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CREDIT OPINION
1 October 2018

Update

Rate this Research

Radian Guaranty Inc.

Update following upgrade to Baa2 IFS rating

RATINGS

Radian Guaranty Inc.

Domicile	Philadelphia, Pennsylvania, United States
Long Term Rating	Baa2
Type	Insurance Financial Strength
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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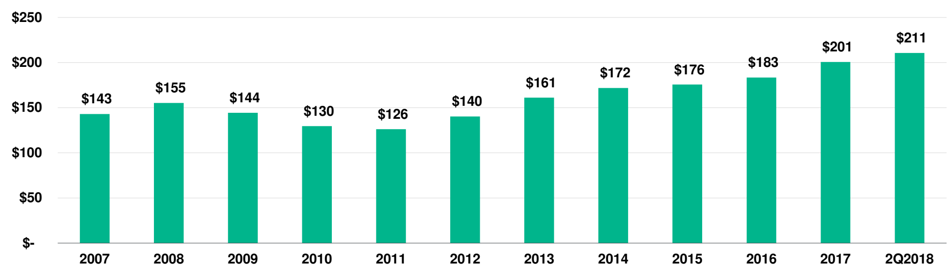
Summary

Radian Guaranty Inc. (Radian Guaranty) is the principal operating subsidiary of Radian Group Inc. (Radian Group – senior debt Ba2 stable), a US insurance holding company whose subsidiaries provide mortgage insurance to lenders and borrowers primarily for high LTV mortgage loans purchased by Fannie Mae and Freddie Mac (the GSEs). At Q2 2018, Radian Group had approximately $211 billion of direct primary insurance in force. Radian also owns several businesses that provide mortgage and real estate services.

Radian Guaranty's Baa2 insurance financial strength rating reflects its strong position in the US mortgage insurance market, its diverse customer base, comfortable cushion in its compliance with the GSEs' capital standards (PMIERs) and recent actions to extend its debt maturity profile and increase liquidity at the holding company. These strengths are tempered by the commodity-like nature of the mortgage insurance product the sensitivity of the mortgage insurance business model to economic conditions and the potential for price competition in the US mortgage insurance market.

Exhibit 1

Radian Group: Direct Primary Insurance in Force ($ Bil.)



Source: Company Reports

Credit strengths

» One of the market leaders in the US private mortgage insurance sector

» Diverse customer base of lenders mitigates some of the challenges in a commodity business

» High quality post-2008 business written continues to enhance capital and profitability

» GSE's risk-based capital requirements (PMIERs) increases protection for policyholders and creditors

Credit challenges

» Lack of unrestricted dividend capacity and significant debt maturities through 2021

» Mortgage insurance is largely a commodity business

» Sector's fortunes are greatly influenced by lenders, the GSEs, public policy decisions, and other uncontrollable variables, including competition from the FHA and VA

» Price competition in the private US mortgage insurance market could adversely impact profitability

Outlook

On September 21, 2018, Radian's ratings were upgraded by one notch, reflecting the company's improving financial profile, including the firm's progress in reducing its financial leverage and improving its debt maturity profile over the past several quarters. We expect the firm to continue to improve its financial leverage metrics over the next year through organic capital generation in the favorable environment for mortgage credit. The outlook for the ratings is stable.

Factors that could lead to an upgrade

» Continued improvements in the company's debt laddering structure

» Adjusted financial leverage in the 20% range

» Sustained PMIERs compliance with the maintenance of a comfortable capital adequacy buffer

» Improved holding company profitability metrics with returns on capital consistent with those of its peers

Factors that could lead to a downgrade

» Non-compliance with PMIERs

» Decline in shareholders' equity (including share repurchases) by more than 10% over a rolling twelve month period

» Deterioration in the parent company's ability to meet its debt service requirements

» Adjusted financial leverage above 30%

Key Indicators

Exhibit 2
Radian Guaranty Inc.

Radian Guaranty Inc. [1]	2017	2016	2015	2014	2013
New Insurance Written	53,905	50,530	41,411	37,349	47,255
Total Primary Insurance in Force	200,724	183,450	175,584	171,810	161,240
Total Primary Risk in Force	51,288	46,741	44,627	43,239	40,017
Net Income	121	308	287	960	-197
Total Shareholders' Equity	3,000	2,872	2,497	2,097	940
Avg. NIW as a % of Total Industry NIW	10.3%	9.4%	8.8%	11.8%	11.6%
Prime loans % RIF	96.6%	95.1%	93.9%	92.6%	90.8%
Client Concentration	6.3%	8.7%	11.3%	14.6%	20.6%
Geographic Concentration	26.6%	26.9%	26.8%	27.1%	27.1%
Adjusted Risk to Capital	14.0x	16.5x	18.2x	21.5x	29.8x
Return on Capital (GAAP)	3.0%	7.9%	8.1%	36.8%	-20.7%
Combined Ratio (SAP) [2]	50.4%	60.4%	49.3%	62.4%	111.7%
Cash Flow Coverage	0.0x	0.0x	0.0x	0.0x	0.0x
Adjusted Financial Leverage	26.5%	28.0%	33.7%	36.7%	50.6%
Total Leverage	26.5%	28.0%	33.7%	38.3%	52.9%

[1] Information based on US GAAP financial statements of Radian Group Inc. as of Fiscal YE December 31
[2] Information based on SAP financial statements of Radian Guaranty Inc. as of Fiscal YE December 31
Source: Company Reports, Moody's Investors Service

Profile

Radian Group is a leading provider of private mortgage insurance in the United States, primarily through Radian Guaranty. The company also provides risk management products and real estate services to financial institutions through Clayton and other non-regulated subsidiaries. At Q2 2018, Radian had approximately $211 billion of direct primary insurance in force and shareholders' equity of approximately $3.2 billion.

Detailed credit considerations

Moody's rates Radian Guaranty Baa2 for insurance financial strength, which is in line with the adjusted rating indicated by Moody's insurance financial strength rating scorecard.

Insurance Financial Strength Rating

The key factors currently influencing the ratings and outlook are:

Market position: First tier market share and diverse customer base of lenders

Radian Guaranty's Baa score for market position reflects its strong market presence in the US mortgage insurance market. During 6M2018, Radian Guaranty's private MI market share was approximately 20.2% (Full year 2017: 20.0%), which places Radian Guaranty in the first tier of US mortgage insurers.

Radian Guaranty has a diverse customer base of lenders, including many small and regional lenders that are sometimes more flexible in their dealings with insurers than the larger banks and mortgage lenders.

Radian's Mortgage and Real Estate Services business segment (primarily through Clayton) provides outsourced services, information-based analytics and specialty consulting for buyers and sellers of, and investors in, mortgage loans, real estate-related loans and securities and other asset-backed securities. In Moody's opinion, these operations complement Radian's MI business and provide the firm with useful insights into current housing and real estate market conditions.

While we view Radian's market position to be in the top tier of US mortgage insurers, our Baa adjusted score is lower than the A score in the rating scorecard due to the commodity-like nature of the product and the increasing presence of reinsurance and alternative capital in the mortgage risk transfer market.

Housing market attributes: Good demand for private mortgage insurance amid a favorable housing market environment

We assign the same score (currently A on an adjusted and unadjusted basis) for this rating factor to all of our rated US mortgage insurers.

I. Demand for mortgage insurance

The private mortgage insurance (PMI) industry is well established in the US with PMIs benefiting from the GSEs' requirement, under their federal charter, to use credit enhancement on mortgages with loan-to-value (LTV) in excess of 80%. During 2017, the PMI industry's market share of insured loans was approximately 39%, up significantly from a low of 15% in 2009, but still well below the 77% achieved in 2007.

PMIs' franchises may come under pressure as a result of housing market reform. A contemplated narrower role for, or termination of, the GSEs would reduce or eliminate the MIs' core franchise, forcing them to compete against other sources of mortgage credit enhancement. While the timing and extent of housing finance reform could affect demand for mortgage insurance, PMIs currently benefit from the slow pace of GSE reform, which maintains the current status-quo.

The GSE capital standards under PMIERs require PMIs to hold significantly more capital relative to their risk-in-force, than was the case under the prior GSE capital requirements, or relative to capital levels required by state insurance regulators. While the PMIERs financial requirements are stringent, particularly for legacy PMIs, they provide a standardized risk-based approach to capital adequacy, and position the PMIs as viable counterparties and providers of private capital to the US housing finance market. Overall, we consider the PMIERs to be credit positive for the PMI industry.

II. Generic loan attributes

The score reflects the continued tight mortgage underwriting standards, the partial recourse nature of mortgage lending and good servicing practices in the US. Since the financial crisis, US PMIs have been writing business almost exclusively in the prime, first-lien segment of the mortgage market. We expect underwriting standards to remain fairly conservative despite some anticipated loosening as the industry recaptures market share from the FHA, the FHFA takes steps to encourage lenders to originate loans across a broader range of credit profiles, and purchase originations, which tend to be with lower credit quality borrowers, outpace refinance originations.

Insured mortgage loans in the US are typically long-term, fixed-rate products with partial recourse to the borrower. While residential mortgage loans in the US are secured by the underlying property, lenders generally have no recourse beyond the property itself. The mortgage insurers also insure a material amount of high LTV loans, though their >95% LTV new production has greatly declined since 2009. Historically, exposure to higher LTV loans has made mortgage insurers particularly vulnerable to housing downturns.

III. Housing market conditions

The score reflects our view that the current US housing finance environment is positive for mortgage insurers. Historically low interest rates and moderate house price appreciation have contributed to strong housing affordability metrics, which despite some weakening, remain substantially above the long-term average, and should be resilient to a measured return to more normalized interest rates. In addition, expectations for macroeconomic fundamentals, including moderate GDP growth, and continued improvement in employment, support a stable underlying macroeconomic environment in the US.

In addition to favorable housing and macroeconomic conditions, the sector could benefit from certain demographic factors. The below-trend homeownership rate, particularly amongst a younger population, has caused the build-up of potential homeowners, and an expected pent-up demand for homes. A stronger US economy, with better prospects for employment, and increased availability of mortgage credit are two key factors that could contribute to an increase in the homeownership rate. PMIs would directly benefit from such a scenario since much of the pent-up demand for housing will be driven by first-time homebuyers that are typical users of mortgage insurance.

Capital adequacy: Improving capital adequacy with comfortable PMIERs cushion

Radian Guaranty's risk-adjusted capital adequacy continues to improve as the company's higher risk legacy exposures amortize. The company has made significant use of reinsurance over the past several years to manage its capital requirements under the PMIERs, which also improves its capital adequacy metrics, but results in some degree of dependence on third-party capital.

Radian Guaranty has a comfortable PMIERs cushion. As of Q2 2018, the company had available assets of approximately $3.7 billion vs. required assets of $3.3 billion, resulting in a cushion of approximately 15% of required assets. The firm also maintains strong liquidity at the holding company that could be used to increase available assets at the operating company for PMIERs compliance purposes.

Profitability: Profitability improving as legacy business shrinks

Radian Guaranty's Baa score for profitability reflects its diverse customer base and improving profitability metrics balanced by our view of the sector's historical cyclicality and the commoditized nature of the MI product. We see Radian Guaranty's diverse customer base as a feature that could help mitigate competition with other MIs. Its customer base includes many small and regional lenders that are more flexible in their dealings with insurers than the large banks.

Profitability will be adversely impacted by the new round of premium rate cuts that took effect in June 2018. However, we believe it will take a couple of years for new business written at lower premium rates to make a significant impact on overall realized premiums. Even with the rate cuts, we expect the US mortgage insurers to continue to post strong returns due to the run-off of legacy books, which lowers incurred losses, and the favorable macro-economic environment which is expected to keep defaults on more recent vintage loans low.

During 2017, Radian Group reported net income of approximately $121 million (2016: $308 million), which was adversely impacted by a $103 million charge associated with the recently enacted US tax legislation, as well as a $131 million (after-tax) write-down of goodwill and other intangible assets in its Mortgage and Real Estate Services segment. For the first six months of 2018, Radian Group reported net income of approximately $323 million.

We lower the adjusted score for profitability to Baa from the unadjusted score of A to account for the cyclicality of the mortgage insurance business model and increased competition in the market.

Financial flexibility: Deleveraging and improved debt laddering has improved financial flexibility

Radian's improved liquidity at the holding company and the deleveraging that has occurred over the past several years are credit positive. During 2017, Radian successfully extended its debt maturity profile through a tender offer financed by the sale of $450 million of senior notes due 2024 in order to lower interest expense and reduce refinancing risk over the next several years, when a significant portion of the company's debt matures. Upcoming debt maturities (carrying amount) include: $158 million due in 2019, $232 million due in 2020 and $196 million due in 2021. Radian's current run-rate annual interest expense is approximately $55 million.

We raise the adjusted score for financial flexibility to Baa from the unadjusted score of Ba to account for the firm's tax, interest and expense sharing agreement and further expected improvements in the company's financial and total leverage metrics over the next year.

Liquidity analysis

Radian Guaranty currently has no unrestricted dividend capacity due to its large negative unassigned surplus balance (Q2 2018: -$737 million), but the firm is able to access funds at the operating company outside of ordinary dividends through a tax, interest and expense sharing agreement. As of Q2 2018, Radian Group had immediately available unrestricted cash and liquid investments of approximately $202 million and also had access to a $225 million revolving credit facility (currently undrawn).

Structural considerations

The three notch difference between the parent's Ba2 senior debt rating and Radian Guaranty's Baa2 financial strength rating is Moody's standard notching for US insurance holding companies.

Methodology and scorecard

Exhibit 3

Radian Guaranty Inc.

Financial Strength Rating Scorecard [1][2]	Aa	A	Baa	Ba	<Ba	Score	Adjusted Score
Factor 1: Market Position (20%)						**A**	**Baa**
Avg. NIW as a % of Total Private & FHA NIW			9.8%				
Prime Loans (% of RIF)	96.6%						
Client Concentration		6.3%					
Geographic Concentration		26.6%					
Factor 2: Housing Market Attributes (25%)						**A**	**A**
Demand for Mortgage Insurance			x				
Generic Loan Attributes		x					
Housing Conditions		x					
Factor 3: Capital Adequacy (30%)						**A**	**Baa**
Adjusted Risk-to-Capital Ratio		14.0x					
Factor 4: Profitability (15%)						**A**	**Baa**
Return on Capital (after-tax) [3]			7.0%				
Combined Ratio		66.8%					
Factor 5: Financial Flexibility (10%)						**Ba**	**Baa**
Cash Flow Coverage [3]					0.0x		
Adjusted Financial Leverage [3]			26.5%				
Total Leverage [3]			26.5%				
Operating Environment						Aaa - A	Aaa - A
Aggregate Profile						**A3**	**Baa2**

[1] Information based on SAP financial statements as of Fiscal YE December 31
[2] The Scorecard rating is an important component of the company's published rating, reflecting the stand-alone financial strength before other considerations (discussed above) are incorporated into the analysis
[3] Information based on US GAAP financial statements of Radian Group Inc. as of Fiscal YE December 31
Source: Company Reports, Moody's Investors Service

Ratings

Exhibit 4

Category	Moody's Rating
RADIAN GUARANTY INC.	
Rating Outlook	STA
Insurance Financial Strength	Baa2
RADIAN GROUP INC.	
Rating Outlook	STA
Senior Unsecured	Ba2

Source: Moody's Investors Service

Moody's related publications

Sector Comments / Sector In-Depth Reports

- Mortgage Insurers – US: 2Q 2018: Strong performance in line with positive outlook (August 2018)
- Mortgage Insurance - US: Premium rate cuts highlight competitive pressures, a credit negative, April 2018
- Mortgage Insurance - US: Arch, Freddie Mac pilot program targets private capital to grow risk transfer market, April 2018
- Mortgage Insurers - US: Strong Q4 2017 earnings reflect positive conditions for mortgage credit, March 2018
- Tax Reform US: Corporate tax cut is credit positive, while effects of other provisions vary by sector, December 2017

Industry Outlook

- Mortgage Insurance - US: Positive outlook reflects supportive economic, housing market conditions, November 2017

Rating Methodology

- Rating Methodology for Mortgage Insurers, April 2016

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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