

# **Preferred Valuation after the TARP**

We believe that preferred valuation in general remains extremely attractive for long-term investors. After a brief recap of recent market events and their impact on preferreds, we offer a detailed explanation of how and why we reach that conclusion.

The final four months of 2008 has been perhaps the most turbulent period ever for the preferred market. Starting in September, the government took conservatorship of Fannie Mae and Freddie Mac, establishing a capital position senior to existing preferred shareholders and suspending payment of preferred dividends. This was followed closely by the bankruptcy of Lehman Brothers Holdings and the rescue of AIG. With markets in virtual freefall, Congress (eventually) passed the Emergency Economic Stabilization Act establishing the Troubled Asset Relief Program (TARP), and Treasury has already committed the first half of that \$700 billion program. The Federal Reserve cut the federal funds rate from 2.0% to a range of 0-0.25% and dramatically expanded its balance sheet in a host of initiatives designed to provide liquidity to the financial system and to encourage lending. The three remaining large, independent broker-dealers either converted to bank holding companies (Goldman Sachs and Morgan Stanley) or sold out to one (Merrill Lynch is now part of Bank of America). Bank consolidation accelerated as Washington Mutual failed and its banking operations were acquired by J.P. Morgan Chase, National City Bank was bought by PNC, and Wachovia was acquired by Wells Fargo after a bitter contest with Citigroup, which itself accepted a government lifeline only weeks after losing out on Wachovia. The National Bureau of Economic Research declared that the U.S. economy has been in recession since December 2007. As 2008 came to a close, the Bush administration extended bridge loans to General Motors and Chrysler, using up the first \$350 billion tranche of funds authorized under the TARP.



Figure 1: Merrill Lynch Preferred Indices, Price Return

Not surprisingly, preferred prices were volatile. Figure 1 plots the price return (indexed to 100 on 8/31/08) for three Merrill Lynch preferred indices representing DRD-eligible, \$25-par taxable, and institutional taxable preferreds.<sup>1</sup> Much of the weakness in preferred securities occurred prior to the announcement of the TARP on September 19. Since then, DRD-eligible and retail taxable preferreds (P8D0 and P8HO) are up 2–6%, while institutional taxable preferreds (C8CT) are about 10% weaker – probably reflecting deleveraging and tax-loss selling by funds, insurance companies, and other institutional investors.

## Historically High Yields

Preferred securities represent the highest-yielding investment grade fixed income asset class. Preferreds are historically cheap to Treasuries, investment grade corporate bonds, and municipal bonds. In other words, preferred securities in general are trading at historically wide yield spreads to other benchmark fixed income investments. Figures 2 through 5 show the historical yields and yield spreads to Treasuries, corporates, and municipals for the three Merrill Lynch preferred indices noted above.

Figure 2: Preferred and Treasury Yields



Yields of Merrill Lynch Preferred Indices and 30-year Treasury, 8/31/2000 to 12/31/2008

<sup>&</sup>lt;sup>1</sup> The Merrill Lynch indices used throughout this article are: Merrill Lynch 8% Capped DRD-Eligible Preferred Stock Index (P8D0), Merrill Lynch 8% Capped Hybrid Preferred Securities Index (P8HO), and Merrill Lynch 8% Capped Corporate US Capital Securities Index (C8CT). More information about the Merrill Lynch indices and the Barclays Capital indices (denoted in parentheses in the accompanying graphs) can be found in Appendix B.













## Default Tolerance

Of course, one of the reasons that preferred securities are now so cheap is because investors fear that defaults will be high and recoveries low. We acknowledge that defaults and losses from defaults probably *will* run higher than normal over the next few years. The question is, at today's prices, how high can defaults and loss rates go to earn the return on a less-risky asset? We updated the breakeven default analysis that we did in September, using the same model and assumptions.<sup>2</sup> Figure 6 shows the results for the three Merrill Lynch indices we discussed above.

Merrill Lynch Index Values (as of 12/31/08)	Annualized Portfolio Yield <sup>3</sup>	Average Price (Percent of Par Value) <sup>4</sup>	Starting Default Rate <sup>5</sup>	Breakeven Cumulative Defaults <sup>6</sup>	Breakeven IRR <sup>7</sup>
DRD Pfds (P8D0)	9.31%	76.73	18.06%	42.3%	2.23%
Hybrid Pfds (P8HO)	9.73%	71.47	18.95%	43.9%	2.23%
Cap Securities (C8CT)	11.68%	60.54	22.88%	50.2%	2.23%

Figure 6: Breakeven Default Table for Merrill Lynch Preferred Indices

To put these default rates into perspective, from the end of 1928 to 1939, cumulative default rates on Moody's investment grade, Baa-rated, and all-rated (including speculative grade) issuers were 6.7%, 10.2%, and 28.0%, respectively. Results for banks were even worse. Roughly 38% of depository institutions failed over that 10-year period, most of them during the first three years. Nonetheless, the model shows that the index portfolios can withstand *even higher default rates than occurred during the Great Depression* and still earn the same return as the 10-year Treasury.

We do not think default rates will come anywhere close to exceeding those experienced during the Great Depression. Even before the government's recent actions, such default rates seemed implausible. During the Great Depression, there was no deposit insurance and the Federal Reserve made the fatal mistake of shrinking the money supply. Today, all deposits up to \$250,000 are federally insured, and some non-interest-bearing deposits are insured without limit. The Fed is flooding the market with liquidity, rapidly expanding the money supply. Treasury has committed more than \$250 billion in preferred equity capital to banks. And the Fed and Treasury have expressed resolve to do even more if necessary to support the financial system. Although we have to concede that it is possible

<sup>&</sup>lt;sup>2</sup> See the Appendix for a description of the model.

<sup>&</sup>lt;sup>3</sup> The Annualized Portfolio Yield equals the dollar-weighted average Annualized Yield of index securities.

<sup>&</sup>lt;sup>4</sup> Average Price equals the dollar-weighted average Price of index securities.

<sup>&</sup>lt;sup>5</sup> Starting Default Rate is the annual default rate, applied quarterly, for the first two years. Modeled defaults in subsequent years decline by 50% per year for the next four years and then are held constant at 0.25% annualized for the remaining four years of the 10-year horizon.

<sup>&</sup>lt;sup>6</sup> Breakeven Cumulative Defaults equals the total percentage of defaults the portfolio can incur, under the modeling assumptions, so that the portfolio's internal rate of return equals the yield on the 10-year Treasury note.

<sup>&</sup>lt;sup>7</sup> Breakeven IRR is the internal rate of return on the preferred portfolio under the modeling assumptions. It is equal to the simple annual yield on the 10-year Treasury note as of the valuation date.

that defaults will be higher than these breakeven levels despite the government's extraordinary efforts, our belief is that it is extremely improbable.

Before moving to the next topic, we'll take just a moment to discuss deferral risk. Our model ignores it, even though virtually all preferred issues may skip dividend payments for a period of time (in some cases in perpetuity) without triggering an event of default. For financial institutions, we continue to think that the risk of deferral absent default will be low: If a financial company halts its preferred dividend, it will lose access to the capital markets, which usually means default is imminent unless there is government intervention to prevent it. Of course, government support but elimination of preferred dividends is precisely what happened in the case of Fannie Mae and Freddie Mac. However, we think that is a special case given their status as government sponsored enterprises. We expect future government intervention will look more like the Citigroup rescue on November 23, 2008 (which preserved preferred dividends) rather than the conservatorship of Fannie and Freddie. Moreover, the Treasury has firmly established itself as an investor at the preferred level across a broad range of financial institutions. It has a strong interest in having banks continue to pay preferred dividends.

## Government Actions Limit "Tail Risk"

One of the most important aspects of the government's multi-faceted response to the credit crisis is that it should sharply reduce the possibility of a severe economic and financial contraction. Market economies always face the threat of a self-perpetuating downward spiral but rarely experience one, since price signals tend to keep supply and demand in healthy balance most of the time. In hindsight, it is clear that too many assets – most obviously real estate but also corporate and financial assets – were purchased with credit that was priced too cheaply to reflect the true risks assumed by lenders. Asset prices, which were driven too high via debt-financed purchases, have tumbled, while debt obligations remain unchanged<sup>8</sup>, eroding or eliminating the equity cushion that protects debt holders. Even as sellers of assets lowered prices in order to raise cash to pay down debt, credit to purchase those assets became constrained, and so asset prices fell further. The biggest risk facing an economy that is in the midst of such a debt-deleveraging cycle is that liquidity and credit dry up, worsening and extending the downward spiral in asset prices, wealth and economic activity.

The Federal Reserve, Treasury and the FDIC, recognizing these downside risks, have moved aggressively to limit them. Most dramatically, the Fed slashed interest rates and more than doubled its balance sheet from about \$900 billion in August 2008 to \$2.26 trillion currently, not only lending more money but also buying financial assets outright. These actions are providing crucial liquidity to banks, corporations, and the mortgage market. The FDIC expanded deposit insurance to ward off potential deposit runs at banks and moved quickly to facilitate the takeover of failed or weakened institutions by stronger ones. Treasury committed the first half of the \$700 billion TARP in just three months, helping to recapitalize the banking system in a way that was friendly to preferred investors (see below). Moreover, all three institutions have combined their resources to support systemically important institutions whose failure could have led to further

<sup>&</sup>lt;sup>8</sup> That is, the face amount to be repaid is unchanged. Market prices of most private debt have fallen significantly.

contraction in lending. AIG and Citigroup are the two most prominent examples, and there probably will be more before this crisis ends. Finally, Congress and senior members of the incoming Obama administration are discussing sizable fiscal stimulus to help offset some of the reduction in private consumption necessary to pay down debt (i.e. to increase saving).

Each of these policy responses is important individually. Together, they should provide borrowers, lenders, and intermediaries the time necessary to allow an orderly adjustment of asset prices and debt obligations. Not all institutions will survive, but we think the financial system will. In short, we think that the "tail risk" facing the economy of another depression has been and will be sharply limited by these policy actions and the private sector responses to them. If so, then preferred securities – which in our view reflect a doomsday economic scenario – are priced too cheaply.

## TARP Supports Current Preferred Investments

Although the TARP was initially envisioned as an asset purchase program to support asset valuations, it soon transformed into the Capital Purchase Program (CPP) for banks and thrifts. For preferred investors, the most critical aspect of the CPP is that the Treasury's investment ranks *pari passu* with (but not senior to) existing DRD-eligible preferred shareholders and junior to taxable preferred securities. This decision by the government to invest alongside or below existing preferred shareholders restored some of the confidence in the preferred markets that had been significantly weakened by the events beginning with the conservatorship of Fannie Mae and Freddie Mac.

The CPP also provides a roadmap for the eventual restoration of private capital into these banks. Because preferred securities likely will play a prominent role in bank recapitalization, this has led to fears that heavy supply will keep preferred prices depressed for an extended period. We think those fears are overblown for two reasons. First, the coupon on CPP preferreds is 5% for the first five years and 9% thereafter. Banks have an incentive to replace the CPP preferred over the next three years even if the cost of replacing it is high, since doing so allows them to halve the number of warrants owned by Treasury. However, for the warrants to have real value (and thus interest banks in retiring them with expensive preferred), common stock prices have to rise substantially. We think it's unlikely that common stock prices would rally so significantly without preferred prices rising also. Thus, there may be supply, but it's likely to come only when preferred yields are lower (prices higher).

Second, looking beyond the five-year coupon step-up, banks would look to replace TARP preferred if it can be replaced at a cost below 9%. Since most bank preferreds today yield more than 9%, prices would need to appreciate in order to bring out new issue supply. In addition, we believe that a sizable portion of the CPP capital will be replaced with common equity, either via new issuance or retained earnings as profits recover. We think regulators will encourage it and markets will demand it. As the common equity cushion increases, preferred prices should improve. On balance, we do think that preferred issuance will increase in the future, but we believe that the bulk of it will be issued at lower yields and higher prices than where preferreds are trading today.

### Potential Equity-like Returns

The current yields on the three Merrill Lynch indices of preferred securities, which range from 9.6% to 11.9%, are now comparable to the long-run annualized return on common equities (roughly 10.2% from 1960 through 2007, including reinvested dividends, for the S&P 500 stock index). Of course, in addition to current yield, returns on preferreds will depend upon defaults, loss severities, deferrals, and price performance going forward. However, we think government actions to limit downside risk to the economy should benefit preferred and debt securities relative to common equity, which should push preferred prices higher over time. That is because the government policies necessarily trade off economic stimulus over the near term for restraint over the long run. In the case of fiscal stimulus, any government debt issued to pay for spending programs ultimately must be repaid with higher taxes. Similarly, the Fed eventually will have to shrink its balance sheet, which will absorb private sector credit capacity and liquidity. Each of these will restrain private sector growth after the crisis ends. This is good news for debt and preferred holders, since these government policies imply lower risk of default than would occur otherwise, but it may mean lower long-term growth and profit for common equity holders. We provide a table of potential preferred returns under various default and price scenarios in the Appendix at the end of this article.

#### Could Preferred Prices Go Even Lower?

Looking rationally at preferred securities valuation leads us to the firm conclusion that preferreds in general are cheap. They are at historically wide spreads to benchmark fixed income asset classes. They can tolerate very high default rates and still generate positive returns, and the government's actions to limit the severity of the recession should substantially reduce the risk that defaults get that severe. At more-reasonable default rates, preferreds can provide common equity-like returns with lower risk. As they were in September, we believe that preferred securities remain extremely attractive for long-term investors.

However, we recognize that markets today are far from completely rational. Stung by losses, some leveraged preferred investors have been forced to exit the market, and many will not come back. Others see short-term risk that they feel outweighs preferreds' long-term potential, or they fear that new issue supply will prevent preferreds from recovering. Still others genuinely fear that the U.S. economy is headed for another Great Depression, despite all efforts to prevent it.

We do not know precisely how this recession will play itself out. We can only assess the factors that we think will affect preferred valuation, as we have tried to outline here, and act accordingly. All investing entails taking risks. Intelligent long-term investing entails taking risks when the potential payoffs are high and the probability of poor outcomes is low. We believe that in the preferred market, now is such a time.

Flaherty & Crumrine Incorporated January 5, 2009

Merrill 8% Ca	pped DRD-	Eligible Prefe	erred Stock Ir	ndex (P8D0).	Starting Price = 76.73, Annualized Portfolio Yield = 9.31%		
Starting Default	Cumulative		Ending Current				
Rate	Defaults	Ending Price	Yield	Preferred IRR	Scenario Description		
23.86%	51.7%	76.73	9.31%	0.00%	Zero Return		
18.06%	42.3%	76.73	9.31%	2.23%	Breakeven to UST 10-yr		
15.69%	38.0%	76.73	9.31%	3.16%	Bank default rate in Great Depression		
10.73%	28.0%	76.73	9.31%	5.13%	Default rate for all rated bonds in Great Depression		
3.31%	10.2%	76.73	9.31%	8.17%	Default rate for Baa-rated bonds in Great Depression		
3.31%	10.2%	90.00	7.94%	9.25%	Same as above, but average price recovers to 90% of par		
Merrill 8% Ca	pped Hybri	d Preferred S	ecurities Ind	ex (P8HO). S	starting Price = 71.47, Annualized Portfolio Yield = 9.73%		
Starting Default	Cumulative		Ending Current				
Rate	Defaults	Ending Price	Yield	Preferred IRR	Scenario Description		
24.69%	52.9%	71.47	9.73%	0.00%	Zero Return		
18.95%	43.9%	71.47	9.73%	2.23%	Breakeven to UST 10-yr		
15.69%	38.0%	71.47	9.73%	3.52%	Bank default rate in Great Depression		
10.73%	28.0%	71.47	9.73%	5.52%	Default rate for all rated bonds in Great Depression		
3.31%	10.2%	71.47	9.73%	8.60%	Default rate for Baa-rated bonds in Great Depression		
3.31%	10.2%	85.00	8.18%	9.76%	Same as above, but average price recovers to 85% of par		
Merrill 8% Capped Corporate US Capital Securities Index (C8CT). Starting Price = 60.54, Annualized Portfolio Yield = 11.68%							
Starting Default	Cumulative		Ending Current				
Rate	Defaults	Ending Price	Yield	Preferred IRR	Scenario Description		
28.42%	58.1%	60.54	11.68%	0.00%	Zero Return		
22.88%	50.2%	60.54	11.68%	2.23%	Breakeven to UST 10-yr		
15.69%	38.0%	60.54	11.68%	5.21%	Bank default rate in Great Depression		
10.73%	28.0%	60.54	11.68%	7.33%	Default rate for all rated bonds in Great Depression		
3.31%	10.2%	60.54	11.68%	10.62%	Default rate for Baa-rated bonds in Great Depression		
3.31%	10.2%	75.00	9.43%	11.94%	Same as above, but average price recovers to 75% of par		

Appendix A: Scenario Return Table for Merrill Lynch Preferred Indices (10-year Horizon beginning December 31, 2008)

These scenario returns were generated using a default model that applies a quarterly default rate to a portfolio of preferred securities. We assume that: (i) defaults run at a high, constant rate for the first two years, declining by one-half each year for the next four years, and stabilizing at 0.25% per year in the final four years of our 10-year investment horizon; (ii) there is no recovery upon default; (iii) preferred prices remain unchanged unless noted otherwise; (iv) defaults occur at the end of each quarter, and (v) there are no dividend deferrals. Although dividend deferral (but not default) by financial companies is relatively rare historically, it does happen, and it is a risk that the model does not incorporate. We attempt to compensate for this by making the conservative assumption that recovery upon default is zero, whereas the historical recovery rate on defaulted preferreds, according to Moody's Investors Service, is approximately 13% of par. Nonetheless, a high rate of dividend deferral would reduce the breakeven default rates generated by our default model.

See "Thoughts on Preferred Valuation in a Turbulent Market," Flaherty & Crumrine Incorporated, September 19, 2008 for a more complete description of the model and its assumptions. A copy is available at <u>www.preferredincome.com</u> or <u>www.fcclaymore.com</u>.

The columns in the table denote certain model inputs and outputs. The Starting Default Rate is the scenario default rate for the first two years (thereafter declining by one-half each year to 0.25% for the final four years). Cumulative Defaults represent the total percentage of the original portfolio that has defaulted by the end of the 10-year horizon. The Preferred IRR is the internal rate of return earned on the preferred portfolio given the assumed inputs. The first two scenarios in each section illustrate how high defaults can go to generate IRRs equal to zero and the 10-year Treasury yield. The next three scenarios in each section target various cumulative default rates from the Great Depression (1928-1938). The cumulative default rate of 28% and 10.2% represent the cumulative defaults of Moody's all-rated (investment grade and speculative grade) and Baa-rated rated credits, respectively, over the same period. The last scenario in each section uses the Baa default rate, but increases the ending preferred price, which increases the IRR. Recovery upon default is assumed to be zero in all scenarios. Pricing data is as of 12/31/2008.

### Appendix B: Notes to Market Indices

#### Notes to All Market Indices

All index returns include interest income and do not reflect any expenses. They are presented on a pre-tax basis and are calculated on a month-end basis. In addition, the index returns are unmanaged and do not necessarily represent any investment products managed by Flaherty & Crumrine.

#### Merrill Lynch Preferred Securities Indices

Merrill Lynch 8% Capped DRD-Eligible Preferred Stock Index (P8D0), Merrill Lynch 8% Capped Hybrid Preferred Securities Index (P8HO), and Merrill Lynch 8% Capped Corporate US Capital Securities Index (C8CT). These indices are referenced as (1), (2), and (3), respectively, in the accompanying graphs. P8HO is a subset of the Merrill Lynch Fixed Rate Preferred Securities Index that contains all listed, subordinated constituents of the fixed rate index with a payment deferral feature. The fixed rate index includes investment grade DRD eligible and non-DRD eligible preferred stock and senior debt. P8D0 is a subset of the fixed rate index that contains fixed rate preferred securities which qualify for the corporate dividends received deduction and are issued by U.S. corporations and government agencies. C8CT is a subset of the Merrill Lynch Corporate All Capital Securities Index that contains investment grade fixed rate or fixed-to-floating rate \$1,000 par securities that receive some degree of equity credit from the rating agencies or their regulators. All three indices have the issuers capped at 8%.

The yield to maturity for the Merrill Lynch indices is supplied by the Bloomberg mnemonic MLI\_YTM\_CONV and is defined as the average yield to maturity of constituents weighted by market value. The yield to maturity for C8CT after 6/30/2007 calculated by Flaherty & Crumrine using index member data and pricing provided by Merrill Lynch.

## Barclays Capital Indices

The Barclays Capital Long U.S. Corporate Index is a subset of the Barclays Capital U.S. Corporate Investment Grade Index that contains publicly issued U.S. corporate securities and global issues that are SEC-registered. The index includes investment grade fixed rate securities in the industrial, utility, and finance sectors. The Barclays Capital Municipal Bond Index includes fixed-rate investment-grade rated bonds issued by municipalities at least at least one year from their maturity date, including general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. These indices are referenced by (4) and (5), respectively, in the accompanying graphs. Both Barclays Capital indices were formerly known as Lehman Brothers indices.

The yield to maturity for the Corporate Index and the yield to worst for the Municipal Index are obtained directly from the Barclays Capital Live website at https://live.barcap.com.

© 2009, Flaherty & Crumrine Incorporated. All rights reserved. This commentary contains forward-looking statements. You are cautioned that such forward-looking statements are subject to significant business, economic and competitive uncertainties and actual results could be materially different. There are no guarantees associated with any forecast; the opinions stated here are subject to change at any time; are the opinion of Flaherty & Crumrine Incorporated. Further, this document is for personal use only and is not intended to be investment advice. Any copying, republication or redistribution in whole or in part is expressly prohibited without written prior consent. The information contained herein has been obtained from sources believed to be reliable, but Flaherty & Crumrine Incorporated does not represent or warrant that it is accurate or complete. The views expressed herein are those of Flaherty & Crumrine Incorporated and are subject to change without notice. The securities or financial instruments discussed in this report may not be suitable for all investors. No offer or solicitation to buy or sell securities is being made by Flaherty & Crumrine Incorporated.