as usual for the foreseeable future.

In addition to conducting an on-site meeting with servicing management, our review includes current and historical Servicer Evaluation Analytical Methodology data through Dec. 31, 2018, as well as other supporting documentation provided by the company.

Profile

Servicer Profile	
Servicer name	Federal Home Loan Mortgage Corp. (d/b/a Freddie Mac)
Primary servicing location	McLean, Va.
Parent holding company(i)	Federal Housing Financing Agency (September 2008)
Loan servicing system	Multiple (see the Systems And Technology section)

(i)Federal Housing Financing Agency is the conservator of Freddie Mac (not a parent holding company).

Freddie Mac was chartered by the U.S. Congress in 1970 with a public mission to provide liquidity, stability, and affordability to the U.S. housing market. Freddie Mac fulfills its mission by conducting business in the secondary

mortgage market and purchasing loans through a national network of mortgage lenders; it does not make loans directly.

Freddie Mac Multifamily's mission is to promote an ample supply of affordable rental housing by purchasing mortgages collateralized by apartment buildings with five or more units. Freddie Mac has been funding and servicing multifamily mortgages since 1993 and, as of Dec. 31, 2018, it had cumulatively provided more than \$603 billion in financing for approximately 980,000 multifamily units.

Freddie Mac purchases multifamily mortgages from approved Seller/Servicers and targeted affordable housing correspondents according to Freddie Mac guidelines. The multifamily division has approximately 800 employees, and it is supported by more than 200 additional Freddie Mac employees across finance, technology, legal, enterprise risk management, and human resources departments. The majority of Freddie Mac employees are headquartered at the McLean, Va., campus, with additional multifamily staff located in four regional offices (Arlington, Va., Chicago, Los Angeles, and New York), along with nine field offices.

On Sept. 6, 2008, FHFA placed Freddie Mac and Fannie Mae in conservatorship. The conservator assumed all powers of the board, management, and shareholders; the FHFA reconstituted the Freddie Mac board of directors and executive management team. During conservatorship, the FHFA has made an effort to distinguish the government-sponsored enterprise's (GSE's) multifamily division from the residential loan single-family businesses, which suffered losses during the housing crisis, whereas the multifamily business weathered the crisis and continued to generate positive cash flow while providing liquidity to the multifamily mortgage industry.

In November 2018, FHFA issued its 2019 CS, which established objectives, performance targets, and measures for 2019. The 2019 CS requires Freddie Mac to limit new annual multifamily business to \$35 billion (excluding green loans, loans related to affordable, and certain underserved housing segments), which is at the same level as the 2018 limit. The CS also requires Freddie Mac to transfer a meaningful portion of credit risk on newly acquired mortgages, subject to FHFA target adjustments, as may be necessary to reflect market and economic considerations. Freddie Mac Multifamily uses its K-Deal securitization model, which was adopted in 2009, as the primary vehicle to transfer credit risk.

Freddie Mac Multifamily securitized \$59.9 billion in UPB of multifamily loans in K-Deal transactions during 2018. As of Dec. 31, 2018, 153 loans were on the various Seller/Servicer's watchlist, totaling \$2.4 billion in UPB, or 2.94% of the outstanding loan balance.

Freddie Mac Multifamily sources its loans from approximately 30 approved Seller/Servicers (an additional 22 are approved for servicing only or negotiated transactions), which are licensed in either conventional, small-balance, and/or affordable housing loan products. The Seller/Servicers must meet Freddie Mac's standards for both origination and servicing of multifamily loans, including maintaining minimum financial requirements and satisfactory annual audit results. After Freddie Mac Multifamily purchases a loan from a Seller/Servicer, the servicer typically maintains the loan servicing and asset management duties. The servicer's roles and responsibilities are clearly defined in the Freddie Mac Multifamily Seller/Servicer Guide (SSG). In the event of a loan default, the servicer prepares an initial package for Freddie Mac to review; Freddie Mac then controls the resolution process.

In addition to K-Deals, Freddie Mac Multifamily has various other product types that make up more than \$272 billion (see table 1) as of Dec. 31, 2018 (for more information about these portfolio/product types, see the Appendix of this report). However, consistent with the goal to migrate to a securitization model, the percentage of K-Deal transactions in the portfolio has increased since our last review, comprising 73.2% of UPB as of Dec. 31, 2018, compared with 51.9% as of Dec. 31, 2017.

Table 1

Master Servicing (Serviced By Others)					
As of Dec. 31, 2018					
Product Type	Loan/bond count	Loan/bond count (%)	Unpaid principal balance (mil. \$)	Unpaid principal balance (%)	
Participation certificates (45- and 75-day)	265	1.1	189	0.1	
Participation certificates (55-day)	121	0.5	2,228	0.8	
TEBS	651	2.7	6,048	2.2	
Bond credit enhancements	522	2.1	9,837	3.6	
Retained portfolio (for sale)	1,849	7.6	10,829	4.0	
Retained portfolio (for investment)	847	3.5	23,959	8.8	
K-Deals(i)	12,378	50.7	199,383	73.2	
Q-Deals	1,238	5.1	2,328	0.9	
SB-Deals	6,505	26.6	14,883	5.5	
R-Deals	43	0.2	2,756	1.0	
Total	24,419	100.0	272,440	100.0	

(i) K-Deal information also includes ML deals (securitized TEL). TEBS--Tax-exempt bond securitization.

Management And Organization

The management and organization subranking is ABOVE AVERAGE.

Organizational structure, staff, and turnover

The multifamily division's EVP oversees a staff of over 770, including employees within operations, investments, strategic planning, data management initiative, and business support operations and execution. There are seven lines of business (headcounts as of Dec. 31, 2018):

- Production and sales (119 employees);
- Affordable sales and investments (27);
- Underwriting and credit (250);
- Investments and advisory (39);
- Capital markets (44);
- Business and offerings management (30); and
- Asset management and operations (265).

The division is further supported by in-house legal, accounting, finance, technology, enterprise risk management, human resources, and communications staff.

AMO is organized into four distinct areas:

- Asset Management - manages and monitors borrower transactions, structured transactions, risk ratings, and master servicing asset management and reporting. The unit also oversees investor support, insurance, physical risk guidance, loan boarding, and compliance and property assessments collections.
- Multifamily Operations - manages and reconciles servicer reporting and remittance, the Multifamily (MF) cash desk, monthly operational closing activities, retained portfolio servicing and master servicing (post securitization), and fund administration. The unit also authorizes loan/bond purchases, performs loan sales/securitization document activities, handles the MF data program, and manages the document custody process.
- Operational Risk – is the centralized governance for MF over operational risk, departmental procedures, and business continuity management. In addition, the unit is responsible for the MF contract and vendor management process and reporting, as well as providing management report and analytics for AMO.
- Customer Compliance Management - monitors MF Seller/Servicers' eligibility and compliance, performs audits of MF Seller/Servicers and primary servicers, and assesses counterparty risk of Seller/Servicers and other non-borrowers. The unit also performs servicer appraisal reviews, manages the SSG, interfaces with rating agencies for master, special, and operating advisor ratings and is the main channel for Seller/Servicer communications and relationships.

As of Dec. 31, 2018, 190 employees in the AMO group had roles in master servicing and the majority are located in the McLean, Va., office. AMO continues to utilize outsourcing for assistance when volumes are high, but it does not outsource any remitting or reporting functions.

AMO's average industry experience and tenure levels are supportive of its ABOVE AVERAGE subranking. However they are notably below those of other master servicers ranked STRONG by S&P Global Ratings, particularly at the middle-management and staff levels (see table 2).

During 2018, AMO reported 17.7% overall turnover, which is generally in line with the industry. We note that 14 of the 32 AMO employee "departures" moved to other departments within the company, leaving actual company turnover of 9.9%.

Table 2

Years Of Industry Experience/Company Tenure(i)								
	Senior managers		Middle managers		Asset managers		Staff	
	Industry experience	Company tenure	Industry experience	Company tenure	Industry experience	Company tenure	Industry experience	Company tenure
Master	23	14	12	8	N/A	N/A	4	4

(i)As of Dec. 31, 2018. N/A--Not applicable.

We believe AMO's organizational structure provides appropriate oversight and accountability, and supports the master servicing duties and requirements associated with the various Freddie Mac Multifamily product portfolios, which are described in the Appendix.

Training

Freddie Mac provides its management and staff with a diverse array of ongoing, formal internal and external training programs. Other training highlights include the following:

- Freddie Mac employs full-time dedicated training personnel, and employee participation hours are formally tracked.
- Freddie Mac University is an integrated learning platform where employees can search and register for development opportunities in any of the four general knowledge centers: business expertise, managing people, personal effectiveness, and tools and technology. They also offer employee performance management resources, multifamily divisional training, certification curriculums, and advanced programs.
- Training classes include web-based and instructor-led courses, and include resources and recommended reading. There are more than 175 instructor-led courses and 300 web-based offerings within the multifamily staff development offerings list.
- AMO recently created a new training task force to develop on-site training opportunities and provide resources for individual training opportunities. This will include department-specific education and preparing in-depth sessions on certain MF loan product types and the securitization process for employees.
- The company targets 40 hours per employee annually, with management reporting employees averaged 37 hours of training during 2018. While management reviews employee progress quarterly so that employees are in a position to meet their year-end target, the reported figures were below the targeted goal for the second consecutive year.

Despite falling somewhat short of targeted training hours, AMO's commitment to employee development along with the availability and access to comprehensive corporate training resources are viewed favorably.

Systems and technology

We believe Freddie Mac has effective technology to meet its master servicing requirements. The company continues to focus on technology enhancement projects to further streamline and automate servicing tasks across various loan administration functions. The company has well-designed data backup routines and disaster recovery preparedness. They continue to make enhancements to technology systems, provide staff with effective up-to-date tools, improve and streamline efficiencies, and help investors access information on the K-Deals.

Servicing system applications

Highlights of AMO's systems and technology include:

- Freddie Mac uses Enterprise! v.2015.05 as a secure repository for loan-level master servicing and investment fund processing.
- Multifamily processing system (MPS) is an internal Freddie Mac system that processes the purchase and accounting of multifamily loans.
- MPS Loan Accounting is the system of record for all loans.
- MPS Cash Management provides accounting for funds due and received by Freddie Mac for all multifamily products (excluding commercial mortgage-backed securities [CMBS], which uses an external banking application); the application interfaces with the corporate treasury group.
- MultiSuite for Bonds is the system of record for active bonds; it monitors Freddie Mac credit-enhanced bonds.

- MultiSuite for Bonds Tax-Exempt Bond Securitization (TEBS) is the system of record for active TEBS bonds.
- MultiSuite for Bond Wires is used to submit trustees' draw requests; it is integrated with MPS to capture approval of the wire requests.
- MultiSuite for Investor Reporting provides loan and bond-level investor reporting from Seller/Servicers; it provides reporting on retained portfolio and bond credit enhancement payment activities.
- The Property Reporting System (PRS) is used by Seller/Servicers to submit annual property assessment data, including operating statements, property inspections, and borrower compliance analyses. PRS SBL 2.0, the small-balance loan (SBL) enhancement, incorporates assessment collection and post-securitization master servicing assessment collection into PRS.
- The Insurance Compliance Tool submits and tracks insurance compliance and waiver requests.
- Multifamily Securities Investor Access is a web-based interface that provides investor access for K-Deals, including Commercial Real Estate Finance Council Investor Reporting Package and select deal documents.
- The Consent Request Tracker (CRT) is a web-based tool that tracks and monitors primary, master, and special servicer performance on borrower requests (i.e., loan assumptions and property management changes).
- The Streamlined Management Analytical & Reporting Tool (SMART) is used for loan and portfolio surveillance, to develop business plans, and to assign loan risk ratings.
- The Document Management System is a web-based solution that enables electronic and paperless transmitting and sharing of documents for mortgage originations, underwriting, post-closing loan activity (i.e., servicing documentation), and investor delivery.

In the fall of 2018, the company embarked on a five-year multifamily digital transformation. They have engaged a consultant and are working to increase responsiveness, optimize data processes, allow for portable access, and ease the user experience.

Overall, we believe AMO has a solid integrated technology platform to effectively analyze, monitor, and report on loans, collateral properties, and Seller/Servicers.

Business continuity and disaster recovery

Freddie Mac's enterprise business continuity group works with the business lines to mitigate the risk and impact of business disruptions. It is responsible for identifying recovery solutions consistent with Freddie Mac's recovery time objectives (RTOs). Notable features include:

- Freddie Mac performs disaster recovery testing quarterly, more frequently than most ranked servicers.
- Each Freddie Mac Multifamily department, including AMO, maintains their own business continuity plan. Written updates to the plan are made at least annually and are required to comply with corporate policy.
- The annual full business continuity test was completed in November 2018 with no significant issues identified.
- Each department has a documented business impact analysis along with a systematic assessment of the potential financial, reputational, and operational impacts caused by critical incidents and disruptions. The plan identifies recovery timeframes and requirements, and helps allocate resources during an event. Updates are conducted at least annually. AMO also maintains prudent data back-up and replication routines.

- Freddie Mac's RTO is four hours for cash remittance processing and investor reporting. Its RTO for all other servicing functions is three days, which is generally in line with other ranked servicers.
- Freddie Mac maintains an out-of-region (OOR) disaster recovery data center site in Boulder, Colo., and OOR operations staff in its Chicago office, which are intended to provide business continuity in the event of a disaster at or near the McLean headquarters.

Cybersecurity

Freddie Mac maintains a formal cybersecurity protection plan. Features include the following:

- Maintaining a stand-alone cybersecurity insurance policy and having readily available access to specialized cybersecurity legal counsel.
- Sending employees phishing emails at least monthly to maintain cyber threat awareness.
- Implementing technology to protect against different types of threats. Updates are continually made to: network perimeter firewalls and intrusion detection, layered network to protect critical assets, and anti-malware on incoming emails and desktops.
- Performing security risk testing and regularly installing patches to addresses vulnerabilities as needed.
- Having a third-party vendor perform penetration testing annually to evaluate any potential cybersecurity risk. The last penetration test was conducted in the third quarter of 2018 and no material issues were identified.

Internal controls

Freddie Mac's governance and business services group provides a range of services to support AMO. A centralized operational risk management area assists AMO with crisis management, business continuity, fraud prevention, information security, risk assessment and testing, and Sarbanes-Oxley related compliance. They also provide the EVP of multifamily and the CEO of Freddie Mac an executive summary covering the aforementioned areas. We view this level of reporting favorably and believe it provides an additional level of control and dedication to oversight.

Policies and procedures

Freddie Mac's policies and procedures are extensive, thorough, well-organized, and reviewed annually for potential updates or changes.

- The Multifamily Credit Policy department is required to approve procedure changes and updates.
- Credit policy governance updates are also captured and approved electronically through SharePoint Workflow.
- Procedures are available online to all staff via SharePoint and AllRegs software.

Compliance and quality control

Freddie Mac has three lines of defense to manage its operational risk. The first line of defense includes leaders from the revenue-producing business units and IT. The second line includes leaders from the enterprise risk management and compliance departments, as well as the chief risk officer, providing oversight of the first line of defense. Internal audit is the third line of defense, providing independent oversight of both the other lines of defense.

Internal and external audits

The internal audit group is an independent oversight function established by Freddie Mac's board. The general auditor reports functionally to the audit committee of Freddie Mac's board and administratively to the CEO. Internal audit uses a risk-based planning approach and completes a comprehensive risk assessment of the inherent risks related to each auditable line of business.

- Risk is scored based on operational, credit, and market risks, as well as strategic, reputation, regulatory, and legal issues. The resulting risk score is then used to determine the audit frequency based on a cycle between one and four years.
- Audit opinion results were changed in 2018 to align with the corporate ranking methodology. Audits are now expressed in one of four categories: "very high", "high", "medium", or "low", based on the likelihood of a risk event occurring.

Management reported that its 2018 multifamily audit universe encompassed 14 auditable entities, of which two were risk-rated "high" (two-year audit cycle), seven were "medium" (three-year audit cycle), and five were "low" (four-year audit cycle). Of the audits that were completed, two of them involved the AMO group, one in surveillance and the other in special servicing. Neither AMO audit had more than a minor finding.

For 2019, the multifamily audit universe encompasses 13 auditable entities with a risk rating mix of 23% "high", 46% "medium", and 31% "low" risk. Five multifamily audits will occur in 2019, two of them include AMO activities in the areas of servicing, and loan purchase operations.

We note that during 2019, there was a follow-up to a payment process internal audit issue that was downgraded to a minor finding. The issue was self-identified by management and pertained to enhancing security of the cash management process to be aligned with the internal corporate payment process policy. The security enhancements were over people, process, and technology.

While the internal audit cycle of AMO is somewhat less frequent than those of similarly ranked peers, we believe the overall audit plan is rigorous and suitable given the well-designed three lines of defense that Freddie Mac utilizes under a highly regulated regime. Further, the internal controls and compliance framework at AMO appear to be robust and effective.

With respect to external audit activity, the 2018 USAP report for year-end 2018 was completed and had no issues noted. Freddie Mac is not subject to, nor does it perform, a Regulation AB review.

Vendor management

In our view, Freddie Mac engages and monitors outsourced service providers (i.e., systems, tax administration, etc.) and third-party vendors--which may include appraisers, property managers, and environmental engineers--in a controlled manner.

- AMO engages with vendors primarily to support technology projects and assist with processing borrower consents.
- All vendors are subject to a competitive bid process and stringent corporate procurement requirements.
- Business units provide a quality score that is based on a five-point scale to assess performance for each vendor

quarterly.

- Vendor contracts are tracked for compliance with the contract terms and expiration to ensure timely renewal where appropriate.
- Freddie Mac performs risk assessments on vendor security practices as it relates to the procurement of services.
- AMO targets staffing levels to ensure that core business operations can be performed by its employees and it utilizes service providers for overflow capacity.

Insurance and legal proceedings

The company has represented that it maintains adequate directors and officers coverage that is in line with the requirements of its portfolio size. It does not maintain an errors and omissions policy because it does not provide professional advice or opinions. Although the company faces a broad array of litigation from its ordinary course of business, Freddie Mac has not disclosed any material servicing litigation matters as of June 30, 2019. Given its role as a GSE, we believe current legal and regulatory issues are generally manageable.

Loan Administration

The loan administration subranking is ABOVE AVERAGE.

AMO performs servicing and asset management activities for the Freddie Mac Multifamily portfolio (see table 3). It has established processes and systems designed to complete the following traditional master servicing functions:

- Boarding and tracking each loan on MPS;
- Aggregating and reconciling loan data and funds from subservicers;
- Portfolio accounting;
- Advance tracking and recovery;
- Investor reporting and remittance;
- Collateral, loan, and portfolio-level surveillance;
- Subservicer performance and compliance monitoring; and
- Credit-related borrower consent requests management.

Table 3

Freddie Mac Servicing Portfolio						
Includes portfolio, warehoused, and master serviced loans						
	UPB (mil. \$)	YOY change (%)	No. of assets	YOY change (%)	No. of staff	YOY change (%)
Dec. 31, 2018	81,591.3	11.8	12,848	20.7	190	5.0
Dec. 31, 2017	72,971.1	4.9	10,641	28.0	181	5.2
Dec. 31, 2016	69,574.3	1.5	8,313	19.8	172	27.4
Dec. 31, 2015	68,554.7	1.2	6,937	10.0	135	15.4
Dec. 31, 2014	67,772.6	--	6,304	--	117	--

UPB--Unpaid principal balance. YOY--Year-over-year.

Table 4

Master Servicing Delinquencies										
	Dec. 31, 2018		Dec. 31, 2017		Dec. 31, 2016		Dec. 31, 2015		Dec. 31, 2014	
	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.
Master (SBO) loans	81,591.3	12,848	72,971.1	10,641	69,574.3	8,313	68,554.7	6,937	67,772.6	6,304
Average loan size	6.4	--	6.9	--	8.4	--	9.9	--	10.8	--
Delinquent (%)										
30 days	0.01	--	0.01	--	0.01	--	0.01	--	0.04	--
60 days	0.00	--	0.00	--	0.00	--	0.00	--	0.03	--
90+ days	0.04	--	0.04	--	0.03	--	0.03	--	0.04	--
Total	0.04	--	0.04	--	0.04	--	0.04	--	0.11	--

Totals may not add due to rounding. SBO--Serviced by others. UPB--Unpaid principal balance.

As of Dec. 31, 2018, Freddie Mac's master servicing portfolio had a delinquency rate of 0.04% on all of its master serviced loans subserviced by its licensed Seller/Servicers (see table 4). The portfolio delinquency rate mirrors the level from our prior review, and Freddie Mac's portfolio's delinquency rates have remained consistently lower than those of other industry participants, including CMBS lenders, in recent years.

We believe the track record of low delinquencies is attributable to Freddie Mac's stringent underwriting practices and proactive surveillance activities.

Subservicer oversight

The Customer Compliance Management (CCM) team manages the Seller/Servicer Assessments. Seller/Servicers are expected to adhere to the servicing protocols and standards set forth in the SSG. Freddie Mac has made the borrower experience one of its key priorities, and compliance with the SSG is one way to drive high service levels. Highlights include the following:

- The SSG is incorporated into the pooling and servicing agreements' definition of the "servicing standard", to which master and primary servicers must adhere.
- CCM updates the SSG as needed; changes and updates are communicated to all key parties including Seller/Servicers, CMBS servicers, and investors via the AllRegs subscription site and bulletins sent to servicers from Freddie Mac.
- Including portfolio and securitized loans, Freddie Mac oversees approximately 52 Seller/Servicers. CCM performs periodic reviews of Seller/Servicers, the frequency of which is determined by the level of counterparty risk the Seller/Servicer poses to Freddie Mac.
- The audit function assesses the business operations, financial strength, and compliance with the SSG. CCM is responsible for reviewing annual Seller/Servicer certifications, and monitoring ongoing program compliance and eligibility to service Freddie Mac loans.
- CCM is also responsible for systems and applications associated with counterparty-level exposure tracking and monitoring, and it regularly adds new monitoring capabilities.
- CCM performs full-scope financial reviews of Seller/Servicers considered "moderate risk" or "high risk" at least once every three years covering all operational areas, controls, and financial stability (twelve such full-scope audits were

completed during 2018).

- Limited-scope audits (generally desktop; 22 occurred during 2018) utilize prior audit results and internal feedback to determine the audit scope.
- The audit program tests the Seller/Servicers' overall control environment, underwriting, closing, loan administration, asset management, loan accounting, investor reporting, and compliance with documents and specific loan regulations.
- Audit findings are classified as critical, major, or minor. Each Seller/Servicer is given an audit assessment score of "satisfactory compliance", "somewhat weak compliance", or "weak compliance".
- CCM prepares and delivers detailed servicer reviews to senior management and the Seller/Servicer. Servicers who score below satisfactory compliance on their review will be audited more frequently.
- CCM additionally reviews annual certifications submitted by Seller/Servicers, including attestations by chief servicing officers regarding package quality and adherence to the servicing standard.
- The certification package includes audited financial statements, internal control structures, evidence of insurance, an external auditor's opinion, and net worth statement, to verify Seller/Servicers' compliance with Freddie Mac's eligibility requirements.

Borrower requests

The asset management group is responsible for overseeing borrower consent requests that are submitted by the Seller/Servicer on the borrower's behalf. Seller/Servicers perform initial reviews and produce a credit case that includes a recommendation on the transactions that they submit to AMO either for acknowledgement or consent. Other process features include the following:

- There were 4,606 consent requests processed during 2018, primarily addressing loan assumptions, partial collateral releases, and defeasance approvals. Other borrower consents addressed included easements, condemnations, modifications to loan documents, and repair escrow agreement modifications/extensions.
- Freddie Mac has established challenging goals for their servicers of 30-day and 15-day turnaround times for assumptions and other types of borrower consents, respectively.
- Underscoring the challenge of the aforementioned timeliness goal, its Seller/Servicers have been able to "timely" complete these requests at a 58% success rate through Dec. 31, 2018.
- Each borrower request is evaluated for compliance with governing documents and credit policy and any impact on collateral and associated risk (e.g., credit, interest rate, reputational, or operational). The goal is to preserve, protect and, if possible, improve Freddie Mac's risk position while providing outstanding customer service.
- Delegated authority within AMO to approve the borrower consent requests is generally based on loan size and risk rating.
- Freddie Mac's CRT system is used to track and monitor borrower requests processed by the Seller/Servicers on their portfolios. The system gives AMO visibility into the status of the process and allows them enhanced reporting and monitoring.

Asset and portfolio administration

The loan surveillance group, functionally included in the asset performance and compliance department, monitors loan portfolios' credit quality, overall loan performance, and guarantees relating to the Freddie Mac bond and securitization programs. It uses information from the Seller/Servicers (e.g., operating statements and property inspections) along with internal and external models to:

- Risk-rate each loan and guarantee;
- Revalue collateral properties;
- Develop risk plans for higher-risk loans; and
- Coordinate with enterprise risk management and finance groups to establish adequate reserve levels.

The risk-rating process starts with an internally generated loan score, representing the "life loss number" associated with the loan. The SMART system further incorporates property-specific criteria such as inspection results, net operating income, debt-service coverage ratio trends, loan-to-value, compliance issues, borrower payment trends, vacancy factors, and pending maturities. Based on this information, a risk rating of one to 10 is assigned; ratings of six and below are considered low risk. A risk rating of seven means the loan has some element of heightened risk, but default and/or loss is not expected. Nonetheless, these loans require business plans from the Seller/Servicer and revaluation. Risk ratings from eight to 10 indicate a higher risk of default and losses are probable; loans in these categories are subject to revaluation, impairment recommendations, business plans, quarterly reviews, and possibly increased inspection frequency.

In the surveillance group, the team is broken out among K-Deal master servicing, small balance loan master servicing, and other reporting responsibilities providing support to surveillance.

We believe AMO continues to take a proactive approach to portfolio surveillance, and appears to have effective processes for identifying and managing high-risk loans.

Investor reporting, advancing, and special servicer interaction

Depending on the product, AMO may advance funds for scheduled principal and interest payments, liquidity advances, credit enhancements, swap payments, full UPB payments at payoff, and other operating and property protection advances.

Other notable features include the following:

- Remittance reports are reviewed and approved by the MF loan accounting manager.
- Custodial bank credit ratings used by seller/servicers are tracked for compliance.
- MF loan accounting does not have dedicated custodial accounts. The MF loan administration group reconciles amounts submitted by seller/servicers to what was reported each month.
- Freddie Mac added an automated wire process where reconciliations are handled through Enterprise! for cash remittances to individual trustees. Additionally, as reconciliations are completed, an automated file is now generated (instead of manual), which is more efficient and reduces the likelihood of manual errors.

- Freddie Mac has updated their loan and securitization documents pending the phase-out of LIBOR index rates. Since November 2018, such documents contain an "alternative index" protocol.
- Advance monitoring and recovery procedures are documented for the serviced-by-others portfolio, and all advances are tracked in Enterprise! by the loan accounting group.
- Freddie Mac has a formalized advancing committee process. On deals where Freddie Mac is the appointed master servicer, the AMO executive team, including AMO vice presidents and directors, meet monthly to review the status of all loans with outstanding advances.
- The Freddie Mac special servicing group (with input from the third-party special servicer and property valuation discussions with their lenders) prepares an advance determination memo addressing the likelihood of recoverability, which is then provided to the advancing committee.
- The memo to the AMO executive team includes, at a minimum, the advances to date, occupancy status, appraisal values, broker opinions of value, future capital expenses, and estimated timeline for recovery.
- The committee then makes the recoverability determination.

Financial Position

The financial position is SUFFICIENT.

Appendix: Freddie Mac Multifamily Portfolios/Product Types

Participation certificates (PC)

A seller delivers a pool of multifamily mortgages and receives a Freddie Mac Multifamily PC with a principal amount equal to the aggregate principal of the delivered mortgages. The PCs are mortgage pass-through securities issued and guaranteed by Freddie Mac. While the 45- and 75-day products are no longer offered in the marketplace, Freddie Mac currently offers a 55-day product. Master servicing functions include reconciling servicer reports and payments, along with advancing funds.

Bond credit enhancements

Freddie Mac provides a credit enhancement for fixed- or variable-rate tax-exempt and taxable housing revenue bonds. The bonds that are credit-enhanced by Freddie Mac are secured by multifamily mortgages. Master servicing functions include advancing bond principal and interest (P&I), aggregating monthly bond draw requests for the bond trustee, aggregating all reporting and remittance data from servicers, and providing liquidity advances.

Retained portfolio

The retained portfolio consists of loans held for investment that were originated before the introduction of the K-Deals, and loans held for sale in the warehouse awaiting securitization. Master servicing functions include reconciling payments and servicer reports, delinquency monitoring, assessing loan risk ratings, maintain watchlists, and making property protection advances.

Tax-Exempt Bond Securitization (TEBS)

TEBS is a proprietary execution through which a sponsor transfers tax-exempt multifamily housing revenue bonds and related taxable bonds or mortgages to Freddie Mac, and Freddie Mac issues senior class A certificates that are sold to investors and subordinate class B certificates that are privately placed with the sponsor and pledged to Freddie Mac. Master servicing functions include aggregating reports and payments, reconciling bonds and P&I payments, along with confirming and allocating funds.

Freddie Mac K-Deals

Freddie Mac aggregates mortgage loans acquired from Seller/Servicers and sells them to a third-party depositor, which places the loans in a real estate mortgage investment conduit (REMIC) trust, which in turn issues various classes of bonds. Freddie Mac purchases and guarantees the senior bonds and certain subordinate interest-only bonds. The remaining bonds are purchased by third-party investors. Freddie Mac then deposits the guaranteed bonds into a structured pass-through certificate (SPC) trust and issues guaranteed SPCs backed by the guaranteed bonds. Freddie Mac performs administrator functions (for the SPC trust, not the REMIC trust) including remitting funds to senior bond investors and bond-level reporting.

Freddie Mac SB-Deals

Freddie Mac aggregates small-balance mortgage loans purchased from Seller/Servicers and sells them to a third-party depositor, which places the loans in a REMIC trust, which in turn issues various classes of bonds. Freddie Mac guarantees the senior securities issued by the REMIC trust, which are then publicly offered. The unguaranteed securities issued by the third-party trust are privately offered to third-party investors. In some cases, a third party may act as a loan seller and Freddie Mac may issue SPCs.

Freddie Mac Q-Deals

Similar to K-Deals, with the loans held in a REMIC trust, the key differences are as follows: individual loans are never purchased onto Freddie Mac's balance sheet (rather, Freddie Mac purchases and insures senior bonds, which are sold to investors) and the underlying loans are not underwritten by Freddie Mac at origination (rather, they contain seasoned loans that are presented to Freddie Mac and an underwriting plan is crafted based on the pool's risk profile). Master servicing functions performed are similar to K-Deals.

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