### Subprime and the Credit Crisis: Impact on the P&C Insurance Industry

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#### Subprime and the Credit Crisis: Impact on the P&C Insurance Industry



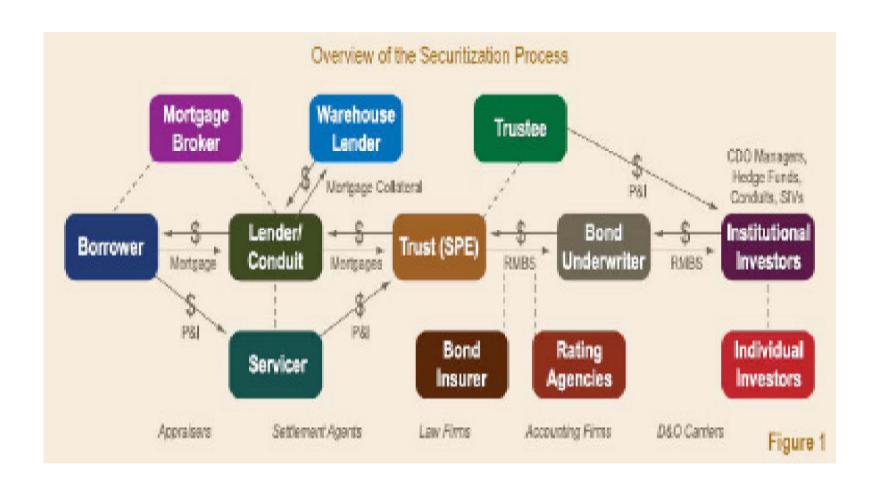
#### » Overview

- Subprime Lending & Securitization
- > Subprime-Related Federal Filings by Case Type
- » Specialty Insurers
  - Financial Guaranty Insurers
  - Mortgage Guaranty Insurers
- » Traditional P&C Insurers
- » Future Impacts on Industry



#### Subprime Lending and Securitization



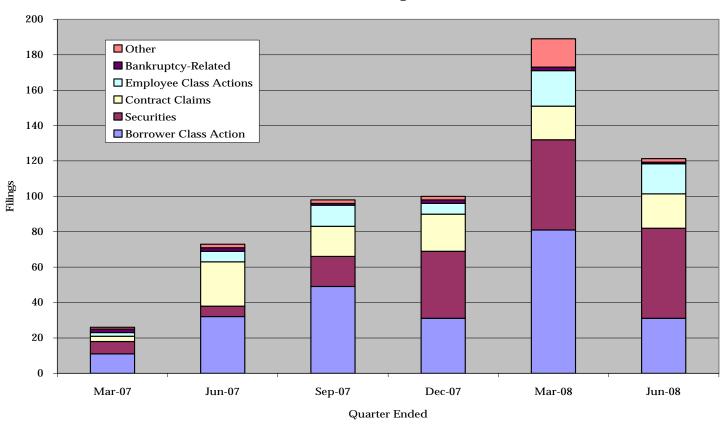




#### Subprime-Related Federal Filings by Case Type



#### Subprime-Related Federal Filings by Case Type, 2007-Q2 2008 (Total Filings = 607)





#### Financial Guaranty Insurers



- » Background
- » S&P Financial Strength Ratings
- » US GAAP Surplus
- » US Statutory Surplus
- » Summary



### Financial Guaranty Insurers Background



- » Financial guaranty insurers guaranty the payment of principal and interest of bonds and other securities in the event of default of the underlying credit
- » Protection typically provided by financial guaranty insurance policies; protection was also provided via credit default swaps
- » Companies are generally organized into Municipal Bond, Structured Securities, and International units or segments
- » As of 12/31/2007, there were 9 monoline financial guaranty companies (Radian included in Mortgage Guaranty Insurers in following slides); the "Big 4" guaranteed approximately 80% of all municipal bonds
- "AAA" rating (or equivalent) is paramount in competing and attracting new business



### Financial Guaranty Insurers S&P Financial Strength Ratings



S&P Financial Strength Ratings								
<u>Company</u>	<u>Prior</u>	12/07	03/08	06/08	09/08	12/08	<u>Current</u>	
AMBAC	AAA	AAA	AAA	AA	AA	A	A	
MBIA	AAA	AAA	AAA	AA	AA	AA	BBB+/AA-	
FSA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	
FGIC	AAA	AAA	BB	BB	BB	CCC	CC	
Syncora/XLCA	AAA	AAA	A-	BBB-	BBB-	В	В	
AGC/AGL	AAA	AAA	AAA	AAA	AAA	AAA	AAA	
ACA	A	CCC	CCC	CCC	CCC	В	Withdrawn	
CIFG	AAA	AAA	A+	A-	A-	A-	A-	
ВНАС				AAA	AAA	AAA	AAA	



# Financial Guaranty Insurers US GAAP Surplus (\$'s in millions)



US GAAP Surplus (\$millions)								
Company	<u>Dec-2007</u>	<u>Mar-2008</u>	<u>Jun-2008</u>	<u>Sep-2008</u>	<u>Dec-2008</u>	S&P Rating		
AMBAC	\$2,279.9	\$1,285.7	\$1,939.5	(\$886.9)		A		
MBIA	3,655.8	2,060.2	3,975.2	2,622.9	994.4	BBB+/AA-		
FSA	1,577.8	44.4	61.9	(627.4)		AAA		
FGIC	853.0	821.2		852.2		CC		
Syncora/XLCA	427.1	348.4	(182.1)	63.5		В		
AGC/AGL	1,666.6	1,492.7	2,242.4	2,089.9	1,926.2	AAA		
ACA	NA	NA	NA	NA		Withdrawn		
CIFG	59.0	NA	NA	NA		A-		
ВНАС						AAA		



## Financial Guaranty Insurers US Statutory Surplus (\$'s in millions)



US Statutory Surplus (\$millions)								
<b>Company</b>	<u>Dec-2007</u>	<u>Mar-2008</u>	<u>Jun-2008</u>	<u>Sep-2008</u>	<u>Dec-2008</u>	<b>S&amp;P Rating</b>		
AMBAC	\$3,316.1	\$3,629.3	\$3,453.3	\$1,088.5	\$1,554.4	A		
MBIA	3,663.1	3,957.1	4,260.7	3,314.5	3,502.4	BBB+/AA-		
FSA	1,628.9	1,854.9	1,171.5	1,299.1		AAA		
FGIC	260.9	366.1	285.6	350.2		CC		
Syncora/XLCA	138.9	*	(881.1)	83.3	(2,399.7)	В		
AGC/AGL	399.6	380.1	458.8	425.8	378.1	AAA		
ACA	229.1	182.3	157.8	101.6	101.3	Withdrawn		
CIFG	66.1	80.0	(423.5)	(1,311.9)		A-		
ВНАС	105.0	998.2	989.5	980.1		AAA		



#### Financial Guaranty Insurers Summary



- » Significant reduction in number of "AAA" insurers from year-end
- » Currently, three broad "groups" of insurers
  - AAA: AGC, FSA, BHAC (Note: AGC and FSA recently announced merger)
  - Run-Off and/or Reinsurance Agreements Announced or Likely: FGIC, Syncora,
     ACA, CIFG
  - > Restructuring: AMBAC, MBIA
- » Restructuring efforts include splitting municipal/public finance exposure from structured exposure
- » Entrance of Berkshire Hathaway into the market



#### Mortgage Guaranty Insurers



- » Background
- » S&P Ratings
- » US GAAP Surplus
- » US Statutory Surplus
- » Summary



#### Mortgage Guaranty Insurers Background



- » Mortgage guaranty insurance (also called private mortgage insurance ("PMI")), protects a lender if a homeowners defaults on his/her mortgage
- » Lenders typically require insurance if equity/down payment is less than 20% of value of home (i.e., LTVs greater than 80%)
- » Seven (7) active mortgage insurance groups in the US (down from 8 at beginning of 2008)
- » PMI is the private sector alternative to non-conventional, governmental-insured home loans; mortgages backed by the government are insured by FHA of guarantees b DVA
- » Fannie Mae and Freddie Mac create mortgage backed securities backed by FHA, VA, and conventional loans
- » Subprime is not the first crisis in PMI's history the 1980's were a difficult period particularly in energy related areas due to effects of high interest rates, ARMs, negative amortization loans, etc.

### Mortgage Guaranty Insurers S&P Financial Strength Ratings



S&P Financial Strength Ratings								
<u>Company</u>	12/08	<u>Current</u>						
MGIC	AA-	AA-	AA-	AA-	A	A	A	
Radian	AA	AA	AA-	A	BBB+	BBB+	BBB+	
PMI	AA	AA	AA	A+	A-	A-	A-	
AIG/UGC	AA+	AA+	AA+	AA+	A+	A+	A-	
Genworth	AA	AA	AA	AA	AA	AA	AA-	
Old Rep/RMIC	AA	AA	AA	AA-	A+	A+	A+	
Triad	AA-	AA-	AA-	AA-	_	_	Vol. Runoff	
CMG	AA-	AA-	AA-	AA-	AA-	AA-	AA-	



#### Mortgage Guaranty Insurers US GAAP Surplus (\$'s in millions)



<u>Group</u>	<u>Dec-2007</u>	<u>Mar-2008</u>	<u>Jun-2008</u>	<u>Sep-2008</u>	<u>Dec-2008</u>	S&P Rating
MGIC	\$2,594.3	\$2,986.7	\$2,866.4	\$2,628.6	\$2,367.2	A
Radian	2,720.7	2,867.4	2,455.9	2,332.3	2,030.7	BBB+
PMI	2,513.0	2,239.9	2,008.6	1,452.9		A-
AIG/UGC	95,801.0	79,703.0	78,088.0	71,182.0	52,710.0	A-
Genworth	13,478.0	12,725.0	12,345.0	10,498.0	8,926.0	AA-
Old Rep/RMIC	4,541.6	4,376.7	4,058.9	3,914.3	3,740.3	A+
Triad	498.9	338.4	140.9	(28.4)		Vol. Runoff
CMG	NA	NA	NA	NA		AA-



#### Mortgage Guaranty Insurers US Statutory Surplus (\$'s in millions)



<u>Company*</u>	<u>Dec-2007</u>	Mar-2008	<u>Jun-2008</u>	<u>Sep-2008</u>	<b>Dec-2008</b>	S&P Rating
Mortgage Guaranty Ins Corp	\$1,258.5	\$1,721.0	\$1,508.3	\$1,529.0		A
Radian Guaranty, Inc.	184.4	159.6	80.1	468.0		BBB+
PMI Mortgage Ins Co	495.5	624.0	630.4	434.2		A-
United Guar. Res. Ins Co	495.5	508.9	635.2	791.6		A-
Genworth Mort. Ins Corp	243.5	250.2	200.4	159.2	276.8	AA-
Republic Mortgage Ins Co	120.8	91.3	66.2	100.1		A+
Triad Guaranty Ins Corp	197.7	203.4	192.1	284.2		Vol. Runoff
CMG Mortgage Ins Co	77.0	77.9	77.4	68.3		AA-



#### Mortgage Guaranty Insurers Summary



- » Fewer "stand-alone" mortgage guaranty insurers, so harder to assess their isolated financial impact
- » Only 2 of 8 groups are currently rated "AA"
- » Since loss reserves are set based on delinquencies, recent results and near term future results are expected to continue to be unfavorable housing prices decline, ARM interest rates reset, and the US economic situation continues to decline
- » Some companies have dipped into statutory contingency reserves
- » One company (Triad) went into voluntary runoff in July 2008



#### Traditional P&C Insurers



- » Overall Industry
  - > Subprime Specific Impacts
  - Realized and Unrealized Capital Losses
  - > Ratings Issues
- » Specific Company Impacts
- » Underwriting Impacts
  - > Subprime D&O/E&O
  - Madoff D&O/E&O



### Traditional P&C Insurers Overall Industry



- » Subprime Specific Impacts
  - > S&P: The vast majority of rated entities have negligible subprime exposure; a small number of companies had exposure that was not negligible
  - > Fitch: Based its analysis of year-end 2006 statutory filings, AIG's subprime exposure accounted for 2/3rds of the industry total
- » Significant Realized Capital Loss (\$9.7 billion) and Unrealized Capital loss (\$31.1 billion) through 09/30/2008
- » Ratings Issues: Some P&C insurance companies ratings are being stressed due to factors other than underwriting (for instance, affiliated life company stresses, investments, others)



## Traditional P&C Insurers Specific Company Impacts



- » Those active in selling credit default swaps (CDS)
- » Those with mortgage guaranty subsidiaries
- » Those with investments in mortgage backed securities (MBS) and collateralized debt obligations (CDO)
- » Those with D&O/E&O exposure to financial institutions



## Traditional P&C Insurers Underwriting Impacts – Subprime D&O/E&O



- » Most see this as the largest underwriting exposure of traditional P&C insurers
- » Recent Advisen Ltd. Estimates (November 2008)
  - > D&O \$5.9 billion in industry losses
  - > E&O \$3.7 billion in industry losses
  - > Total \$9.6 billion in industry losses
  - For both lines of business, 80% of estimated financial institution market share is with largest 10 carriers/markets
- » D&O capacity/rates for financial institutions has tightened up, but capacity available outside of this sector, and rates have generally been steady



### Traditional P&C Insurers Underwriting Impacts – Madoff D&O/E&O



- » Aon Corp Estimates (January 2009)
  - \$1.8 billion most likely loss
  - > Range of \$0.8 billion to \$3.8 billion
  - Loss of \$6.4 billion assuming 100% liability for all parties (i.e., a "worst possible loss" situation)
  - > Exposure "split" into four (4) categories
    - Asset Management Firms
    - Foreign Banks and Insurers
    - Charities
    - Bernard L. Madoff Investment Securities



## Traditional P&C Insurers Underwriting Impacts – Comparison



- » Subprime D&O/E&O Losses \$9.6 billion
- » Madoff D&O/E&O Losses \$1.8 billion
- » 2008 Property Catastrophe Losses \$25.2 billion (Source: ISO PCS, January 2009)
- » 2008 Realized and Unrealized Capital losses through 09/30/2008 \$40.8 billion (Source: National Underwriter, December 2008)



## Traditional P&C Insurers D&O/E&O – Comparison to S&L Crisis



- » Haven't been able to find an industry D&O loss figure for the S&L crisis
  - > Estimate of TOTAL cost of S&L crisis is \$153 billion, based on FDIC report
- » However, S&L crisis helped precipitate the hard market for D&O in the mid-1980s
- » The good news for D&O insurers today, relative to the S&L era, is that due to exposure concerns, many of the largest financial institutions have not been able to buy much (if any) D&O limits in recent years or only Side A coverage
- » The bad news is that full entity coverage is standard in D&O today
- » This may suggest that subprime may be more of an E&O exposure
- » In addition to entity coverage, other coverage changes (or exclusions) make comparison between S&L and Subprime difficult (i.e., regulatory exclusions, insured vs insured exclusions)



#### **Future Impacts on Industry**



- » Pressure on capital (and ratings) due to realized/unrealized losses
- » Increased M&A activity?
- » US recession impact on other P&C lines of business
- » End of soft market cycle/firming of rates?
- » Insurance Securitization (property catastrophe, life/mortality); Future of innovation? Stifled or enhanced?
- » Rating Agencies will rating agencies "tighten up" across the board?
- » Enterprise Risk Management
- » Insurance Regulation More fuel to state vs. federal debate?
- » Regulation of Credit Default Swaps?

