Operational Risk Assessments

1st Service Solutions, Inc.

October 2017

Operational Classifications:	Commercial Vendor: Commercial Debt-Resolution Advisor
Ranking:	MOR CV2 (Affirmed)
Forecast:	Stable
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Rationale

Morningstar Credit Ratings, LLC affirms its second-highest ranking, MOR CV2, to 1st Service Solutions as a commercial vendor serving as a commercial debt-resolution advisor for borrowers with distressed loans contained in commercial mortgage-backed securities. Morningstar based its ranking on the following factors:

- Experience: 1st Service has highly experienced business managers and asset managers with servicing and special-servicing backgrounds.
- Track Record: The company enjoys a solid track record of assisting borrowers in working through successful loan resolutions. For the 12-month period ended August 2017, the company resolved 63 distressed or defaulted commercial mortgage loans covering a variety of resolution methods, property types, and geographic locations, with a combined balance of $1.3 billion as compared with 45 in 2015 and 52 in 2014.
- CMBS Expertise: 1st Service has familiarity with CMBS pooling and servicing agreements and special servicers' reporting requirements.
- Technology: The company has a robust proprietary net-present-valuation model, which it recently enhanced to provide 10-year income and discounted cash flow projections. It also has a tool to integrate loan and securitized pool data from third-party sources to identify and communicate with potential clients. The company is developing a portal for clients to track their casework progress.
- Policies and Procedures: The company has workflow diagrams for each operational function available to employees on a shared drive. These diagrams, which make procedures for each operational function very clear, can be amended as needed.
- Capital Sourcing: The company has strong relationships with brokers and other real estate-capital providers who work with many CMBS special servicers. These relationships provide borrowers access to capital needed to make their resolution strategies practicable and acceptable to special servicers.

Forecast

The forecast for the ranking remains Stable. Morningstar expects 1st Service to serve as an effective debt-resolution advisor for CMBS borrowers and expects the ranking to remain unchanged during the next 12 months.

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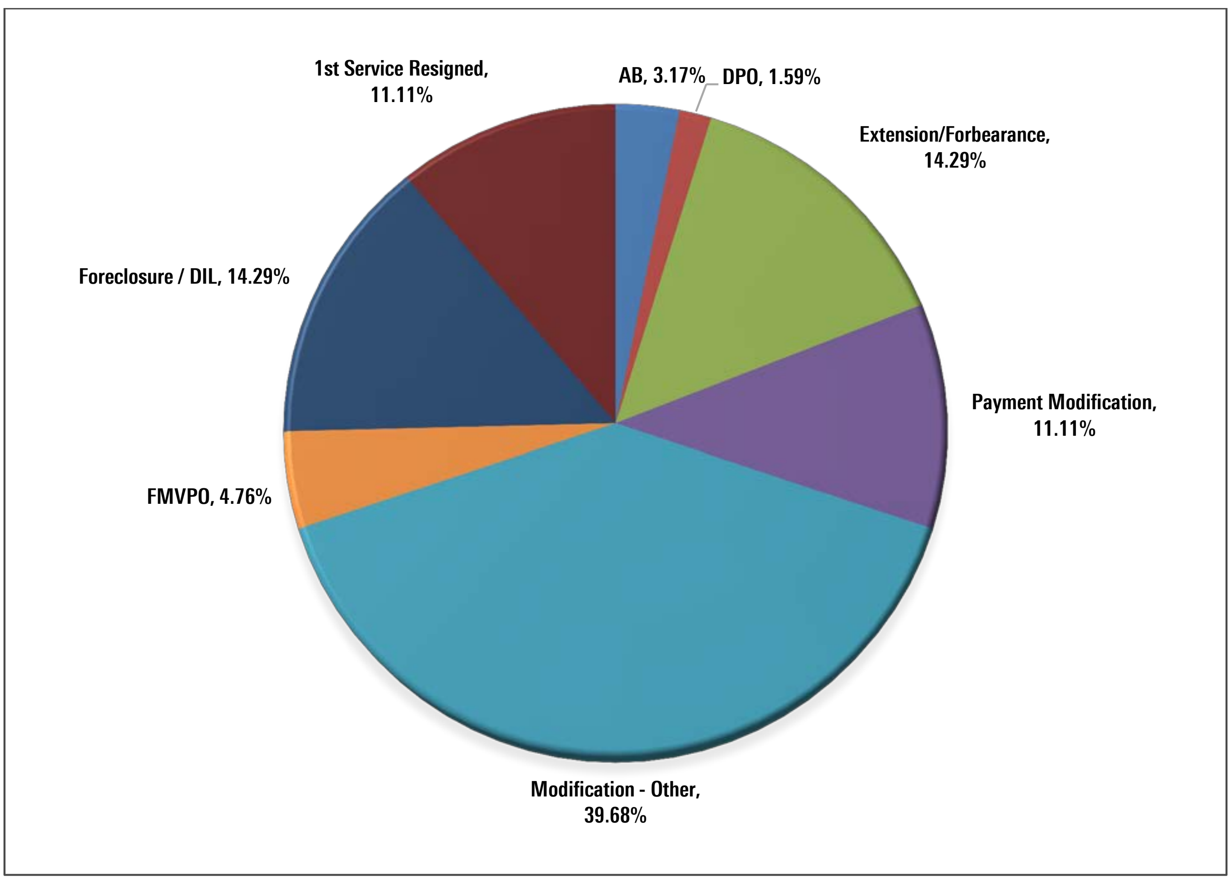
Company Profile and Business Overview

Privately held 1st Service is headquartered in Dallas. CEO Ann Hambly started the company in 2005 to guide borrowers through the complex and often confusing requirements imposed by the documents governing CMBS transactions. As was the case with defeasance several years ago, some CMBS borrowers have become confused and frustrated by the labyrinth of requirements and conditions imposed for consents such as assumptions, partial releases, and easements. 1st Service initially focused on the assumption approval process; however, since the financial crisis in 2008, the company has focused primarily on restructuring CMBS debt, providing guidance for borrowers involved in the note auction process, matching borrowers in need of equity injections with sources of capital, and assisting borrowers in need of a 1031 exchange under the Internal Revenue Service code. The company has expanded its client base beyond borrowers to include attorneys, investment sales brokers, capital market brokers, mezzanine lenders, company turnaround experts, and distressed-property buyers. These entities, which interact with distressed debt borrowers, could benefit from the company's expertise. The company maintains an affiliated entity that connects borrowers to potential sources of capital for equity infusions as part of the resolution process. As of Aug. 31, 2017, the company employed 14 people. A senior management team with extensive backgrounds in banking, real estate asset management, and commercial loan servicing, leads 1st Service. For the 12-month period ended August 2017, the firm completed 63 resolutions, representing $1.3 billion in unpaid principal balance. In addition, the firm completed 397 loan resolutions from 2011 through July 2016, representing a total of $7.3 billion in unpaid principal balance.

Chart 1 – Total Loan Resolutions (August 2016-August 2017)*



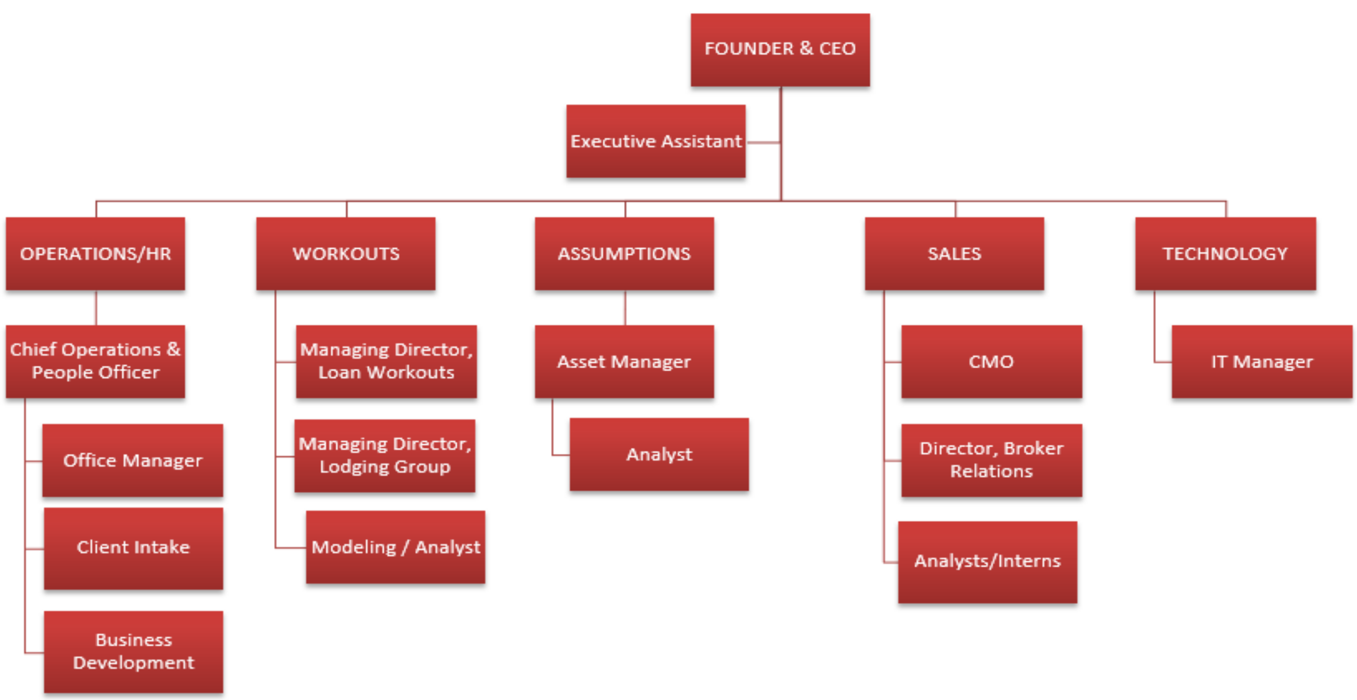
*Total exceeds 100% because of rounding.

Operational Infrastructure

Organizational Structure

1st Service's organizational structure reflects the company's focus on its two main goals: borrower advocacy and outreach. The company has five departments: workouts, assumptions, sales, technology, and operations and human resources. The workout department handles all aspects of borrower loan resolutions, including discounted payoffs, capital infusions, note sales, and any other methodology of resolving nonperforming or underperforming loans. The assumptions group works on the firm's original business line of guiding borrowers through the consent process within the context of CMBS PSA requirements. Business development focuses on the task of identifying and reaching out to troubled borrowers using a variety of data feeds and outreach methods. Sales focuses on negotiating engagements and maintaining relationships with brokers and other intermediaries with borrowers to build a referral business. The technology department maintains and enhances the company's proprietary software for loan resolution modeling and the applications used to track workflow. The operations and human resources team handles personnel issues, training, and the day-to-day running of the company.

Chart 2 – Organizational Structure



Management and Staff Experience

As of August 2017, senior management had approximately 30 years of industry experience, and middle management averaged about 10 years of experience. Staff averaged about seven years of industry experience and about two years with the company. This discrepancy in industry experience is intentional, as the company recruits staffers out of college, frequently through internships, and senior managers mentor them. This seems to be an effective approach, as the field of commercial debt advisory is relatively new, and it allows staffers to become acclimated with the company's culture and borrower-oriented business approach. The strong oversight of senior managers, coupled with the frequent quality control and process reviews of each case disposition, allows this employment model to work well and foster staff retention. For the 12-month period ended August 2017, employee turnover was 21.5%, representing four positions. However, one of those one was a retirement, another a move to a part-time consulting role, and a third represented a consultant leaving to start a competing firm.

Table 1 – Management and Staff: Average Years of Experience

	August 2017		June 2016		December 2015	
	Industry	Company Tenure	Industry	Company Tenure	Industry	Company Tenure
Senior Management	30	7	29	4	28	4
Middle Management	10	7	27	7	26	7
Staff	7	2	14	1	14	1

Management and Staff Turnover

The high turnover rate in 2016-17 involved the voluntary departure of seven people, three of whom were college interns.

Table 2 – Management and Staff Turnover Rates*

	August 2017	Decemebr 2016
	Primary Servicing	Primary Servicing
Total Employees - Beginning of Period (# of Positions)	12	19
Total Turnover Rate (%)	0	21.1** (7 Positions)
Involuntary (%)	0	0
Voluntary (%)	0	21.1
New Hires (# of Positions)	2	0
Total Staff - End of Period (# of Positions)	14	12

*Staff departures divided by number of staff at beginning of period.
** Three of the seven departures were college interns and not included in the % calculation

Workload Ratio

1st Service had four analysts dedicated to distressed loan resolutions as of Aug. 31, 2017, and the ratio of resolution cases per analyst stood at approximately 16/1. This ratio may fluctuate depending upon the complexity of a particular resolution case.

Assessment: Although the company experienced high employee turnover in 2016, one loss was a retirement and two others were resignations of individuals to pursue different opportunities. Three of the seven positions vacated represented college student interns whose employment was temporary. The company has not experienced any turnover since then.1st Service's senior and middle management are well-experienced, and its organizational structure effectively addresses its debt-advisory business both with regards to loan resolution casework and the sourcing of new and maintenance of existing client relationships. The average years of experience for staff involved in loan resolution, while much lower by comparison, reflects the company's practice of hiring young people who can be mentored in the unusual business of borrower advocacy and nurturing their career within the company.

Training

1st Service maintains a robust, albeit informal, training regimen for its employees as befits a company of its size. It holds formal monthly training sessions, which are taught by senior managers or third-party experts. Each employee receives 18-24 hours of training through these sessions. In addition, the company provides monthly practice sessions during which a senior manager will review a specific service offering provided by the company. The purpose is to walk through the function and identify any weaknesses or areas for improvement. Practice sessions have covered topics including assumption, option analysis, restructure planning, and prequalification processes. Finally, the company has offered free instructional webinars quarterly since 2009. These webinars focus on timely topics within the CMBS industry, such as impending maturities, note auctions, receiverships, tenants-in-common restructures, and modifications, and are open to the public. The company offers 140 hours of training and expects each employee to complete a minimum of 80 hours of training per year. While this number may seem high, the company believes the nature of borrower-advisory work necessitates more training and preparation than traditional loan administration. In the 12 months ended August 2017, team members attended over 20 hours of training, not including the monthly practice sessions mentioned above, reviewing the methodology for specific service offerings provided by the company. Additionally, the company tracks each employee's hours of training and includes them in each person's key performance indicators for job performance.

Assessment: The company possesses a robust training regimen for a company of its size. The company's tracking of each employee's training hours and its inclusion in their review process has further strengthened the company's training regimen.

Audit, Compliance, and Procedural Completeness

In 2017, 1st Service engaged a third-party auditing firm to conduct regular operational reviews of the company's functions quarterly. This firm has also been engaged to validate 1st Service's financial statements and projections while also monitoring the company's progress toward meeting its stated financial and business growth goals. 1st Service also uses a thorough and detailed quality-control regimen that regularly reviews functions performed by each department. Rather than reviewing processes quarterly or even monthly, the company performs quality-control reviews on each active resolution case for each step in the process before undertaking the next step. The program is detailed and outlines the areas to be reviewed, the review objective, the type of examination performed, the responsible parties, the frequency and the supporting documentation evidencing the review, and results reporting.

Assessment: Based on the small size of the company and the fact that it handles no cash in its loan-resolution activities, Morningstar believes 1st Service has an effective quality-control program. Furthermore, the company's engagement of a third-party auditing firm to conduct regularly scheduled operational reviews of the company's functions significantly strengthens the company's oversight of operational risk. Such an audit protocol will serve the company well as it grows its loan debt advisory business.

Legal Liability and Corporate Insurance

1st Service reported that it has initiated legal action against a capital provider for allegedly unpaid fees due the company and considers the legal action nonmaterial to the company. Furthermore, it reported that it has directors and officers and errors and omissions insurance coverage.

> **Assessment:** Morningstar, which reviewed the company's insurance coverage, determined that its directors and officers and errors and omissions coverage amounts are adequate, because the governing language in its engagement contracts limits its liability in any dispute to fees paid by the client, and the business involves no cash management or custody of any kind.

Technology and Disaster Recovery

1st Service uses two proprietary technology systems. One, client relationship management, is a data warehouse fed by three outside data sources that assist the company in identifying new business and following leads to borrowers in potential distress. This system also maintains a running ledger of pipeline activity for all borrower casework and prospective new business. In 2017, the company expanded the content of this system, which now houses approximately 50,000 client contacts and can now also keep track of outreach and follow-up effort for each. The second application, Joule, is a net-present-valuation cash flow model that can be used for any type of collateral and can be adjusted to work with any set of variables and assumptions. A third-party technology company reviews the system and issues recommendations for upgrades or other changes as needed. A third-party vendor data stream providing loan-level information also feeds into the Joule application. In 2017, the company changed its provider of market level economic and demographic data, which now provides more data for each submarket throughout the country. The company also enhanced its modeling application for assumptions allowing it to calculate the potential effect of tenant turnover on property level reserves. In addition, the company uses ARGUS for lease analysis. Both CRM and Joule reside on a shared drive. The company has postponed earlier plans to develop a customer login portal but plans to do so in the foreseeable future.

1st Service conducts disaster-recovery testing annually, with the last test performed in June 2017, and the results were satisfactory. The company backs up and moves data to an external hard drive mirroring the in-house server. The shared drives are also backed up to cloud sync for off-site back-up as well as external file sharing. All employees have access to a detailed up-to-date disaster-recovery and business-resumption plan complete with calling tree and scenario instructions. The company contracted with a third-party vendor, which provides alternative office locations at 12 sites in the Dallas-Fort Worth area. The company identified critical and essential business functions, with critical ones recovered within 48 hours and essential ones within five business days.

> **Assessment:** 1st Service has sound technology well-suited for its business. Its net-present-valuation model allows for the creation of a number of options for distressed borrowers to choose in working out their loans. Developing an outward facing borrower portal will provide the company with a competitive advantage and improve client communication. The company has robust disaster-recovery and business-resumption protocols especially for a company of its size.

Debt-Resolution Advisory Administration

Since its founding, 1st Service has worked on the resolution of loans involving various property types across 41 states and nearly 20 special servicers, including most of the major ones in the CMBS industry. The company has employed diverse approaches to resolving troubled loans with the dual goal of preserving borrowers' equity while making a case for minimizing loss to the trust so as to make the arrangement mutually acceptable. In most of these cases, a substantial decrease in value of the collateral has occurred since the loan's original underwriting, and the company's first hurdle is to make both the borrower and lender recognize this fact to bring both parties to the negotiating table.

Chart 3 –Deals by Special Servicer (August 2016-August 2017)

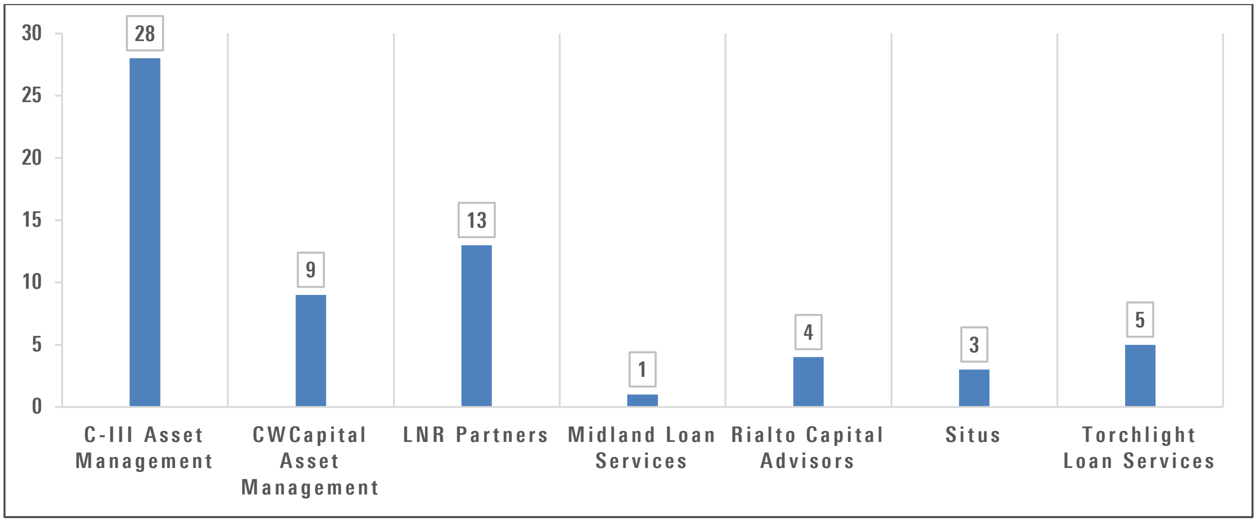


Chart 4 – Deals by State (August 2016-August 2017)

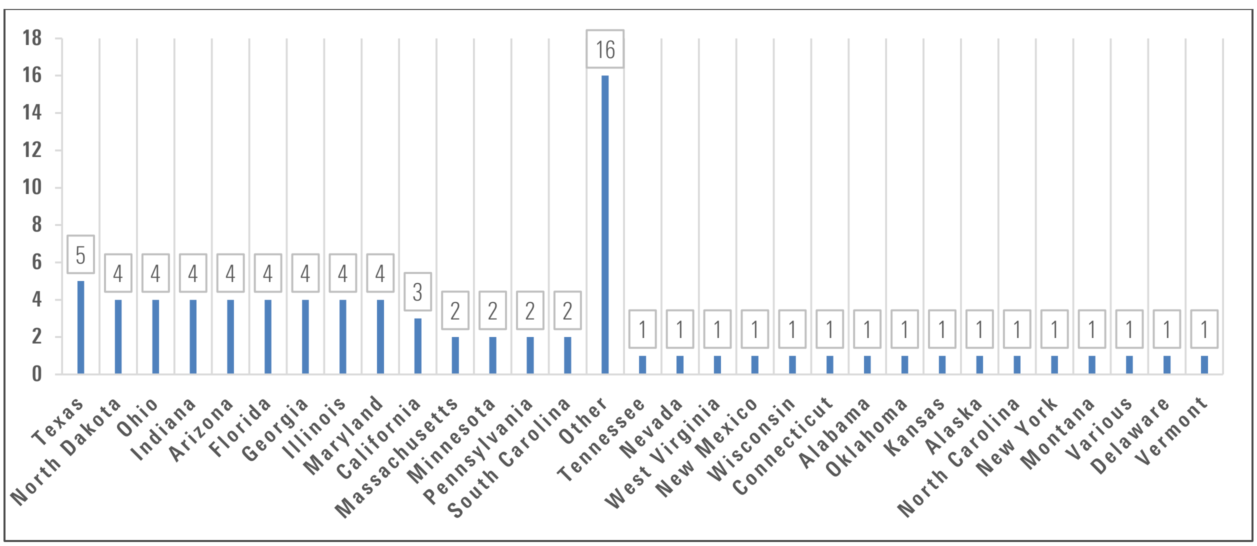
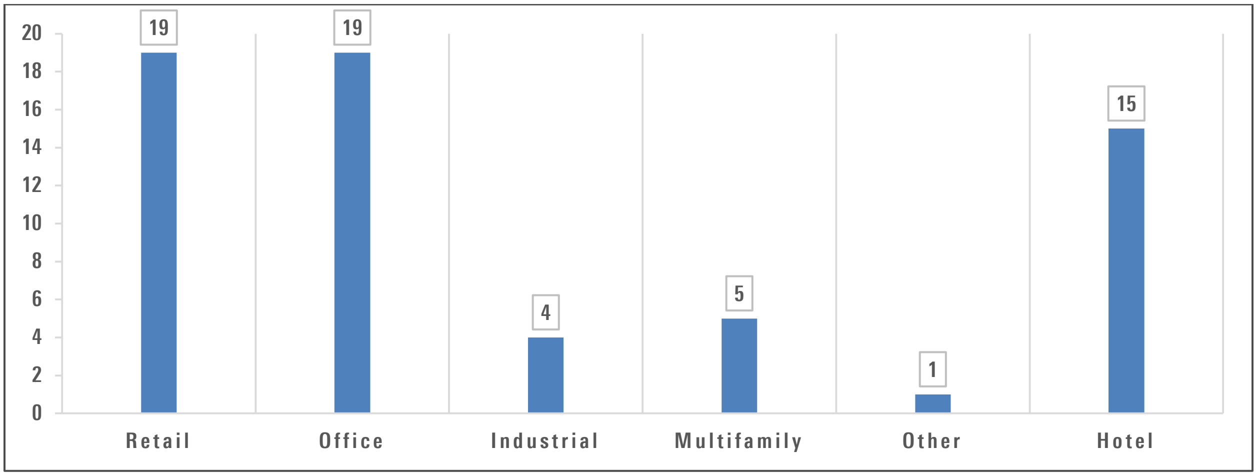


Chart 5 – Deals by Property Type (August 2016-August 2017)



Screening, Prequalification, and Engagement Process for Borrowers

The first step in the company's loan-resolution process is to screen potential clients. The company researches past performance on any CMBS loans the borrower may have had. This helps gauge the level of understanding the borrower may have regarding the myriad requirements of PSAs governing CMBS transactions and the amount of education and counseling the borrower may require. Next, the company determines the borrower's willingness to accept advice and follow the instructions of the resolution advisor. If the company senses a lack of such willingness it will refrain from being engaged on the case. This is a key determinant, as the company cannot effectively negotiate with a lender if it cannot guarantee adherence by the borrower to its proposals. In fact, the company reports that it typically rejects over 50% of resolution cases brought to it by distressed borrowers for this reason. Lastly, but equally as important, the company gauges the borrower's capability and willingness to inject fresh capital into the transaction. This will determine what option scenarios can be modeled for the resolution as injections of additional equity is often a requirement by lenders before they agree to consider a proposal. For the 12-month period ended August 2017, the company was engaged in 63 loan-resolution cases. In comparison, as of July 30, 2016, the company had been engaged on 32 loan-resolution cases, with 45 cases in 2015 and 52 in 2014.

Once the screening and prequalification process is complete, the company uses an engagement agreement, which has been reviewed by counsel and approved by the CEO. The agreement includes an appendix with a standard list of required documentation to be submitted by the client as well as the scope of services the company will provide. As part of its quality-control function, the company each quarter reviews every case to ensure that a fully executed engagement agreement accompanies each case and that actions being undertaken fall within the scope of services defined in the agreement.

The assigned asset manager will then begin a review of the property-level documentation to assess such items as past performance and current metrics such as debt service coverage ratios, occupancy levels, and the like.The manager then makes income projections and obtains a broker's opinion of value. In addition, the asset manager reviews all pertinent documentation associated with the securitized transaction, such as the controlling PSA and any prospectus supplements issued at the time of transaction sale. The asset manager then uses a third-party data source to ascertain the loan status, its maturity date, and any relevant servicer comments derived from its monthly trustee reports. The manager reviews the latest trustee report to check the status of any outstanding bonds in the securitized transaction holding the troubled loan and determine the position and potential motivations of the special servicer in that securitization regarding resolution of the loan. The manager creates an abstract of this information and uses it during the first kick-off call with the client.

> **Assessment:** 1st Service's screening and prequalification practices for new clients are thorough and well-designed to assure effective vetting of new clients and minimize the chances for failure due to a lack of engagement by the client or factual shortcomings of the underlying property. The engagement procedures are also well controlled and provide the asset manager with a solid base of data upon which to build an effective action plan for resolution of the distressed loan associated with the property.

Distressed Debt-Resolution Analysis and Initiation of Negotiations

The company analyzes various debt-resolution scenarios through its proprietary Joule net-present-value model. This application allows the asset manager to run multiple scenarios for resolution strategies inputting a wide range of variables to produce a 10-year income stream for the underlying collateral and then apply a discounted cash flow analysis to arrive at the present value created for the property with each option. Among the variables that can be adjusted in the model is infusion of fresh equity into the property by the borrower. Depending upon the specific characteristics of any given case, typical scenarios run through the model are note sales, extensions, modifications, forbearance, foreclosure, and bifurcation of the note into an A/B structure, where the B note accrues no interest and is paid back only upon final liquidation of the property. Once a specific option has been selected, a committee, composed of senior asset managers and the company's CEO, reviews the action plan. If approved, the asset manager then presents and explains the option to the borrower for approval. At least weekly, asset managers update borrowers on the current status of their resolution cases.

Once a resolution proposal approach has been established, the company then seeks to make contact with the special servicer as quickly as possible. The average time it takes to do this depends on whether the loan is still with the master servicer at the time of the company's engagement or has already been transferred to the special. If still with the master servicer, immediately upon engagement the company crafts an imminent default letter for presentation to the master servicer. The consequences of this action are fully discussed with the borrower prior to delivery, and the company responds to any additional information request received from the master servicer. The company reports that the average time elapsed for the loan's transfer to special servicing once the master servicer is notified is usually between 30 and 60 days, at which point direct contact is made with the special servicer in one to two business days. If the loan is already with the special servicer, the latter time frame applies. The average time frame for submission of the actual resolution proposal to the special servicer however, can vary widely, depending on several variables, many tied to the borrower. Some of these include the length of time the borrower takes to execute the prenegotiation letter and provide any required documentation or information to the special servicer as well as the time it takes the borrower to review and approve resolution proposals prior to submission to the special servicer. Delivery of the initial resolution proposal to the special servicer commences the negotiation process, and timelines can vary widely depending on the individual circumstances surrounding the loan as well as the underlying collateral.

> **Assessment:** 1st Service has a thorough and well-established process for developing loan-resolution action plans and explaining them to the borrower. The committee process is a preferred way of reviewing and approving credit decisions involved in developing loan-resolution plans.

Ranking Definitions

The numerical scale of MOR CV1 to MOR CV4 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 in key areas of risk
4	Demonstrates lack of compliance in one or more key areas of risk

A company assigned a ranking of at least MOR CV3 is deemed to comply with what we view as the minimum prudent standards and requirements for the company's operational category and role. For access to Morningstar's Operational Risk Assessments of Commercial Servicers: Methodology and Process and other published reports, please visit www.morningstarcreditratings.com

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