The Role of Ratings

Professor Frank Partnoy, University of San Diego School of Law
Eleventh Annual International Conference
Credit Market Turmoil of 2007-08: Implications for Public Policy
Main Point 1

A primary cause of the recent credit market turmoil was overdependence on credit ratings and credit rating agencies.
Main Point 2

Without overdependence the complex financial instruments at the center of the crisis could, and would not, have been created or sold.
Main Point 3

Long-term sustainable policy measures should take into account both regulatory and behavioral overdependence on ratings.
Overview

- Theory: where credit ratings fit
- The role of ratings in the crisis
- Reform proposals
Economy.com

In November 2005, the Company acquired Economy.com, a leading independent provider of economic research and data services. The acquisition will deepen Moody’s analytical capabilities to broader areas of economic and demographic research, expand the range of products and services offered to institutional customers and introduce new customers to Moody’s. It will provide Economy.com with access to Moody’s extensive client base, deep product marketing capabilities and other resources needed to expand its business. **The purchase price was not material and the near term impact to operations and cash flows is not expected to be material.**

Source: Moody’s Form 10-K, Feb. 29, 2008
## Theory I: Reputational Intermediaries

<table>
<thead>
<tr>
<th>Pure Gov’t Rater</th>
<th>Pure Private Rater</th>
</tr>
</thead>
<tbody>
<tr>
<td>USDA</td>
<td>Good Housekeeping</td>
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<tr>
<td></td>
<td>Financial Publishers</td>
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<tr>
<td></td>
<td>Economy.com</td>
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</tbody>
</table>
Theory I: Reputational Capital

“We’re in the integrity business: People pay us to be objective, to be independent and to forcefully tell it like it is.” John Bohn, Jr., President, Moody’s (1995)

“Ratings are of value only so long as they are credible.” S&P Debt Ratings Criteria (1986)
## Theory II: Regulatory Licenses

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Annual Federal Agency Decisions Based on NRSRO Status
Theory II: Regulatory Licenses

“Over the last three decades, we have embedded [the use] of credit ratings into our rule books. Recent events have awakened us to the unintended consequences of our behaviors. Credit ratings have become a crutch.”

Paul Atkins, SEC Commissioner, June 2008
A Brief History

1975: broker-dealer rules

1970s/80s: Hickman/Milken and the investment grade “cliff”

1990s: CBOs/structured notes for regulatory arbitrage

2000s: search for investment grade collateral, more regulatory arbitrage
Role of Ratings in the Crisis: CDOs and SIVs

Rated Collateral
L/T+150bp (MBS, CDS, and/or CDOs)

Special Purpose Entity

Senior
L/T+30bp
AAA

Mezzanine
L/T+180bp
BBB

Equity
Residual
Not rated
RMBS issues backed by sub-prime lending

Sources: Bank of England, Dealogic and Bank calculations, data include residential mortgage-backed securities (RMBS) backed by sub-prime and non first lien mortgages.
Role of Ratings in the Crisis: CDOs and SIVs

- Rated Collateral
- Rated MBS
- Cash-Flow CDO
- Synthetic CDO
- Single-Tranche
- SIV
- Synthetic CDO
- Synthetic CDO
- Synthetic CDO
- Synthetic CDO
- Synthetic CDO
- Synthetic CDO
- Synthetic CDO
SEC Report

“One analyst expressed concern that her firm’s model did not capture ‘half’ of the deal’s risk, but that ‘it could be structured by cows and we would rate it.’”

Source: SEC Summary Report of Issues Identified in the Commission Staff’s Examinations of Select Credit Rating Agencies, July 2008, at 12
CDO 2006 Data

• 2006 cash flow CDO issuance doubled to $490 bn
• 2006 synthetic CDO issuance doubled to $450 bn

• Implications
  – Many mortgages bet on dozens of times
  – Zero sum game (winners, too)

Credit protection by institution type

Sources: Bank of England; BBA and Bank calculations, net long and short positions.
## Spread-for-rating comparison

<table>
<thead>
<tr>
<th>Rating</th>
<th>Underlying</th>
<th>Spread</th>
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<tbody>
<tr>
<td>AAA</td>
<td>Corporate bonds</td>
<td>&lt;5</td>
</tr>
<tr>
<td>AAA</td>
<td>Credit card ABS</td>
<td>15</td>
</tr>
<tr>
<td>AAA</td>
<td>iTraxx CDS index</td>
<td>22</td>
</tr>
<tr>
<td>AAA</td>
<td>CMBS</td>
<td>25</td>
</tr>
<tr>
<td>AAA</td>
<td>Cash-flow CDO</td>
<td>32</td>
</tr>
<tr>
<td>AAA</td>
<td>CPDO</td>
<td>200</td>
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</table>

Role of Rating Agencies: CDO Modeling

- Default probability
- Expected recovery
- Correlation
- Active management
- Strategic selection of collateral
# S&P Default Rate Assumptions for CDOs

<table>
<thead>
<tr>
<th></th>
<th>ABS (all)</th>
<th>Corp Year 4</th>
<th>Corp Year 7</th>
<th>Corp Year 10</th>
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</thead>
<tbody>
<tr>
<td>AAA</td>
<td>0.25%</td>
<td>0.19%</td>
<td>0.52%</td>
<td>0.99%</td>
</tr>
<tr>
<td>AA</td>
<td>0.50%</td>
<td>0.57%</td>
<td>1.20%</td>
<td>1.99%</td>
</tr>
<tr>
<td>A</td>
<td>1.00%</td>
<td>0.81%</td>
<td>1.81%</td>
<td>3.04%</td>
</tr>
<tr>
<td>BBB</td>
<td>2.00%</td>
<td>1.81%</td>
<td>3.94%</td>
<td>6.08%</td>
</tr>
<tr>
<td>BB</td>
<td>8.00%</td>
<td>9.49%</td>
<td>14.20%</td>
<td>17.47%</td>
</tr>
<tr>
<td>B</td>
<td>16.00%</td>
<td>21.45%</td>
<td>26.15%</td>
<td>28.45%</td>
</tr>
</tbody>
</table>

Source: S&P; Partnoy (2006)
The “BBB” Problem

<table>
<thead>
<tr>
<th>Orig Rtg</th>
<th>Aaa</th>
<th>Aa</th>
<th>A</th>
<th>Baa</th>
<th>Ba</th>
<th>B</th>
<th>Caa</th>
<th>Ca</th>
<th>C</th>
<th>Total UPG</th>
<th>Total DNG</th>
<th>Total Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>96.2% (2,212)</td>
<td>2.8% (65)</td>
<td>0.3% (6)</td>
<td>0.2% (5)</td>
<td>0.3% (8)</td>
<td>0.1% (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aa</td>
<td>89.9% (1,295)</td>
<td>1.0% (15)</td>
<td>2.8% (40)</td>
<td>2.6% (37)</td>
<td>1.6% (23)</td>
<td>0.9% (13)</td>
<td>0.8% (11)</td>
<td>0.5% (7)</td>
<td></td>
<td>0</td>
<td>146</td>
<td>1,441</td>
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<tr>
<td>A</td>
<td>38.3% (565)</td>
<td>25.2% (372)</td>
<td>17.0% (251)</td>
<td>10.4% (154)</td>
<td>2.6% (38)</td>
<td>2.0% (30)</td>
<td>4.4% (65)</td>
<td></td>
<td></td>
<td>0</td>
<td>910</td>
<td>1,475</td>
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<tr>
<td>Baa</td>
<td>14.8% (224)</td>
<td>16.3% (247)</td>
<td>28.3% (428)</td>
<td>12.5% (189)</td>
<td>10.7% (161)</td>
<td>17.3% (262)</td>
<td></td>
<td></td>
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<td>0</td>
<td>1,287</td>
<td>1,511</td>
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<tr>
<td>Ba</td>
<td>5.1% (28)</td>
<td>15.1% (83)</td>
<td>6.7% (37)</td>
<td>11.8% (65)</td>
<td>61.2% (336)</td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
<td>521</td>
<td>549</td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
<td>2,951</td>
<td>7,275</td>
</tr>
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</table>

Summary of the Role of Ratings

“Some investors may not appreciate fully that ratings provide only a summary opinion on the riskiness of a product. And those with mandates restricting their investment to certain ratings bands may be attracted by higher-yielding products within those bands, without fully appreciating the associated risks.”

Reform Proposals

- Remove regulatory licenses
  SEC/ Basel
  Market-based measures
- “Shock therapy”
  Split structured finance
  Litigation
  Disclosure
  Market-based measures
Litigation – First Amendment


Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.
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