Federal Housing Finance Agency
Office of Inspector General

Enterprise Counterparties: Mortgage Insurers

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Executive Summary

Fannie Mae and Freddie Mac (the Enterprises) operate under congressional charters to provide liquidity, stability, and affordability to the mortgage market. Those charters, which have been amended from time to time, authorize the Enterprises to purchase residential mortgages and codify an affirmative obligation to facilitate the financing of affordable housing for low- and moderate-income families. Pursuant to their charters, the Enterprises may purchase single-family residential mortgages with loan-to-value (LTV) ratios above 80%, provided that these mortgages are supported by one of several credit enhancements identified in their charters. A credit enhancement is a method or tool to reduce the risk of extending credit to a borrower; mortgage insurance is one such method. Since 1957, private mortgage insurers have assumed an ever-increasing role in providing credit enhancements and they now insure "the vast majority of loans over 80% LTV purchased by the" Enterprises. In congressional testimony in 2015, Director Watt emphasized that mortgage insurance is critical to the Enterprises' efforts to provide increased housing access for lower-wealth borrowers through 97% LTV loans.

During the financial crisis, some mortgage insurers faced severe financial difficulties due to the precipitous drop in housing prices and increased defaults that required the insurers to pay more claims. State regulators placed three mortgage insurers into "run-off," prohibiting them from writing new insurance, but allowing them to continue collecting renewal premiums and processing claims on existing business. Some mortgage insurers rescinded coverage on more loans, canceling the policies and returning the premiums. Currently, the mortgage insurance industry consists of six private mortgage insurers.

In our 2017 Audit and Evaluation Plan, we identified the four areas that we believe pose the most significant risks to FHFA and the entities it supervises. One of those four areas is counterparty risk – the risk created by persons or entities that provide services to Fannie Mae or Freddie Mac. According to FHFA, mortgage insurers represent the largest counterparty exposure for the Enterprises. The Enterprises acknowledge that, although the financial condition of their mortgage insurer counterparties approved to write new business has improved in recent years, the risk remains that some of them may fail to fully meet their obligations. While recent financial and operational requirements may enhance the resiliency of mortgage insurers, other industry features and emerging trends point to continuing risk.

We undertook this white paper to understand and explain the current and emerging risks associated with private mortgage insurers that insure loan payments on single-family mortgages with LTVs greater than 80% purchased by the Enterprises.

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ABBREVIATIONS

Arch	Arch Mortgage Insurance Company
CMG	CMG Mortgage Insurance Company
Enterprises	Fannie Mae and Freddie Mac
Essent	Essent Guaranty, Inc.
FHFA or Agency	Federal Housing Finance Agency
Genworth	Genworth Mortgage Insurance Corporation
LTV	Loan-to-value
MGIC	Mortgage Guaranty Insurance Corporation
National	National Mortgage Insurance Corporation
OIG	Federal Housing Finance Agency Office of Inspector General
PMI	PMI Mortgage Insurance Company
PMIERs	Private Mortgage Insurer Eligibility Requirements
Radian	Radian Guaranty, Inc.
RMIC	Republic Mortgage Insurance Company
Triad	Triad Guaranty Insurance Corporation
United	United Guaranty Residential Insurance Company
UPB	Unpaid Principal Balance

BACKGROUND

The Enterprises operate under congressional charters to provide liquidity, stability, and affordability to the mortgage market. Those charters, which have been amended from time to time, authorize the Enterprises to purchase residential mortgages and codify an affirmative obligation to facilitate the financing of affordable residential housing for low- and moderate-income families. Pursuant to their charters, the Enterprises may purchase single-family residential mortgages with a high LTV (greater than 80%), provided that these mortgages are supported by one of several enumerated credit enhancements. A credit enhancement is a method or tool to reduce the risk of extending credit to a borrower. Credit enhancements protect the Enterprises from the higher risk of loss associated with mortgages with high LTVs.

Enterprise charters identify three types of credit enhancement that can be used: loan-level mortgage insurance, seller participation in not less than 10% of the mortgage, or an on-demand repurchase commitment in the event of a default. Since 1957, mortgage insurers have assumed an ever-increasing role in providing credit enhancements for such mortgages and they now insure "the vast majority of loans over 80% LTV purchased by the" Enterprises. In 2015 congressional testimony, Director Watt emphasized that mortgage insurance is critical to the Enterprises' efforts to provide increased housing access for lower-wealth borrowers through 97% LTV loans. As the chairman for a private mortgage insurance company trade association explained:

> Borrowers with lower down payments present a greater risk of default and a significantly increased risk of loss to a lender than those with a significant down payment. The private [mortgage insurance] industry is designed to protect lenders and investors against that risk, while ensuring low down payment borrowers have access to safe, reliable and prudently underwritten mortgage credit.

Mortgage insurance transfers the risk arising from default of a mortgage to an insurer for the portion of a mortgage in excess of 80% of the value of the mortgage. The particular level of mortgage insurance required by the Enterprises depends upon the LTV of the loan, among other factors.

In setting coverage levels, the Enterprises have sought to reduce their losses in the event of defaults of high LTV residential mortgages to a level comparable to 80% or lower LTV mortgages, with coverage that is usually deep enough for a reduction comparable to a 65 to 75% LTV mortgage.

Private mortgage insurance covers between 6 and 35% of the value of a loan depending on the size of the down payment, covering an average of 25% of the value of a loan. When a borrower obtains and pays for mortgage insurance, the borrower can cancel the insurance once he/she acquires a 20% equity stake in the home. Federal law requires cancellation of such insurance when the borrower pays down the loan to 78% of the original home value.[1]

According to FHFA, mortgage insurers represent the largest counterparty risk for the Enterprises. That risk arises from the potential insolvency of, or non-performance by, mortgage insurers that insure single-family mortgages with greater than 80% LTV. An economic downturn could result in an increase in borrower foreclosures and defaults, and claims on mortgage insurers. Economic stress could also reduce purchases of single-family homes and concomitantly reduce the demand for mortgage insurance.

Historical Performance of Mortgage Insurers

Prior to the 1980s, the mortgage insurance industry had "been a virtual money machine."[2] The "collapse of farm prices, which ate into the value of homes in the Farm Belt" and the "drop in oil prices began causing widespread mortgage defaults in the Southwest" led to "a huge run-up in payouts by insurers and a retrenchment in the industry."[3] Suffering severe losses, about half of the private mortgage insurers stopped writing new insurance or were prohibited by state regulators from doing so, and one major company failed. According to the Urban Institute, "the share of mortgages insured by mortgage insurers had bottomed out" by the late 1980s.[4]

However, the mortgage industry was soon on an upswing. The next 20 years, from 1988 to 2008, were another period of substantial growth for mortgage insurers as economic growth strengthened.[5] As summarized by the Urban Institute, "a large part of the recent housing boom was built on shaky fundamentals driven by the rapid growth of risky products, such as interest-only, negative amortization, or piggyback mortgages; lax underwriting; poor risk management; and inadequate due diligence from nearly all market participants."[6] Beginning in 2007, as housing prices fell and defaults skyrocketed, mortgage insurers incurred large

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[1] When the lender obtains and pays for the mortgage insurance, the insurance is generally maintained for the life of the loan.

[2] Eric Berg, *Upheaval at Mortgage Insurers*, New York Times (Mar. 3, 1988) (online at www.nytimes.com/1988/03/03/business/upheaval-at-mortgage-insurers.html?pagewanted=all).

[3] *Id.*

[4] Laurie Goodman and Karan Kaul, *Sixty Years of Private Mortgage Insurance in the United States*, Urban Institute (Aug. 22, 2017) (online at www.urban.org/research/publication/sixty-years-private-mortgage-insurance-united-states).

[5] *Id.*

[6] *Id.*

losses. As an industry, mortgage insurers sustained significant losses from 2007 through 2012.

Three mortgage insurers, Triad, PMI, and RMIC, were found by their respective state regulators to lack sufficient capital and were placed into "run-off." Insurers in run-off do not write new insurance but continue collecting renewal premiums and processing claims made under existing policies. In addition, these regulators directed the three insurers in run-off status to partially defer claim payments due to the Enterprises.

Further, some mortgage insurers rescinded coverage based on rights in their master policies, canceling the policies as improperly issued and returning the premiums. According to an Urban Institute report, mortgage insurance rescission rates were as high as 25% of claims received at the peak of the crisis, compared to a historic rate of 7%. Mortgage insurance policies generally permit mortgage insurers to rescind insurance coverage when the insurer finds evidence of fraud or misrepresentation or determines that the loan did not qualify for insurance at the time the policy was issued.[7] In those circumstances when mortgage insurers rescinded insurance, FHFA said that previously the Enterprises could automatically demand that the originating lenders repurchase the mortgages.[8] Repurchase demands caused by such rescissions helped mitigate Enterprise losses.

Current Composition of Mortgage Insurance Industry

Just as the private mortgage insurance industry looked different in 1990 than it did in 1980, the current private mortgage insurance industry looks different today than it looked in 2005. In 2005, before the housing crisis, the industry had eight firms: MGIC, Radian, United, PMI, Genworth, RMIC, Triad, and CMG. Three of these firms—PMI, RMIC, and Triad—were placed into "run off" by state regulators and are not writing new policies. At the same time, three new players entered the mortgage insurance industry, either by acquiring legacy insurers or starting new operations.[9] Reflecting consolidation in the mortgage insurance industry, one of the eight mortgage insurers operating in 2005 has been acquired by another: United was sold to Arch. Arch presently has the highest market share. Currently, the private mortgage

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[7] In these circumstances, the insured has a period of time to challenge or rebut the decision.

[8] Mortgage insurance rescission is no longer a cause for automatic repurchase.

[9] The two new insurers are Essent, which was approved by the Enterprises in 2010, and National, which was approved by the Enterprises in 2013. Arch acquired CMG (which was owned in part by PMI) and the operating platform of PMI and was approved by the Enterprises in 2014.

insurance industry consists of six mortgage insurance companies.[10] These six companies do not include the three insurers in run-off that are not writing new policies, as discussed earlier.

FHFA Eligibility Requirements for Mortgage Insurers

To ensure that mortgage insurers possess the financial and operational capacity to withstand an economic downturn and pay in full claims made by the Enterprises, FHFA, as conservator, directed the Enterprises to align and strengthen their risk management requirements for mortgage insurers.[11] (Prior to 2015, Fannie Mae and Freddie Mac had individual requirements for mortgage insurers.) As a result, the Enterprises issued revised Private Mortgage Insurer Eligibility Requirements (PMIERs) in 2015, following a public comment period on a draft in July 2014, with the requirements becoming effective on December 31, 2015.

Requirements Imposed by PMIERs and Effect of PMIERs Implementation

PMIERs impose a set of requirements that mortgage insurers must meet to insure loans either owned or guaranteed by the Enterprises. According to FHFA, the requirements are designed to reduce risk to the Enterprises and ensure that qualified mortgage insurers maintain sufficient financial strength to withstand significant economic stress. PMIERs establish the following financial requirements:

- An insurer must maintain sufficient capital resources such that its available assets (those readily available to pay claims) meet or exceed its minimum required assets (the greater of $400 million or the total risk-based requirement.)[12]
- An insurer must establish and maintain a capital plan that, at a minimum, forecasts its future financial requirements based on projections for delinquent loans under both

[10] Genworth Financial, Inc. has a pending acquisition by China Oceanwide Holdings Group Co, subject to regulatory approvals. If the deal is closed, the acquired company would need approvals from the Enterprises to remain eligible to insure loans it acquires.

[11] FHFA initially directed the Enterprises to develop counterparty risk management standards for mortgage insurers in 2013, including both eligibility requirements and uniform master policies (which specify terms between lenders and mortgage insurers). Master policies, in part, were required to clarify and limit the reasons a mortgage insurer could rescind coverage. New policies took effect in 2014. In 2016, FHFA directed the Enterprises to further update mortgage insurer master policy rescission relief principles to address early rescission relief offerings. The updates are expected to be implemented by the end of 2018.

[12] The total risk-based required asset amount is a function of the insurer's direct risk in force and the risk profile of the associated loans. Loan risk profile factors include characteristics such as original LTV, original credit score, delinquency or claim status, vintage, debt-to-income ratio over 50, cash out refinances, investment properties, and no or low documentation loans.

expected and stress economic scenarios.[13] The plan must also contain contingencies for raising additional capital in the event of a shortfall.

PMIERs also contain quality control requirements that include:

- A quality control program to assess the effectiveness of its underwriters and that of its delegated underwriting programs to enable an insurer to monitor adherence to its underwriting guidelines and ensure the accuracy of the mortgage data being relied upon.

- Ownership of the operating platform (necessary to write mortgage guaranty insurance) operated by individuals employed by the insurer or a contract in place with a third-party to provide such services.

In addition to these financial and operational standards, PMIERs require that mortgage insurers limit their business activity to the writing of mortgage guaranty insurance.

As of December 31, 2017, the mortgage insurers currently approved by the Enterprises to insure mortgages meet the PMIERs requirements. According to Moody's Investors Service, PMIERs strengthened the capital adequacy of mortgage insurers and promoted transparent risk-based pricing among the companies.

Possible Updates to PMIERs

To ensure the requirements within PMIERs remain current, it is expected they will be updated every two years and may be updated more frequently if there is a significant change in market conditions. Accordingly, in 2017 and 2018, FHFA directed the Enterprises to evaluate the existing PMIERs and whether any updates are appropriate. In December 2017, mortgage insurance companies received a summary of proposed changes to PMIERs for their comment. FHFA projects that any updated PMIERs requirements will not become effective until year-end 2018.

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[13] The stress scenario should use assumptions consistent with the "severely adverse scenario" detailed in the Federal Reserve's Comprehensive Capital Analysis and Review.

RISKS RELATED TO MORTGAGE INSURANCE AS A CREDIT ENHANCEMENT

We identified a number of risks attendant to mortgage insurance as a credit enhancement, some of which are increasing over time. We now discuss each of these risks.

Concentration Risk

Concentration risk exists when the Enterprises rely on a small number of counterparties, increasing the exposure to any individual counterparty. Six private mortgage insurers have met the PMIERs requirements and are approved to provide mortgage insurance coverage for mortgages purchased by the Enterprises. Business within this limited number of counterparties is further concentrated because as of September 30, 2017, three insurers are responsible for providing roughly two-thirds of the mortgage insurance coverage for the Enterprises. Because the lender, not the Enterprise, generally selects the mortgage insurer for a mortgage when it is originated, the Enterprises are unable to manage their mortgage insurer concentration risk. Currently, there is a significant risk that much of the mortgage insurance backstopping high LTV loans bought by the Enterprises will be provided by a few insurers.

Monoline Risks

A monoline is a business that focuses on operating in one specific financial area. Pursuant to state insurance regulation and to qualify under PMIERs, a mortgage insurer must be a monoline and limit its business activity to the writing of mortgage guaranty insurance.[14] On the one hand, this can insulate mortgage insurance companies against other general insurance risks and help ensure that they don't exit the market during times of stress. However, this requirement also means mortgage insurance companies face increased risks due to a lack of diversification.

Like mortgage insurers, the Enterprises are also monolines, leaving both unable to diversify to reduce risk. Further, they are both in the same residential mortgage business and have highly correlated risks. This risk is exacerbated because the events they insure against – housing defaults – are cyclical, and when defaults spike and home values sink, mortgage insurers are called upon to make massive payments. In 2013, a National Association of Insurance Commissioners Working Group specifically identified the cyclic nature of mortgage insurance as a problem, pointing out that periods of high profitability are followed by periods of varying duration of catastrophic loss. This means that mortgage insurers' counterparty

[14] A mortgage insurance company may be owned by a holding company that is a diversified insurer.

strength may be stressed precisely when they are needed by the Enterprises as a source of strength.

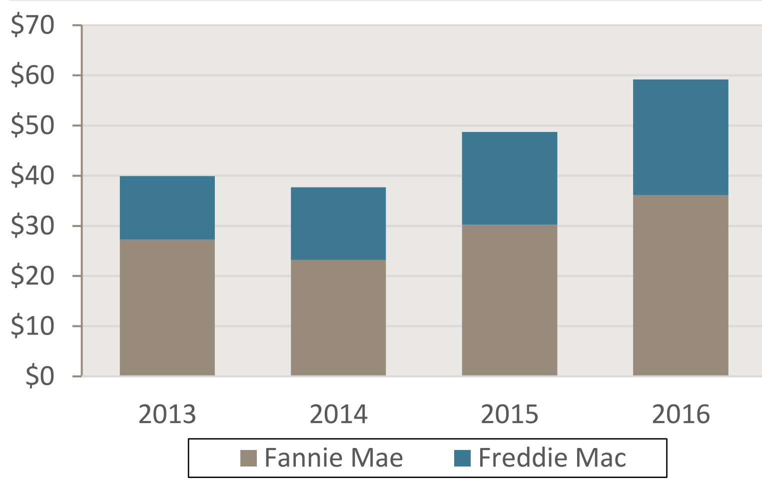
Credit Risk Transfer Transactions Do Not Transfer Mortgage Insurance Counterparty Risk

Based on guidelines established by FHFA in 2012, the Enterprises engage in credit risk sharing transactions to transfer to private investors a portion of the credit risk of loans they acquire. The credit risk transferred in these transactions is separate from counterparty risk, and the Enterprises' credit risk transfer transactions do not transfer counterparty risk to investors—if a mortgage insurer does not meet its obligations, the Enterprise covers the resulting losses. For example, if a loss occurs on a loan with primary mortgage insurance, the mortgage insurer provides credit loss coverage before credit risk transfer investors or the Enterprises. However, if a mortgage insurance company fails to pay a claim per its contractual obligation, the Enterprise steps in to cover the loan. Investors are not exposed to mortgage insurance company counterparty risk.

Risk in Force and Increasing Volume

Risk in force refers to the dollar amount of mortgage insurance coverage. According to FHFA, mortgage insurers are the Enterprises' largest counterparty exposures. Fannie Mae had mortgage insurance risk in force of $135 billion on $532 billion of single-family unpaid principal balance (UPB) as of September 30, 2017. Freddie Mac had mortgage insurance risk in force of $83 billion on $323 billion of single-family UPB as of September 30, 2017. See Appendix for coverage by mortgage insurer as of December 31, 2016. Over the past few years, the amount of Enterprise mortgage insurance risk in force has increased. See Figure 1.

FIGURE 1. ENTERPRISE PRIMARY MORTGAGE INSURANCE RISK IN FORCE FOR NEW ACQUISITIONS ($ BILLIONS)



Source: FHFA.

The Enterprises establish reserves for potential credit losses in the event of default or foreclosure of mortgage loans they have purchased or guaranteed. In order to establish such reserves, the Enterprises estimate potential credit losses, against which they offset potential recoveries from mortgage insurance. As of September 30, 2017, Fannie Mae estimated that the potential recoveries from mortgage insurance acted to reduce its total loss reserves by $1 billion. In the event that one or more mortgage insurers were unable to honor their obligations in the event of a default or foreclosure, the Enterprises would be liable to cover the losses, unless they could put back the mortgages to the originating lender.

Risk of Unmet Obligations by Companies in Run-off

As discussed earlier, state regulators placed three mortgage insurers into run-off during the last financial crisis. These three insurers partially deferred claim payments due to the Enterprises.

Since being placed in run-off, the three insurers have gradually been paying a larger proportion of their claims in cash and a smaller proportion with deferred payments. One is currently paying its claims in cash and is no longer deferring payments on policyholder claims. As of December 31, 2016, the second was paying 75% of claims in cash and deferring the remaining 25%, and the third was paying 71.5% of claims in cash and deferring the remaining 28.5%.

Additionally, the three mortgage insurers in run-off have also made payments on their accumulated deferred obligations. In 2014, RMIC paid the Enterprises in full for its accumulated deferred payments. In the fourth quarter of 2017, RMIC paid the Enterprises interest on the payments it had previously deferred. Triad and PMI have previously made one-time cash payments but continue to have accumulated deferred obligations with the Enterprises. Fannie Mae had $944 million and Freddie Mac had $500 million of accumulated deferred payment obligations from these two insurers as of September 30, 2017. Freddie Mac reported it reserved for the full unpaid amount because collectability was uncertain.

Although the three insurers in run-off are barred from writing new insurance, they continue to provide a combined $10 billion of risk in force for Fannie Mae and $3.4 billion in coverage for Freddie Mac as of September 30, 2017. According to FHFA, the Enterprises are concerned, based on historical trends, that these run-off companies increase the risk that a mortgage insurer will fail to pay claims or will have diminished quality or speed of claims processing.

Mortgage Insurer Credit Ratings

Mortgage insurer balance sheets have strengthened since the 2008 financial crisis, as reflected in the recent decision by Moody's Investors Service to upgrade the ratings of several mortgage insurance groups. Nevertheless, mortgage insurer credit ratings remain below prior standards ten years after the crisis. Historically, the Enterprises required mortgage insurers to have a minimum AA credit rating, however, this requirement was relaxed when the mortgage insurance industry faced strain during the most recent financial crisis. Under PMIERs, approved insurers (other than newly approved insurers) must maintain at least one rating with a rating agency acceptable to the Enterprises, although there is no specified minimum rating. As of September 30, 2017, none of the main approved mortgage insurers had a rating at or above the historic AA level. (See Appendix.) Freddie Mac reported that it continued to acquire new loans with mortgage insurance from mortgage insurers with credit ratings below investment grade as of year-end 2016. Although some mortgage insurance companies have been upgraded since then, at least one was rated BBB- as of September 30, 2017, according to Freddie Mac.

CONCLUSION...

The Enterprises acknowledge that although the financial condition of their mortgage insurer counterparties approved to write new business has improved in recent years, the risk remains that some of them may fail to fully meet their obligations, particularly, as Freddie Mac notes, under a stress economic scenario. There are positive emerging trends, such as stronger mortgage insurer capital, compliance with PMIERs, the ongoing effort to consider whether PMIERs should be updated, and the strength of the housing market.

However, other industry features and emerging trends point to risks from private mortgage insurance as a credit enhancement, including increasing volume, high concentrations, an inability by the Enterprises to manage concentration risk, mortgage insurers with credit ratings below the Enterprises' historic requirements and investment grade, the challenges inherent in a monoline business and the cyclic housing market, and remaining unpaid mortgage insurer deferred obligations. In light of these factors, and particularly as the largest counterparty exposure for both Fannie Mae and Freddie Mac, private mortgage insurers merit continued attention by FHFA and the Enterprises.

OBJECTIVE, SCOPE, AND METHODOLOGY ....

The objective of this white paper was to understand and explain the current and emerging risks associated with private mortgage insurers that insure loan payments on single-family mortgages with LTVs greater than 80% purchased by the Enterprises. To achieve this objective, we reviewed publicly available documents from FHFA, the Enterprises, mortgage insurance companies, and other institutions. We also met with FHFA officials and obtained information from Fannie Mae and Freddie Mac.

We provided FHFA with the opportunity to respond to a draft of this white paper. We appreciate the cooperation of FHFA staff, as well as the assistance of all those who contributed to the preparation of this white paper.

APPENDIX: ENTERPRISE MORTGAGE INSURANCE COVERAGE

Enterprise Mortgage Insurance Coverage					
	Rating as of September 30, 2017	Coverage as of December 31, 2016 ($ Billions)			
Mortgage Insurer	Credit Rating	Fannie Mae UPB	Fannie Mae Risk in Force	Freddie Mac UPB	Freddie Mac Risk in Force
Arch Capital Group Ltd.	A-	128.4	33.2	70.6	18.1
Radian Guaranty, Inc.	BBB-	100.6	25.9	62.1	16.0
Mortgage Guaranty Insurance Corp.	BBB	95.4	24.7	59.5	15.2
Genworth Mortgage Insurance Corp.	BB+	73.1	18.6	43.3	11.1
Essent Guaranty, Inc.	BBB+	45.1	11.2	29.2	7.5
National Mortgage Insurance Corp.	BBB-	21.2	4.4	*	*
PMI Mortgage Insurance Co.**	Not Rated	15.1	3.8	7.4	1.9
Republic Mortgage Insurance Co.**	Not Rated	12	3.1	5.6	1.4
Triad Guaranty Insurance Corp.**	Not Rated	4	1.1	2.9	0.7
Others		1.8	0.3	12.3	3.0
Total		496.7	126.2	292.9	75.0

*Freddie Mac included amounts for National Mortgage Insurance Corp. in the Others category.

**These mortgage insurers were under various forms of supervised control by their state regulators and were in run-off. They were not approved for new business by the Enterprises.

Note: Fannie Mae includes pool insurance coverage representing approximately 1% of total insurance in force and less than 1% of total risk in force. Freddie Mac includes pool insurance coverage representing less than 1% of total UPB and less than 1% of total coverage, primarily from Radian.

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