

## CREDIT OPINION

5 February 2016

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### RATINGS

#### RADIAN GUARANTY INC.

Domicile	Philadelphia, Pennsylvania, United States
Long Term Rating	Baa3
Type	Insurance Financial Strength
Date	28 Jan 2016
Outlook	Stable
Date	28 Jan 2016

Please see the ratings section at the end of this report for more information.

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## Radian Guaranty Inc.

### Summary Rating Rationale

Radian Group Inc. is a US insurance holding company whose subsidiaries provide mortgage insurance to lenders and borrowers, including insuring high loan-to-value mortgages purchased by Fannie Mae and Freddie Mac (the "GSEs"). Radian also owns several businesses that provide mortgage services.

The Baa3 financial strength rating of the principal operating subsidiary, Radian Guaranty Inc., reflects its relatively diverse customer base, compliance with the GSEs' capital standards (the "PMIERS"), and recent actions to spread out its debt maturity profile to alleviate pressures on holding company liquidity. However, the parent's significant debt leverage (~33% adjusted debt-to-capital as of 12/31/15) and an unresolved IRS tax dispute continue to weigh on Radian Guaranty's rating. We also expect more price competition in a crowded, commoditized market in 2016-17.

The parent's Ba3 senior debt rating is based on standard notching from the principal operating company's financial strength rating.

### 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 new business written since the 2007-08 crisis continues to enhance capital and profitability;
- » GSE's risk-based capital requirements increases protection for beneficiaries and creditors.

### Credit Challenges

- » High debt leverage;
- » Unresolved IRS tax dispute;
- » Mortgage insurance is largely a commodity business;
- » Sector's fortunes are greatly influenced by lenders, the GSEs, public policy decisions, and other uncontrollable variables;
- » Competition from FHA and VA;
- » Sector is still fighting to restore market credibility after 2007-08 financial crisis.

## Rating Outlook

The rating outlook is stable.

## What to Watch For

- » Additional steps to extend debt maturities to better match dividend capacity from operating subsidiaries;
- » We expect more competition within the crowded mortgage insurance market in the next 12-18 months;
- » IRS tax dispute (see Factor 3, Capital Adequacy, below).

## Factors that Could Lead to an Upgrade

- » Better alignment of the parent's debt maturity profile to Radian Guaranty's expected dividend capacity and/or reduction of debt at the parent;
- » Comfortable compliance with PMIERS;
- » More clarity about the range of potential outcomes in the group's tax dispute with the IRS.

## Factors that Could Lead to a Downgrade

- » Non-compliance with PMIERS;
- » Deterioration in the parent company's ability to meet its debt service requirements;
- » An adverse outcome on the IRS tax dispute that is significantly beyond the amount that has already been placed on deposit or held in reserves.

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## Key Indicators [1]

Radian Guaranty, Inc.

	2014	2013	2012	2011	2010
Avg NIW as a % of Total Private & FHA NIW	11.7%	12.1%	12.9%	8.7%	4.2%
Prime Loans (% of RIF) [2]	93.3%	91.5%	88.3%	84.7%	82.6%
Client Concentration (Top 3 Clients as a % of IIF) [2]	18.0%	20.6%	25.4%	32.2%	35.4%
Geographical Concentration (Top 3 State as % of IIF) [2]	27.1%	27.1%	25.0%	26.1%	26.5%
Adjusted Risk-to-Capital Ratio [3]	27.7x	31.7x	37.7x	37.0x	29.4x
Return on Capital [4]	36.7%	-20.7%	-62.8%	29.5%	-192.8%
Combined Ratio [5]	62.4%	111.7%	155.8%	217.2%	232.3%
Cash Flow Coverage	0.0x	0.0x	0.0x	0.0x	0.0x
Adjusted Financial Leverage [4]	37.0%	50.6%	48.8%	42.2%	54.1%
Total Leverage [4]	38.6%	52.9%	52.4%	48.0%	64.1%

[1] Data based on mix of US statutory financials for Radian Guaranty Inc. and GAAP financials for consolidated group.

[2] Company reports.

[3] Statutory capital.

[4] US GAAP for consolidated group.

[5] US statutory financials.

## Notching Considerations

The three notch difference between the parent's Ba3 senior debt rating and Radian Guaranty's Baa3 financial strength rating is Moody's standard notching for US insurance holding companies.

## Detailed Rating Considerations

The scorecard on the last page and discussion below summarize the factor scores that make up the Baa3 financial strength rating of Radian Guaranty.

### MARKET POSITION: Baa - FIRST TIER MARKET SHARE REFLECTS DIVERSE CUSTOMER BASE OF LENDERS AND SINGLE PREMIUM STRATEGY

Radian Guaranty's Baa score for market position reflects its first-tier market share alongside United Guaranty and MGIC. Its aggressive growth strategy in single premium policies has been a major contributor to its market share but, for such business written after 12/31/15, would increase capital requirements. The PMIERS impose a higher risk charge on lender-paid policies, which include most single premium policies, in comparison with borrower-paid monthly premium policies.

Radian Guaranty has a relatively diverse customer base of lenders, including many small and regional lenders that are more flexible in their dealings with insurers than the large banks. (Some of the large banks and lenders want a common price from all insurers and merely allocate business randomly and, sometimes, pro rata to insurers.)

### HOUSING MARKET CONDITION: A - GOOD DEMAND FOR PRIVATE MORTGAGE INSURANCE AMID A FAVORABLE HOUSING ENVIRONMENT

#### I. Demand for Mortgage Insurance: Baa

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%. The proportion of mortgage originations insured by private and government-sponsored insurers (i.e., FHA and VA) has increased to approximately ~35% in 9M15 from 30% in 2009. In addition, as freshly capitalized PMIs enter the market, and legacy PMIs recover from the 2008-09 financial crisis, they continue to recapture market share from the FHA. The PMI industry's market share of insured loans was ~35% in 9M15, significantly up from a low of 15.4% in 2009, but still below the 77.3% 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, that maintains the current status quo.

The 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. In addition, the PMIERS are a risk-based capital standard, with meaningfully higher capital required to support legacy exposures. As a result, we expect to see some differentiation in profitability between legacy PMIs and the more recent entrants. While the PMIERS financial requirements are onerous, particularly for legacy PMIs, they strengthen the industry's capital adequacy significantly, and position 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: A

The score reflects the continued tight mortgage underwriting standards, the partial recourse nature of mortgage lending and improving 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 LTV >95% new production has greatly declined since 2009. Historically, exposure to high LTV loans has made mortgage insurers particularly vulnerable to housing downturns.

As property prices have increased, borrowers' equity positions have improved, potentially reducing default rate and loss severities. During the housing crisis, the US mortgage servicing industry experienced problems with delays in collections, loan modifications and foreclosures, and bad practices such as shoddy recordkeeping. Lender practices have improved, driven in part by greater regulatory oversight, including by the Consumer Financial Protection Bureau (CFPB).

#### III. Housing Market Conditions: A

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.

While moderate house price appreciation and strong affordability is positive for the sector, overall, it should be considered in the context of the sector's exposure to legacy business, some of which is still in a negative equity position, and benefits more from strong house price appreciation. PMIs with meaningful legacy books remain exposed to a somewhat tepid housing recovery.

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 PMI.

#### **CAPITAL ADEQUACY: Baa – PMIERS COMPLIANT BUT AN UNRESOLVED IRS TAX DISPUTE AND HIGH DEBT LEVERAGE ARE OVERHANGS**

Radian Guaranty's Baa score for capital adequacy reflects our expectation that it will continue to comply with the capital standards of Fannie Mae and Freddie Mae. Helped by its previous sale of Radian Asset Assurance and a temporary surplus note issued to the parent, Radian Guaranty is currently compliant with the PMIERS.

However, an unresolved IRS tax dispute and significant debt leverage remain overhangs. The tax dispute relates to the group's treatment of the flow-through income and loss from an investment in a portfolio of residual interests of Real Estate Mortgage Investment Conduits ("REMICs") between 2000-07. An initial settlement was agreed to by the IRS rank and file but ultimately rejected by IRS management. As of 30 September 2015, the group stated that the tax dispute could result in a maximum liability of \$157 million in taxes and penalties, \$122 million or more in owed interest, and \$31 million in related state back taxes and interest, gross of amounts that are already on deposit with the IRS or held in reserves.

Although the parent has taken recent steps to spread out debt maturities, its high debt leverage (~33% adjusted debt-to-capital as of 12/31/15) will continue to color our view of future dividend requirements on Radian Guaranty. Radian Guaranty is not expected to be able to pay dividends without regulatory approval for several more years.

#### **PROFITABILITY: Baa - SCORE REFLECTS THE SECTOR'S TRACK RECORD, COMMODITY NATURE OF THE BUSINESS, AND RADIAN'S DIVERSE CUSTOMER BASE**

Radian Guaranty's Baa score for profitability is based on our view of the sector's checkered track record and Radian Guaranty's diverse customer base. In its 58-year modern history, the sector has made almost no money on a cumulative basis. While the burnout of pre-2009 vintage mortgages has allowed the sector to turn the corner on profitability, we expect more price competition in a crowded mortgage insurance market in 2016-17, influenced by PMIERS risk-based pricing versus FHA pricing.

We see Radian Guaranty's diverse customer base as a feature that could help mitigate competition. Its customer base include many small and regional lenders that are more flexible in their dealings with insurers than the large banks. (Some of the large banks and lenders want a common price from all insurers and merely allocate business randomly and, sometimes, pro rata to insurers.) Its ~34% operating expense ratio (including loss adjustment expenses), however, is higher than that of MGIC (~18%) and United Guaranty (~29%) based on FY14 statutory financials.

Because Radian grew its business volume faster than some of its competitors after the 2007-08 crisis, we expect its profitability to benefit more from this high quality business than would, for example, MGIC. Pre-2009 vintage loans only represent ~25% of Radian's primary risk-in-force as of 12/31/15 compared with ~37% of MGIC's primary risk-in-force.

#### **FINANCIAL FLEXIBILITY: Ba - IMPROVED HOLDING COMPANY LIQUIDITY BUT DEBT BURDEN REMAINS HIGH**

Radian Guaranty's Ba score for financial flexibility recognizes improved liquidity at the holding company but nevertheless significant debt leverage of ~33% of capital as of 12/31/15. We don't believe the parent has much incremental borrowing capacity to increase leverage as Radian Guaranty is still unable to upstream dividends without prior regulatory approval.

As of YE15, the parent had ~\$340mn of liquidity, prior to the execution of the Board authorization of \$100mm share repurchase program, and \$195mn of senior notes due 2017, \$52mn of senior convertibles due 2017, \$300mn of senior due 2019, \$390 of senior convertibles due 2019, and \$350mn of senior due 2020.

## Rating Methodology and Scorecard Factors

Radian Guaranty, Inc. is rated using the Rating Methodology for [Mortgage Insurers](#).

### Radian Guaranty, Inc. [1]

Financial Strength Rating Scorecard	Aa	A	Baa	Ba	<Ba	Score	Adjusted Score
<b>Factor 1: Market Position (20%)</b>						A	Baa
Avg. NIW as a % of Total Industry NIW			11.6%				
Prime Loans (% of RIF)		92.8%					
Client Concentration [2]			18.0%				
Geographical Concentration [2]		27.1%					
<b>Factor 2: Housing Market Attributes (25%)</b>						A	A
Demand for Mortgage Insurance				x			
Generic Loan Attributes		x					
Housing Conditions		x					
<b>Factor 3: Capital Adequacy (30%)</b>						Ba	Baa
Adjusted Risk-to-Capital Ratio [3]				27.7x			
<b>Factor 4: Profitability (15%)</b>						Caa	Baa
Return on Capital (after-tax) [4]					-13.0%		
Combined Ratio [5]					156.0%		
<b>Factor 5: Financial Flexibility (10%)</b>						Ba	Ba
Cash Flow Coverage				0.0x			
Adjusted Financial Leverage [4]				37.2%			
Total Leverage [4]				38.6%			
<b>Aggregate profile</b>						Ba	Baa3

[1] Data as of 12/31/2014

[2] Company reports.

[3] Statutory capital.

[4] US GAAP for consolidated group.

[5] US statutory financials.

## Ratings

Exhibit 3

Category [Moody's Rating](#)

### RADIAN GUARANTY INC.

Rating Outlook STA

Insurance Financial Strength Baa3

### RADIAN GROUP INC.

Rating Outlook STA

Senior Unsecured Ba3

Source: Moody's Investors Service

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