Summary

In this report, Fitch Ratings examines the capital structures of taxable closed-end funds (CEFs), which have changed materially in recent years following a shutdown in the market for auction-rate preferred stock (ARPS) in 2008. The report discusses trends and differentiating characteristics of various financing instruments used to refinance ARPS. All data were derived from Fitch’s proprietary CEF leverage database.

- At year-end 2010, 213 U.S. leveraged taxable CEFs had $31.7 billion of leverage outstanding secured by $124 billion in assets (see chart on page 2).
- The number of taxable funds utilizing ARPS as a form of leverage decreased to 40 at year-end 2010 from 112 at year-end 2007, while, over the same period, total ARPS outstanding in taxable funds declined to $5.8 billion (18% of total funding) from $33.3 billion (68% of total funding).
- New leverage financing came primarily from bank credit facilities, margin loans, reverse repurchase agreements, and privately placed debt and preferred stock (see chart below).
- The final maturity of these new forms of leverage is short relative to the perpetual maturity of ARPS issued previously. As such, taxable CEFs have shifted their focus away from managing maximum penalty rates associated with “frozen” ARPS to managing the refinancing or roll-over risk inherent in new forms of leverage.
- The cost of these new leverage forms is, in most cases, nominally more expensive in the near term, although this must be viewed in the context of rates across a full interest rate cycle, combined with the dividend penalty terms of the ARPS.

Related Research

Applicable Criteria
- Closed-End Fund Debt and Preferred Stock Rating Criteria, Aug. 17, 2009
- Closed-End Funds: Fitch Clarifies Criteria for Make-Whole Amounts and Other Prepayment Obligations, March 18, 2010

Other Research
- CLOs and CEFs: A Comparison of Leveraged Loan Investment Vehicles, April 26, 2011
- Closed-End Funds: Evolving Use of Leverage and Derivatives, Sept. 27, 2010
- Closed-End Funds: Redemptions Provide Some Liquidity to Illiquid ARPS Market, Aug. 31, 2010


Source: Fitch Ratings.
• Effective leverage ratios have trended down since 2008, reflecting increases in net asset values and reduced funding levels overall. Fitch notes that regulatory leverage limits are more conservative for bank credit facilities and margin loans (33% leverage) than ARPS (50% leverage), which may act as a partial constraint on leverage levels.

• Conversely, regulatory guidelines for reverse repurchase agreements, another form of financing that CEFs are utilizing to a greater degree, may allow for more leverage, absent other internal and external limits.

Leverage Trends and Terms
The sections below describe the characteristics of each major form of leverage, identifying fund sectors that most commonly utilize them, the typical costs of financing for each, the maturity terms, and the typical investor base. These forms of leverage types are presented in descending order by their current size relative to the overall market.

Terms of Most Widely Used Leverage Forms by Taxable CEFs
(As of Dec. 31, 2010)

<table>
<thead>
<tr>
<th>Leverage Type</th>
<th>% of Taxable CEF Leverage</th>
<th>Term</th>
<th>Primary Investors</th>
<th>Approximate Cost of Financing</th>
<th>CEF Sectors Utilizing Type of Leverage</th>
<th>Average Fund Size Utilizing Leverage ($ Mil.)</th>
<th>No. of Funds Utilizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Facilities/Margin Loans</td>
<td>46</td>
<td>0.5–3.0 Years</td>
<td>Banks</td>
<td>Drawn: LIBOR + 75–150 bps; Undrawn: 25–100 bps</td>
<td>HY and IG corporate, loan, convertible, equity, and balanced</td>
<td>621</td>
<td>119</td>
</tr>
<tr>
<td>ARPS</td>
<td>18</td>
<td>Perpetual</td>
<td>Historically retail, now mostly broker-dealers</td>
<td>150% of ‘AA’ CP rate (+15 bps) or LIBOR + 125 bps (+150 bps)</td>
<td>HY and IG corporate, loan, convertible, equity, and balanced</td>
<td>750</td>
<td>40</td>
</tr>
<tr>
<td>Reverse Repo</td>
<td>12</td>
<td>30–90 Days</td>
<td>Banks</td>
<td>10–75 bps, tied to fed funds rates Floating: LIBOR + 100–300 bps; Fixed: 400–600 bps</td>
<td>HY and IG corporate</td>
<td>536</td>
<td>41</td>
</tr>
<tr>
<td>Private Preferred and Notes</td>
<td>6</td>
<td>5–10 Years</td>
<td>Insurance companies</td>
<td>Drawn: CP or LIBOR based; Undrawn: 50–60 bps</td>
<td>HY and IG corporate, loan, and sector equity</td>
<td>724</td>
<td>18</td>
</tr>
<tr>
<td>ABCP</td>
<td>6</td>
<td>90 Days Rolling</td>
<td>Bank-sponsored ABCP conduits</td>
<td>Drawn: CP or LIBOR based; Undrawn: 50–650 bps</td>
<td>HY and IG corporate</td>
<td>660</td>
<td>13</td>
</tr>
<tr>
<td>Exchange-Traded Preferred</td>
<td>5</td>
<td>5–7 Years</td>
<td>Retail</td>
<td>Drawn: LIBOR + 75–150 bps; Undrawn: 25–100 bps</td>
<td>Equity and sector equity</td>
<td>941</td>
<td>16</td>
</tr>
</tbody>
</table>

HY—High yield. IG—Investment grade.

Bank Credit Facilities and Margin Loans
• The number of funds utilizing bank credit facilities and margin loans increased to 119 at year-end 2010 from 44 at year-end 2007. Bank facilities and margin loans now represent 45% of total leverage utilized by taxable CEFs, up from 5% at year-end 2007.

• Following the auction-rate market dislocation, the SEC granted exemptive relief from the 300% minimum asset coverage test, which encouraged taxable CEFs to refinance ARPS with bank borrowings. The 300% test has since been reinstated.
• Fitch has observed that CEFs investing in almost all asset sectors (corporate, loan, convertible, balanced, and equity) have utilized bank credit facilities and/or margin loans.

• Proceeds were used predominantly to refinance existing ARPS, a large portion of which carried higher than average penalty rates.

• At year-end 2010, the cost of financing on credit facilities and margin loans ranged from LIBOR plus 75 basis point (bps) to 150 bps on drawn balances and 25–100 bps on undrawn balances. Margin loans tended to be more expensive for drawn amounts and credit facilities were more expensive for undrawn amounts. Maturities ranged from one to three years for credit facilities and 90–270 days for margin loans.

Reverse Repurchase Agreements
• Between year-end 2007 and year-end 2010, the number of funds utilizing reverse repurchase agreements increased slightly to 41 from 39, but rose more appreciably on a percentage of total taxable leverage basis, to 12.0% from 5.6%. The percentage increase was driven by higher utilization by several larger CEFs.

• Fitch observed that funds investing in the investment-grade and high-yield corporate bond sectors were the predominant users of this form of leverage, reflecting the favorable terms offered on such collateral by counterparty lenders. The cost of financing ranged from 10–75 bps, with terms averaging 30–90 days.

• Fitch notes that reverse repurchase agreements are typically excluded from 1940 Act minimum asset coverage tests and, instead, are subject to asset segregation rules subsequently put forth by the SEC. For more information on this topic, please see the Fitch report titled “Closed-End Funds: Evolving Use of Leverage and Derivatives,” published Sept. 27, 2010.

Asset-Backed Commercial Paper Financing
• Between year-end 2007 and year-end 2010, the number of funds utilizing asset-backed commercial paper (ABCP) decreased to 13 from 28, although this constituted a relatively small decline in the percentage of total taxable leverage to 5.6% from 7.1%. The chart on page 1 illustrates that ABCP was used heavily to refinance some of the ARPS in the second half of 2008, but, subsequently, such use has decreased, consistent with the broader decline in ABCP issuance.

• Funds investing in the investment-grade and high-yield corporate sectors were the predominant users of ABCP financing, much like such funds were the predominant users of reverse repurchase agreements.

• Similar to bank credit facilities and margin loans, ABCP financing is subject to the SEC’s 300% minimum asset coverage test; ABCP financing was exempted from the test from 2008–2010.

Privately Placed Preferred Stock and Notes
• Between year-end 2007 and year-end 2010, the number of funds utilizing privately placed preferred stock and notes increased to 18 from six and constituted an increase in the percentage of total taxable leverage to 6.9% from 0.2%. Fitch observed that funds investing in high-yield corporate bonds and sector equities were the predominant users of this form of leverage.

• Insurance companies have been the primary investors in these securities, given their appetite for collateralized instruments that produce relatively stable and predictable returns.
Fitch has observed increased usage of prepayment premiums and make-whole amounts in legal terms of such securities in the event of early redemption. Such provisions seek to balance a fund’s desire to maintain flexibility and the ability to refinance obligations with investors’ desire to secure a predictable yield to maturity. For more information on this topic, see Fitch’s report titled “Closed-End Funds: Fitch Clarifies Criteria for Make-Whole Amounts and Other Prepayment Obligations,” dated March 18, 2010.

The cost of financing for privately placed preferred stock and notes was initially set at approximately LIBOR plus 100–300 bps for floating-rate issues and 400–600 bps for fixed-rate issues; although such costs have decreased gradually over time. Note maturities have averaged five to 10 years.

All senior notes and preferred shares are subject to the SEC’s 300% and 200% asset coverage tests, respectively.

**Exchange-Traded Preferred Stock**

Between year-end 2007 and year-end 2010, the number of funds utilizing exchange-traded preferreds increased slightly to 16 from 14, although this represented an increase in the percentage of total taxable leverage to 6.9% from 0.2%.

Fitch observed that funds investing in diversified portfolios of equities were the predominant issuers of exchange-traded preferreds, although several master limited partnership sector equity funds participated as well.

Distribution tended to be focused on retail investors, given that exchange-traded preferred stock trade on a public exchange for which a secondary market is more transparent and clearly defined.

The cost of financing is fixed and ranges from 450–650 bps, with maturities of five to 10 years.
Taxable Closed-End Funds Reduce ARPS Leverage, Shift to Alternate Forms

May 25, 2011