Assured Guaranty Municipal Corp. (AGM)
Assured Guaranty (Europe) plc (AGE)

Entity: Assured Guaranty Municipal Corp.			
Affirmed	**Type**	**Rating(s)**	**Outlook**
Assured Guaranty Municipal Corp.	IFSR	AA+	Stable
Entity: Assured Guaranty (Europe) plc			
Affirmed	**Type**	**Rating(s)**	**Outlook**
Assured Guaranty (Europe) plc	IFSR	AA+	Stable

Methodology:

Financial Guaranty Global Rating Methodology

Analytical Contacts:

Jack Morrison, Associate Director
(646) 731-2410
jmorrison@kbra.com

Peter Giacone, Senior Director
(646) 731-2407
pgiacone@kbra.com

Paul Kwiatkoski, Managing Director
(646) 731-2387
pkwiatkoski@kbra.com

Rating Summary: AGM's rating reflects its substantial claims paying resources, skilled management team and ability to withstand KBRA's stress scenario losses as applied across the company's insured portfolio.

AGM's exposure to the Commonwealth of Puerto Rico remains a key area of focus. Given the volatile history and significant unresolved issues for the island, KBRA continues to incorporate conservative severity assumptions in the losses it applies to AGM's Puerto Rico exposure. KBRA also analyzed AGM's ability to pay Puerto Rico losses at higher severity assumptions than our current stress scenario and determined that the results were consistent with AGM's rating. Should the ultimate recoveries on insured Puerto Rico bonds approach zero, there would be downward pressure on AGM's rating.

AGM has written primarily U.S. municipal business since the credit crisis and this segment continues to represent most of the insured portfolio. While new business origination is below pre-credit crisis levels, increased volumes in the U.S. municipal sector have now offset run-off in the insured portfolio and stabilized AGM's leverage ratios which remain close to historic lows. AGM's legacy exposure to structured finance continues to decline, falling by 22% since KBRA's last review.

The recent acquisition of an alternative asset manager, BlueMountain Capital Management, LLC (BlueMountain), by AGM's parent company, signals a strategic shift for the firm which could have long-term implications for how AGM develops its financial guaranty business over time. A large global manager of CLOs, BlueMountain also has expertise in corporate credit, asset-backed finance, and healthcare sectors.

Assured's alternative asset management initiative has transitioned to a significant commitment of financial and management resources. The integration of BlueMountain will present managerial and administrative challenges that are new for the Company, especially compared to previous acquisitions which have primarily been financial guaranty portfolio integrations. KBRA expects the Company will leverage its successful acquisition track record and take a measured approach regarding the investment of assets in this business in a manner that maintains the capital strength of AGM but also notes the higher level of risk associated with the Company's revised asset allocation strategy.

KBRA's IFSR rating of AGM incorporates the impact of the BlueMountain acquisition based on management's business plan for this entity. As AGM furthers its deployment of assets into the BlueMountain platform, KBRA expects to utilize other analytical approaches incorporated in the applicable rating methodologies to refine its analysis of AGM's capital position.

KBRA also reviewed AGM's corporate governance framework, credit and risk management processes and consider them strong and reflective of industry best practices. AGM has a proven management team and a well-developed governance framework.

The **Stable Outlook** reflects KBRA's stress case loss analysis which incorporates significant deterioration across multiple sectors of AGM's total portfolio relative to current performance, which should contribute to stability if ultimate losses do not approach or exceed these modeled levels.

Key Rating Strengths

- Ability to withstand KBRA's conservative stress case loss assumptions across the insured portfolio.
- The substantial and continuing run-off in higher risk components of the portfolio; namely structured finance
- Experienced management team which operates with a mature and high-functioning operating platform supported by strong governance and risk management systems.
- AGE also benefits from extensive intra-group financial support agreements.

Key Rating Concerns

- The ultimate level of losses in Puerto Rico remain unclear.
- Diversification into alternative asset management investments introduces risk in terms of asset quality within AGM's investment portfolio.
- The negative impact of an unsuccessful integration of BlueMountain.
- Ongoing industry trends of narrow credit spreads, low interest rates, and constrained market share, which is an environment which requires diversification into new areas.

Drivers for Rating Change

Drivers	
• Favorable developments related to Puerto Rico exposures. • Market factors that include a more favorable interest rate environment, firmer pricing conditions and sustainable profitability.	+
• Challenges related to integration of asset management platform into existing insurance-based operations or investment strategy execution that is too aggressive and negatively impacts claims-paying ability. • Persistent adverse developments in Puerto Rico which indicate ultimate recoveries approaching zero.	-

Key Ratios

KBRA's Stress Loss Treatment by AGM Portfolio Segment ($ in millions)

Portfolio Segment	Net Par	Financial Guaranty Stress Losses[1] (Future Value)	Comments
Puerto Rico	$1,864	$1,268	8-year debt service moratorium (35% subsequent recovery in years 11-18) followed by severities of 7.5% to 30% based upon issuer as remaining debt service comes due
Distressed structured finance and other credits	2,478	489	Includes RMBS and other distressed credits
Balance of portfolio	110,714	1,812	Monte Carlo simulation losses
Totals	$115,057	$3,569	Aggregrate stress losses incorporated in Bond Insurer financial model

AGM Portfolio (incl. AGE)

Net Par Outstanding ($ thousands)

Segment	3Q19		3Q18		% Chg.
U.S. Public Finance	$ 82,479,144	71.7%	$ 79,828,166	69.8%	3.3%
International Infrastructure	30,025,641	26.1%	31,232,453	27.3%	-3.9%
Global Structured Finance	2,551,747	2.2%	3,272,971	2.9%	-22.0%
	$ 115,056,532	100.0%	$ 114,333,590	100.0%	0.6%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

AGM Portfolio (incl. AGE)

Net Par Outstanding ($ thousands)

Rating (1)	3Q19		3Q18		% Chg.
AAA	$ 1,640,536	1.4%	$ 1,654,367	1.4%	-0.8%
AA	10,026,191	8.7%	8,253,537	7.2%	21.5%
A	56,170,962	48.8%	56,984,468	49.8%	-1.4%
BBB	43,086,849	37.4%	42,219,913	36.9%	2.1%
BIG	4,131,994	3.6%	5,221,305	4.6%	-20.9%
	$ 115,056,532	100.0%	$ 114,333,590	100.0%	0.6%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

(1) Reflects Assured internal rating category.

Historical Leverage

($ millions)	3Q19	4Q18	4Q17	4Q16	4Q15	4Q14
NPO	115,057	115,555	120,504	113,955	133,409	151,320
CPR	4,456	4,730	4,644	4,377	4,626	4,799
NPO/CPR	26x	24x	26x	26x	29x	32x

Note: see Figure X for further balance sheet data.

Source: AGM statutory statements with adjustments for loss mitigation bonds and financial supplements

[1] These are stress case loss assumptions that support an overall AA+ rating on the insured portfolio. KBRA is not forecasting this level of losses for AGM.

Rating Determinants (RD)
1. Corporate Assessment
2. Insured Portfolio and Modeling Analysis
3. Claims-Paying Resources and Financial Profile

RD 1: Corporate Assessment

Background

AGM's ultimate parent is Assured Guaranty Ltd. (AGL). AGL, together with its subsidiaries (Assured), is a Bermuda-based holding company that provides credit enhancement products, through its subsidiaries, to the U.S. and international public finance, infrastructure, and structured finance markets, and, as of October 1, 2019 asset management services.

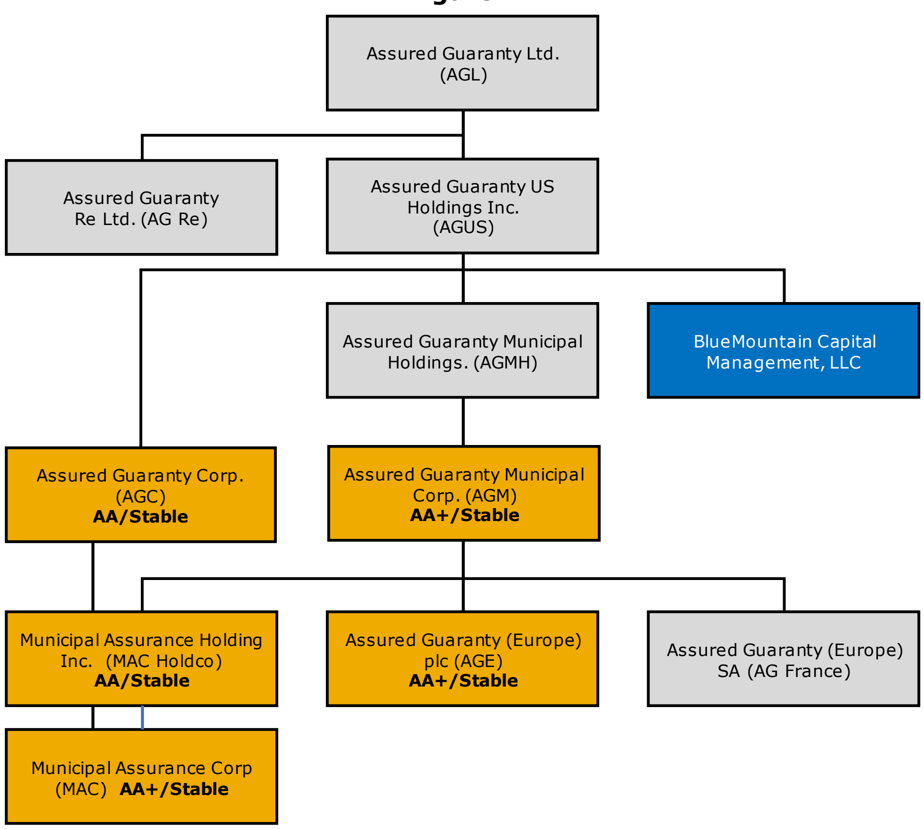
Subsequent to the Great Recession, Assured continued to write new financial guaranty policies in the municipal market and, to a limited extent, in the structured finance market. Assured entities have been the most active providers of financial guaranty products in the industry from 2008 to present. AGM is the most active writer of financial guaranty business under the Assured platform. AGM owns 100% of London-based AGE.

In anticipation of the finalization of "Brexit", Assured established and obtained authorization for a new subsidiary in France, Assured Guaranty (Europe) SA, which will be more than 99% owned by AGM, with less than 1% owned by AGM's holding company, AGMH.

Ownership Structure

AGM is a wholly-owned subsidiary of Assured Guaranty Municipal Holdings Inc. (AGMH), an intermediate holding company and a wholly-owned, indirect subsidiary of AGL. AGM was founded in 1985 and is domiciled in New York. It is the largest operating subsidiary of AGL. AGM owns 100% of the common stock of AGE and facilitates its operations through a series of support agreements (see AGE Background and Business Strategy below). AGM also owns 61% of Municipal Assurance Holdings Inc. (MAC Holdco) while its affiliate Assured Guaranty Corp. (AGC) owns 39%.

Figure 1



Source: Assured Guaranty Ltd.

Business Strategy

AGM underwrites global public finance and infrastructure transactions and has been the most active writer of new business within the Assured platform. AGE is focused on international public finance, including infrastructure transactions across several sectors, and structured finance.

With its recent acquisition of BlueMountain, Assured has crystalized its intentions to expand its business platform into alternative investments and asset management. The acquisition was driven by Assured's ongoing strategy of investment in alternative asset management opportunities, which management views as complementary to Assured's existing financial guaranty business and a mechanism to diversify its revenue sources. KBRA will continue to closely monitor the Company's progress in building out this platform and any potential impacts on AGM's claims paying resources and/or risk profile from a policyholder perspective.

The acquisition of BlueMountain by Assured closed on October 1, 2019. BlueMountain was purchased at Assured Guaranty US holdings Inc. (AGUS) for $160 million, plus an additional commitment of $90 million in working capital commitments. The acquisition was funded by loans to AGUS from Assured's primary operating insurance entities (AGC, AGM, and MAC) which are also committed to invest a combined total of an additional $500 million in BlueMountain managed funds, CLOs and separately-managed accounts. BlueMountain investments may include CLO equity tranches, as well as asset-backed securities focused on private debt investments in specialty finance companies and assets. When acquired, BlueMountain had over $15 billion of assets under management across corporate credit, asset-backed finance, and healthcare investments.

Assured Guaranty has also previously invested in other alternative investments, including private equity asset managers, and leveraged debt funds. These relatively small investments reflect the execution of an initiative to deploy funds from Assured Guaranty's operating companies, including AGM, that management deems excess capital. These investments are expected to be admitted assets under statutory accounting policies and standards. However, KBRA reviews each investment on a case by case basis with respect to the funds available to pay claims and applies haircuts in our financial model analysis to reflect the increased risk and lower liquidity of these assets. KBRA will continue to monitor the company's progress in building out its alternative investment strategy and any potential impacts on AGM's claims paying resources and risk profile.

Corporate Governance

The Board of Directors of AGL is responsible for the corporate governance of all Assured subsidiaries, including AGM, and is responsible for defining the business strategy for the entire organization.

The AGL Board consists of 10 members and, except for the Chief Executive Officer (CEO), who is a Board member, the Board considers all the other directors as independent according to the listing standards of the New York Stock Exchange. KBRA notes that all directors have extensive professional backgrounds and appropriate qualifications for the oversight of a financial institution of AGL's size and complexity. The roles of Chairman and CEO are separate. The Board members meet regularly without the presence of the CEO which, in KBRA's view, contributes to the Board's independence.

The Board carries out its responsibilities through the operation of seven committees: Audit, Compensation, Environmental and Social Responsibility (ESR), Finance, Nominating and Governance, Risk Oversight, and Executive. The CEO sits only on the Executive Committee, which meets between Board meetings exclusively in the event time sensitive matters arise that require Board deliberation and authority prior to the next scheduled meeting of the full Board. In 2018, all of the committees met at least four times, except for the Executive Committee which did not meet. The Board also conducts separate sessions to discuss current or emerging issues that might impact the business and meets quarterly to review progress towards meeting operational objectives.

In KBRA's view, a Board level committee that focuses exclusively on risk, such as AGL's Risk Oversight Committee, better positions a company to maintain a high level of focus on this area, one that is critically important for a financial guaranty insurance company.

AGM's Board of Directors is comprised of 11 members consisting of executive officers of AGM.

AGE's Board of Directors is comprised of seven members which includes two executive officers of AGM, two executive officers of AGE and three UK-based independent directors. All AGE directors have professional backgrounds and qualifications which KBRA considers appropriate to carry out the responsibilities of the board. AGE's board maintains two committees, Risk Oversight and Audit, which perform similar functions to these committees at the AGL level.

AGE Financial Support Agreements

AGE enjoys significant financial support from its parent company, AGM, through co-insurance, quota share and excess of loss reinsurance and a net worth maintenance agreement. These agreements are a significant factor in KBRA's rating of AGE.

Risk Management

Assured has established a risk management framework under the supervision of the Board's Risk Oversight Committee ("ROC"). The Risk Management Department is responsible for the oversight of the framework under the supervision of the Chief Risk Officer ("CRO") and the Portfolio Risk Management Committee ("PRMC"). The PRMC is a management level committee that includes the CEO, CRO, Chief Surveillance Officer, Chief Credit Officer, General Counsel, CFO, President of Assured Guaranty Re ("AG Re"), and the Executive Officer.

The Risk Management Department is responsible for providing the PRMC with research and data used to establish, monitor and reassess policies and procedures on a regular basis. The Risk Department is also responsible for the execution of policies established by the PRMC. The PRMC meets as needed, generally quarterly, to review the insured portfolio and market trends. All decisions made by the PRMC are reported to AGL's Risk Oversight Committee. This ensures that representatives of Assured's Board are adequately informed about risk positions and industry trends. These reporting mechanisms are intended to add discipline to the risk management process and enhance the ability of the Board and senior management to effectively execute company strategy.

The Risk Management Department prepares the Own Risk and Solvency Assessment ("ORSA"), the annual corporatewide risk appetite statement, which incorporates AGM, and is also responsible for Enterprise Risk Management across Assured. The ORSA report includes an analysis of economic capital which, in KBRA's view, is a robust and useful perspective to assess AGM's risk profile.

Surveillance

Surveillance of insured risk is well integrated with the risk management process across all Assured entities. Surveillance categorizes the company's exposures into one of six categories to determine how frequently credits are reviewed. Category one and two credits are considered performing and are generally reviewed on an annual or semiannual basis. Category three requires quarterly reviews. At Category four, the intensity of review increases further and typically requires the creation of a team that includes legal resources. Categories five and six are considered impaired, may require loss reserves and are monitored by the Workout Committees.

Written credit reports document the surveillance review. KBRA reviewed the surveillance reports for a portion of credits across multiple categories and sectors.

KBRA views the surveillance reporting process as comprehensive and as providing a robust mechanism to inform senior management about the condition of the insured portfolio.

RD 2: Insured Portfolio and Modeling Analysis

Insured Portfolio

All par numbers shown below are on a statutory basis as of September 30, 2019 and exclude bond purchases. Insured net par at AGM increased 0.6% since KBRA's last review (as of September 30, 2018). New business originations exceeded run-off as net par outstanding grew modestly to $115.0 billion. This offsets historical trends where portfolio amortization outpaced new business origination. While 37% of AGM's gross par is ceded to reinsurers ($67.6 billion), over 99% is to AGM affiliates Assured Guaranty Re Ltd., MAC (AA+/Stable) and AGC (AA/Stable).

Figure 2

AGM Portfolio (incl. AGE)		
Par Outstanding - 3Q19 ($ thousands)		
Assured Guaranty Re Ltd.	$ 51,845,672	28.4%
Municipal Assurance Corp.	12,353,220	6.8%
Assured Guaranty Corp.	2,974,746	1.6%
Other	416,921	0.2%
Ceded Par	$ 67,590,559	37.0%
Net Par	115,056,532	63.0%
Gross Par	$ 182,647,091	100.0%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

The insured portfolio of AGM consists primarily of U.S. public finance and international infrastructure obligations, with a de minimis amount of global structured finance obligations. The portfolio composition is shown in the figure 3 below. U.S. public finance exposures continue to represent the bulk of the insured portfolio, increasing overall by 3% and increasing as a percentage of total net par to 72%. Insured structured finance exposure has declined 22% from KBRA's last review. AGM has not written any structured finance business since the beginning of the credit crisis. Going forward, the international infrastructure segment of the portfolio could increase as a proportion of total insured portfolio as Assured steadily increases new business across its non-U.S. platform. Exposures within this segment tend to be long-dated and amortize more slowly than typical U.S. municipal credits. The weighted average internal rating of the total portfolio remains A-.

Figure 3

AGM Portfolio (incl. AGE)					
Net Par Outstanding ($ thousands)					
Segment	**3Q19**		**3Q18**		**% Chg.**
U.S. Public Finance	$ 82,479,144	71.7%	$ 79,828,166	69.8%	3.3%
International Infrastructure	30,025,641	26.1%	31,232,453	27.3%	-3.9%
Global Structured Finance	2,551,747	2.2%	3,272,971	2.9%	-22.0%
	$ 115,056,532	100.0%	$ 114,333,590	100.0%	0.6%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

Figure 4

AGM Portfolio (incl. AGE)					
Net Par Outstanding ($ thousands)					
Rating (1)	**3Q19**		**3Q18**		**% Chg.**
AAA	$ 1,640,536	1.4%	$ 1,654,367	1.4%	-0.8%
AA	10,026,191	8.7%	8,253,537	7.2%	21.5%
A	56,170,962	48.8%	56,984,468	49.8%	-1.4%
BBB	43,086,849	37.4%	42,219,913	36.9%	2.1%
BIG	4,131,994	3.6%	5,221,305	4.6%	-20.9%
	$ 115,056,532	100.0%	$ 114,333,590	100.0%	0.6%

Source: AGM statutory statements with adjustments for loss mitigation bonds.
(1) Reflects Assured internal rating category.

The portfolio distribution of sectors and ratings of AGM's insured portfolio are shown below in Figures 5-7. As new business originations have included more health care revenue and infrastructure exposures than in past years, the overall risk profile of the insured portfolio has increased marginally. This is reflected in Figure 5 as the health care sector and infrastructure sector have increased 32% and 11%, respectively. While these sectors generally exhibit more risk than a traditional G.O or tax-backed obligation, they represent a relatively small component of AGM's overall public finance portfolio. The international infrastructure segment decreased 4.0% and the global structured finance segment decreased 22% from last review. KBRA will continue to monitor any shifts in the portfolio from a credit risk perspective from the addition of new business writings and/or portfolio run-off which potentially could affect policyholders over the long-term. Generally, run-off will continue to mitigate legacy risks, particularly within the structured finance portion of the portfolio.

In 2018, virtually all of the insured international infrastructure exposure at Assured platform-wide was consolidated into AGE. While this portion of the portfolio decreased modestly from KBRA's last review, this sector is characterized by slower amortizing and longer-dated exposures.

Figure 5

U.S. Public Finance (incl. AGE)					
Net Par Outstanding ($ thousands)					
Disclosure Sector	**3Q19**		**3Q18**		**% Chg.**
General Obligation	$ 33,156,064	40.2%	$ 31,753,666	39.8%	4.4%
Tax-supported	19,983,333	24.2%	20,010,029	25.1%	-0.1%
Municipal Utility Revenue	13,274,722	16.1%	13,485,593	16.9%	-1.6%
Transportation Revenue	6,891,120	8.4%	6,643,434	8.3%	3.7%
Health Care Revenue	4,027,239	4.9%	3,053,862	3.8%	31.9%
Education/University	2,832,871	3.4%	2,697,199	3.4%	5.0%
Infrastructure Finance	1,242,418	1.5%	1,117,836	1.4%	11.1%
Housing Revenue	705,258	0.9%	687,146	0.9%	2.6%
Other Public Finance	342,113	0.4%	354,597	0.4%	-3.5%
Investor Owned Utilities	24,005	0.0%	24,805	0.0%	-3.2%
	$ 82,479,144	100.0%	$ 79,828,166	100.0%	3.3%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

U.S. Public Finance (incl. AGE)					
Net Par Outstanding ($ thousands)					
Rating [(1)]	**3Q19**		**3Q18**		**% Chg.**
AAA	$ 115,472	0.1%	$ 125,594	0.2%	-8.1%
AA	8,349,966	10.1%	7,729,732	9.7%	8.0%
A	45,746,284	55.5%	45,242,073	56.7%	1.1%
BBB	25,870,095	31.4%	24,021,727	30.1%	7.7%
BIG	2,397,327	2.9%	2,709,041	3.4%	-11.5%
	$ 82,479,144	100.0%	$ 79,828,166	100.0%	3.3%

Source: AGM statutory statements with adjustments for loss mitigation bonds.
(1) Reflects Assured internal rating category.

Figure 6

International Infrastructure (incl. AGE)					
Net Par Outstanding ($ thousands)					
Disclosure Sector	**3Q19**		**3Q18**		**% Chg.**
Infrastructure Finance	$ 12,602,201	42.0%	$ 14,206,438	45.5%	-11.3%
Regulated Utilities	11,355,172	37.8%	11,567,160	37.0%	-1.8%
Other Public Finance	6,068,268	20.2%	5,458,855	17.5%	11.2%
	$ 30,025,641	100.0%	$ 31,232,453	100.0%	-3.9%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

International Infrastructure (incl. AGE)					
Net Par Outstanding ($ thousands)					
Rating [(1)]	**3Q19**		**3Q18**		**% Chg.**
AAA	$ 924,184	3.1%	$ 836,026	2.7%	10.5%
AA	1,428,927	4.8%	195,468	0.6%	631.0%
A	10,372,577	34.5%	11,595,558	37.1%	-10.5%
BBB	16,656,818	55.5%	17,797,870	57.0%	-6.4%
BIG	643,136	2.1%	807,531	2.6%	-20.4%
	$ 30,025,641	100.0%	$ 31,232,453	100.0%	-3.9%

Source: AGM statutory statements with adjustments for loss mitigation bonds.
(1) Reflects Assured internal rating category.

Figure 7

Global Structured Finance (incl. AGE)					
Net Par Outstanding ($ thousands)					
Disclosure Sector	**3Q19**		**3Q18**		**% Chg.**
Residential Mortgages	$ 2,363,884	92.6%	$ 2,968,504	90.7%	-20.4%
Pooled Corporate Obligations	94,595	3.7%	95,865	2.9%	-1.3%
Consumer Receivables	51,422	2.0%	80,707	2.5%	-36.3%
Commercial Receivables	19,979	0.8%	23,130	0.7%	-13.6%
Other Structured Finance	17,841	0.7%	96,254	2.9%	-81.5%
Insurance Securitization	4,026	0.2%	8,510	0.3%	-52.7%
	$ 2,551,747	100.0%	$ 3,272,971	100.0%	-22.0%

Source: AGM statutory statements with adjustments for loss mitigation bonds.

Global Structured Finance (inc. AGE)					
Net Par Outstanding ($ thousands)					
Rating [(1)]	**3Q19**		**3Q18**		**% Chg.**
AAA	$ 600,880	23.5%	$ 692,747	21.2%	-13.3%
AA	247,298	9.7%	328,338	10.0%	-24.7%
A	52,101	2.0%	146,837	4.5%	-64.5%
BBB	559,936	21.9%	400,317	12.2%	39.9%
BIG	1,091,531	42.8%	1,704,733	52.1%	-36.0%
	$ 2,551,747	100.0%	$ 3,272,971	100.0%	-22.0%

Source: AGM statutory statements with adjustments for loss mitigation bonds.
(1) Reflects Assured internal rating category.

Portfolio Stress Analysis

In order to develop stress case losses across AGM's entire portfolio of $115 billion KBRA utilized a (i) Monte Carlo simulation and (ii) deterministic analysis for the (a) Puerto Rico exposures, (b) RMBS, and (c) distressed credits. Each of these approaches is discussed further below.

Monte Carlo Simulation Model

KBRA uses a Monte Carlo simulation model to quantify the amount of stress scenario claims within the consolidated AGM insured portfolio. KBRA views this as the most appropriate approach for modeling loss expectations for large, diverse portfolios typical of the financial guaranty industry.

The model uses the assigned rating and sector of each insured credit to simulate default and severity performance over the remaining life of the portfolio. KBRA's public finance and structured finance analysts assessed AGM's internal ratings by sector and made various adjustments. In this process, KBRA selected a cross-section of credits to review from various sectors within AGM's insured portfolio. To conduct these reviews, KBRA obtained AGM's internal surveillance reports for each credit and supplemented them with independent information sources.

The Monte Carlo model produces a series of 100,000 paths where each path assesses the probability of future defaults for each credit in each year of its remaining life. If a credit defaults, a sector-specific severity assumption is applied against the amount of debt outstanding at that point in time to calculate loss amount. The model generates 100,000 paths to produce a broad distribution of results utilized by KBRA to develop a stress scenario analysis. For AGM, the aggregate of all annual loss payments at the 97.9% confidence level, or that level associated with a AA+ rating, was $1,812 million over the life of the portfolio on a future value basis.

The total loss amounts produced by the Monte Carlo model also incorporates, in KBRA's opinion, conservative assumptions for refunding activity in AGM's insured municipal portfolio.

Puerto Rico

KBRA applied a discrete stress case scenario to AGM's $1.9 billion of Puerto Rico net par exposure. AGM's Puerto Rico exposure declined from $2.2 billion at last review from the resolution of COFINA as well as scheduled amortization. KBRA's Puerto Rico stress case assumes a complete moratorium on all debt service payments by the Commonwealth and all of its bond issuing entities for a period of eight years (i.e. AGM pays 100% of scheduled principal and interest for the next eight years, through 2027.) At the end of the moratorium period, beginning in year 9 and continuing for all subsequent years, KBRA applied loss severity assumptions to each Commonwealth bond issuer ranging from 7.5% to 30% as the remaining debt service payments come due. For all claim payments made by AGM during the moratorium period, KBRA assumes AGM receives recoveries of 35% (65% severity) over an eight-year period beginning in year 11.

The table below displays the applied stress case loss payout pattern for AGM's Puerto Rico exposure in five-year increments. The negative "losses" in the periods below represent the impact of 35% recoveries on claim payments made during the initial moratorium period. The total stress case loss amount ($1,268 million) equates to approximately more than half of AGM's current net par exposure to Puerto Rico on a present value basis.

Figure 8

Puerto Rico Stress Case Losses ($ in thousands)

Years				
2020-2024	**2025-2029**	**2030-2034**	**2035-2039**	**Total**
$ 1,068,852	677,332	(196,602)	(281,597)	$ 1,267,985

KBRA also analyzed the impact of substantially higher severity assumptions on AGM's claims paying resources and these greater levels of losses did not have a rating impact, in KBRA's view. However, should ultimate recoveries approach zero, there would be downward pressure on the rating.

Residential Mortgage Backed Securities and Other Distressed Credits

All material exposures within AGM's RMBS portfolio were analyzed on an individual transaction basis by KBRA's RMBS analytical team. KBRA obtained transaction detail at the CUSIP and insured tranche level from AGM which represented the individual insured positions outstanding as of September 30, 2019. For all insured, first-lien backed U.S. positions, the loan level data of the underlying collateral pool was updated and loan level losses were projected consistent with KBRA's U.S. RMBS Rating Methodology. Collateral pools supporting the majority of first-lien transactions were stressed by assuming economic conditions that included property value declines of 40% from current levels. KBRA's analysis applied these aggregated residential loan level losses to the insured tranches based on the waterfall provisions of the RMBS trusts and further allocated losses to AGM on those positions according to AGM's net exposure. The representation and warranty agreements AGM has with several financial institutions as well as projected subrogation recoveries were factored into this analysis on a transaction level basis and served to decrease the ultimate losses to AGM.

In addition, KBRA estimated discrete losses for a small number of other defaulted or severely impaired credits. In the financial model, combined net outflows for RMBS and other distressed credits totaled approximately $489 million on a future value basis.

Bond Insurer Financial Model

KBRA's bond insurer financial model ("model") calculates projected cash flows over a 35-year forecast period under assumed stress scenario conditions. KBRA then evaluates the outputs of the model from both a present and future value perspective to develop a comprehensive view of an insurer's overall financial strength.

The model starting point is AGM's Claims Paying Resources (defined in the "Claims Paying Resources" section below) which reflects the Company's beginning base of available invested assets. The model assumes that assets earn interest at Company's current yield levels, with some downward adjustment by KBRA based on tenor and average rating. This adjustment is intended to capture credit, interest rate and liquidity risks. The model also incorporates the Company's estimate of future installment premiums with a haircut by KBRA of 10%. For operating expenses, KBRA assumes the Company goes into run off immediately and, after some initial increases, expenses are assumed to decline sharply.

The model projects the ability of the Company to pay annual stress losses and other expenses as they come due through the 35-year forecast period. For AGM, the stress scenario losses (all on a future value basis) were the sum of (i) the aggregate annual losses generated in the loss profile KBRA developed from the tail distribution of the Monte Carlo simulation model of $1,812 million, (ii) Puerto Rico losses of $1,268 million, and (iii) distressed structured finance and other credit outflows of $489 million. KBRA notes the increase in stress losses from the Monte Carlo simulation reflects the impact of changes in the overall risk profile of the insured portfolio as the Company has modestly increased its exposure to health care and other sectors.

KBRA analyzes the outputs of the bond insurer financial model to evaluate the ability of a financial guarantor to pay projected claims and expenses over time on a future value basis. AGM is able to pay all claims and other expenses in this analysis with a comfortable asset balance remaining at the end of the 35-year forecast period.

Stress Capital Balance

In order to supplement its financial analysis, KBRA has developed an additional metric, the Stress Capital Balance (SCB), to provide a present value measure of capital adequacy. While an analysis of AGM's projected asset balances across the entire 35-year forecast period remains an important aspect of KBRA's review, an examination of capital adequacy in current (i.e. present value) terms provides an additional useful perspective for KBRA's credit assessment. As outlined in further detail in the Appendix, the SCB utilizes key components of the bond insurer financial model to calculate a metric that summarizes AGM's capital position at its current rating level.

Based on KBRA's stress scenario assumptions, AGM achieves a SCB in the range of $750-950 million a modest decline from KBRA's last review due to the capital impact of the BlueMountain transaction and the shift in the risk profile of the insured portfolio from new business origination.

In KBRA's opinion, these bond insurer financial model results are consistent with an insurance financial strength rating of AA+.

RD 3: Claims-Paying Resources and Financial Profile

Claims-Paying Resources

KBRA defines claims paying resources as the sum of unearned premium reserves, loss and loss adjustment reserves, contingency reserves, and policyholder's surplus. For AGM, KBRA deducts certain investments in affiliates, such as the surplus notes of AGC as well as AGM's equity investment in MAC because KBRA views these assets as illiquid and deeply subordinate.[2]

As of September 30, 2019, AGM's claims paying resources remained strong at $4.5 billion, down slightly from year end 2018. Leverage declined to 24x through 2018; however, at September 30, 2019, leverage increased marginally to 26x as new business originations have begun to outpace portfolio amortization. All things equal, this trend may increase leverage in the future.

[2] KBRA does reflect the projected future performance of the AGC surplus notes in accordance with their terms in our financial model because KBRA rates AGC at AA which is consistent with the view that AGC can satisfy scheduled interest on their surplus notes.

KBRA KROLL BOND RATING AGENCY

Figure 9

Select AGM Statutory Balance Sheet Data						
$ Thousands	**9/30/2019**	**12/31/2018**	**12/31/2017**	**12/31/2016**	**12/31/2015**	**12/31/2014**
Claims paying resources:						
Unearned premium reserves	$1,249,144	$1,251,420	$1,234,445	$1,155,247	$1,341,063	$1,438,865
Loss & LAE reserves	203,019	518,180	634,308	410,519	438,134	487,177
Contingency reserve	970,171	912,907	972,016	1,073,839	1,182,629	1,310,796
Policyholder surplus	2,472,842	2,533,492	2,253,871	2,321,005	2,440,809	2,266,850
Adjustments*	(439,608)	(485,800)	(450,997)	(583,399)	(776,269)	(704,657)
Total claims paying resources (KBRA definition)	**$4,455,568**	**$4,730,198**	**$4,643,642**	**$4,377,212**	**$4,626,366**	**$4,799,031**
Net statutory par outstanding (NPO)	$115,643,000	$115,555,000	$120,504,000	$113,955,000	$133,409,000	$151,320,000
Net statutory debt service outstanding (NDSO)	$182,205,000	$183,075,000	$191,884,000	$175,688,000	$206,779,000	$234,490,000
Leverage: NPO/Claims paying resources (X)	**26x**	**24x**	**26x**	**26x**	**29x**	**32x**
Leverage: NDSO/Claims paying resources (X)	**41x**	**39x**	**41x**	**40x**	**45x**	**49x**

Note: Unearned premium reserves exclude deferred ceding commission.

Source: AGM statutory statements and financial supplements with adjustments for loss mitigation bonds.

** Reflects investment in MAC and AGC surplus note since 2013; reflects investment in MAC surplus notes in 2013-2015 (fully repaid in 2Q16).*

Balance Sheet

AGM's balance sheet has remained relatively stable over the last several years with only minor changes in key asset and liability categories. Cash and short-term investments were elevated compared to prior years in anticipation of the BlueMountain acquisition.

Figure 10

AGM Statutory Balance Sheet						
$ Thousands	**9/30/2019**	**12/31/2018**	**12/31/2017**	**12/31/2016**	**12/31/2015**	**12/31/2014**
Bonds	$3,276,930	$3,757,648	$3,866,923	$4,074,774	$4,234,302	$4,331,217
Stocks (includes Investments in Affiliates)	1,073,714	1,127,050	899,863	539,194	674,889	619,149
Cash & short term investments	438,971	176,054	212,022	127,000	255,392	334,483
Other invested assets and receivables	331,324	362,634	393,478	371,616	471,565	516,163
Total cash and invested assets, net admitted	**$5,120,938**	**$5,423,386**	**$5,372,286**	**$5,112,584**	**$5,636,148**	**$5,801,011**
Investment income due and accrued	33,275	36,497	40,411	38,981	40,081	41,911
Deferred tax asset	21,152	24,773	50,418	156,992	91,893	93,697
Other assets	21,404	27,815	16,495	24,965	20,355	24,603
Total Assets, net admitted	**$5,196,769**	**$5,512,471**	**$5,479,610**	**$5,333,522**	**$5,788,476**	**$5,961,222**
Loss and LAE Reserves	203,019	518,180	634,308	410,519	438,134	487,177
Unearned Premium Reserve	1,249,144	1,251,420	1,234,445	1,155,247	1,341,063	1,438,865
Contingency reserve	970,171	912,907	972,016	1,073,839	1,182,629	1,310,796
Other liabilities	301,593	296,473	384,971	372,911	385,842	457,534
Total Liabilities	**$2,723,927**	**$2,978,979**	**$3,225,739**	**$3,012,517**	**$3,347,667**	**$3,694,372**
Common capital stock	15,000	15,000	15,000	15,000	15,000	15,000
Surplus Notes	-	-	-	-	-	25,000
Gross paid-in and contributed surplus	376,363	376,363	376,363	477,205	776,953	776,876
Unassigned Funds	2,081,479	2,142,129	1,862,508	1,828,800	1,648,856	1,449,974
Policyholder Surplus	**$2,472,842**	**$2,533,492**	**$2,253,871**	**$2,321,005**	**$2,440,809**	**$2,266,850**
Total Liabilities and Policyholder Surplus	**$5,196,769**	**$5,512,471**	**$5,479,610**	**$5,333,522**	**$5,788,476**	**$5,961,222**
Cash & short term assets/Total assets (%)	8.4%	3.2%	3.9%	2.4%	4.4%	5.6%
Bonds/Total assets (%)	63.1%	68.2%	70.6%	76.4%	73.2%	72.7%

Source: AGM Statutory Statements

Investments

The investment portfolio is dominated by high quality municipal and corporate bonds, with a smaller portion of lower quality RMBS and other structured finance bonds acquired by AGM as part of its loss mitigation strategy. As of September 30, 2019, the duration of the portfolio was 3.8 years. KBRA notes that AGM has allocated a small portion of its investment portfolio into riskier asset classes managed by BlueMountain in order to increase overall yield. KBRA will continue to monitor this shift in investment strategy and its overall impact on AGM's claims-paying resources.

Figure 11

AGM Investment Portfolio Composition (9/30/2019)			
$ Millions	Amortized		Pre-tax
Sector	Cost	% of portfolio	Book Yields*
U.S. State and Political Subdivisions	$2,286	42%	3.53%
U.S. Government	38	1%	2.93%
Corporate Securities	1,214	23%	2.75%
RMBS	431	8%	5.58%
CMBS	212	4%	3.42%
Asset-backed securities	253	5%	3.93%
Non-U.S. Government	210	4%	1.39%
Total Fixed Maturities	**$4,644**	**86%**	**3.43%**
Short term investments and cash	739	14%	1.80%
Grand Total	**$5,383**	**100%**	**3.23%**

Source: AGM financial supplement

** Cash excluded from total yield calculations.*

Income Statement

AGM reported statutory net income of nearly $240 million for the first nine months of 2019. The company continues to generate a steady stream of earnings from the run-off of its insured portfolio and consistent investment income. AGM's expense ratio has trended upwards in 2019 as gross premium volume continues to fluctuate reflecting the ongoing challenges in new business origination caused by persistently low interest rates and credit spreads.

Figure 12

Select AGM Statutory Income Data						
$ Thousands	9/30/2019	12/31/2018	12/31/2017	12/31/2016	12/31/2015	12/31/2014
Gross Premiums Written (GPW)	$152,738	$254,775	$332,742	$219,959	$198,604	$245,042
Net Premiums Written	108,106	187,681	261,821	143,477	141,842	173,887
Net premiums Earned (NPE)	99,214	156,686	202,426	295,799	222,958	203,133
Loss & loss adjustment expenses (L&LAE)	(45,020)	44,607	332,228	103,022	132,941	(120,663)
Other underwriting expenses	71,981	90,246	114,922	84,226	74,201	86,508
Total losses & operating expenses	26,961	134,852	447,150	187,248	207,142	(34,154)
Net underwriting gain (loss)	72,253	21,833	(244,724)	108,551	15,816	237,287
Net investment gain	182,178	142,397	181,756	155,488	199,410	159,261
Other income, net gain (loss)	10,101	39,785	299,990	29,055	55,330	9,243
Earnings Before Taxes	264,532	204,015	237,022	293,095	270,556	$405,791
Net Income (Loss)	$239,933	$172,207	$152,389	$190,726	$216,695	$303,884
Dividends Paid	$186,900	$170,500	$196,000	$246,600	$214,800	$160,000
Expense ratio (Underwriting exp. / GPW)	47.1%	35.4%	34.5%	38.3%	37.4%	35.3%
Loss ratio (L&LAE / NPE)	-45.4%	28.5%	164.1%	34.8%	59.6%	NM
Combined ratio	1.8%	63.9%	198.7%	73.1%	97.0%	NM
Return on Surplus (ROS) Pre-tax basis *	14.1%	8.5%	10.4%	12.3%	11.5%	35.8%
Return on Surplus (ROS) After-tax basis *	12.8%	7.2%	6.7%	8.0%	9.2%	26.8%

Source: AGM statutory statements

** Return on Surplus was annualized for 3Q2019.*

AGE Financial Position

As of December 31, 2018, AGE reported shareholder's funds of £771 million, an increase of £218 million from year-end 2017 reflecting the culmination of the merger of other Assured European entities into AGE. Claims paying resources at year-end 2018 were nearly £1.5 billion, implying a relatively low gross par leverage of 16x. Unearned premium balances are high due the large upfront premium that is typical for international infrastructure transactions. Due to the high level of reinsurance on the portfolio, AGE has reported negligible net earnings over the last several years.

Figure 13

Summary AGE Balance Sheet Data					
£ Thousands	**12/31/2018**	**12/31/2017**	**12/31/2016**	**12/31/2015**	**12/31/2014**
Total Assets	£1,877,475	£1,318,460	£1,025,846	£1,103,352	£1,152,186
Claims paying resources:					
Provision for unearned premium	£665,701	£395,683	£422,271	£471,121	£500,023
Technical provisions	43,626	16,241	21,028	21,731	28,179
Shareholder's funds	770,983	553,836	205,519	194,099	191,541
Total claims paying resources (KBRA definition)	£1,480,310	£965,760	£648,818	£686,951	£719,743
Gross par outstanding (GPO)	24,000,000	14,000,000	14,600,000	15,000,000	
Net par outstanding (NPO)	10,000,000	500,000	300,000	300,000	
Leverage: GPO/Claims paying resources (X)	**16x**	**14x**	**23x**	**22x**	**0x**
Leverage: NPO/Claims paying resources (X)	**7x**	**1x**	**0x**	**0x**	**0x**

Source: AGE financial statements. Prepared in accordance with UK GAAP.

Dividends

AGM's ability to pay dividends is subject to statutory limitations imposed by New York insurance law, which provides that a New York financial guaranty insurer generally cannot pay a dividend except out of the portion of the insurer's earned surplus that represents the net earnings, gains or profits which that insurer has not otherwise utilized. Additionally, without regulatory approval, a New York financial guaranty insurer may not pay dividends in aggregate during any 12-month period in excess of the lesser of 10% of its surplus and 100% of its adjusted net investment income for such 12-month period. The maximum amount distributable from AGM as ordinary dividends in 2019 is approximately $220 million, of which $187 million was paid in the first nine months of 2019.

AGE is authorized by the Prudential Regulatory Authority (PRA) and regulated by the PRA and the Financial Conduct Authority (FCA). The PRA assesses AGE's capital adequacy within the European Solvency II framework which specifies that insurers are subject to a Solvency Capital Requirement (SCR) which is calculated based on standardized formulas to determine the capital necessary to support the risks underwritten by the company. Through active dialogue with the company, the PRA provides feedback and guidance on any management plans to augment or reduce AGE's capital resources. In general, AGE may pay dividends to its parent company, AGM, provided such actions do not reduce AGE's capital base below the sum of its SCR plus an additional margin determined by AGE.

Reinsurance

AGM, jointly with AGC and MAC, benefits from an aggregate excess of loss reinsurance facility with an unaffiliated reinsurer rated no lower than AA- or who has posted collateral. The current facility attaches when the group's aggregate combined net losses exceed $800 million on investment grade U.S. public finance exposures as of September 30, 2017. The facility covers $180 million of the next $400 million of losses in excess of the attachment point with AGM, AGC and MAC jointly retaining the remaining $220 million. This agreement became effective on January 1, 2018, and replaced a similar excess of loss facility, which expired December 31, 2017. The new agreement reflects a lower attachment point and less reinsurance coverage, along with lower annual premiums, than the prior facility. Because of its joint nature and the potential for losses at AGC or MAC to limit the support available for AGM, this facility is not incorporated in KBRA's rating assessment of AGM. AGE is not party to this reinsurance agreement.

Sutton Capital Trusts

In June 2003, AGM established four Custodial Trusts (the Trusts) which issued an aggregate of $200 million of preferred trust securities. The proceeds of the issuance were invested in highly rated commercial paper. AGM entered into an agreement with the Trusts whereby it is entitled in its sole discretion to deliver Preferred Stock to the Trusts in exchange for cash up to the $200 million held in the Trusts.

Several other financial guarantors successfully utilized similar capital support facilities during the credit crisis to augment their claims paying resources. In light of the very liquid investments in the Trusts and the associated robust funding mechanism, KBRA includes $200 million of capital support from the Trusts in its financial model analysis of AGM. AGE does not have access to any similar soft capital facilities.

Appendix – Stress Capital Balance

KBRA defines the Stress Capital Balance (SCB) as the amount of the present value of projected assets minus the present value of projected liabilities as captured within the model. KBRA calculates the two components of the SCB as follows:

- The current present value of assets reflects the discounted CPR for the Company at the end of year 12 as projected within the financial model. In addition, any remaining installment premium beyond year 12 (i.e. year 13 and after) is discounted to a current present value and added to the discounted year 12 CPR to determine the total current asset position. The discount rate for both components of assets is the investment yield utilized within the model.
- The current present value of liabilities reflects the discounted remaining projected stress case losses beyond year 12 (i.e. year 13 and after). Operating expenses for years 13 through 18 are also discounted and added to the present value of claims to determine the total current liability position. The discount rate for both components of liabilities is the investment yield utilized within the model plus an increment designed to capture additional risk associated with the liabilities. The increment is currently 50 basis points and may be adjusted by KBRA from time to time.

Please see the following sample SCB calculation using illustrative data.

Illustration of Stress Scenario Capital Balance Calculation

	Beginning CPR:	100,000		
	Investment Yield:	2.50%		

Year	Stress Scenario Claims	Expenses	Installment Premiums	CPR
0				100,000
1	4,000	1,000	750	
2	3,950	1,030	730	
3	3,900	1,061	710	
4	3,850	902	690	
5	3,800	767	670	
6	3,750	652	650	
7	3,700	554	630	
8	3,650	471	610	
9	3,600	400	590	
10	3,525	340	570	
11	3,450	289	550	
12	3,375	246	530	82,763
13	3,300	221	510	
14	3,225	199	490	
15	3,150	179	470	
16	3,075	161	450	
17	3,000	145	430	
18	2,925	131	410	
19	2,850		390	
20	2,775		370	
21	2,700		350	
22	2,625		330	
23	2,550		310	
24	2,475		290	
25	2,400		270	
26	2,200		250	
27	2,000		230	
28	1,800		210	
29	1,600		190	
30	1,400		170	
31	1,200		150	
32	1,000		120	
33	800		75	
34	600		50	
35	400		25	

A	61,539	PV of Year 12 CPR
B	3,960	PV of Installment (years 13-35)
C=A+B	65,499	PV of Assets (Discounted at Investment Yield)
D	45,005	PV of Claims (years 13-35)
E	1,021	PV of Expenses (years 13-18)
F=D+E	46,026	PV of Liabilities (Discounted at Yield +50 bp)
C-F	19,473	**Stress Capital Balance (SCB)**