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Servicer Evaluation: Midland Loan Services

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Ranking Overview

Servicing category	Overall ranking	Subrankings		
		Management and organization	Loan administration	Outlook
Commercial primary	ABOVE AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	Positive
Commercial master	ABOVE AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	Positive
Commercial special	ABOVE AVERAGE	ABOVE AVERAGE	STRONG	Positive
Financial position				
SUFFICIENT				

Rationale

S&P Global Ratings' rankings on Midland Loan Services (Midland) are ABOVE AVERAGE as a commercial mortgage loan primary, master, and special servicer. On March 29, 2021, we affirmed our rankings on Midland (see "Midland Loan Services Rankings Affirmed; Outlook Is Positive," published March 29, 2021). The outlook on each ranking is positive.

Our rankings reflect Midland's:

- Seasoned and experienced management team, despite recent changes to senior leadership;
- Strong technology platform, including its widely used Enterprise!® servicing system;
- Detailed policies and procedures, which are reviewed or updated at least annually;
- Comprehensive quality control and audit environment;
- Industry leadership in primary, master, and special servicing, accompanied by a lengthy operating history and track record;
- Diverse property types in its primary and master servicing portfolio, accompanied by strong geographic and investor diversity; and
- Substantial institutional commitment to the servicing platform and the commercial mortgage-backed securities (CMBS) business, accompanied by financial backing and shared resources provided by The PNC Financial Services Group Inc. (PNC).

Since our prior review (see "Midland Loan Services Rankings As A Commercial Mortgage Loan Servicer In The U.S. And Canada Lowered," published April 1, 2020), the following changes and/or developments have occurred:

- On Sept. 21, 2020, S&P Global Ratings withdrew Midland's primary, master, and special servicer rankings in Canada at the company's request.
- In February 2021, Midland changed its senior leadership team, including replacing each of the two co-heads of the business unit: a senior vice president (SVP), who was responsible for servicing operations, and a long-tenured executive vice president (EVP), who focused on major strategic opportunities and relationships.

- In conjunction with the above, Midland promoted the previous head of the real estate solutions (RES) group to be its head, an SVP position that reports to the co-heads of PNC Real Estate.
- Additionally, Midland created a new chief operating officer position. Reporting to the aforementioned sole head of Midland, this role was filled by an SVP who previously served as an SVP in business development.
- Further organizational changes include the elevation of two vice presidents to SVP, a senior manager taking over operating responsibilities of RES, as well as the promotion of another senior manager to be responsible for the day-to-day operations of special servicing, which resides within RES.
- Midland engaged an offshore vendor, in India, to assist with financial statement analysis and data entry activities, all performed within Enterprise!®, and subject to onshore quality control and review.
- Midland completed updates to its special servicing asset management system, AM Insight®™, including enhancements to the net present value model, and the servicer also implemented a browser-based special servicing surveillance module used to monitor its named special servicing portfolio.
- Midland adopted Enterprise! version 2018.0 in August 2020, which included enhancements to security and its borrower portals as well as improved transaction processing.
- Midland implemented a number of robotic process automation (RPA) initiatives to improve efficiency, including flood determination data entry, sub-servicer operating statement analysis reports (OSAR) upload, and tax payment processing.
- While Midland is continuing to service its existing multi-borrower single-family rental (SFR) loans, it is exiting the multi-borrower SFR transaction market going forward. At the same time, Midland has begun outsourcing special servicing of certain SFR loans/transactions to a third-party contractor. Such contractor's staff uses AM Insight and all work product, and compliance requirements follow Midland's required procedures and policies.
- While there have been no significant changes to the disaster recovery and business continuity program, some improvements were made in response to the COVID-19 pandemic. This included procuring laptops, monitors, and printers for about 5% of its staff (those originally not capable of working from home) to fully equip all employees to work remotely.
- A group of about 30 essential employees were also divided into two teams to do two-week rotational shifts to perform functions that cannot be done remotely such as mail, vault functions, and wet ink signatures requirements. In addition, an existing contract with the backup local office was activated, providing an alternate office location to certain employees who are unable to work from home.
- Midland's primary/master serviced commercial mortgage-backed securities (CMBS) and Freddie Mac Capital Markets Execution (CME) investor clients fueled an overall 9.5% portfolio unpaid principal balance (UPB) growth as of Dec. 31, 2020, compared with year-end 2018. CMBS investor client portfolios increased to \$183.7 billion (37.1% of UPB) compared with \$108.7 billion (24.0% of UPB) as of year-end 2018, and the CME portfolio volume rose to \$68.9 billion (13.9% of total UPB) compared with \$48.0 billion (10.6% of total UPB). This growth was partially offset by a 31.3% decline (\$60.1 billion) in other third-party investor client UPB over the same period.
- Midland's aggregate volume of named special servicing appointments of U.S. CMBS and CME transactions increased to \$143.7 billion of UPB, from \$137.9 billion of UPB as of year-end 2018 as growth in CMBS appointments of \$15 billion more than offset a greater than \$9 billion decline in CME assignments.

Outlook

The outlook on each ranking is positive. Although Midland recently made changes to senior management, the servicer's deep and experienced management team allowed the organization to promote veteran managers from within to new leadership positions. Further, the servicer's 2020 Regulation AB (Reg AB) certification contained no exceptions following a material recurring non-compliance instance in each of the 2019 and 2018 reports. While we view the 2020 Reg AB report favorably, a recent internal audit report, along with the recent organizational restructuring that carried a needs improvement rating, inhibits a higher ranking at this time. Nonetheless, given Midland's track record of managing a substantial loan portfolio, including those with complex servicing structures, its sound technology environment, servicing efficiencies, and ongoing procedural diligence, we expect it to remain a highly effective servicer for all of the portfolios it services.

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, 2020, as well as other supporting documentation provided by the company.

Profile

Servicer Profile	
Servicer name	Midland Loan Services
Primary servicing location	Overland Park, Kan.
Parent holding company	A division of PNC Bank N.A.
Loan servicing system	Enterprise v2018.0.7/AM Insight

Founded in 1991 and headquartered in Overland Park, Kan., Midland is a business unit of PNC Bank N.A. and a leading provider of loan servicing, asset management, and technology solutions for the commercial real estate finance industry. PNC is one of the largest diversified financial services institutions in the U.S. with assets of \$467 billion as of Dec. 31, 2020, and has businesses engaged in retail banking, corporate and institutional banking, asset management, and residential mortgage banking. In addition to its Overland Park headquarters, Midland has offices in Little Rock, Ark.; Atlanta, Ga.; Pittsburgh, Pa.; and Washington, D.C.

On Nov. 16, 2020, PNC announced a definitive agreement to acquire BBVA USA Bancshares Inc., including its U.S. banking subsidiary, BBVA USA, for \$11.6 billion in cash. BBVA USA operates branches in Texas, Alabama, Arizona, California, Florida, Colorado, and New Mexico. The transaction is expected to close in mid-2021, subject to customary closing conditions, including receipt of regulatory approvals, and will increase PNC's total assets by an estimated \$102 billion, creating the fifth-largest bank by assets and a PNC presence in 29 of the 30 largest markets in the U.S.

Midland's corporate objective is to grow a high-quality earnings stream through the delivery of loan servicing, special servicing, asset management services, and technology solutions to the commercial real estate finance industry.

Midland expects growth will be accomplished by:

- Capturing a significant market share of available commercial and multifamily mortgage servicing rights;

- Expanding special servicing, special credits asset management and disposition, due diligence, and collateral management services businesses;
- Delivering subservicing, outsourced services, and technology solutions to multifamily agency, portfolio, specialty finance, and bank lenders;
- Selectively entering other commercial servicing and structured finance markets and expanding its products and services;
- Acquiring third-party servicing rights and companies with appropriate risk-adjusted returns on investment; and
- Providing PNC Real Estate treasury management services to Midland clients and borrowers.

Midland's commercial loan servicing business activities are further diversified through its investment in the Enterprise! loan management system, a widely used commercial mortgage servicing platform. Including the Midland and PNC affiliate portfolios, there are currently 19 company users with approximately \$1.3 trillion in UPB serviced on Enterprise! Midland also provides servicing, infrastructure, and technology to support PNC Real Estate and other PNC Bank N.A. business activities.

Midland's primary and master servicing volume has increased steadily over the past several years and reached nearly \$537.8 billion as of Dec. 31, 2019 (see tables 1-4). However, UPB declined 8.5% to \$495 billion during 2020, largely due to a major client bringing its servicing portfolio in house. At the same time, active special servicing volume UPB rose more than fivefold during the year and totaled \$8.3 billion as of Dec. 31, 2020.

Additionally, Midland is amongst the largest named special servicers of CMBS/CME loans, with an appointed special servicing portfolio of commercial real estate loans (CMBS, CME, CRE-collateralized loan obligation [CRE-CLO], and SFR) that exceeded \$168 billion as of Dec. 31, 2020. We note that the portfolio statistics throughout this report and the scope of this review excludes whole business asset-backed securities and other specialized asset classes that Midland also services. When including those asset classes, Midland's 2020 year-end primary/master servicing portfolio includes 31,448 loans totaling \$668 billion (including \$60.1 billion in PNC Real Estate loans), and its named special servicing portfolio includes 8,840 loans aggregating \$218 billion according to the Mortgage Bankers Association (MBA).

Table 1

Total Servicing Portfolio						
	UPB (mil. \$)	YOY change (%)	No. of assets	YOY change (%)	No. of staff	YOY change (%)
Primary/master servicing						
Dec. 31, 2020	495,290.3	(7.9)	28,019	(27.3)	436	(0.5)
Dec. 31, 2019	537,788.0	18.9	38,556	25.5	438	9.5
Dec. 31, 2018	452,295.2	9.0	30,710	3.4	400	(2.4)
Dec. 31, 2017	414,859.7	7.6	29,709	4.7	410	0.0
Dec. 31, 2016	385,544.3	5.5	28,369	(0.5)	410	(2.8)
Special servicing						
Dec. 31, 2020	8,306.1	431.0	393	214.4	44	41.9
Dec. 31, 2019	1,564.1	67.1	125	98.4	31	19.2
Dec. 31, 2018	935.9	28.2	63	(25.0)	26	(3.7)
Dec. 31, 2017	729.9	16.8	84	0.0	27	(3.6)

Table 1

Total Servicing Portfolio (cont.)						
	UPB (mil. \$)	YOY change (%)	No. of assets	YOY change (%)	No. of staff	YOY change (%)
Dec. 31, 2016	624.9	(16.7)	84	1.2	28	(6.7)

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

Table 2

Portfolio Overview										
	Dec. 31, 2020		Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2017		Dec. 31, 2016	
	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.
Primary loans	399,415.6	23,877	460,969.0	35,012	388,109.6	27,865	361,757.2	27,416	352,079.4	26,891
Master (SBO) loans	95,874.7	4,142	76,819.0	3,544	64,185.6	2,845	53,102.5	2,293	33,464.9	1,478
Total servicing	495,290.3	28,019	537,788.0	38,556	452,295.2	30,710	414,859.7	29,709	385,544.3	28,369
Average loan size	17.7	--	13.9	--	14.7	--	14.0	--	13.6	--
Special servicing										
Loans	8,069.4	383	1,405.2	115	863.9	58	600.7	75	516.0	76
REO properties	236.6	10	158.9	10	72.0	5	129.2	9	108.9	8
Total special servicing(i)	8,306.1	393	1,564.1	125	935.9	63	729.9	84	624.9	84

(i) Totals may not add due to rounding. SBO--Serviced by others. REO--Real estate owned. UPB--Unpaid principal balance.

Table 3

Primary/Master Portfolio Breakdown By Property Type And State(i)				
	UPB (mil. \$)	UPB (%)	No. of properties	Properties (%)
Type				
Multifamily	170,000.5	34.3	19,391	6.8
Office	83,961.3	17.0	8,766	3.1
Retail	54,651.5	11.0	6,305	2.2
Other/various	48,596.2	9.8	21,561	7.5
Lodging	32,854.7	6.6	4,901	1.7
All other	105,226.0	21.2	226,201	78.8
Total(ii)	495,290.3	100.0	287,125	100.0
State				
CA	77,245.8	15.6	9,975	3.5
NY	48,927.5	9.9	3,289	1.1
TX	40,600.8	8.2	3,258	1.1
FL	29,181.4	5.9	2,965	1.0
IL	20,352.3	4.1	6,569	2.3
All other	278,982.5	56.3	261,069	90.9
Total(ii)	495,290.3	100.0	287,125	100.0

(i) As of Dec. 31, 2020. (ii) Totals may not add due to rounding. UPB--Unpaid principal balance.

Table 4

Primary/Master Portfolio By Investor Product Type(i)				
Loan type	UPB (mil. \$)	Loan count	UPB (%)	Loan (%)
CMBS/CDO/ABS	183,662.8	9,414	37.1	33.6
Other third-party Investors (REITs, Investment Funds, etc.)	132,056.6	9,894	26.7	35.3
Life insurance companies	76,311.1	2,625	15.4	9.4
Freddie Mac K-Series	68,945.8	2,759	13.9	9.8
On own or parent's balance sheet	11,381.3	1,729	2.3	6.2
Banks/financial institutions	9,726.8	301	2.0	1.1
Warehouse/held for sale	9,508.0	400	1.9	1.4
FHA & Ginnie Mae	3,637.1	862	0.7	3.1
Fannie Mae	60.8	35	0.0	0.1
Total(ii)	495,290.3	28,019	100.0	100.0

(i)As of Dec. 31, 2020. (ii)Totals may not add due to rounding. CMBS--Commercial mortgage-backed securities. CDO--Collateralized debt obligation. ABS--Asset-backed securities. UPB--Unpaid principal balance.

Management And Organization

The subrankings for management and organization for primary, master, and special servicing are ABOVE AVERAGE.

Organizational structure, staff, and turnover

Midland's commercial loan servicing operation is led by a highly experienced SVP who was promoted to the Head of Midland position in February 2021. This position reports to the co-heads of PNC Real Estate, has seven SVP direct reports, including a chief operating officer, two responsible for loan servicing operations, as well as an operations director for RES and a commercial credit expert. The two other SVP direct reports are responsible for client technology solutions and client account management and business development, respectively. In addition, the investor reporting function, managed directly through two vice presidents, also reports directly to the Head of Midland.

The group is managed using a combination of functional and portfolio approaches to perform the particular servicing contract requirements. As noted above, loan servicing operations responsibilities are divided between two SVPs. One manager is responsible for functional groups that include traditional servicing areas, such as tax and collateral services, insurance, financial services, and operational accounting. The other manager handles portfolio groups, asset management activities, and the treasury function. Portfolio groups are organized by client and product specialties, and include government services, institutional servicing, portfolio servicing, and specialized servicing. Asset management activities include borrower services, collateral surveillance, covenant administration, reserve administration, and complex loan administration (specializing in cash-managed loan administration).

The RES group performs traditional special servicing tasks for both CMBS and non-CMBS clients as well as asset management activities. Its performing asset management unit handles master and primary serviced loan consent processing. Another unit oversees performing loan borrower requests that require Midland's consent as special servicer. Additionally, RES provides portfolio management and surveillance activities for both CMBS and non-CMBS investments including acquisition due diligence, loan sale support, annual reviews, valuations, and portfolio surveillance. Finally, a servicing liaison group is responsible for the communication between RES and external master

servicers and rating agencies and supports the asset managers for loan administration functions.

Midland further leverages selected activities (e.g., technology, human resources, RCQA, corporate legal, and finance) from PNC. We believe Midland's organizational structure fully covers all servicing activities with logical and effective reporting lines and appropriate segregation of duties.

Since our last review, Midland outsourced a limited amount of CMBS financial statement analysis and data entry activities to an offshore vendor in India, its first time utilizing offshore services. Management indicated offshoring services could be expanded in the future after an established track record with the vendor.

As of Dec. 31, 2020, Midland's servicing organization comprises 480 employees, with 436 devoted to primary and master servicing, and 44 positions in special servicing. Since our last review, Midland has bolstered its staffing levels in each of primary/master servicing and special servicing. Primary/master servicing staffing rose 9%, which occurred despite an 8.7% decline in loan count, notwithstanding a 9.5% increase in UPB. During our last review, we observed that Midland's staff may have been stretched, and we believe that its hiring efforts have alleviated that concern.

With regard to special servicing, although Midland's staffing level has increased 69% since our site visit, its asset/asset manager ratio is now at a relatively high level, exceeding 16, compared with approximately five as of Dec. 31, 2018. We believe this ratio is indicative of little room for incremental asset growth without adding headcount, and may have contributed to the decision to outsource certain SFR portfolios as previously noted. Further, RES also provides due diligence for B-piece buyers that we believe has the potential for an operational strain in this unit given the explosive growth of the active portfolio.

Senior management industry experience and tenure levels remain strong and slightly improved from our prior site visit. In particular, in conjunction with the aforementioned organizational changes, Midland's reported average experience was 24 years, unchanged since our last site visit, and tenure was 20 years, versus 17 years, for its primary and master servicing senior management team (see table 5). Special servicing senior management average experience (29 years versus 27 years at our last site visit) and tenure (25 years versus 22 years) also increased.

Table 5

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
Primary/master	24	20	20	17	N/A	N/A	7	6
Special	29	25	24	18	16	9	11	4

(i)As of March 1, 2021. N/A--Not applicable.

Primary and master servicing turnover was at a relatively low level of 10.3% during 2020 compared with 22.3% and 16.8%, respectively, during 2019 and 2018. In addition, in a year where special servicing volume accelerated throughout the industry, Midland also reported a relatively low level of turnover of 9.7%, compared with the much higher levels of 42.3% and 25.9% reported, during 2019 and 2018, respectively, when the portfolio was declining.

Training

Training is guided and administered by a dedicated training manager who arranges Midland's formal professional development curriculum and schedule in conjunction with department managers. The manager has been with Midland for 24 years in a variety of servicing and technology operational roles, has functioned in this training role since November 2018, and leverages PNC's human resources department (i.e., PNC University) to help these efforts.

In our view, employee training is overall on par with other highly ranked servicing organizations. Employee training goals are 30 hours per year, although those with less than three years of experience have a 40-hour requirement. In 2020, the actual average training fulfilled was approximately 47 and 60 hours for primary/master servicing and special servicing employees, respectively, well in excess of target goals.

Other aspects of training include:

- Midland utilizes MyLearning, PNC's Learning Management System, to track required and risk-based training.
- The training program, known as Midland Employee Enrichment Training (MEET), is diverse, well-focused, and incorporates internal and external training opportunities. MEET is offered at bronze, silver, and gold levels, which, in addition to satisfying the curriculum, require a minimum of two, five, and eight years of Midland tenure to successfully complete each level, respectively. There are six MEET working group members, including the training manager, an SVP of operations group manager (who serves as the chairperson), and a business training manager from PNC University.
- Senior managers and external subject-matter experts provide many of the course offerings, and the programs address job-specific needs across most positions and departments.
- RES also participates in training and presentations offered by outside legal counsel and service providers on topics relevant to certain jurisdictions or of interest to the asset managers, including depositions, client/attorney privilege, one-action states, non-judicial foreclosure, foreclosure processes by state, and bankruptcy.
- Employees have continuous access to iLearn, a new learning tool that provides a collaborative employee-driven learning experience. Currently, there are nearly a dozen featured providers on iLearn that offer thousands of skill-building courses covering a variety of subjects that include customer service, communication, and decision making, as well as courses targeted to the financial markets.
- Midland also leverages the classes and materials offered by the MBA, and its employees also have access to MyLearning's hundreds of web-based, self-paced learning modules.
- While not included in reported training hours, employees also attend conferences that are specific to servicing and the industry. Although conference attendance was down in 2020 due to the pandemic, Midland employees were active participants in industry working groups for CREFC and MBA.

Systems and technology

Midland's technology platform centers on its Enterprise! servicing system that promotes automation and efficiency is scalable to accommodate its substantial servicing volume and is integrated with AM Insight™ for special servicing. Midland has well-designed data backup routines and disaster recovery (DR) preparedness and has established robust cybersecurity protocols. Key elements of its systems and applications, business continuity (BC) and DR programs, and security environment are described below.

Servicing system applications

- Enterprise! version 2018.0, adopted in August 2020, is the loan servicing and asset management system. Enterprise! integrates loan accounting, servicing, asset management, borrower customer service, and investor reporting into a single system. Its investor reporting functionality meets CMBS investor reporting package requirements as well as formats for other investors, including government-sponsored enterprise and life insurance companies. Enterprise! is integrated with the general ledger and corporate treasury functions.
- A strategic multi-year investment was started in 2020 to enhance the Enterprise! platform. A focus is being placed on continued user enhancements, modernization, and transformation for a digital future.
- Midland utilizes AM Insight™, which is fully integrated with Enterprise!, as the special servicing asset management system. The system offers case management, electronic approvals, and additional workflow and/or alerts to address recent industry and/or regulatory requirements and provide efficiencies in managing defaulted assets. Since our last review, a browser-based surveillance module used to monitor named special servicing was added, replacing a previously utilized access database.
- Midland utilizes a host of in-house developed applications, outside of Enterprise!, all of which facilitate accounting, loan boarding, and advancing functions, including those used in cash management (Cash Workstation), transaction processing (Automated Transaction Processing (ATP), bank account reconciliations (Bank Account Reconciliation System), remittance data calculations (Investor Reporting Module/Automated Investor Reporting), and cash managed/waterfall loan administration (Waterfall Loan Management).
- Other applications include Borrower Insight®, a web portal that allows borrowers to securely view loan information, and CMBS Investor Insight® and Portfolio Investor Insight®, which are secure websites that provide portfolio, asset, and property-level information to assess pool and loan performance for CMBS and private-loan portfolio investors, respectively.
- Since our last review, Midland implemented a number of time-saving RPA initiatives, also known as BOTs, to improve efficiency, including flood determination data entry, sub-servicer OSAR upload, tax payment processing, and document imaging.

Midland's Enterprise! loan servicing system has been widely adopted throughout the industry and, as of our visit, was used by 19 other commercial mortgage servicers (including Midland affiliates), according to the company. Midland provides technical support for the system and leadership in system developments. As a major application system provider to the commercial mortgage industry for the Enterprise! application, the overall corporate organization ensures data backup and redundancy for all its clients.

Business continuity and disaster recovery

Midland's DR and BC plans include well-detailed and daily data backup routines, off-site data storage and retrieval, and fail-over mechanisms.

PNC has established a technical environment supported by three data centers, which are replications of one another, located in Richmond, Va. (the primary data center), Ashburn, Va., and Pittsburgh, Pa., respectively, for quick system failover and recovery of business processes should a disaster occur. Data is replicated in a near real-time/asynchronous manner to the secondary data centers that will allow for continuous access in the event of primary data center loss.

The Midland BC plan addresses all core systems and operational areas; it is tested at least annually and is reviewed and approved by business process owners. The PNC office in Little Rock, Ark., which is located more than 300 miles from the main office location in Overland Park, Kan., serves as an alternate work site for employees.

While there have been no significant changes to the disaster recovery and business continuity program, some improvements were made in response to COVID-19. This included procuring laptops, monitors, and printers for about 5% of its staff (those originally not capable of working from home) to fully equip all employees to work remotely. A group of about 30 essential employees were also divided into two teams to do two-week rotational shifts to perform functions that cannot be done remotely such as mail, vault functions, and wet ink signature requirements. In addition, an existing contract with the backup local office in Lenexa, Kan. was activated, providing an alternate area office location to certain employees who are unable to work from home.

The latest DR test was conducted remotely in June 2020, with no material issues reported. The plan calls for all critical servicing applications to be restored within 24 hours.

Cybersecurity

Management reported that it maintains a formal cybersecurity plan. Employees are sent phishing emails at least quarterly (employees in high-profile, high-risk positions receive them more frequently) to test compliance. Midland utilizes a third-party company to handle penetration testing on a recurring basis, and there were no significant issues reported during the most recent testing, which was completed in January 2021. In addition, a policy is in place to remediate any issues identified with timeline requirements. Certain vendors (depending upon risk level) receive a cybersecurity review, which includes an assessment of specific information security and related policies. Midland also has specialized legal counsel available for cybersecurity matters.

Internal controls

Midland maintains strong internal controls that include extensive and well-documented policies and procedures, internal and external audits, and a dedicated RCQA group that supports strong and responsive risk avoidance and correction procedures. Features are described below.

Policies and procedures

Midland's policies and procedures are comprehensive and easily navigable and cover all aspects of servicing activities. Each functional area also maintains a process workflow chart accompanied by a descriptive narrative. The company's policies and procedures:

- Are accessible to all employees via a shared network drive;
- Have a standardized electronic format template;
- Are updated by a staff member in the loan servicing group, who coordinates the annual updating with department managers from the business units, compliance, and legal groups;
- Are reviewed by senior managers for change authorization;
- Indicate the date of the most recent change/update; and
- Are updated and electronically communicated via the company intranet for consistent dissemination.

Compliance and quality control

RCQA is led by a director who reports to the co-heads of PNC Real Estate. The director is dedicated to the function, which includes 13 full-time equivalents (FTEs). RCQA operates independently from servicing operations, and provides guidance and support on PNC risk programs, policies and procedures. The group works closely with Midland to maintain the Risk and Control Self-Assessment (RCSA), which is the book of record for all internal controls that are in place to mitigate risk. Quality control efforts include a quarterly management certification process for departmental controls, with the workflow management system monitoring accuracy and timeliness across functional areas.

RCQA also performs testing of the RCSA controls to ensure they are designed properly and operating effectively. When issues are identified, RCQA coordinates with the issue owner to determine the remediation plan, tracking remediation efforts through the issue lifecycle, validating completion prior to closure. The department also acts as the liaison for both internal and external audits as well as regulatory reviews.

RCQA also provides business continuity oversight, which includes planning, maintenance, and testing for Midland, as well as coordinating with clients when necessary. RCQA provides physical security oversight and support, technology audit support, and is a liaison to the PNC Business Continuity Management organization.

Internal and external audits

Midland is subject to an annual Reg AB (platform-wide) certification. The 2020 certification contained no exceptions following a material recurring non-compliance instance in each of the 2019 and 2018 reports. The prior years' non-compliance was related to inaccuracies in investor reporting; specifically, inaccuracies related to schedule AL (asset level) reporting. Service Organization Controls Reports (i.e., a SOC-1 and SOC-2) are also conducted annually. The 2020 SOC-1 report was clean, with only minor exceptions noted. No exceptions were noted in the 2020 SOC-2 report pertaining to Midland's Enterprise! Loan Management Application System.

The bank's internal audit (IA) department also conducts annual operational reviews. During 2020, the IA department conducted operational process audits that included: a March review of the area responsible for account management and business development (Midland Client Solutions); a March review of loan servicing (Midland Loan Servicing) inclusive of a technology review of Enterprise!; and a November review of asset management and special servicing activities (Midland RES) inclusive of a technology review of Enterprise! The overall audit opinions noted in the Midland Client Solutions and RES reports were satisfactory. The overall audit opinion noted in the Midland Loan Servicing report was needs improvement.

For the aforementioned Midland Loan Servicing internal audit, 14 issues were identified, of which three were deemed high risk. One of the high-risk issues that remains open is a PNC enterprise issue that management indicated has a moderate impact to Midland. Another issue, which was self-identified, has been remediated and is pending validation, pertained to the loan setup function. The third issue, which has since been closed, pertained to complaint management. Of the other 11 items identified, all six of the low-risk items have been closed, and one of the five medium-risk items remains open.

Vendor management

Midland adheres to an enterprise third-party management (ETPM) program. The ETPM program requires the completion of various risk assessments for each third-party vendor relationship, both initially and on an ongoing basis. The breadth and depth of the risk assessments are influenced by various factors, including the statement of work, data, and technology maintained by the third-party vendor. These risk assessments are jointly completed by both PNC/Midland and the vendor, as required. An ETPM portal provides management and RCQA tools to own relationships while mitigating and managing risk. The line of business owns the ongoing monitoring and oversight of the contract relationship.

The company engages a number of outside firms for various servicing and special servicing activities such as taxes, Uniform Commercial Code-1 filings (UCCs), insurance, financial statement analysis, inspections, appraisals, environmental review, property management, and brokerage, and legal services. Engagements are handled by senior management for platform-wide services (i.e., taxes, UCCs, financial statement analysis/data entry), while asset-level vendor assignments are recommended by assigned asset managers and approved by department heads for special servicing activities. For environmental site assessments, Midland utilizes environmental legal counsel to select firms from a pre-approved list and then reviews their work product for quality and accuracy.

Vendor performance ratings are completed monthly, quarterly, or annually, based on the respective vendor risk level as scored by the servicer's vendor management system. We believe Midland's third-party vendor processes are well-monitored and enable the company to have appropriate controls over its vendors.

Insurance and legal proceedings

Midland has represented that it maintains adequate directors and officers, as well as errors and omissions insurance coverage given the size of its servicing portfolio. Management analyzes the effectiveness of purchased insurance coverage on an annual basis at each policy renewal and makes changes where it deems appropriate. As of the date of this report, management has indicated no servicing litigation matters other than those in the ordinary course of business. Management believes none of these matters will have a material adverse effect on its ability to perform under the related servicing agreement.

Loan Administration--Primary Servicing

The loan administration subranking is ABOVE AVERAGE for primary servicing.

Strong geographic (all U.S. states are represented) and property-type diversity is evident in the primary/master servicing portfolio, with an emphasis on multifamily (34.3% of UPB; see table 3). Investor diversity is broad (see table 4), and while most investor-type volume has increased since our last review, other third-party investors declined meaningfully owing to the aforementioned client bringing its portfolio in house.

In particular, Midland's primary/master serviced CMBS and CME investor clients fueled an overall 9.5% portfolio UPB growth as of Dec. 31, 2020, compared with year-end 2018. CMBS investor client portfolios increased to \$183.7 billion (37.1% of UPB), inclusive of \$27.2 billion of single-family rental loans, compared with \$108.7 billion (24.0% of UPB), when single-family rental loans were considered outside of the scope of the review. CME portfolio volume rose to

\$68.9 billion (13.9% of total UPB) from \$48.0 billion (10.6% of total UPB) as of year-end 2018. This aforementioned growth was offset in part by a 31.3% decline (\$60.1 billion) in other third-party investor client UPB over the same period. Consistent with other servicers, reported delinquencies have risen due to the COVID-19 pandemic and totaled 4.1% as of Dec. 31, 2020 (see table 6).

Table 6

Primary Servicing Portfolio										
	Dec. 31, 2020		Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2017		Dec. 31, 2016	
	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.
Primary loans	399,415.6	23,877	460,969.0	35,012	388,109.6	27,865	361,757.2	27,416	352,079.4	26,891
Average loan size	16.7	--	13.2	--	13.9	--	13.2	--	13.1	--
Delinquent (%)										
30 days	0.48		0.13		0.03		0.09		0.16	
60 days	0.38		0.13		0.04		0.05		0.62	
90+ days	3.22		0.99		0.95		1.47		1.50	
Total(i)	4.08		1.25		1.03		1.61		2.28	

(i) Totals may not add due to rounding. UPB--Unpaid principal balance.

New loan setup

Midland effectively administers the loan setup process. The majority of new loan setups are accomplished via electronic file downloads, and the data validation process is facilitated by document imaging procedures and error checking features within the servicing system. New loan setup features include the following:

- Borrower welcome letters are system-generated and issued within three business days of loan activations.
- A dedicated CMBS servicing group oversees the negotiation and administration of pooling and servicing agreement (PSA) requirements and is an integral part of setup activities. Abstracts of key servicing requirements and trigger events are integrated into reminders throughout the Enterprise! platform.
- Data integrity controls include a secondary review by a senior file review specialist to verify documentation against the servicing system.
- Formal tracking and the pursuit of missing documents resulted in Midland reporting no trailing documents outstanding on CMBS loans boarded more than six months prior, as of Dec. 31, 2020.
- Midland's quality control process tracks boarding timeliness metrics and confirms accuracy.

Payment processing

Midland has a well-established track record of processing complex payment structures in a highly automated manner. Highlights include the following:

- Payments are processed within ATP where possible, with exceptions handled by the responsible servicing group, which is also through ATP. The treasury group is responsible for the receipt and transmission of wire transfers.
- The electronic payment capture rate is nearly 100%, including Automated Clearing House (approximately 63%), wire transfers (approximately 17%), and lockbox (approximately 18%).
- Checks, which represent approximately 0.5% of payments, are deposited electronically via remote deposit and an

internal system.

- The CMBS portfolio contains nearly 2,200 cash-managed (hard lockbox) loans as of Dec. 31, 2020. In addition, Midland monitors loan covenants for activating springing lockboxes across its entire portfolio, of which 737 were triggered during 2020 (compared with only 270 during 2019).
- Online bank account access is used to balance the payment clearing account and to perform a complete daily reconciliation, including aging of open items. Midland reported 48 suspense items aged more than 60 days (up from one as of our prior site visit) existed as of Dec. 31, 2020. Management indicated that the increased amounts of suspense items, which rose to \$817,000 from \$19,000, were due to the increase in COVID-19-related requests, the amount of time it takes to complete a request and borrowers making partial payments due to financial strain.
- Midland services more than 2,200 adjustable-rate loans within its CMBS portfolio and performs regular adjustable-rate audits on those loans.

Investor reporting

Midland has 61 dedicated staff members for the various investor reporting and operational accounting activities that are properly segregated for reporting, remitting, and related account reconciliation processes. The company also has a high level of asset-specific knowledge and responsiveness in handling investors and other inquiries, including highly structured credits.

Other highlights include the following:

- The servicing system is interfaced with the general ledger to facilitate ledger entries and balance reconciliations.
- Outgoing wires are processed under dual controls.
- Automated fund transfers from payment clearing to custodial accounts occur nightly by the servicing system.
- The servicing system automatically generates investor reports.
- Midland performs daily bank reconciliations of its disbursement and clearing accounts, which is similar to most highly ranked servicers. At the same time, daily bank reconciliations of its custodial accounts are also performed, which is more frequently than most servicers we rank.
- Midland reported no unidentified items aged more than 60 days; it reported 13 occurrences of CMBS reporting errors requiring restatement during 2020, compared with five instances in 2019. Management indicated that the increased number of restatements was due to an increase in the number of modifications where miscommunication with the special servicer occurred.

Escrow administration

Midland has sound controls for all escrow administration activities, which include dedicated teams for tax and insurance. Asset managers handle loan-level reserve monitoring and analysis for other escrowed events such as tenant improvement and replacement reserves. Other features include the following:

- Taxes and insurance are tracked in Enterprise! Loans escrowed for taxes and insurance were approximately 39% and 21%, respectively, of the portfolio.
- A tax service is used for escrowed and non-escrowed loans.
- Insurance policies are reviewed internally for compliance no less than annually.

- Renewal notices are system-generated for insurance policies. Enterprise! also automatically generates letters on non-escrowed tax accounts to send to borrowers to verify payment.
- A forced-placed policy, which provides for a 120-day look-back period, is in effect. As of Dec. 31, 2020, 175 loans were covered by this policy.

Asset and portfolio administration

Midland has an experienced staff and diligent procedures covering asset and portfolio administration tasks including loan performance monitoring, covenant tracking, and collateral review. Portfolio management includes dedicated staff responsible for loan watchlists and performing loan asset management, as well as reserve accounts (which is now supported by an offshore vendor) and covenant administration. Other notable features include the following:

- Policies and procedures are well-designed, including processes for monitoring complex loan structures.
- A detailed, centrally controlled watchlist process has automated triggers for CMBS and non-securitized loans utilizing CREFC watchlist criteria.
- Servicing analysts review principal and interest (P&I), property protection advance needs, and watchlists. They also monitor specially serviced loans.
- The tracking of operating statements is automated through Enterprise! and Midland maintains proactive procedures to obtain and review these reports.
- As of Dec. 31, 2020, Midland had collected 99% and reviewed 99% of the prior year-end operating statements of its CMBS loans, which is slightly improved from our prior review. We note that, in addition to the spreading of these CMBS financial statements, Midland's offshore vendor began providing financial comments on nearly half of the CMBS portfolio, which are subject to an onshore QC review.
- For the remainder of the portfolio, an onshore vendor performs the data entry, and Midland surveillance analysts are responsible for the analysis, borrower contact, and quality control.
- Tracking inspections is also automated through Enterprise! We note that Midland reported a spike in delinquent inspections (i.e., those not received within 30 days of the due date) resulting largely from government imposed COVID-19 restrictions. Delinquent inspection levels were reported to be 12.6% as of Dec. 31, 2020, compared with 0.3% at year-end 2019 and 3.4% at our last review.
- UCCs are tracked through Enterprise! During the second half of 2020, the portfolio had more than 17,200 filings with no lapses reported (and no lapses since our prior review).

Borrower requests

Midland addresses borrower requests in a proactive and efficient manner. Highlights include the following:

- A team of approximately 29 staff members (up from 21 as of our last review) within the performing loan asset management team that reports up to the head of RES, handles borrower consents at Midland in its capacity as primary and master servicer.
- Midland facilitates borrower communications through Borrower Insight, and requests are tracked on the servicing system with notations of issues or delays in completing requests.
- A third-party vendor occasionally processes or underwrites the request for Midland's review and approval (primarily loan assumptions, transfers of interest, and leasing matters).

- Approvals are based on delegations of authority, and larger credit matters are controlled through a committee process and may involve review by the special servicing area for approvals.
- Midland leverages a PNC-wide system to track customer complaints. It no longer conducts an annual borrower satisfaction survey.
- Midland's borrower consent activity rose significantly during 2020, increasing more than 56% in its role as a primary and master servicer. Specifically, Midland reported that it processed approximately 3,550 CMBS consent requests, 56% (1,977) of which were leasing consents and 15% (538) pertained to forbearance requests. This compares to the 2019 volume of approximately 2,265 CMBS consent requests, 57% (1,292) of which were leasing consents, 11% (257) pertained to assumptions, and 10% (221) were defeasance requests. We note that S&P Global Ratings did not track forbearance requests before 2020, but we believe historical volume before COVID-19 was minimal.

Early-stage collections

Midland's asset management group has three dedicated staff members (up from one at our prior review) to handle early-stage collections. Noteworthy features include the following:

- All collection letters are system-generated. Notice letters are automatically issued when the grace period expires.
- Borrower telephone contact is initiated within two days after the due date or grace period expires, and a chronology of collection comments is centrally maintained in Enterprise!
- Delinquency reports are produced no less than monthly.

Loan Administration--Master Servicing

The loan administration subranking is ABOVE AVERAGE for master servicing.

Within its total servicing portfolio of \$495.3 billion (28,019 loans), Midland oversees 29 subservicers who service \$95.9 billion in UPB, consisting of 4,142 CMBS and CME loans. Following a sustained period of extremely low delinquency levels since 2017, delinquency rates rose meaningfully during 2020, due to COVID-19 challenges, but are still relatively low at 1.84% as of Dec. 31, 2020 (see table 7).

Table 7

Master Servicing Portfolio											
	Dec. 31, 2020		Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2017		Dec. 31, 2016		
	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	UPB (mil. \$)	No.	
Master (SBO) loans	95,874.7	4,142	76,819.0	3,544	64,185.6	2,845	53,102.5	2,293	33,464.9	1,478	
Subservicers	--	29	--	29	--	30	--	31	--	41	
Average loan size	23.1	--	21.7	--	22.6	--	23.2	--	22.6	--	
Delinquent (%)											
30 days	0.68		0.00		0.00		0.00		0.00		
60 days	0.24		0.00		0.08		0.00		0.00		
90+ days	0.93		0.18		0.41		0.50		1.67		
Total(i)	1.84		0.18		0.49		0.50		1.67		

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

Subservicer oversight is handled jointly by an allocated staff of nine FTE from RCQA and investor reporting. Investor reporting handles day-to-day transactional activities, while RCQA oversees subservicers' compliance requirements and audits. As a master servicer, borrower requests are channeled through servicing within the operations group's borrower services or the RES team, depending on the source and nature of the request.

New loan setup

The company follows the same protocols to setup new subserviced loans as it does with those that it primary services. Because these loans are all serviced by other servicers, the setup process occurs via electronic file downloads.

- After the file download, the loan records are checked by loan administration using the same standard of internal controls that is used for primary serviced loans.
- Imaged documents are received from subservicers and incorporated with the loan record through the imaging system.
- Online investor deal summaries and PSAs assist in monitoring subservicer reporting procedures.
- Loans are set up for "shadow servicing" to record loan-level P&I payment records, and tax and insurance information is not loaded at the loan level but monitored via quarterly officer certificates and monthly subservicer reports.
- All loans are boarded so that payments can be processed no later than the first determination date.

Subservicer accounting and reporting

Midland has appropriate controls for recording subservicer remittances. Midland is well-experienced in overseeing a large number of subservicers. Aspects of subservicer remittance accounting include the following:

- Midland's subservicer oversight staff provides subservicers with monthly calendars that note all critical reporting and remittance deadlines.
- Accounting staff in investor reporting reconcile incoming subservicer remittances monthly to the servicing system and perform daily bank account reconciliations.

Subservicer oversight

Escrow administration

Midland takes proactive measures to monitor subservicer activity relating to the tracking of real estate taxes, insurance, UCC filings, and reserve account receipts and disbursements.

- Monthly subservicer electronic downloads update expiration and paid-to dates on Enterprise!, and the company uses quarterly exception reports to resolve open items with subservicers.
- Subsversicers are required to provide quarterly officer certifications in compliance with subservicing agreements.

Asset and portfolio administration

Midland's subservicer asset administration oversight activities are proactive and include reviewing subservicer property inspections, re-analyzing property financial statements, and monitoring watchlist triggers for subserviced loans. Furthermore, Midland:

- Reviewed 86.7% (up from 71% at our last review) of the inspections received from its subservicers during the last six months of 2020 (with some newly outsourced vendor support with data entry) and maintains formal procedures to follow up with subservicers to resolve inspection issues.
- Historically has used a third-party vendor to data enter the OSARs. The vendor completes a sub-set of the OSARs and an automated process using a bot completes the remaining OSARs with an internal review of the data. Midland is in the process of building the bot out to complete additional property types with the goal of 100% data entry of sub-serviced OSARs with the appropriate level of quality control in place. Beginning with 2020 year-end financials, Midland will also re-analyze a maximum of 20% of all OSARs completed by sub-servicers compared to a historical level of 50% as noted below.
- Reanalyzes 50% of the property financial statements submitted by subservicers. When reviewing these statements, Midland compares the subservicer's debt service and cash flow calculations with the borrower's actual property operating statements. Follow-up calls are placed to the subservicer pertaining to items such as computation errors, deferred maintenance issues, and cash flow questions.
- Collected and reviewed 99% of the prior year-end financial statements of its CMBS loans, as of Dec. 31, 2020, which is slightly better than the 99% and 95% respective levels reported as of Dec. 31, 2018.
- Places master serviced loans on the watchlist following the same criteria used for primary serviced loans.

Audit and compliance

Overall, we believe that Midland's procedures denote sound subservicer audit practices through a combination of desk reviews and on-site audits. Highlights include the following:

- Before initiating an audit, the RCQA manager completes a quality control checklist, and the subservicer completes a subservicer compliance questionnaire.
- Subservicer audits are accomplished by RCQA through either an on-site or desk review, which are annual if the subservicer is associated with any of the top 10 loans in a CMBS transaction. During 2020, Midland performed 28 audits its U.S. subservicers. All of them were conducted as desk audits due to COVID-19 restrictions.
- A detailed audit template is used for reviewing subservicer performance for all core functional areas. Subservicer audit results are used to designate either acceptable or unacceptable performance, and the subservicer receives a letter containing exception items and recommendations.

Investor reporting, CMBS advancing, and special servicer interaction

The servicing system automatically incorporates subserviced and primary serviced loans for reporting to investors, and all reporting is handled through electronic file delivery or a secured investor website and corresponding wire transfers for the remittance. Advancing and recovery are also handled through the servicing system with good oversight procedures.

- Monthly investor reporting and remitting occurs in the investor reporting department, which is aligned by investor type.
- The reporting analyst reviews the monthly reports (primary and subserviced loans) for accuracy and other information, such as complete watchlist information.
- The review also determines whether loans are transferred to the special servicer.

- Advances are monitored through a series of monthly system-generated advance exposure reports that highlight the advance type (P&I, property protection, etc.), valuations, and the ratio of advances to appraised values and unpaid balances.
- Midland maintains procedures to monitor special servicers' appraisal updates and regularly conducts calls with special servicers regarding advancing decisions.
- An eight-member advance review committee meets monthly and monitors and controls the amount and recoverability of advances for trusts that Midland services. Its advance determination criteria involve a four-level analysis based on the magnitude of the advance amount, the advance-to-value ratio, and the delinquency of the loan, along with an analysis of the remaining portfolio. When a loan is assigned a level above one, closer scrutiny of the loan is received on a monthly basis. A variety of thresholds are used as a basis to determine non-recoverability; such loans are classified at a level four rating.
- Management indicated that its overall advances rose considerably during 2020 due to COVID-19 delinquencies, but they remain well below peak Great Financial Crisis levels.
- Midland's CMBS advancing procedures attempt to avoid interest shortfalls and reduce loss severity.

Loan Administration--Special Servicing

The loan administration subranking is STRONG for special servicing.

Midland has a demonstrated track record of resolution activity and continues to invest in its AM Insight system. Midland indicated it had resolved more than 3,425 specially serviced assets since 2005, with total net recoveries of 87% on approximately \$33 billion of UPB. During 2020, active special servicing UPB volume increased substantially, totaling \$8.3 billion (383 loans; 10 real estate-owned [REO] properties) at year end compared with \$1.56 billion (115 loans; 10 REO) as of Dec. 31, 2019 (see table 8).

Table 8

Special Servicing Portfolio															
	Dec. 31, 2020			Dec. 31, 2019			Dec. 31, 2018			Dec. 31, 2017			Dec. 31, 2016		
	UPB (mil. \$)	No.	Avg. age (i)	UPB (mil. \$)	No.	Avg. age (i)	UPB (mil. \$)	No.	Avg. age (i)	UPB (mil. \$)	No.	Avg. age (i)	UPB (mil. \$)	No.	Avg. age (i)
Active inventory															
Loans	8,069.4	383	9.0	1,405.2	115	11.8	863.9	58	15.7	600.7	75	13.8	516.0	76	12.3
Real estate owned	236.6	10	32.1	158.9	10	18.7	72.0	5	35.8	129.2	9	35.8	108.9	8	36.5
Total(ii)	8,306.1	393	9.6	1,564.1	125	12.4	935.9	63	17.3	729.9	84	16.2	624.9	84	14.6

(i) Avg. age reflects the time in months from the date the loan first became specially serviced to the reporting date. (ii) Totals may not add due to rounding. UPB--Unpaid principal balance.

Special servicing assignments have been based on relationships with unaffiliated B-piece buyers. In aggregate, as of Dec. 31, 2020, Midland was the named special servicer on more than \$168 billion of UPB contained across 387 transactions, including 302 CMBS, 47 SFR, 36 CME, and two CRE-CLOs.

As of Dec. 31, 2020, the special servicing group, which is a unit within RES, included 44 FTEs, up 69% from our last review, of which 24 (up from 12 since our last review) are asset managers who work on both loans and REO assets. In our view, the resulting assets per asset manager of approximately 16.4 (compared with approximately five at our last site visit) is suggestive of little room for incremental asset growth without adding headcount any may have also contributed to the decision to outsource certain SFR portfolios as previously noted. Removing the 12 outsourced SFR assets from the asset-to-asset manager ratio results in a slightly less stressed calculation of 15.9.

During 2020, resolution activity was at a multi-year high, while the average resolution period averaged a multi-year low of 8.6 months (see table 9), which also compared favorably to peers. The volume and velocity of the resolutions were largely attributable to COVID-19 relief requests, as 62 of the 112 loan resolutions (55%) reported during 2020 were loans that transferred to Midland during the calendar year. Further, nearly 60% of the resolution activity related to loans that returned to master servicer at an average hold time of 6.2 months, which is a bit lengthier than the average of peers during the year. At the same time, nearly 20% of the loans were full payoffs, which averaged only 4.4 months to resolve, a bit quicker than is peer average. Resolution activity in 2020 was diversified amongst property type, albeit skewed towards retail (34% of loan count), single-family rental (26%) and lodging (15%) and was almost exclusively for CMBS trusts.

Table 9

Total Special Servicing Portfolio--Loan Resolutions															
	2020			2019			2018			2017			2016		
	UPB (mil. \$)	No.	Avg. age(i)	UPB (mil. \$)	No.	Avg. age(i)	UPB (mil. \$)	No.	Avg. age(i)	UPB (mil. \$)	No.	Avg. age(i)	UPB (mil. \$)	No.	Avg. age(i)
Resolutions															
Loans	2,045.7	107	7.9	467.3	43	13.7	231.0	33	15.2	175.0	45	15.7	232.4	44	14.4
Foreclosed loans	101.3	5	24.6	149.9	8	15.4	109.6	7	37.6	30.7	4	17.5	20.9	3	18.8
Total(ii)	2,147.0	112	8.6	617.1	51	13.9	340.5	40	19.2	205.7	49	15.8	253.3	47	14.6
Resolution breakdown															
Returned to master	1,637.7	66	6.2	240.1	20	7.3	94.5	15	13.5	52.0	13	13.9	133.9	7	18.5
Full payoffs	102.6	22	4.4	137.5	10	12.4	65.4	8	11.3	36.8	16	6.6	45.8	17	7.8
DPO or note sale	305.4	19	17.9	89.6	13	24.6	71.1	10	21.1	86.2	16	26.1	52.7	20	18.5
Foreclosed loans	101.3	5	24.6	149.9	8	15.4	109.6	7	37.6	30.7	4	17.5	20.9	3	18.8
Total/average(ii)	2,147.0	112	8.6	617.1	51	13.9	340.5	40	19.2	205.7	49	15.8	253.3	47	14.6

(i) Avg. age reflects the time in months from the date the loan first became specially serviced to the reporting date. (ii) Totals may not add due to rounding. UPB--Unpaid principal balance. DPO--Discounted payoff.

Loan recovery and foreclosure management

Midland continues to display effective, well-disciplined, and proactive loan recovery and foreclosure management protocols. Highlights include the following:

- Asset managers complete file reviews and property inspections, assemble local market data, and develop a loan resolution plan within a relatively concise 45-day target (or, if shorter, the timeframe established in the PSA).
- Midland requires borrowers/guarantors to sign pre-negotiation letters before entering into workout discussions.

- Valuation and net present value analysis is integrated within AM Insight™, which maintains all workout plans.
- Asset managers engage vendors, which are tracked within the asset management application, and also provide for timeline monitoring. Vendor tracking also provides for feedback regarding quality of work.
- Plans are presented to a special servicing committee for approval, per Midland-delegated authority.
- Workout plans are updated as negotiations dictate.
- If warranted, plans are updated for a foreclosure recommendation.

The company's foreclosure process is controlled and well-managed. Recommended foreclosure actions are followed by an REO resolution plan, which includes a bidding process for property management and brokers. Detailed pre- and post-foreclosure checklists ensure that all time-sensitive issues surrounding the asset, such as environmental and appraisals, are completed before taking title.

REO management and disposition

Midland demonstrates proactive REO management and sales oversight. Property manager and broker selection is controlled through approved vendor lists. Standard contracts are used (with limited exceptions for leasing brokers), and the engagement of the manager/broker is tracked and administered within the company's servicing systems. Other notable aspects include the following:

- Asset managers monitor property managers' adherence to a Midland-issued procedure manual for reporting and compliance.
- Asset managers prepare an REO business plan and budget within a relatively concise 45-day period from acquisition. The approval process is by committee review, per Midland-delegated authority.
- All sale disposition cases must be submitted to the appropriate delegated authority, which may require a credit committee for final approval. The asset managers, in conjunction with Midland's legal department, coordinate the closing process.

REO disposition activity has been moderate since our last review, with only three sales completed during 2020 and six executed during 2019, compared with 11 during 2018 (see table 10). At the same time, gross and net sales proceeds relative to market value during each of 2020 (99.4% and 93.4%) and 2019 (98.3% and 95.4%) exceeded the 2018 respective levels of 98.0% and 83.8%. Further, while the average REO hold period during the past two years of 15.2 months exceeded the average of 11.6 times reported during 2018, they compared favorably to peers.

The REO inventory as of Dec. 31, 2020, aggregated \$236.6 million of UPB for 10 properties. This remaining active REO portfolio has been in special servicing inventory an average of 32.1 months, which, although considerably higher than the 18.7 months reported at yearend 2019, is otherwise relatively consistent with its historical norms (see table 7) and is mitigated by its remaining small inventory and recent track record of the aforementioned generally faster REO dispositions than peers. The company has a well-controlled broker engagement process and also performs periodic REO revaluations to monitor advances and non-recoverability determinations.

Table 10

Total Special Servicing Portfolio--Real Estate-Owned Sales															
	2020			2019			2018			2017			2016		
	Amount (mil. \$)	No.	Avg. REO hold period (mos.)	Amount (mil. \$)	No.	Avg. REO hold period (mos.)	Amount (mil. \$)	No.	Avg. REO hold period (mos.)	Amount (mil. \$)	No.	Avg. REO hold period (mos.)	Amount (mil. \$)	No.	Avg. REO hold period (mos.)
Estimated market value	9.3	4	13.0	38.3	6	16.6	67.1	11	11.6	28.5	4	28.0	79.8	12	17.9
Gross sales proceeds	9.3	--	--	37.7	--	--	65.8	--	--	26.6	--	--	70.6	--	--
Net sales proceeds	8.7	--	--	36.6	--	--	56.3	--	--	26.0	--	--	67.7	--	--
Gross sales proceeds/market value (%)	99.4	--	--	98.3	--	--	98.0	--	--	93.4	--	--	88.5	--	--
Net sales proceeds/market value (%)	93.4	--	--	95.4	--	--	83.8	--	--	91.3	--	--	84.9	--	--

REO--Real estate owned.

REO accounting and reporting

Midland has a properly controlled property management accounting function that includes sound monthly bank account reconciliation procedures.

Midland's REO accounting and reporting procedures are primarily overseen by the asset managers who monitor monthly property management operating account activity. In addition, the RES collateral management services group provides a second review of the property management operating account activity. The RCQA group conducts periodic reviews of the REO property managers throughout the year and focuses on the cash receipt and disbursement processes. Furthermore:

- Property managers electronically submit monthly reporting packages to the asset managers, which are received and uploaded to AM Insight™.
- Property incomes and expenses are controlled through dual operating accounts that are reconciled monthly.
- On-site audits of property managers are detailed within the company's procedures. However, during 2020, no audits were conducted compared with the two performed during the prior year. Management indicated that COVID-19-related travel restrictions inhibited any onsite activity during the year.

Borrower requests

Midland addresses borrower requests in a proactive and efficient manner for loans that require special servicer consent. Highlights include the following:

- Borrower consents that are handled by the special servicer are reviewed and processed by the collateral management services (CMS) team, which reports directly to the head of RES.
- The CMS team works closely with the performing asset management team for loans where Midland is both master and special servicer where the consent request will require both special servicer and directing certificateholder

(DCH) approval.

- The review and approval processes for all borrower consents and special serviced loans are subject to the same delegations of authority to ensure consistency for the level of review required for asset management and default management activities.
- In its capacity as special servicer, Midland's borrower consent activity increased significantly during 2020, rising more than 160%. Volume was concentrated in leasing consent activity (46%) and forbearance requests (26%).

Performing loan surveillance

Midland has proactive surveillance procedures to effectively monitor its named special servicing portfolio. Notable features include the following:

- Midland receives a nightly feed of all publicly available CMBS and CME portfolios from Trepp, which includes loan, property, financial, and watchlist commentary. That feed is loaded into a series of tables in Enterprise! As previously noted, a browser-based surveillance module is used to monitor the named special servicing portfolio.
- Midland has designed reports to identify watchlist loans, loans of concern identified by the B-piece investor during the due diligence process, maturing loans, covenant compliance issues, and loans with deteriorating conditions, in order to facilitate proactive surveillance and also quickly assess the impact of major credit events such as natural disasters, tenant bankruptcies, store closings, etc.
- Asset managers utilize the various reports and information to conduct calls with master servicers and DCH to review changes within the named special servicing portfolio.
- Midland conducts monthly surveillance calls with many of its DCH clients to discuss loans of concern and proactively determine if a specific loan needs to be transferred to special servicing.

Legal department

Servicing and special servicing staffs have access to Midland's five-attorney legal department. The legal staff controls the engagement process and case management oversight involving external law firms. Asset-level legal costs, which must be approved for payment by the assigned asset managers, are tracked within the servicing system to facilitate monitoring of special servicing's actual legal costs to budgets within asset status plans.

Financial Position

The financial position is SUFFICIENT.

Related Research

- Select Servicer List, April 2, 2021
- Midland Loan Services Rankings Affirmed; Outlook Is Positive, March 29, 2021
- Servicer Evaluation Spotlight Report: Environmental, Social, And Governance Factors Have Consistently Powered Our Servicer Evaluation Rankings, Nov. 16, 2020
- The PNC Financial Services Group Inc. 'A-/A-2' Ratings Affirmed On Agreement To Buy BBVA USA Bancshares;

Outlook Stable, Nov. 17, 2020

- The PNC Financial Services Group Inc., July 9, 2020
- U.S. Commercial Mortgage Servicers Preparing For Impact From COVID-19, April 3, 2020
- Midland Loan Services Rankings As A Commercial Mortgage Loan Servicer In The U.S. And Canada Lowered, April 1, 2020
- Analytical Approach: Global Servicer Evaluations Rankings, Jan. 7, 2019

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