Sample Subprime MBS Structure

Senior/Sub 6 Pack Structure vs. the XS/OC Structure

Collateral

Deal with 6-Pack Structure

Deal with XS/OC

Note: The scale in Figure 1 does not accurately reflect relative size of bonds. IO or Interest Only. Source: UBS

Sample Subprime RMBS Payments

Monthly Mortgage Payments

REMIC Trust

Accounts

Interest Payments

Principal Payments

Sample RMBS Interest Waterfall


Allocation of Interest

Table 2
Summary Statistics for CDO and CDO$^2$ Tranches in our Simulation under Baseline Parameters

<table>
<thead>
<tr>
<th></th>
<th>Attachment points</th>
<th>Default probability</th>
<th>Expected payoff</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>0%-6%</td>
<td>97.52%</td>
<td>0.59</td>
<td>NR</td>
</tr>
<tr>
<td>Mezzanine</td>
<td>6%-12%</td>
<td>2.07%</td>
<td>&gt; 0.99</td>
<td>BBB-</td>
</tr>
<tr>
<td>Senior</td>
<td>12%-100%</td>
<td>&lt; 0.00%</td>
<td>&gt; 0.99</td>
<td>AAA</td>
</tr>
<tr>
<td>CDO$^2$ ([16, 12])</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>0%-6%</td>
<td>56.94%</td>
<td>0.93</td>
<td>C</td>
</tr>
<tr>
<td>Mezzanine</td>
<td>6%-12%</td>
<td>&lt; 0.00%</td>
<td>&gt; 0.99</td>
<td>AAA</td>
</tr>
<tr>
<td>Senior</td>
<td>12%-100%</td>
<td>&lt; 0.00%</td>
<td>&gt; 0.99</td>
<td>AAA</td>
</tr>
</tbody>
</table>

Note: While the parameter values used in our simulation do not map into any particular market, they were chosen to mimic broadly the types of collateral and securitizations commonly observed in structured finance markets.
Figure 1
Sensitivity of CDO and CDO\(^2\) to Changes in Default Correlation

**A: CDO**

![Graph A: CDO](image)

**B: CDO\(^2\)**

![Graph B: CDO\(^2\)](image)

*Note:* Figure 1 explores the sensitivity of the original collateralized debt obligation and the CDO\(^2\) tranches to changes in default correlation for bonds within each collateralized debt obligation. The correlation in defaults for bonds belonging to different collateral pools remains fixed at zero. The figure displays the expected payoff as a function of the default correlation, normalized by the expected payoff under the baseline calibration.

Assumes rho = 0.20
Figure 2

Sensitivity of CDO and CDO$^2$ to Changes in Default Probability

Note: Figure 2 explores the sensitivity of the original collateralized debt obligation and the CDO$^2$ tranches to changes in the default probability for bonds in each collateralized debt obligation. The figure displays the expected payoff as a function of the default probability, normalized by the expected payoff under the baseline calibration.

Assumes $p_{\text{Default}} = 0.05$
Source: Coval et al. (2009).