

# Financial Modeling Breakpoints: 2020 Effects

December 18, 2020



# Background

- The Breakpoint approach was introduced in 2009 with respect to CMBS and RMBS securities.
- However, the approach penalizes fixed rate securities (like most CMBS) – where prices also move in response to interest rate movements.
- Due to this and other shortcomings, NAIC staff has made several attempts to get rid of the breakpoint methodology.

# Example of Breakpoint Calculation

- The example bond is held by several insurers at a BACV of 102.7.
- It has an intrinsic price of 99.25 and the AVR breakpoints listed to the right.
- Under the breakpoint methodology this bond is designated NAIC 3.

AVR Breakpoints

NAIC 2	NAIC 3	NAIC 4	NAIC 5	NAIC 6
100.10	102.26	107.06	118.86	135.03



# The “No Loss” Exception

- To alleviate the penalties of the breakpoint approach, the “No Loss” exception was introduced.
- If a modeled security met certain criteria, it could be designated as NAIC 1 without regard to BACV.

Original “No Loss” Criteria:

“Zero loss” in any of the modeled scenarios; AND

Would be designated as NAIC 1 (AAA – A) under FE rules.

For clarity we will refer to bonds which have zero losses in any scenario as “Zero Loss” and bonds which meet both criteria as “No Loss”

## 2020 Framework

- To conform the P&P to industry request that No Loss securities be reported as NAIC 1.A, staff made changes in the second part of the criteria. Specifically:

Would be designated as **NAIC 1**  
(AAA – A) under FE rules.



Would be designated as **NAIC 1.A**  
(AAA) under FE rules.

- This has led to the unintended consequence of some 1) Zero Loss, 2) AA-A rated securities 3) purchased at a premium incurring a disproportionate capital charge.

# Effects of New Framework

- Insurers hold \$8 Billion (as of YE 2019) of CMBS bonds which (as of the interim analysis):
  1. Original ratings of AA or A;
  2. Zero Loss; and
  3. Are held at an average price of 101.1
- These bonds will be penalized under the current framework.

# Example of Application of the New Framework

- The example bond is held by several life insurers at BACVs from 101.1 to 101.6.
- It is modeled as Zero Loss and has an original rating of AA
- Under the current text this bond is designated NAIC 2 – a disproportionately high capital charge.

AVR Breakpoints

NAIC 2	NAIC 3	NAIC 4	NAIC 5	NAIC 6
100.86	103.04	107.87	119.76	136.05



101.1 -101.6

# Staff Recommendations

- Staff recommends that VOS accept the proposed editorial changes.
- Additionally, staff recommends that VOS direct the NAIC to develop a designation mapping framework for post-crisis RMBS/CMBS securities for YE 2021.



# Response to ACLI proposal

- The ACLI proposal is operationally difficult to implement.
- If the industry agrees to support the abolition of breakpoints, staff suggests lowering the “Zero Loss” threshold price to 99.15 for YE 2020 CMBS only.
- Since these bonds still hold capital we propose lowering threshold to match the midpoint.

	Total	Zero	Zero %	Diff
2019	4586	3923	85.5%	
Interim	4586	3357	73.2%	12.3%
Normal	5022	3724	74.2%	11.4%
99.5	5022	3872	77.1%	8.4%
99.15	5022	3951	78.7%	6.9%