THE SECURITIES BORROWING AND LENDING MARKET

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SunGard’s Astec Analytics
Background of SunGard’s Astec Analytics

- Securities lending specialist
  - Market information
  - Benchmarking
  - Research

- Founded 1980
  - Acquired by SunGard October 2007
  - 29-years experience
  - State-of-the-art technology
  - Integration with other SunGard solutions

- Clients
  - Beneficial owners and direct lenders
  - Custodians and 3rd-party agent lenders
  - Prime brokers
  - Hedge funds
State of the Industry
SUNGARD

Effects of the Last Year – Supply

Source: SunGard Astec Analytics
<table>
<thead>
<tr>
<th>Year</th>
<th>Fee (bp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
</tbody>
</table>

Source: SunGard Astec Analytics
Securities Loan Volume
U.S. Equities

Source: SunGard Astec Analytics
Effects of the last year – spread differentials

GC vs. Special, by Intrinsic Fees

Source: SunGard Astec Analytics
Effects of the Last Year – ‘Specials only lending?’

Source: SunGard Astec Analytics
Focus on Investment Companies: S/L Market Share

- About one-tenth of loan volume

TOTAL ON-LOAN VOLUME (2Q08)
$2.2 Tn
Lending activity at funds has increased steadily since the late 1990s.
Total returns vary across asset classes
  - Due to utilization rates and loan spreads

### Average Earnings Due To Securities Lending for Different Investment Styles

*July 2008. Source: SunGard Astec Analytics*

<table>
<thead>
<tr>
<th>Investment Style</th>
<th>Return on Loans (Basis Points)</th>
<th>Average Share of Portfolio on Loan</th>
<th>Annualized S/L Return on Portfolio Value (Basis Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Small-Cap</td>
<td>173.5</td>
<td>11.6%</td>
<td>20.0</td>
</tr>
<tr>
<td>Equity Mid-Cap</td>
<td>153.2</td>
<td>6.1%</td>
<td>9.4</td>
</tr>
<tr>
<td>Equity International</td>
<td>119.3</td>
<td>5.7%</td>
<td>6.8</td>
</tr>
<tr>
<td>Fixed Income Government</td>
<td>40.1</td>
<td>15.6%</td>
<td>6.3</td>
</tr>
<tr>
<td>Equity Growth</td>
<td>92.3</td>
<td>5.9%</td>
<td>5.4</td>
</tr>
<tr>
<td>Equity Value</td>
<td>82.0</td>
<td>6.0%</td>
<td>4.9</td>
</tr>
<tr>
<td>Fixed Income Corporate</td>
<td>73.7</td>
<td>5.7%</td>
<td>4.2</td>
</tr>
<tr>
<td>Fixed International</td>
<td>50.0</td>
<td>8.2%</td>
<td>4.1</td>
</tr>
<tr>
<td>Equity Domestic</td>
<td>68.0</td>
<td>5.5%</td>
<td>3.7</td>
</tr>
<tr>
<td>Fixed Income High Yield</td>
<td>89.3</td>
<td>4.2%</td>
<td>3.7</td>
</tr>
<tr>
<td>Balanced</td>
<td>51.7</td>
<td>5.9%</td>
<td>3.0</td>
</tr>
<tr>
<td>Equity Large-Cap</td>
<td>79.4</td>
<td>2.6%</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Overview of the U.S. Securities Lending Model
Overview of the U.S. Securities Lending Model

- Use of Lending Agents
  - Custodial / operational activity
  - Few ‘direct’ lending programs

- Collateral
  - Cash, almost exclusively, with regulatory promotion
  - Collateral ‘re-investment’ became driver of S/L revenue

- Industry competition
  - Rise of the third party lending agent
  - Competing on (cash) returns

- Service levels
  - Income splits
  - Indemnification
U.S. Regulatory Interest and Impact
Reg SHO Timeline

- **Reg SHO Adopted**: 7-Sep-2004
- **Threshold List**: Jan 2005
- **Pilot Period**: 2 May 2005 – 30 Jun 2007
- **Rule 201 Eliminates Uptick Rule**: Jul 2007
- **SEC Bans Short Selling in Financial Stocks**: 18 Sep 2008 – 8 Oct 2008
- **10b-21**: 17 Sep 2008
- **Rule 204T**: 17 Sep 2008 – 31 Jul 2009

2005 2006 2007 2008 2009
The original uptick rule vis-à-vis securities lending

*Analysis of changes in stock loan volume before/during/after Pilot Period for Russell 3000 Index stocks:*

- **Change from pre-Pilot to start of Pilot:**
  - Pilot stocks (N=750) → +17%
  - Non-Pilot stocks (N=2,600) → +14%

- **Change from end days of Pilot to elimination of Uptick rule:**
  - Pilot stocks (N=750) → +18%
  - Non-Pilot stocks (N=2,600) → +16%
- SEC short selling restrictions
  - Emergency Order of July 2008
  - Short selling ban of September 2008

Source: SunGard Astec Analytics
US Regulatory Interest and Impact – Rule 204

Before Rule 204T
13 Aug 2008 - 16 Sep 2008
Avg. # Stocks on List per Day: 134
Avg. # Days on the List: 11

Now, with Rule 204T and No Options Market Maker Exemption
Avg. # Stocks on List per Day: 57
Avg. # Days on the List: 6.1

Close-Out Requirement Was T+13
Close-Out Requirement Is T+3
Transparency in Securities Lending
Transparency in Securities Lending

- How it all started
  - Unintentional opacity

- How it has changed
  - Cross-border expansion
  - Corporate actions and voting
  - Academic interest
  - Beneficial owner interest
  - Growth in robust available data
  - Performance benchmarking requirements and the RFP process
  - Regulatory interest

- Where we are today
  - ‘Real’ acceptance of principle of ‘relevant’ transparency
- Price discovery tool
- Securities lending trading desks
Astec Analytics

Thank You

www.sungard.com