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.

<table>
<thead>
<tr>
<th></th>
<th>NAIC 2</th>
<th>NAIC 3</th>
<th>NAIC 4</th>
<th>NAIC 5</th>
<th>NAIC 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakpoint</td>
<td>100.10</td>
<td>102.26</td>
<td>107.06</td>
<td>118.86</td>
<td>135.03</td>
</tr>
</tbody>
</table>

AVR Breakpoints

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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.
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.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Zero</th>
<th>Zero %</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>4586</td>
<td>3923</td>
<td>85.5%</td>
<td></td>
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<tr>
<td>Interim</td>
<td>4586</td>
<td>3357</td>
<td>73.2%</td>
<td>12.3%</td>
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<td>Normal</td>
<td>5022</td>
<td>3724</td>
<td>74.2%</td>
<td>11.4%</td>
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<td>99.5</td>
<td>5022</td>
<td>3872</td>
<td>77.1%</td>
<td>8.4%</td>
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<tr>
<td>99.15</td>
<td>5022</td>
<td>3951</td>
<td>78.7%</td>
<td>6.9%</td>
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