Contents
Operational Risk Assessments: Methodology and Process for Commercial Servicers.............1
   Introduction ............................................................................................................................. 3
Section 1 - Operational Risk Assessments: Terminology and Definitions ............................. 3
   Categories and Ranking Symbology ................................................................................... 3
   Ranking Forecast Terminology ........................................................................................... 4
Section 2 - Operational Risk Assessments: Analysis and Considerations ............................. 4
   Summary ............................................................................................................................. 4
   Certain Qualifications and Limitations ............................................................................... 6
   Reassessment Process ........................................................................................................ 6
   Key Risk Areas: Operational Infrastructure and Portfolio Administration ......................... 7
   Operational Infrastructure .................................................................................................. 8
      1. Organizational Structure and Business Strategy ....................................................... 8
      2. Audit, Compliance, and Procedural Completeness ................................................. 10
      3. Technology and Disaster Recovery ........................................................................ 10
   Portfolio Administration: Primary and Master Servicers ................................................. 11
      1. Loan Administration ................................................................................................. 12
      2. Investor Reporting, Accounting, and Advancing ..................................................... 14
      3. Portfolio Management ............................................................................................. 15
   Portfolio Administration: Special Servicers ...................................................................... 16
      1. Asset Management .................................................................................................. 17
      2. Asset Resolutions ..................................................................................................... 17
      3. Investor/Master Servicer Reporting ........................................................................ 18
   Appendix 1 - Definitions of Certain Terms ............................................................................ 18
   Appendix 2 - Defined Servicer Roles .................................................................................... 19
   Appendix 3 - General Characteristics of Ranking Levels ..................................................... 19
   Appendix 4 - Information Submission Requirements ........................................................... 22
Introduction

Morningstar performs operational risk assessments of commercial servicers through its separate Operational Risk Assessments Group. (The term ‘commercial servicer’ and certain other terms used herein are defined in Appendix 1 hereto.)

As more fully described below, an operational risk assessment is an opinion regarding the non-credit related risks associated with a servicer’s performance, or expected performance, of certain functions in finance transactions, with an emphasis on how such risks may impact investors, and on the effectiveness of the servicer’s protocols to mitigate such risks. Other information posted to Morningstar’s website at https://ratingagency.morningstar.com, including the “Operational Risk Assessment” link thereon, should be considered and reviewed in conjunction with this document.

Morningstar assigns operational risk assessment rankings only for servicers that enter into a written engagement letter with Morningstar and pay Morningstar for this service.

In addition to assessing servicers involved in CMBS transactions, we also assess servicers that may not participate in securitized transactions, but rather service commercial loan portfolios on behalf of a parent company or other types of third-party investors. Accordingly, our assessments and the assigned rankings take into consideration a servicer’s abilities and duties acting in such capacities.

September 2015 is the effective date for this document, and the analyses, considerations and other matters set forth herein. This document supersedes the “Morningstar Operational Risk Assessment: Methodology and Process for Commercial Servicers” published in January 2015.

Section 1 - Operational Risk Assessments: Terminology and Definitions

Categories and Ranking Symbology

We assign operational risk assessment rankings in the categories of commercial mortgage servicing, small-balance commercial mortgage servicing, business-based servicing (which may include both real estate and non-real estate collateralized loans), and construction loan servicing. Furthermore, the assigned ranking within each category also addresses the defined role as primary, master, or special servicer as applicable. A summary of the key attributes associated with each of these servicing roles is provided in Appendix 2.

The operational risk assessment symbology comprises: (a) a prefix of ‘MOR’ to indicate the issuer of the assessment; (b) a numerical scale of ‘1’ (highest) to ‘4’ (lowest); and (c) alpha characters to distinguish the category of commercial servicer to which the numerical scale value applies. Thus, we assign operational risk assessment rankings to servicers based on this four-tiered, numerical scale in the following categories:

‘MOR CS1’ (highest) to ‘MOR CS4’ (lowest) for commercial mortgage servicers (other than small-balance, business-based and construction loan commercial servicers)
‘MOR SBC1’ to ‘MOR SBC4’ for small-balance commercial mortgage servicers
‘MOR BBC1’ to ‘MOR BBC4’ for business-based commercial servicers
‘MOR CC1 to ‘MOR CC4’ for construction loan commercial servicers
‘MOR CV1’ to ‘MOR CV4’ for commercial vendors

► The numerical scale of ‘1’ to ‘4’ is defined as follows:
   ‘1’ Exceeds prudent loan servicing standards in key areas of risk
   ‘2’ Demonstrates proficiency in key areas of risk
   ‘3’ Demonstrates compliance with key areas of risk
   ‘4’ Demonstrates lack of compliance with one or more key areas of risk

► A servicer or vendor assigned a ranking of at least ‘MOR3’ is deemed to comply with what
we view as the minimum prudent loan servicing or asset management standards and
requirements for the firm’s operational category and role. Some of the general
characteristics associated with each ranking level are provided in Appendix 3.

Ranking Forecast Terminology

► Morningstar characterizes each ranking with a forecast, which represents an opinion
regarding the stability of the ranking or potential revision of the ranking during the next 12-
month period.

► Morningstar’s terminology and definitions for its ranking forecasts are as follows:

  Stable - the ranking will likely remain unchanged.

  Positive - the ranking either may remain constant or may be adjusted upward based
  on our view of pending operational initiatives or changes.

  Negative - the ranking may be adjusted downward based on our view of the servicer’s
  performance or operational capabilities.

  Evolving - the ranking may be adjusted upward, downward, or remain constant based
  on how certain actions by, or events involving, the servicer are concluded and can be
  fully assessed by us.

Section 2 - Operational Risk Assessments: Analysis and Considerations

Summary

► We believe that servicing is a very important component in finance transactions and that a
servicer can affect, positively or negatively, many aspects of transactional performance
based on its abilities and practices to mitigate operational risk. Accordingly, an operational
risk assessment offers an in-depth analysis of a servicer based on the functions the servicer
is expected to perform relative to the characteristics and requirements of a finance
transaction. This analysis focuses on non-credit related risks associated with the
performance or expected performance of such functions and the effectiveness of the
servicer’s protocols to mitigate operational risk with an emphasis on how such risk
may impact certain investors.
We view our assessments as a value-added research product intended to provide interested parties with further insights and performance information about ranked servicers responsible for protecting their interests. An operational risk assessment is intended to give interested parties an independent opinion regarding the strengths, deficiencies, and overall attributes and capabilities of ranked servicers participating in securitizations and other finance transactions. Our assessment examines a servicer’s control practices, degree of operating efficiency, and overall track record and capabilities across a broad range of performance factors and within the context of the portfolio types and the company’s particular role as a primary servicer, master servicer, special servicer, or vendor.

An opinion about a servicer and the assignment of the corresponding assessment ranking reflect our views of the servicer relative to what we consider to be generally accepted industry best practices, comparative peer performance, and other industry data as applicable and available. The assessment takes into consideration the servicer’s stated practices, performance results, and operational characteristics based on a number of quantitative measures, such as staffing workloads, employee turnover, borrower consent processing time, reporting accuracy, and, in the case of special servicers, asset recovery performance data. The assessment also considers certain qualitative factors, such as the composition and relative complexity of the serviced portfolio, the servicer’s degree of experience and responsiveness with third-party investor reporting, the effectiveness of the servicer’s portfolio management practices to monitor collateral performance, and, as applicable, how it handles payment advances and recoverability decisions within a commercial mortgage-backed securities transaction. (The review and consideration of a servicer’s procedures, controls, and capabilities with regard to advances is not an opinion of creditworthiness or any other financial consideration.) Based on available information, we will consider whether the practices and performance results of a servicer, and particularly of a special servicer, reflect what is known as “the servicing standard,” which states that a servicer should make decisions and adhere to procedures that best align with the overall interests of the corresponding investor, or of the securitization trust. Based on this standard, special servicers are, therefore, expected to pursue asset resolution strategies to obtain the highest recovery for the trust overall on a net present value basis without deference to an affiliate’s investment position or any one CMBS investor class in the transaction.

An operational risk assessment of a servicer is based on our analysis of the information submitted by the servicer and from conducting a site visit meeting with the servicer’s management and other professional staff to obtain additional information about the servicer. In advance of the site visit, we provide the servicer with a meeting agenda of discussion topics that follows the scope of assessment described in this document. In advance of the site visit, we provide the servicer with an information request for materials to be delivered to us. The standard request items are attached as Appendix 4. Morningstar’s operational risk assessment analysts may request additional information or documentation from the servicer to support or clarify information or documentation previously obtained.
Morningstar assigns operational risk assessment rankings and forecasts through a committee whose voting members consist of analysts in Morningstar’s Operational Risk Assessment Group, and Morningstar credit ratings analysts when deemed necessary. Once we determine the final ranking, we publicly issue the operational risk assessment and assigned ranking through a press release that provides the ranking, forecast, and a brief summary of the underlying analysis. We also publish an operational risk assessment report that provides the ranking, forecast and underlying analysis in greater detail. The full assessment report is not subscription-based and is made publicly available on our website, https://ratingagency.morningstar.com.

Certain Qualifications and Limitations

- An operational risk assessment of a servicer is based in part on information it provided to Morningstar. All such information is Third-Party Information as defined in this document and for purposes of the Disclaimer and Terms of Use set forth herein.

- As the economic environment, regulations, markets and transaction structures continue to change, Morningstar may revise any or all underlying analyses and considerations. An operational risk assessment ranking of a servicer is subject to revision or withdrawal at any time with or without notice.

- An operational risk assessment ranking of a servicer, including any change or withdrawal of a ranking, is not and should not be considered or construed as a credit rating, outlook or credit rating action of any form. Morningstar, for its operational risk assessments, does not issue any form of credit rating, outlook or credit rating action with respect to the financial strength or creditworthiness of any ranked servicer or other entity.

- We rely on the factual accuracy of the servicer’s information submission and the servicer’s own representations about its operations, practices, and business. We will compare the servicer’s stated practices against its written policies and procedures, report samples, auditors’ reports, and other sources as may be available. However, our assessment itself is not an audit. For example, we do not examine individual asset files, test procedures and technology applications, or conduct any other testing in that regard that may be construed as an audit. Accordingly, we do not examine a servicer’s pooling and servicing agreements, or other transactional and servicing agreements to test its compliance with the specific terms and conditions of such agreements.

Reassessment Process

- Under the typical assessment engagement, we generally perform a servicer reassessment annually, and through substantially the same process used for an initial assessment.

- Additionally, we may reassess a servicer at any time based on new factors or events of which we become aware and consider material and that we believe may negatively affect the servicer’s operations. Any revision to or withdrawal of an operational risk assessment ranking may occur as a result of the receipt of information obtained from the servicer or from sources other than the servicer. A servicer’s ranking may be immediately reduced to the lowest assessment level or withdrawn if we are informed that the servicer engaged in
fraud, knowing misappropriation or misapplication of funds or any instance of impropriety or negligence, as Morningstar may determine. We may determine that the ranking, if not immediately withdrawn, should be placed on Alert status in such a case, or in other cases in which we become aware of a pending event or situation expected to be of limited duration involving the servicer that we believe may negatively affect the servicer’s operational capabilities and performance. When we place a ranking on Alert status, we will concurrently issue a corresponding press release to indicate this change in the ranking’s status and that we are monitoring the pending event or situation through its resolution to determine if and when a ranking change may be required. The duration of a ranking’s placement on Alert status is generally for a period not exceeding 90 to 120 days by which time we will raise, lower, or affirm the ranking and assign a new forecast for the ranking, which we will communicate through a publicly issued press release. Alternatively, we may disclose the need to extend the ranking Alert for an additional period if the situation or event is not yet fully resolved.

Key Risk Areas: Operational Infrastructure and Portfolio Administration

► The overall assigned ranking of a servicer is based on our assessment of the servicer (as either a primary, master, or special servicer) in two key areas: Operational Infrastructure and Portfolio Administration.

► In our committee process, we assign individual scores to a set of factors within each of these two key areas. The score given to each factor ranges from 1 (highest) to 4 (lowest) and has a corresponding percentage weight to determine the subscore for each key area. The overall ranking is determined by averaging the two subscores. Not every factor will apply in the same manner or to every servicer. In those cases, additional weight will be allocated to the factors that do apply, so that the weighting of all factors within each key area will still total 100%. Any servicer assigned a subscore of ’4’ in either of the key areas, Operational Infrastructure or Portfolio Administration, will receive a final overall operational risk assessment ranking of ‘MOR4’.

The overall score and corresponding assigned ranking level are as follows:

<table>
<thead>
<tr>
<th>Overall Score</th>
<th>Assigned Servicer Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 to 1.25</td>
<td>MOR1</td>
</tr>
<tr>
<td>1.26 to 2.25</td>
<td>MOR2</td>
</tr>
<tr>
<td>2.26 to 3.25</td>
<td>MOR3</td>
</tr>
<tr>
<td>3.26 to 4.0</td>
<td>MOR4</td>
</tr>
</tbody>
</table>
As an example, a hypothetical commercial mortgage special servicer receiving the subscores shown below would be ranked MOR CS2:

<table>
<thead>
<tr>
<th>Key Area</th>
<th>Subscore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Infrastructure</td>
<td>1.6</td>
</tr>
<tr>
<td>Portfolio Administration</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Overall Ranking</strong></td>
<td><strong>2.1</strong></td>
</tr>
</tbody>
</table>

The factors within each of these two key areas are discussed in greater detail below.

**Operational Infrastructure**

The factors we consider in our review of a servicer’s Operational Infrastructure and the weight we assign to each factor are as follows:

- Organizational Structure and Business Strategy (30%)
- Audit, Compliance, and Procedural Completeness (40%)
- Technology and Disaster Recovery (30%)

The percentages set forth above represent the approximate weight given to each factor. Each of these factors is discussed serially below along with some of our general expectations for servicers to be assigned a ranking of at least ‘MOR CS3’ in the area of Operational Infrastructure.

1. Organizational Structure and Business Strategy

a. We believe that effective management, solid professional experience, and a well-designed, stable organizational structure are essential components for successful servicing. In our view, experienced management and well-trained employees, combined with an investment in technology and sound operating controls can directly contribute to the long-term viability of an organization and better servicing performance. Morningstar assesses a servicer’s operational infrastructure by reviewing its history, managerial structure, professional experience and tenure, staff turnover, the scope and relevance of training programs, the extent and reasonableness of the servicer’s overall business plan, and the effectiveness of the existing organizational structure to support current servicing assignments and those contemplated by the business plan.

b. The servicing staff’s years of experience indicates a probable knowledge depth of generally accepted industry practices and the servicer’s overall skill base for performing servicing activities. As a guideline, to attain a ranking of ‘MOR3’ we generally expect a servicer’s management-level employees to have at least 10 years of industry experience on average and its professional staff to have at least five years of industry experience on average. Servicers with higher rankings will generally have senior managers and key professionals with at least 15 years of industry experience on average.

c. Along with staffing experience, we believe the turnover rate among employees can often be an indicative measure of organizational stability and can be a reflection of the general management at the servicer. We calculate a commercial servicer’s turnover rate based on the
total number of staff departures since the beginning of the period. Morningstar believes that high turnover is detrimental to performance efficiency and organizational effectiveness. We also consider voluntary versus involuntary turnover for both management and staff positions to analyze the operational prudence of any involuntary turnover that may be attributable to a portfolio sale, corporate merger, or other planned business action. We ask the servicer to explain what we may view as a high turnover rate, or an increase from a prior period, and ask how the servicer is addressing the issue. We also recognize that the same number of staff departures in a smaller servicing organization will have a greater impact on its turnover rate on a strict percentage basis than in a larger servicing organization. We expect a commercial servicer with a ‘MOR3’ ranking to have a moderate amount of annualized staff turnover rate, but generally not exceeding 15%. We expect higher ranked servicers to have lower annualized staff turnover rates that are generally at or below 10%.

d. We also consider the servicer’s overall business strategy for sustainability and portfolio growth. We review how readily the servicer’s existing infrastructure can support its current servicing requirements and its stated plans for portfolio growth or diversification, including any associated operational changes or enhancements under consideration. Along these lines, we also factor the servicer’s overall history and experience as a servicer for the types of investors and portfolios it currently services or intends to service.

e. Additionally, we look for risk-avoidance strategies, including a proper segregation of duties, to be embedded in the organizational structure. Morningstar operational risk assessment analysts have reviewed servicers with predominantly portfolio or functionally-oriented structures, as well as flat versus more intricate reporting structures. Depending on the servicer’s portfolio characteristics, we believe a hybrid structure of portfolio and functionally-driven servicing departments can more frequently serve to maximize operating efficiency in terms of both cost and time.

f. When assessing a servicer’s organizational structure and staff qualifications, we review the substance and extent of the servicer’s formalized training activities. We believe a dedicated training function can add value by expanding the staff’s knowledge of loan servicing best practices, established procedures, various industry issues, and regulatory requirements that may directly affect their job responsibilities. The method and level of training depends on numerous factors including the size of the servicer (based on number of employees) and the level of industry experience desirable in new employees. In our experience, smaller-sized companies will typically offer fewer formalized training programs and have no dedicated personnel to oversee training activities. As a general guideline, we believe a servicer ranked ‘MOR3’ will target 30 to 40 training hours per employee per year and substantially comply with that target. Higher ranked servicers will tend to exhibit a more formalized training function, have a dedicated staff position to oversee all training, centrally track required hours, and offer a variety of relevant training opportunities both internally and externally for all levels of staff and management.
2. Audit, Compliance, and Procedural Completeness

a. We place particular weight on the servicer’s audit function along with the quality and completeness of the servicer’s policies and procedures. We believe that a robust audit function promotes accountability and accuracy, which in turn, mitigates risk. We review the servicer’s audit and any related quality assurance reports to assess how any exceptions to policies and procedures or regulatory and industry-mandated requirements are identified and corrected.

b. We review the work performed by the servicer’s internal and external auditors, any independent self-monitoring quality control-type programs, as well as the servicer’s Regulation AB compliance (Reg AB), Uniform Single Attestation Program (USAP) compliance, service organization control reports (or equivalent), and any other applicable external audits and reviews. We review the summary of findings, assess their material relevance, and review management responses. We expect the audit scope to address those relevant processes and operating areas associated with the servicer’s roles and responsibilities such as cash management, investor remittances and reporting, asset administration tasks, and portfolio management. To be ranked 'MOR3', we expect a servicer to have: (i) a formalized and independent audit function that delineates the scope and frequency of audits, the process and timing for corrective actions, and the personnel resources involved; and (ii) an audit process that examines cash and investor reporting controls at least every 12 to 18 months.

c. We expect servicers to have documented policies and procedures for all core functional areas and tasks. We believe that well-designed and detailed policies and procedures serve as a useful training reference tool, offer a resource for experienced staff, promote consistent practices, and facilitate auditing. We believe it is a best practice for servicers to develop and update their policies and procedures in a centralized and controlled manner involving senior management review, and preferably including compliance or legal review, for adherence to regulatory requirements, pooling and servicing agreements, inter-creditor agreements, and other transactional and servicing agreements. Servicers normally maintain their policies and procedures on a shared drive or, in many cases, on their intranet. We believe that better constructed written policies and procedures combine statements of policy with clear procedures on how to perform a particular task and include the requisite forms, exhibits and computer screen captures.

d. We review a servicer’s adherence to industry standards for corporate insurance coverage related to directors and officers policies and errors and omissions policies. We expect servicers to meet the insurance requirements as set forth by any applicable government-sponsored enterprise seller/servicer guidelines. We also review whether the servicer or its parent company is involved in any material lawsuits that we believe could negatively affect the servicer’s operations.

3. Technology and Disaster Recovery

a. We review a servicer’s technology tools and capabilities, including both proprietary and purchased applications, data back-up and security, and its disaster-recovery and business-continuity plans and testing.
b. We review a servicer’s technology for whether it controls its data and deploys automation tools to gain operating efficiency and accuracy. Morningstar operational risk assessment analysts are familiar with most commercial servicing technology applications offered by industry vendors and will review the efficacy of any substitute or supplemental proprietary technology tools used by the servicer. While primary and master servicers generally use a purchased servicing system, they may supplement it with other applications. Special servicers typically use a proprietary asset management system with customized features matching their needs. We examine the extent to which systems are integrated to share common data, the extent to which the servicer is optimizing the available functionality of its main systems, and the extent to which the servicer relies on stand-alone spreadsheets that can compromise data integrity and reduce efficiency. Additionally, many primary servicers, particularly those handling larger portfolios, have specialized web sites for their borrowers to access real-time information on their loans and for borrowers to review their compliance requirements. Active CMBS master servicers typically will have a dedicated web portal for investors to access loan and portfolio-level performance reports. We generally find a primary servicer ranked higher than ‘MOR3’ to have a borrower website with functionality commensurate with the servicer’s portfolio characteristics, and a master servicer ranked higher than ‘MOR3’ to have a similar type web site oriented for investors.

c. We expect servicers to employ technology that addresses their portfolio types and reporting requirements. For example, we expect servicers actively handling or expecting to handle CMBS portfolios to have systems able to perform the related loan and portfolio-level accounting and reporting, and be able to track the myriad of loan compliance covenants and performance triggers inherent in such portfolios. Alternatively, we expect construction loan servicers to have technology tools to effectively track and administer draw requests, and monitor project-level requirements and completion activity.

d. Within our assessment of a servicer’s technology environment, we review the servicer’s data back-up protocols along with its disaster-recovery and business-continuity preparedness. We expect servicers to routinely back-up all critical data daily, store the backed-up data at a secured location, and be able to efficiently and readily access that data. We believe a servicer’s data back-up and disaster-recovery procedures should be documented and regularly tested so that key servicing tasks (payment processing, remittance processing, investor accounting and reporting, and other disbursement processing) can be completed accurately and with minimal or no delay. Additionally, we expect the servicer’s disaster-recovery plan to designate viable alternate sites for redundant technology hardware and the relocation of staff. As a general guideline, we believe these alternate sites should respectively reside on power grids separate from their primary locations and ideally be at least 25 miles away.

Portfolio Administration: Primary and Master Servicers

Commercial mortgage servicing, particularly through the evolution of CMBS, demands that servicers have comprehensive portfolio administration procedures and practices to address a myriad of loan and portfolio-level responsibilities in order to guard against errors and oversights, and to protect the interests of their investor clients, but with sensitivity to borrowers’ needs as well. We believe that effective portfolio administration means that lien priorities are maintained, loan-level and investor-level requirements are followed, borrowers’
needs are handled in a reasonable manner, and that potential problem loans are proactively addressed so that investors’ rights and their investment positions are protected.

When assessing a servicer’s portfolio administration capabilities, we consider the servicer’s portfolio characteristics, such as its diversity of investor and collateral types, geographic concentrations, and overall relative degree of complexity and corresponding administrative and management requirements. We also evaluate a servicer’s portfolio administration processes and results relative to what we view as best practices. We also expect servicers ranked above ‘MOR3’ to have broader experience with, and customized procedures, for handling more complex asset structures and portfolios along with consistently strong performance metrics across functions.

This key area examines and weights these factors (the elements associated with each factor cover primary servicers and master servicers, as applicable):

- Loan Administration (30%)
- Investor Reporting, Accounting, and Advancing (35%)
- Portfolio Management (35%)

The percentages set forth above represent the approximate weight given to each such factor. Each of these factors is discussed serially below along with some of our general expectations for servicers to attain a ranking of at least ‘MOR3’.

1. Loan Administration
   a. This assessment factor encompasses the servicer’s procedures and stated practices for new loan boarding, tracking loan file and collateral documentation, payment receipts and disbursement processing, loan accounting, Uniform Commercial Code refilings, real estate tax administration, property insurance administration, and capital expenditure reserve account disbursements. For all these functions, we assess whether we believe the servicer has proactive and overall effective control practices in place.

   b. Loan boarding involves establishing an accurate and complete loan record on the servicing system subsequent to the loan’s closing or transfer. The complete boarding process includes not only all required data inputs for payment processing, escrow accounts, and investor reporting, but also borrower and investor compliance triggers, and collateral performance requirements. We believe an effective boarding process includes controls for testing data accuracy of all system inputs, and prompt notifications to borrowers informing them of the loan transfer and instructing them about their compliance responsibilities. A servicer’s careful review of corresponding PSAs, inter-creditor agreements, and other transactional and servicing agreements is an integral part of a proactive loan boarding function. We expect servicers to complete the essential elements of the loan boarding process promptly, which we generally expect to be within 10 days or less, so that the servicer can perform required cash management, track escrow accounts, and meet its immediate obligations. Servicers with rankings higher than ‘MOR3’ will typically have experience and capabilities to board entire portfolios and do so with an effective use of automation for greater efficiency. We also expect servicers ranked above ‘MOR3’ with their own loan origination businesses to have loan origination and servicing systems electronically interfaced to gain loan boarding efficiency.
Having complete loan documentation, and especially all recorded and properly assigned closing documents, protects the lender’s rights and lien position. Our assessment includes a review of the servicer’s stated practices for monitoring file completeness, vault security for items such as letters of credit, and for follow-up on missing documents. We expect master servicers, whose loans have subservicers, to board and then maintain core loan information and current balances on their systems, but do not expect master servicers necessarily to shadow post each monthly payment and disbursement.

c. We review a servicer’s payment-processing controls and degree of efficiency to receive and post payments. We also examine whether a servicer maintains a separation of duties among the staff for the core tasks involved, such as cash movement, updating system records, and reconciling system records with bank account activity. Also evaluated are the servicer’s cash controls and procedures for handling live checks, and its timely resolution of unprocessed items placed into suspense. As a guideline, we believe that payment clearing accounts should be balanced daily and that suspense items should be resolved within 90 days or less, and within 60 days or less as a best practice. We expect servicers to use a lockbox vendor to receive payments by check generally once a portfolio exceeds 1,000 loans, or otherwise receive the majority of borrower payments through other direct methods (such as wire transfer or automated clearing house) to minimize the number of checks received on-site. In our experience, we find that many servicers also have the on-site capability to scan and electronically deposit any checks they may receive directly. We believe that on-site check scanning and depositing is efficient, but we also expect the servicer to have controlled procedures over this process. For servicers ranked higher than ‘MOR3’, we expect payments processed through lockboxes to be automatically system-posted through a direct interface. In our experience, such servicers typically will have 90% or more of all payments electronically received and automatically system-posted.

d. Many servicers also handle loans with cash management provisions (also referred to as hard lockbox loans) in which the servicer receives and controls the property-level rental payments, funds debt service, escrows, other reserves, and fees, then gives the borrower or its property management agent access to the remaining funds to cover monthly operating expenses. We examine the extent of a servicer’s experience with cash-managed loans and its practices to handle such loans in a controlled and efficient manner.

e. For construction loan servicers, we also assess the servicer’s control practices and level of efficiency to track and fund draw requests, monitor funding commitment levels, and apply payments from unit sales and other partial property releases.

f. We believe that a very important part of effective loan administration for operational risk mitigation is proactively monitoring property insurance coverage adequacy, policy renewals, and the timely payment of policy premiums. Lack of adequate in-force coverage places the loan collateral at risk and ultimately the investor or securitization trust. We expect servicers to centrally track all pertinent property insurance requirements and premium payments for every loan including nonscrawed loans, proactively obtain evidence of coverage renewals that also indicates the appropriate loss payees, track carrier rating provisions, and monitor exceptions for timely resolution. Additionally, we expect servicers to have controlled procedures for loss draft
processing and maintain a lender’s force-placed insurance policy for prompt activation and with a provision for retroactive coverage should the borrower fail to provide evidence of renewed and adequate coverage by the existing policy’s expiration date. Given the complex coverage structures and requirements for many commercial properties, some servicers may use external consultants to assist in reviewing coverage adequacy or even policy renewal tracking. We concur that this outsourcing can enhance a servicer’s insurance administration, but expect servicers to maintain full control over the information and centrally track activity through their own systems. We expect servicers to conduct annual insurance escrow analyses through their servicing systems and adjust required escrow payments to avoid shortfalls. For master servicers overseeing subservicers, we expect master servicers to review quarterly insurance administration exception reports from their subservicers and monitor subservicers’ resolution of open items.

g. Our review of a servicer’s loan administration duties includes its real estate tax payment monitoring practices, which we view as an important part of protecting loan collateral and lien priority. We review the effectiveness of a servicer’s stated real estate tax monitoring procedures for the entire serviced portfolio. We believe that a servicer generally can gain efficiency and mitigate some risk by using a national tax service vendor to monitor the entire portfolio, particularly for a larger and diverse loan portfolio. Regardless of whether a tax service is used, we expect servicers to centrally track all due dates and continually monitor the tax payment status for all loans whether escrowed or not. For escrowed loans, we expect servicers to incur minimal penalties, if any, for late tax payments, which is one measure to gauge the servicer’s administrative effectiveness for this function. We expect servicers to have a standardized process for conducting annual tax escrow analyses using their servicing systems that can accurately calculate revised escrow payments. In the case of geographically diverse portfolios, we believe it is a best practice for the tax escrow analysis to be based on the initial or major annual tax disbursement, as this usually represents the largest single escrow disbursement for each loan. For master servicers overseeing subservicers, we expect master servicers to review quarterly tax administration exception reports from their subservicers and monitor subservicers’ resolution of open items.

2. Investor Reporting, Accounting, and Advancing
a. When assessing a servicer’s investor-reporting and accounting abilities, we consider the servicer’s history and degree of expertise for its current or intended investor types. We expect the servicer to produce all required reports, both in content and format, in accordance with its investors’ requirements and applicable securitization standards, such as those defined by the Commercial Real Estate Finance Council. We assess whether investor bank account reconciliation practices adhere to Regulation AB timelines and requirements. We expect a servicer ranked at least ‘MOR3’ to have a segregation of staff duties among investor-reporting, remitting, and account-reconciling functions, with these functions respectively executed through a controlled approval process.

b. For primary and master servicers involved in securitizations, we may review the servicer’s interactions with investors, trustees, master servicers (if serving as a subservicer) to assess the
servicer’s performance in terms of overall accuracy, timeliness, and completeness of information provided. In our assessment, we consider the extent to which the servicer has incurred any remittance or reporting errors, the servicer’s explanation for such errors, and if the servicer filed any restated investor reports as a result. We expect servicers to conduct their investor-reporting and remitting tasks without routinely incurring any material errors.

c. When reviewing a master servicer, we expect its policies and procedures to reflect effective controls related to receiving and validating subservicer remittances, remittance reports, and reconciling subservicers’ remittances to required pool-level trustee remittance amounts.

d. CMBS master servicers are generally the responsible party for advancing funds for delinquent principal and interest payments so that bondholders continue to receive their scheduled amounts. We believe it is customary and expected practice for master servicers to have clearly stated policies and approval procedures for prudently determining the recoverability of making a monthly debt service payment advance on a delinquent loan. Similarly, we believe that it is incumbent for master servicers to recover their advances in a manner that can best avoid, if at all possible, interest shortfalls to the CMBS trust.

3. Portfolio Management

a. We believe that portfolio management is a critically important component of commercial servicing. Through the evolution of CMBS and other intricate financing structures, the scope for the servicer of what constitutes its portfolio management responsibilities has greatly expanded. In the context of our servicer assessments, we view a servicer’s portfolio management responsibilities as largely relating to its monitoring and management of the portfolio’s performance from a credit or cash flow perspective. This typically involves tracking borrower compliance and loan covenant triggers events, collecting and analyzing financial statements, conducting and reviewing property inspections, managing a watchlist of potential problem loans, and engaging in early-stage collection efforts on delinquent loans.

Portfolio management also often includes analyzing and responding to borrower consent requests such as assumptions, leasing approvals, partial property releases, and releasing reserves to cover capital expenditures. We expect servicers’ stated practices and documented procedures to reflect a proactive and controlled approach for these activities.

b. When assessing a servicer’s portfolio management capabilities, we consider the relative complexity and characteristics of the serviced portfolio and the overall completeness and quality of the servicer’s analytics and monitoring practices. We also assess the servicer’s performance relative to certain metrics, such as its success rate and timeliness to collect and analyze financial statements and inspections, and its timeliness when reviewing borrower consent requests. For example, we expect commercial mortgage primary servicers to conduct annual property inspections for loans greater than $2 million and believe that annual inspections for all loans greater than $1 million is a best practice. We also expect CMBS servicers to complete and submit full-year operating statement analysis reports, or OSARs, by May 31 for the majority of the loans containing such requirements. We believe that primary and master servicers ranked above ‘MOR CS3’ will attain financial statement collection and review rates of 90% or better by that point. Additionally, we believe it is a best practice for
master servicers to reanalyze at least a sizable portion of financial statements submitted by subservicers given that we expect master servicers to include their subserviced portfolio in their watchlist process and given that CMBS master servicers are responsible for making payment advances to the trust.

c. We recognize that small-balance and business loan-based commercial portfolios tend to have some different characteristics from larger commercial real estate loans. For example, collecting annual financial statements can be more challenging and the usefulness of such statements as credit monitoring tools often can have limitations based on their content quality. Accordingly, we assess small-balance servicers based on a set of expectations matching the nature of their portfolios. For example, we expect such servicers to attempt the collection of financial statements at least for their larger loans and follow an inspection schedule based on reasonable loan size thresholds. We also believe that smaller-balance portfolios may be prone to higher delinquency rates. Therefore, we expect small-balance servicers to have especially proactive and pragmatic early-stage collection and loss-mitigation practices.

d. For construction loan servicers, portfolio management largely entails mitigating risks associated with timely and on-budget project completion, interest reserve depletion, leasing and takeout financing, and lot or unit sales absorption and pricing. We assess construction servicers’ portfolio management capabilities based on their documented policies and procedures, stated practices, performance track record, and related reporting tools to proactively address these risks.

e. With respect to CMBS master servicers, portfolio management also encompasses their subservicer compliance and audit practices. We expect master servicers to have a defined program to audit subservicers’ compliance with their servicing agreements and duties. This normally entails policies and procedures for the scope of such audits, documenting results, monitoring corrective actions, and having defined guidelines for the frequency and type of audit (desk or on-site) based on the number of loans subserviced and if the master servicer has particular issues or concerns with any subservicer.

Portfolio Administration: Special Servicers

Special servicers are principally responsible for managing underperforming loans, nonperforming loans, and foreclosed real estate portfolios with the objective of maximizing recoveries on every asset for their investors. We assess special servicers based on their skills and overall track record of achievement in this regard, while taking into consideration their asset-management control practices, including our view of their abilities, procedures, and resources to meet their respective investors’ reporting and compliance requirements. When assessing a special servicer, we consider the diversity and relative complexities of its portfolio and the extent of its experience resolving assets through different methods and workout structures.

Additionally, many CMBS special servicers are affiliated with the first-loss position investor class on the bonds (also referred to as the directing or controlling certificate holder, or B-piece investor). We understand the motivations for a first-loss-position investor also wanting to be the special servicer. However, we also believe this structure can pose a conflict of interest.
given that the special servicer’s duty is to uphold “the servicing standard,” which states that it should resolve assets based on the highest net present value recovery for the trust as a whole without deference to any one investor class. Accordingly, in the course of a CMBS special servicer assessment, we consider this dynamic to the extent possible when reviewing the special servicers’ stated practices and performance results.

We assess the key area of Portfolio Administration for special servicers based on these three weighted factors:

- Asset Management (30%)
- Asset Resolutions (40%)
- Investor/Master Servicer Reporting (30%)

The percentages set forth above represent the approximate weight given to each such factor. Each of these factors is discussed serially below along with some of our general expectations for special servicers to attain a ranking of at least ‘MOR3’.

1. Asset Management
   a. Our review process examines the special servicer’s policies, procedures, and overall practices for determining recovery strategies on newly received assets, executing those strategies, and managing nonperforming assets through their final disposition. We review how recommended resolution strategies and specific actions are documented and approved, the analytical quality of that process, and the special servicer’s controls over third-party service providers, such as property-management companies, brokers, appraisers, environmental and structural engineers, and legal counsel. We also consider the servicer’s experience and procedures managing loans in foreclosure and bankruptcy, managing owned real estate, including the extent of its controls for property-level accounting, and selling owned real estate. We expect special servicers to have documented procedures to oversee these functions in a centralized and controlled manner along with the corresponding reporting tools to do so. We also believe that using a committee structure for controlling asset-resolution approvals is a best practice. We expect CMBS special servicers’ policies and procedures also to address their asset management duties and decision-making processes relative to CREFC reporting and real estate mortgage investment conduit, or REMIC, compliance.

2. Asset Resolutions
   a. We greatly consider a special servicer’s actual asset-recovery performance in our assessment. We examine the servicer’s recent history of resolutions and its record of achievement based on overall time frames, and recovery proceeds relative to current collateral values. We also give consideration to vintage, property type, and other asset-level and portfolio characteristics when examining a special servicer’s overall performance results in any given period. We expect special servicers ranked above ‘MOR3’ to have a successful record of loan and real estate resolutions for third-party investors involving a complex and diverse portfolio. Special servicers ranked ‘MOR3’ generally will have the procedures, reporting tools, and experienced personnel in place to proactively manage assets, but such a special servicer may have a limited history of asset-resolution achievement or may have a trend of recovery results that we view as being either in line with or somewhat below that of some peers.
3. Investor/Master Servicer Reporting
a. We expect special servicers to have capabilities and procedures to deliver their required reports and communicate information in a timely and accurate manner to their investors, master servicers, rating agencies, and operating advisors as applicable. For CMBS special servicers, we view the timely communication and delivery of updated asset values and asset status reports to master servicers as critically important so that master servicers can effectively make prudent advancing decisions and accurately report realized losses. We also examine a CMBS special servicer’s ability to review and respond in a timely manner to borrower consent requests on performing loans that it may receive from a master servicer.

Appendix 1 - Definitions of Certain Terms
As used herein, the following terms have the following meanings:

CMBS means commercial mortgage-backed securities.

Commercial Servicer or Servicer means a servicer overseeing extensions of credit secured by commercial real property. Appendix 2 includes a definition and explanation of the roles of each type of servicer.

Morningstar means Morningstar Credit Ratings, LLC.

PSA means a pooling and service agreement or similar agreement.

Reg AB refers to Regulation AB, 17 CFR § 229.1100 et seq.

Standards mean and refer, collectively, to (i) performance standards recognized within the industry; (ii) performance standards of similarly situated Commercial Servicers; and (iii) Morningstar’s internally developed applicable performance standards, in each case, as selected by Morningstar, in its discretion, for any operational risk assessment(s). Certain of Morningstar’s internally-developed applicable performance standards are described in this document. The highest standard within any set or subset of standards governs any conflict between or among such standards. Notwithstanding anything to the contrary, nothing herein or in any assessment, report or analysis published by Morningstar shall be construed, or is intended to be construed, as an opinion or statement regarding compliance or noncompliance with any applicable law, rule or regulation. Standards may be referred to and/or limited or qualified by references such as prudent loan-servicing standards, minimum prudent loan servicing standards, “the servicing standard,” which states that a servicer should make decisions and adhere to procedures that best align with the overall interests of the corresponding investor, or of the CMBS trust, or applicable securitization standards, such as those defined by the Commercial Real Estate Finance Council.

Third-Party Information has the meaning ascribed thereto in the Disclaimer and Terms of Use set forth herein.
Appendix 2 - Defined Servicer Roles

Primary Servicer:
Primary servicers have direct borrower contact and perform all associated loan-administration and portfolio-management duties. A primary servicer performs investor reporting and, in some cases, may directly perform CMBS investor reporting, remitting, and advancing to the trust if it is the only servicer on the transaction. A primary servicer reporting to a master servicer would be viewed as a subservicer in the transaction.

Master Servicer:
Master servicers typically do not have direct borrower contact. They monitor the activities of primary servicers acting in a subservicing capacity and monitor the overall performance of the subserviced portfolios. The master servicer and subservicer relationship is largely associated with CMBS transactions in which the master servicer is the named servicer to the transaction and is responsible for overseeing the quality of information provided by subservicers to ensure accurate investor reporting and compliance with servicing agreements. CMBS master servicers are responsible for timely and accurate trustee reporting and remitting. CMBS master servicers are also responsible for advancing scheduled payments to the trust and determining the recoverability of advances.

A PSA for a CMBS transaction may generally label the named servicer as the transaction’s master servicer regardless of whether that servicer may oversee subservicers in the transaction. Accordingly, a named CMBS master servicer, besides having advancing and trustee reporting responsibilities, may also have primary servicing duties for some or all loans in the transaction.

Special Servicer:
Special servicers are responsible for managing and resolving underperforming loans, nonperforming loans, and real estate owned properties. A special servicer generally assumes responsibility for managing a loan when the loan becomes 60 days delinquent. A loan may also transfer to special servicing without there being an actual monetary default based on a determination that the loan’s default is imminent. Special servicers may have responsibility for reviewing and approving certain borrower consent requests involving performing loans.

Appendix 3 - General Characteristics of Ranking Levels
An operational risk assessment of ‘MOR CS/SBC/BBC/CC/CV1’ is assigned to a company that in our opinion generally has the following performance attributes:

► Pervasive risk-management practices throughout the organization, including multiple layers of audit, quality control, compliance, and risk assessment.
► Fully documented policies and procedures throughout the operation.
► No significant or repeat findings in any audits and financial-review documents.
► Superior level of technology and automation tools commensurate with the portfolio type, size and profile of assets under management.
► Well-developed and routinely tested disaster-recovery and business-continuity plans.
Highly tenured and experienced management team and professional staff, within an effectively organized operating structure.

A viable corporate business plan that reasonably addresses business expansion opportunities and the associated operational requirements to pursue such opportunities.

Excellent level of operational performance efficiency and productivity consistently achieved across all servicing functions.

The servicer’s overall loan-servicing performance and stated processes are largely at or above Morningstar criteria, industry best practices, and the servicer’s peers.

Highest degree of experience and consistently successful track record managing a diversified and complex portfolio for third-party investors.

An operational risk assessment of ‘MOR CS/SBC/BBC/CC/CV2’ is assigned to a company that in our opinion generally has the following performance attributes:

- Thorough risk-management methodologies embedded throughout the organization, including an independent and regularly scheduled audit function.
- No significant or repeat findings in audits or financial-review documents. Findings of a lower risk nature have been remedied within a specified plan for corrective action.
- Documented policies and procedures denoting proactive practices are in place for all core functions.
- Well-developed technology and level of automation that is commensurate with the portfolio type, size and credit profile of loans under management.
- Effective disaster-recovery and business-continuity provisions embedded within the organizational structure are tested at least annually.
- Management team and professional staff have an overall high degree of relevant industry experience.
- The organizational structure generally addresses all current and planned needs in an overall efficient manner.
- Servicer has a viable business plan that is reasonably executable given near-term market conditions.
- Servicer generally is proficient and outperforms Morningstar criteria in most servicing areas.
- Servicer has a track record with a generally diversified portfolio or has managed many complex assets for third-party investors.

An operational risk assessment of ‘MOR CS/SBC/BBC/CC/CV3’ is assigned to a company that in our opinion generally has the following performance attributes:

- Servicer has an independently administered internal audit or equivalent quality-control function. The scope of the audit program includes all high-risk servicing areas (cash management, investor reporting and accounting, and technology security).
Audit results do not identify any significant or repeat findings. To the extent that exceptions classified as high and medium risk or repeat exceptions were initially cited, the auditors have verified that such findings have been or are being corrected. Findings of a low-risk nature are remedied within the specified plan for corrective action.

Policies and procedures are in place for core servicing functions. A satisfactory level of automation and technology tools commensurate with the portfolio type, size and credit profile of loans under management, although the technology environment may contain some dated architecture or workflow processing inefficiencies/redundancies.

Satisfactory disaster-recovery and business-continuity provisions are in place with at least annual testing.

The management team and professional staff have relevant industry experience, but may not have much tenure with the servicer.

Servicer has a business plan that is reasonably executable given near-term market conditions but may face challenges to leverage opportunities and compete based on its current infrastructure.

Servicer generally performs in accordance with Morningstar criteria and the servicer’s performance capabilities are in line with what we view to be prudent industry practices.

An operational risk assessment of “MOR CS/SBC/BBC/CC/CV4” is assigned to a company that in our opinion generally has the following performance attributes:

- Servicer has underdeveloped or nonexistent risk methodologies including a lack of a viable or independent audit plan.
- There may be significant and pervasive/systemic or repeat findings over time on audit reports and financial-review documents.
- Policies and procedures are not documented for core servicing functions or may indicate control gaps.
- Servicer lacks a level of automation or lacks the technology tools to address the various characteristics of the servicer’s portfolio.
- The technology environment presents a heightened risk of loss due to archaic architecture or ineffective system development and implementation.
- Servicer has a nonexistent or underdeveloped disaster-recovery and business-continuity plan.
- Servicer has poor performance metrics across numerous servicing areas and underperforms when compared to Morningstar criteria and the servicer’s peers.
- Servicer generally engages in practices or has processes which are not compatible with prudent loan-servicing standards and which present a high level of regulatory, legal or reputational risk.
Appendix 4 - Information Submission Requirements

- Historical servicing volumes, delinquency rates, and/or special-servicing portfolio data.
- Completed questionnaire addressing core processes and functions and current year portfolio data (Morningstar provided file format).
- All internal audit, quality-control, and similar type reports including management responses completed during past 12 to 24 months.
- Complete body of documented policies and procedures (manuals, accompanying exhibits, screen shots) as available pertaining to servicing and special-servicing functions and processes.
- Summary of any pending servicing-related material lawsuits.
- Audited financial statements of servicing entity or its direct parent for the last two calendar years.
- Latest corporate and servicing-operation business plan as available.
- Corporate-level and servicer-level organizational charts inclusive of all areas/functions covered in Morningstar’s assessment scope.
- Bios/resumes of senior management, key managers/supervisors, and other professional staff as applicable.
- Summary of main technology applications and reporting tools, with descriptions of any proprietary applications used for servicing or special servicing.
- Copy of any documented data-backup routines and procedures, and corresponding disaster-recovery and related business-continuity plans.
- Summary of any formalized staff training function/processes.
- Sample loan-performance review if conducted (financial-statement analysis, property-condition review, risk rating/credit grades if assigned).
- Sample tracking reports as available for: loan watchlist, portfolio delinquencies, borrower consent requests, borrower compliance/loan covenant triggers, real estate taxes, property insurance, and UCC expirations.
- Master servicers: sample subservicer remittance report.
- Master servicers: sample subservicer tracking reports to monitor subservicer’s PSA compliance.
- Recent representative samples of a subservicer onsite and desktop audit, including any follow-up or results letters issued to subservicer.
- Special servicers: sample asset business plans (or initial asset status reports) for both loan and REO assets.
- Special servicers: sample copy of any recurring asset and portfolio-level status reports.
- Special servicers: sample asset-resolution cases.
- Special servicers: Samples of any recently completed property management company audit reports.