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## U.S. MARKET COMMENTARY

# HIGH-YIELD BONDS NO LONGER COMPELLING

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## High-Yield Bonds No Longer Compelling

A year ago, we advised clients to begin allocating assets to U.S. high-yield bonds, funding the commitments from equities.<sup>1</sup> We believed that the default and recovery outlook was dismal for high-yield bonds, but that bond prices had probably baked in an even worse bloodbath than was likely to actually transpire. From the end of October 2008 to the end of October 2009, high-yield bonds have returned a stunning 48.1%, versus 9.8% for the S&P 500 equity index (see Table A).<sup>2</sup> The vast majority of high-yield bonds' 38 percentage point outperformance occurred during first quarter 2009. Further, the return from high-yield bonds has been vastly less volatile than that from stocks, as is typically the case (Table B).

Given how far high-yield bonds have run, we have much less conviction in their outperformance (versus equities) from this point forward than we did a year ago. Sticking with high-yield bonds is still a reasonable choice for investors that are not particularly concerned with the potential for tracking error relative to equities,<sup>3</sup> as valuations remain fair and the default picture continues to improve, but given that high-yield bond prices now average 92 cents on the dollar (versus 63 cents a year ago), returns from this point forward are unlikely to keep up with equities unless stocks tumble or remain flat. Most investors should consider pulling back from high-yield bonds. When reinvesting the proceeds, investors should consider the relative attractiveness of new investments, particularly since many equity markets are either overvalued (U.S. equities) or overbought (emerging markets). For those investors that had funded their high-yield tactical investment from U.S. equities, we would advocate placing the proceeds into high-quality equities, which are still fairly valued, or perhaps into long-biased long/short hedge funds that carefully hedge. Alternatively, investors may choose to rotate into more attractively priced distressed investments, such as control-oriented distressed debt partnerships.<sup>4</sup> (Bank loans [also called leveraged loans] are floating-rate cousins to high-yield bonds. We last wrote extensively about them in June<sup>5</sup> and provide a brief update on the asset class, together with supporting exhibits, in the Appendix.)

## Disaster Narrowly Averted?

A year ago, we noted that bond prices compensated for a depressionary landscape; we stated that a 13% default-loss rate (a 15% default rate and 15% recovery rate) was a plausible downside scenario. At this point it seems that actual default losses will be moderately better than this adverse scenario. It appears likely

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<sup>1</sup> Please see our October 2008 Market Commentary *High-Yield Bonds: Toxic or Tasty?*

<sup>2</sup> Manager returns may have lagged the index during the period discussed, for reasons that we will detail later on in this commentary.

<sup>3</sup> This is particularly true for taxable investors that plan to hold on for a year to achieve long-term capital gains treatment.

<sup>4</sup> These partnerships generally require long lockups and are only appropriate for investors that can accommodate additional exposure to illiquid assets.

<sup>5</sup> Please see our June 2009 Market Commentary *Distressed Investing*.

that the trailing 12-month default rate will peak at some point this quarter,<sup>6</sup> probably around 14%<sup>7</sup> (Table C); the recovery rate through third quarter 2009 was 26%, similar to the level seen in 2002 (Table D). The default rate predictions shown in Table C have an outlier: Fitch Ratings is standing by its July prediction that the default rate for calendar 2009 will be between 15% and 18% (the firm now believes the lower end of that range is more likely).<sup>8</sup>

After peaking, will default rates collapse or plateau? Most market observers and participants expect default rates to plummet next year. Fitch is an exception; they expect defaults to “remain elevated” next year. We believe that a substantial drop-off, consistent with the (relatively short) history, is the most likely scenario, provided the economy continues to improve.<sup>9</sup> History provides a relatively small number of examples, but those examples point to a significant decline after defaults peak (Table E). The reasons for this are three-fold:

1. The attrition caused by the past year’s high level of defaults has cleaned up the index. Fully 13% of the market’s issuers have defaulted over the past year, and the companies remaining are stronger than the index’s components a year ago. In fact, we estimate that about 50% of the par value of high-yield bonds that were trading below 50 cents on the dollar one year ago have gone on to default. The other half of that universe that did not default is now trading at a median price of 75 cents on the dollar.<sup>10</sup> At the end of a marathon, every runner is weakened, but the universe of finishers is probably in better shape than the broader universe that started the race. The new issuance so far in 2009 may have also helped to spiff up the quality of the index: just 7% of 2009 high-yield issuance tracked by Fitch has been for bonds rated CCC or lower.
2. The ability to roll-over or term-out maturing debt is much greater than it was a year ago. Corporations have issued \$114 billion in high-yield bonds so far in 2009, an annualized rate of \$137 billion that compares favorably to the average issuance of \$112 billion over the past five calendar years. For the first three quarters of 2009, approximately 65% of global high-yield issuance was used to refinance other debt, according to Fitch; this is the highest level since 2003 and compares to an

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<sup>6</sup> Defaults are still quite elevated relative to history, but the pace is slowing. During the third quarter, Moody’s counted 50 global corporate defaults, versus 83 in the second quarter and 89 in the first quarter. The global default count during the first three quarters of 2009 has been 3.6 times the corresponding number in 2008.

<sup>7</sup> The current Moody’s speculative-grade default rate referenced in this paper includes Moody’s rated universe of bank loans (which have a trailing 12-month default rate of 10.9% as of October) and traditional high-yield bonds (which have a trailing 12-month default rate of 14.5%). Moody’s forecasts are based on the combined rate.

<sup>8</sup> Fitch’s estimates include so-called “coercive distressed exchange” transactions as a default, since they may have similar implications for debt holders even though they do not involve a missed payment or bankruptcy filing. By Fitch’s count, there has been \$16 billion worth of these distressed exchanges in 2009, representing 28% of its default count and 18% of its default universe in dollar terms.

<sup>9</sup> We do not believe that a “V-shaped” recovery is a necessary element of a decline in defaults; a muted recovery is consistent with decreasing defaults. A “double-dip” would probably not be consistent with decreasing defaults, however.

<sup>10</sup> This is not to say that the fortunes of the individual non-defaulting companies are improved. Indeed, very few of the companies that were trading at less than half of their par value one year ago have seen their credit ratings improve over the intervening period. However, we believe that many of those that survived the last year will probably make it through the next year as well. Many companies that were in terrible shape last October are no longer part of the index universe (although of course some *other* companies that may have looked fine last year have deteriorated to the point where they are now on the ropes).

average refunding level of about 45% during the past five calendar years.<sup>11</sup> During the market distress from September 2008 through March 2009, just \$15 billion was issued; clearly rolling over maturing debt was not a reasonable option for most companies during that period. The issuance window has been supported by the very low yields on short-term and government-issued securities, which has gradually herded yield-seeking investors out of cash, Treasuries, and agency mortgage-backed securities and into corporate debt (including high-yield corporate debt on the margins).

3. The economy has started to show improvement, boosting the fundamentals of many debtor companies.

In the year that followed the default peaks in 1991 and 2002, the trailing 12-month default rate fell by 7 and 6 percentage points, respectively. We believe there is a decent case for the trailing 12-month default rate to come down from 13+% today to a more moderate level in a year's time, as long as economic distress continues to moderate.

And what happens if the U.S. economy's improvement proves to be merely transitory? After all, we have been arguing that the economy's stabilization has been primarily due to unsustainable fiscal and monetary stimulus, and that the "odds of relapse are high."<sup>12</sup> If the economy dips back into recession, defaults are likely to pick back up and spreads may widen substantially. It is impossible to say for certain whether equities would do better or worse than high-yield bonds in this environment, but historically the high coupon yield of speculative-grade bonds has proven to be moderately defensive, relative to the low, and not always reliable, dividend yield of equities.

For example, if the economy backtracked, causing speculative-grade bond yields to increase in short order from today's 10% level to 15% (implying bond prices of probably 70 to 75 cents on the dollar) and default losses over the next year were 10%, nearly as high as those over the past year,<sup>13</sup> high-yield bond returns would be about -10% to -15% for the year. Would the S&P 500 in that scenario perhaps revert to its long-term average price-earnings multiple of about 16 times normalized earnings?<sup>14</sup> If so, the index would have a price return of about -17%, roughly in line with the high-yield bond scenario. Would equity investors instead throw in the towel after several years of frighteningly volatile returns and bring the index multiple down to 10.2 times normalized earnings (1 standard deviation below average)? Such a sell-off would imply a price return of closer to -50%. It is no doubt possible to construct a downside scenario where equities lose less than high-yield bonds, similar to calendar year 1990 where high-yield bonds returned -9.6% while equities returned -3.1%, but these scenarios have been rare during the relatively short history of the asset class. Investors that are decidedly bearish on the economy and equities may be more comfortable continuing to earn 10% yields. Those that are uncertain rather than explicitly bearish about the economy, and that are sensitive to tracking error versus their policy benchmark, are advised to tread back into high-quality equities.

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<sup>11</sup> Global data are used here because U.S.-only figures were not available, but U.S. bonds are the lion's share of the global high-yield universe.

<sup>12</sup> Please see our August 2009 report *Asset Allocation in the Current Environment: Now What?!*

<sup>13</sup> For instance, a default rate of 12% and a recovery rate of 15% would produce 10.2% default losses.

<sup>14</sup> The normalized price-earnings ratio is one of our preferred valuation metrics and is based on the price level of the S&P 500 divided by the real average earnings of the index over the past ten years.

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## Spreads Still Wide but No Longer Extreme, and Yields Are Now Moderate

The illiquidity premium and default risk premium for high-yield bonds were enormous a year ago (these premia show up as a higher yield). Sky-high risk premia were of course appropriate, given the tremendously stressed market environment and the high level of default risk, but we stated then that with the large illiquidity premium, then-current yields more than compensated for the tough sledding ahead. The yield spread has come in sharply since then. Option-adjusted yield spreads of the BofA Merrill Lynch U.S. High Yield Master II Index over Treasuries were about 1,600 basis points (bps) one year ago, spiked to nearly 2,200 bps in December, and have narrowed by nearly 1,400 bps since then (see Table F, which shows a simple yield spread over ten-year Treasuries of the Barclays Capital U.S. Corporate High Yield Bond Index, which has a longer history than the BofA Merrill index). Currently, the option-adjusted yield spread is 766 bps, compared to a post-1996 average of 595 bps and a low of 241 bps. With *monthly* defaults apparently having peaked several months ago and trailing 12-month defaults likely peaking during this quarter, a 760 bp yield spread (layered over a relatively low Treasury yield) strikes us as reasonable but not particularly generous. Further, the spreads of the higher-quality BB-rated components of the index are still well above their historical average level, but the spreads of CCC bonds, which are historically much more likely to default, are now *below their historical average* (see Tables G and H).

In fact, given the low level of Treasury yields (helped to a perhaps unquantifiable but no doubt significant degree by \$300 billion in Federal Reserve purchases since March), it is helpful to look not just at the traditional spread metric, but also at bond prices and total yields.

Prices of high-yield bonds dropped to about 55 cents on the dollar in December (prior to 2008 they had only rarely fallen as low as 70 cents).<sup>15</sup> They are now priced at 92 cents on the dollar, about equal to the post-1996 average. There is no hard and fast ceiling on bond prices, but it is rare for them to trade much above par. After all, the bonds will only pay back par when they mature (assuming they do not default); that is as good as it gets. Looking at the 19-year history of the BofA Merrill Lynch U.S. High Yield Master II Index, the index's bonds have crested only as high as \$1.05 per \$1 of par value, and they have spent a handful of quarters above par (Table I). Prices of \$1.05 would imply yields of about 7.5%—quite low historically for below-investment-grade bonds. Never say never, but any investor waiting for prices to crest much above \$1.05 even in a nirvana economy better have a lot of patience. In other words, with prices at 92 cents, the majority of potential capital gains have been earned, and this is now a yield game.

Yields are also right at their long-term average. The Barclays Capital U.S. Corporate High Yield Index is yielding 10%, about 100 bps below the average yield for the index's 23-year history (Table J). Granted, yields on all flavors of bonds have been on a downward trend for most of that period, but today's 10% yield is also essentially equal to the *average* yield over the past five years. With unemployment topping 10% and still rising, and with S&P 500 companies reporting earnings for the first two quarters of 2009 that

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<sup>15</sup> Of course, the high-yield bond universe has more than 1,000 different bonds; we measure bond prices in this context using the price function of the BofA Merrill Lynch U.S. High Yield Master II Index, which approximates the average price of the index's component securities.

were lower than any two-quarter period since 1973,<sup>16</sup> today's yield appears to reflect a fairly sanguine view for an economy that is sadly far from average. That said, inflation is not yet lapping at our shores, so if inflation remains muted and the default rate over the next year collapses as many predict, it is possible a 10% yield will seem almost generous in hindsight.

## Manager Performance

The near-50% index return over the past year has been trumpeted far and wide, but did many investors in the high-yield bond arena actually receive those returns? Far too few did.

We continue to believe that the credit space offers opportunities for active managers. Bond indices tend to be issuance-weighted, meaning that the bonds of the most indebted issuers hold the largest index weights—not exactly a recipe for success. However, during some periods, actively managed funds are likely to have trouble keeping up with even imperfectly designed indices. One of those occasions is when the lowest quality bonds begin to run. The BofA Merrill Lynch index was weighted with 16% in CCC bonds a year ago. Few managers followed suit. For most high-yield managers, their investor base thinks of this asset class as either a small permanent allocation, or as a substitute for high-quality bonds. High-volatility portfolios are not conducive to maintaining a stable asset base for that clientele. Over the past year, CCC bonds have returned 49.4%, while higher-quality BB bonds have returned a somewhat more modest 31.8%.<sup>17</sup> As a result, managers tilted toward the higher-quality end of the credit spectrum have lagged. Table K shows the performance of high-yield bond managers in our database compared with two market indices (one of which does not include CCC bonds) for calendar year 2008 and for the first three quarters of 2009. Managers that outperformed in 2008 (likely by tilting toward higher-quality bonds than the overall index) have generally underperformed so far during 2009.

A second reason for underperformance is illiquidity, a factor that we flagged in our October 2008 report when we warned that sizable trades at that point engendered bid-ask spreads of 5 points or more (nearly 8% for a bond trading at 65 cents on the dollar). The liquidity of high-yield bonds was terrible last fall and this spring, so managers had to pay very high bid-ask spreads if they needed to raise cash to meet redemptions (likely in the fall), put incoming cash to work (in the spring and summer), and reposition portfolios (ongoing). In fact, this was one of the reasons that markets have been receptive to new issues; they can be cheaper ways to invest incoming cash than buying bonds in an illiquid secondary market. Liquidity fluctuates, but generally remained poor through March, and has subsequently rebounded somewhat (see trading volume in Table L). Managers that need to buy or sell will face less punitive spreads today.

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<sup>16</sup> Operating earnings, which eliminate the impact of some events considered to be transitory, have dropped somewhat less severely than reported earnings.

<sup>17</sup> Reflects returns of bonds with *current* ratings of CCC and BB, respectively, in the Credit Suisse High Yield Bond Index (e.g., a bond that was rated CCC last fall and was later upgraded or defaulted would not be counted among the CCC bonds for this calculation).

## **The Upshot? We Are No Longer Thrilled About Prospects for High-Yield Bonds**

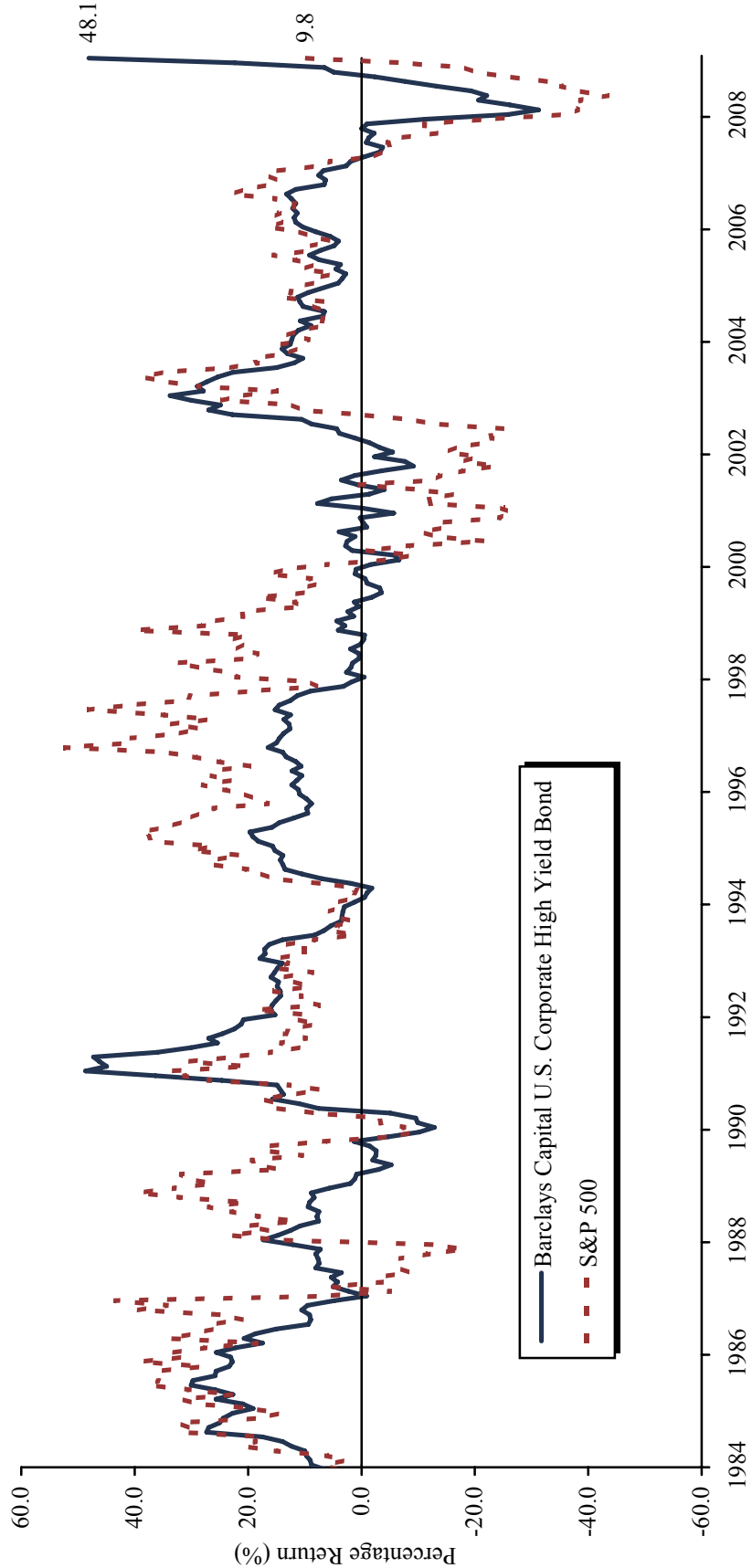
In late 2008, with hedge funds and other investors furiously spitting high-yield bonds out of their portfolio to deleverage and raise cash, we felt confident that they could serve as a bit of a shelter in the storm, and actually that they were priced to deliver acceptable returns in a very wide variety of environments. One year later, prices are 30 points higher and back to average levels, yields are 800 bps lower and back to average levels, and we are much less thrilled about high-yield bonds. We are not overly concerned, because a 10% yield will be more than adequate as long as the level of defaults comes down quickly, as it has historically after peaking. However, returns are going to be much less enticing from this point forward than they have been this year.

For most investors that have owned high-yield bonds as a tactical bet relative to equities, we would generally advise peeling off that bet at this point.<sup>18</sup> It is certainly possible that high-yield bonds will continue to outperform, as they often have when spreads started the period at current levels (see Table M), but the range of scenarios that would likely bring about that outperformance appears narrower than last year, now that there is a much narrower valuation disparity between the two asset classes. That said, we have concerns about equities as well, given that many equity categories are now overvalued. For investors that share our valuation concerns but that care about tracking error, traditional equities are sensible, but we would skew toward high-quality equities, which remain fairly valued (these generally have low leverage, high profitability [return on equity], and a history of retaining profitability through the full business cycle). For investors that are less sensitive to short-term tracking error, long/short equity hedge funds are a reasonable destination, likely to offer some downside protection in the event that equity markets retrace some of this year's rapid ascent. In addition to equities, another asset class worthy of consideration today for those investors that can accommodate additional illiquidity in their portfolio is distressed-for-control private partnerships, which have historically done well when they incept during periods of credit market stress (see Table N), late in the credit cycle.

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<sup>18</sup> There are legitimate reasons to continue to hold high-yield bonds. They are likely to continue to be less volatile and slightly more defensive in a severe downturn than equities (because of the cushion provided by their yield), so investors that hold strongly bearish views of the economy may prefer to continue with high-yield bonds. Also, for U.S. taxable investors that may not have owned high-yield bonds for an entire year, holding on for long-term capital gains treatment is reasonable, particularly if the investor does not have offsetting losses from early in 2009 or carried over from 2008.

**Table A**  
**ROLLING 12-MONTH TOTAL RETURNS OF HIGH-YIELD BONDS AND THE S&P 500**  
**June 30, 1984 – October 31, 2009**



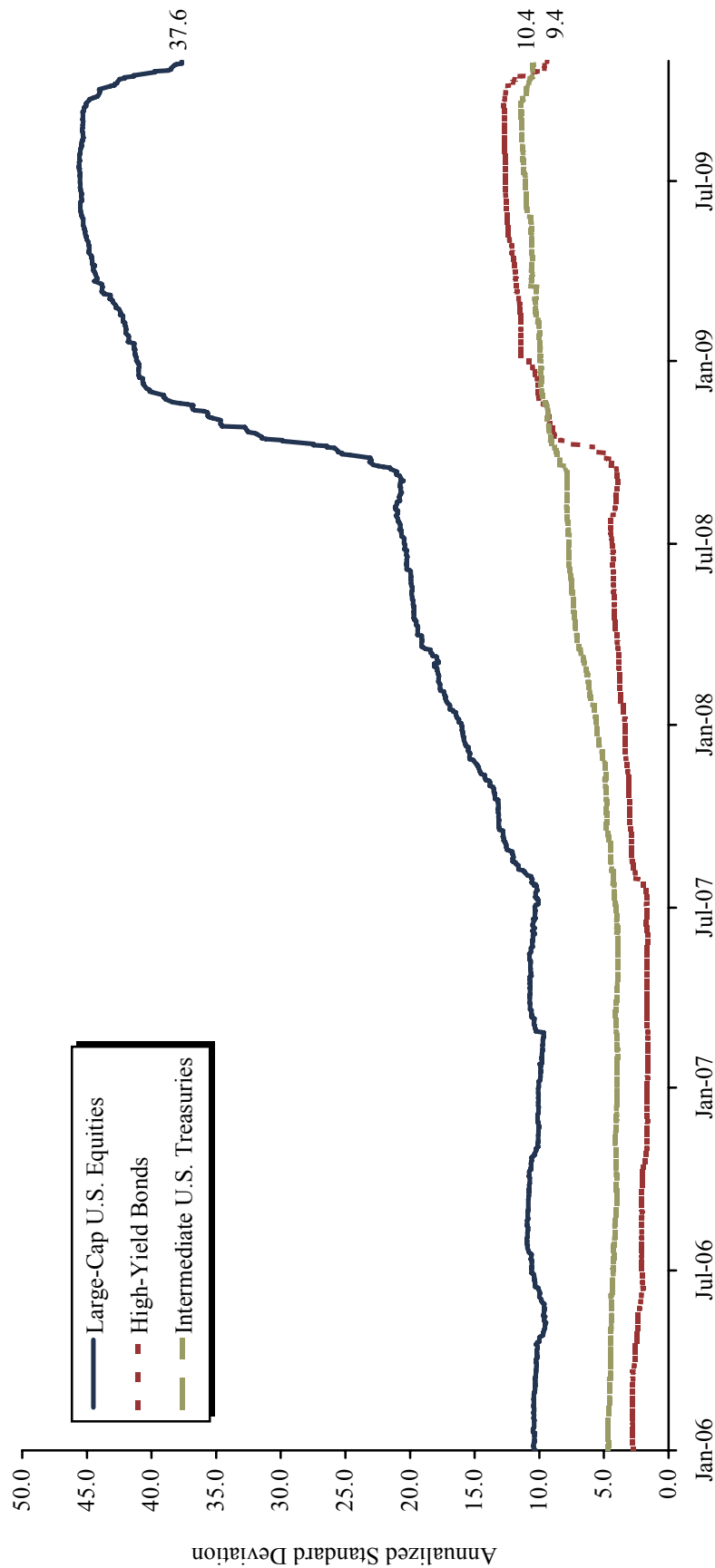
Sources: Barclays Capital and Thomson Datastream.

Note: Data are monthly.



**Table B**  
**ONE-YEAR ROLLING STANDARD DEVIATION OF U.S. EQUITIES, HIGH-YIELD BONDS**  
**AND INTERMEDIATE TREASURY SECURITIES**

January 1, 2006 – October 31, 2009

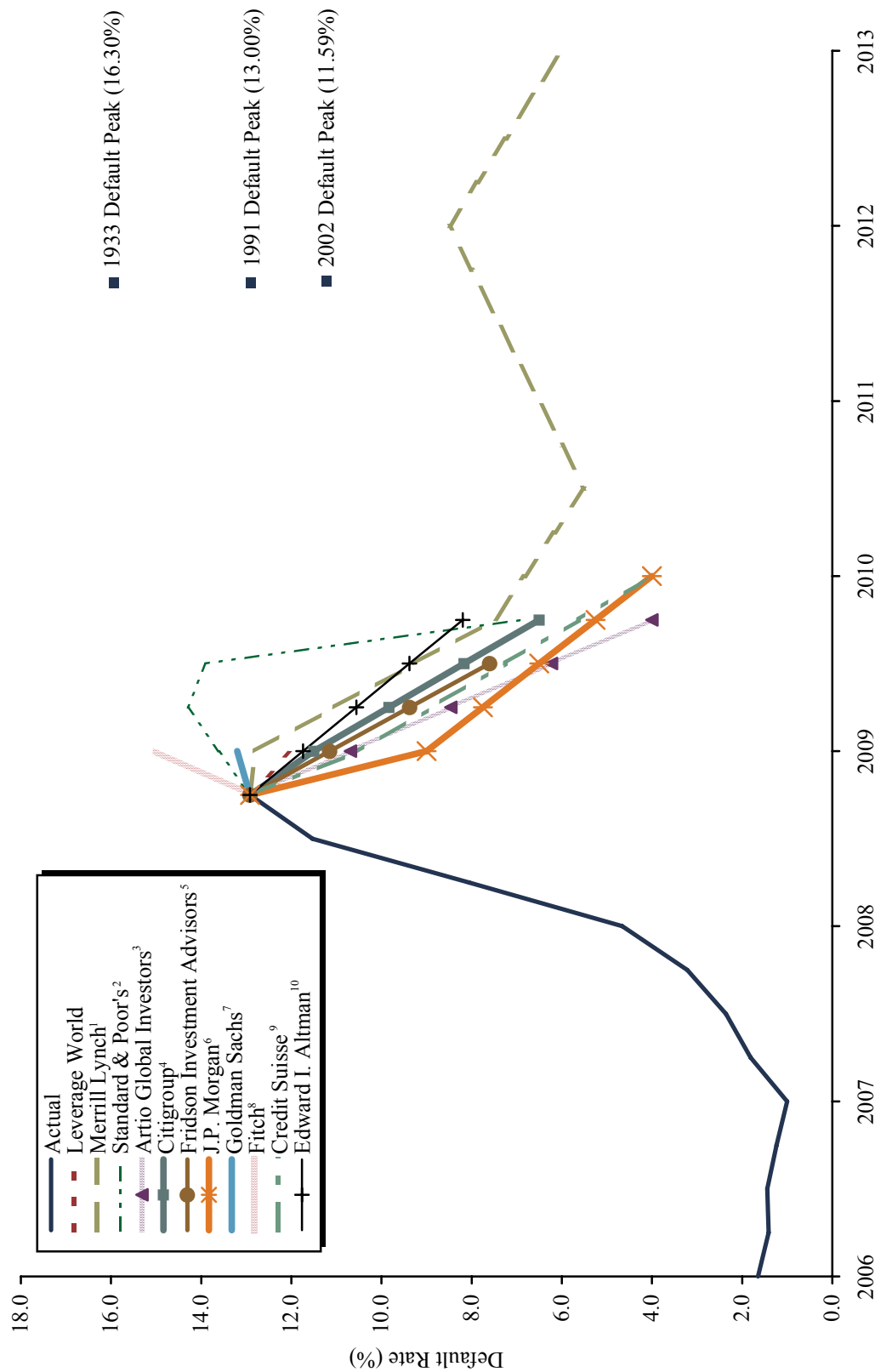


Sources: Citigroup Global Markets, Merrill Lynch & Co., Standard & Poor's, and Thomson Datastream.

Notes: Data are daily. High-yield bonds represent the Merrill Lynch U.S. High Yield Master II Index. Large-cap U.S. equities represent the S&P 500 Index. Intermediate U.S. Treasuries represent the Citigroup 7-10 Year Treasury Bond Index. Graph shows a 265-day correlation, which represents annual trading days.

Table C

ACTUAL AND ESTIMATED DEFAULT RATES FOR HIGH-YIELD BONDS



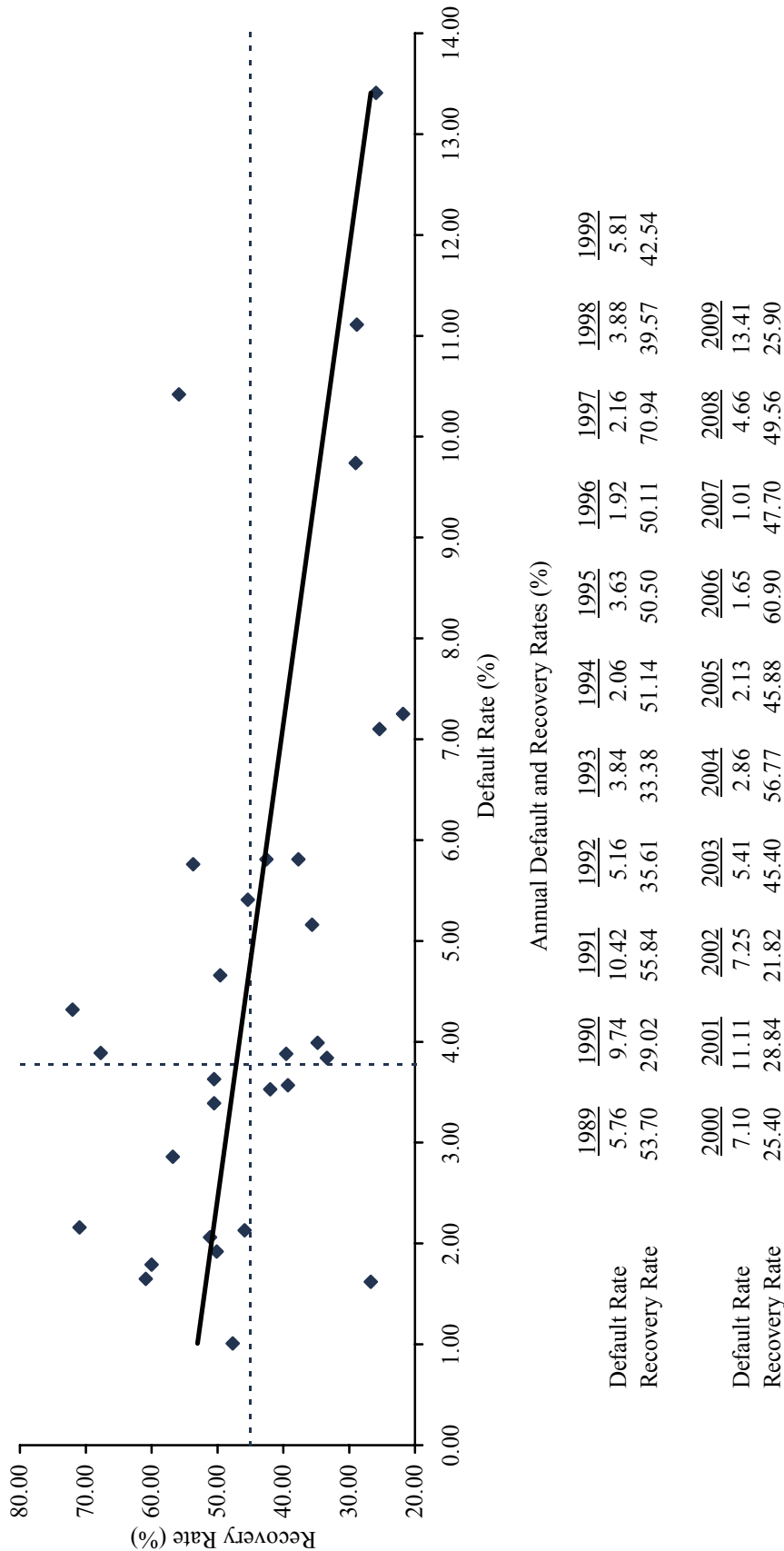
Sources: Edward I. Altman - NYU Salomon Center; Artio Global Investors; *Bank Loan Report*; Citigroup Global Markets; Credit Suisse; *The Economist*; Fitch Ratings; Fridson Investment Advisors; Goldman, Sachs & Co.; *High Yield Report*; J.P. Morgan Securities, Inc.; *Leverage World* (September 11, 2009, and June 26, 2009, issues); Merrill Lynch & Co.; Moody's Investors Service; Reuters; and Standard & Poor's.

Note: All actual figures are provided by Moody's Investors Service.

**Table C (continued)****ACTUAL AND ESTIMATED DEFAULT RATES FOR HIGH-YIELD BONDS****Notes on Estimated Default Rates**

- <sup>1</sup> Merrill Lynch forecasts are as of October 2, 2009. Default cycle assumptions are based on a cycle shape that will contain twin peaks and a final deceleration in defaults, resulting in a fat-tail curve. Based on these assumptions, Merrill Lynch forecasts a 12.8% level in December 2009, 7.5% in September 2010, 5.5% in early-to-mid 2011 (we assume June 2011), 8.5% in late 2012, and 6% in late 2013.
- <sup>2</sup> On July 27, 2009, Standard & Poor's forecast that the default rate will drop to 13.9% by June 2010 after peaking at 14.3% in March 2010, according to revised estimates. In October 2009, Standard & Poor's forecast a U.S. corporate default rate of 6.9% over the following year, with a potential range of 5.5% to 9.9%.
- <sup>3</sup> Artio Global Investors believes that defaults are currently at their peak. Historically, default rates have dropped by 9 percentage points in the trailing 12 months after their peak and therefore Artio has forecast 4% defaults over the next 12 months.
- <sup>4</sup> Citigroup estimates are based on views by strategist Michael Hampden-Turner as of October 3, 2009. His model is based on factors such as changes in bank lending, the economic growth rate, and the size of the speculative-grade market. He estimates that the U.S. default rate will peak this quarter and fall to 6.5% by autumn of next year.
- <sup>5</sup> As of August 27, 2009, Fridson Investment Advisors sees a U.S. default rate of about 7.6% in its June 2010 forecast. Martin Fridson, chief executive of FIA, said he based the June 2010 forecast on splitting the difference between Moody's and Fitch estimates.
- <sup>6</sup> As of October 1, 2009, J.P. Morgan forecasts the high-yield bond default rate to decline to 4% in 2010, revised down from their previous forecast of 7%.
- <sup>7</sup> As of October 9, 2009, Goldman Sachs forecasts the 12-month trailing default rate will reach a high level of 13.2% by the end of the year.
- <sup>8</sup> As of October 22, 2009, Fitch Ratings forecasts that the U.S. default rate would end this year in a range of 15% to 18%. The firm expects that the lower end of that range is more likely, at 15%.
- <sup>9</sup> Based on figures in the Credit Suisse 2009 Leveraged Finance Mid-Year Outlook and Review, Credit Suisse projects a 2010 default rate between 3% and 5%. We have taken an average to arrive at a default rate of 4.0% in 2010.
- <sup>10</sup> As of September 30, 2009, Edward I. Altman forecasts a one-year default rate of 6.70% if the recession has ended, and 9.62% if it continues or there is a relapse. We have taken the midpoint of these two rates: 8.2%.

**Table D**  
**RECOVERY RATES AND ANNUAL DEFAULT RATES FOR HIGH-YIELD BONDS**  
**December 31, 1978 – October 31, 2009**

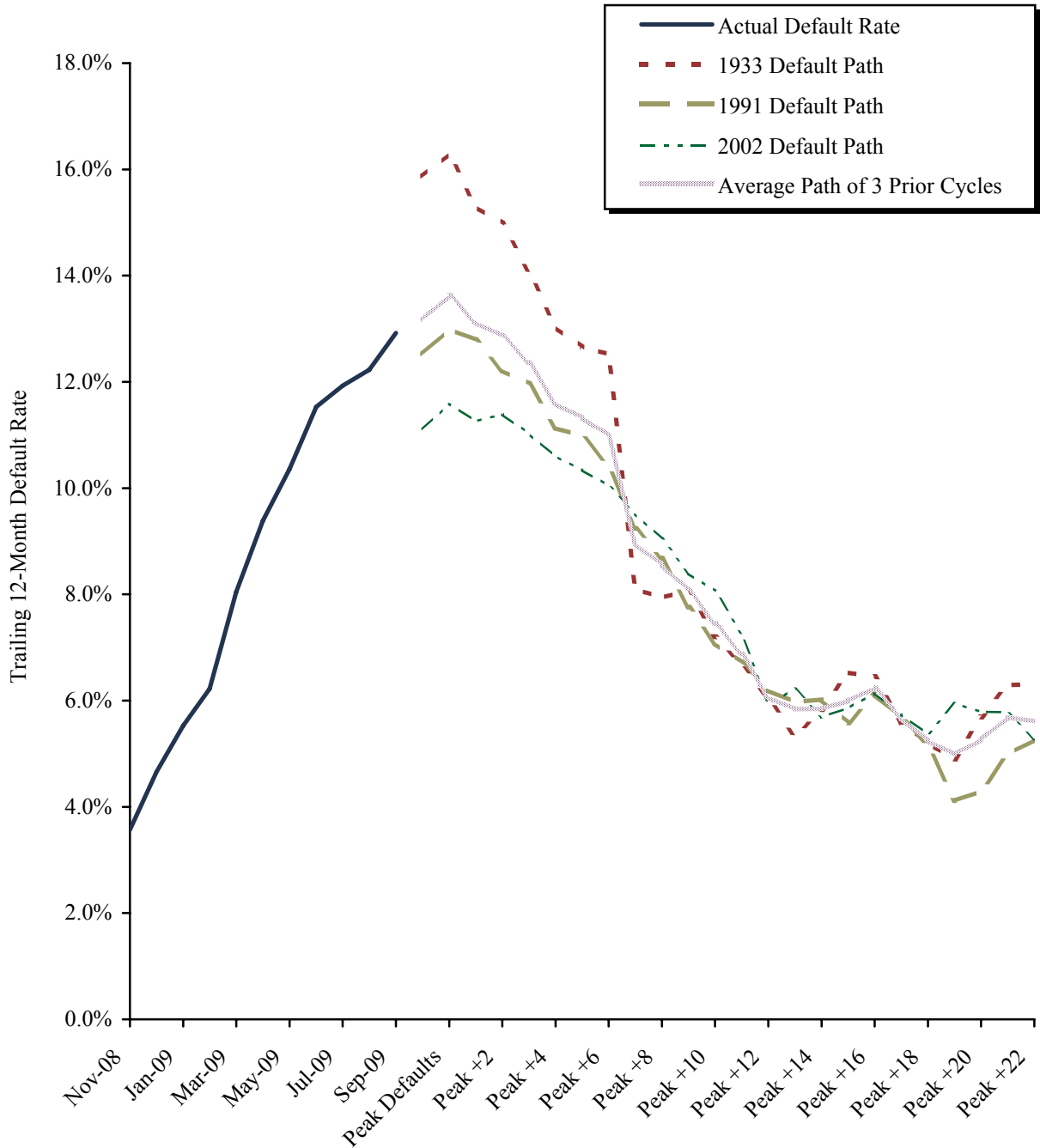


Sources: Edward I. Altman - NYU Salomon Center, Bloomberg L.P., and Moody's Investors Service.

Notes: Format adapted from Garman Research. The 2009 default rate figure represents the trailing 12-month default rate, through October 31. Recovery rates for 2009 are through September 30.

Table E

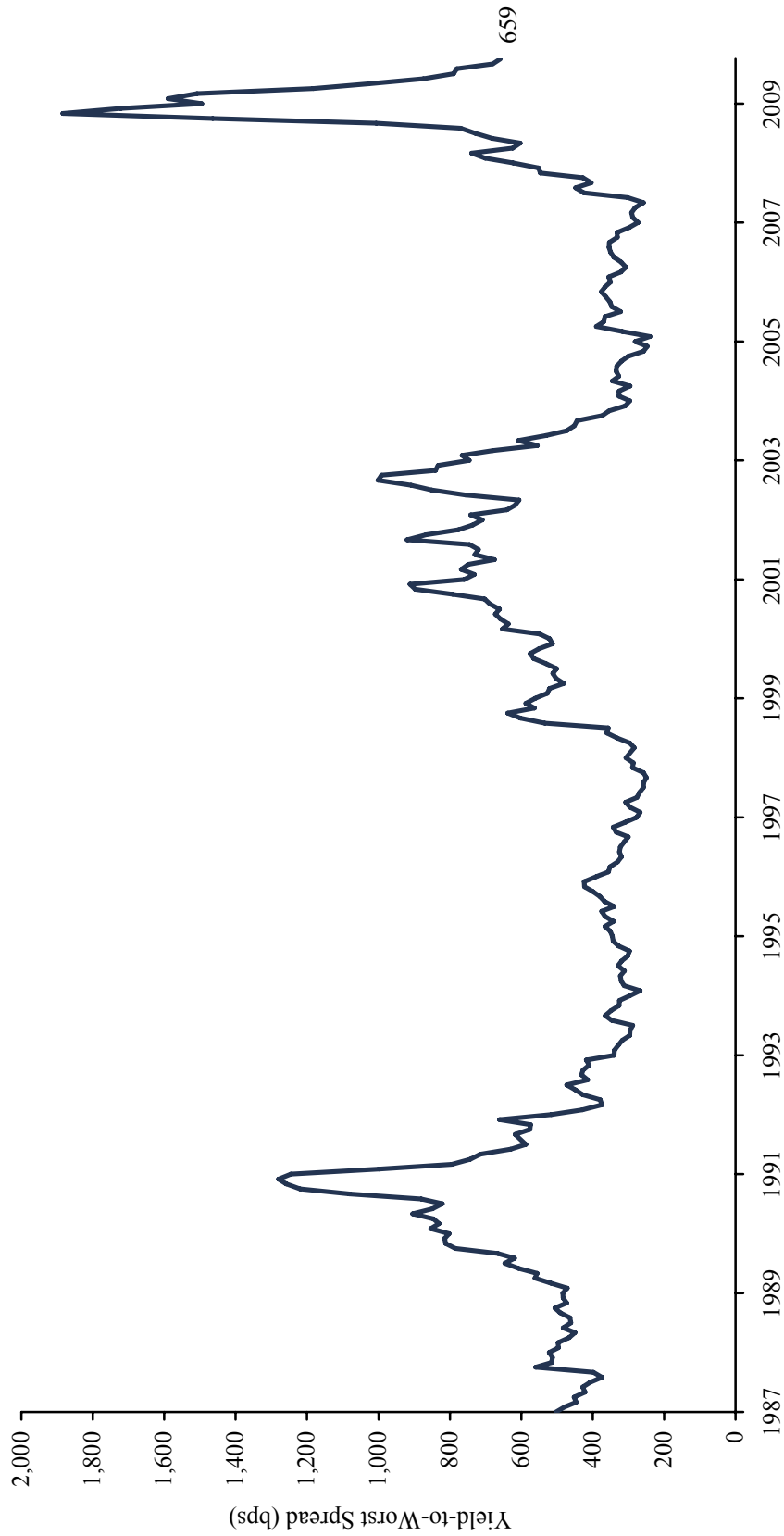
DEFAULT RATE SCENARIOS FOR U.S. HIGH-YIELD BONDS



Sources: Cambridge Associates LLC and Moody's Investor Services.

Notes: Scenarios assume that defaults peak in two months from starting point. Default rate refers to percentage of speculative-rated issuers defaulting in the trailing 12 months. Global high-yield bonds are used for the 1933 default path.

**Table F**  
**YIELD SPREAD FOR HIGH-YIELD BONDS OVER TEN-YEAR TREASURIES**  
**January 31, 1987 – October 31, 2009**

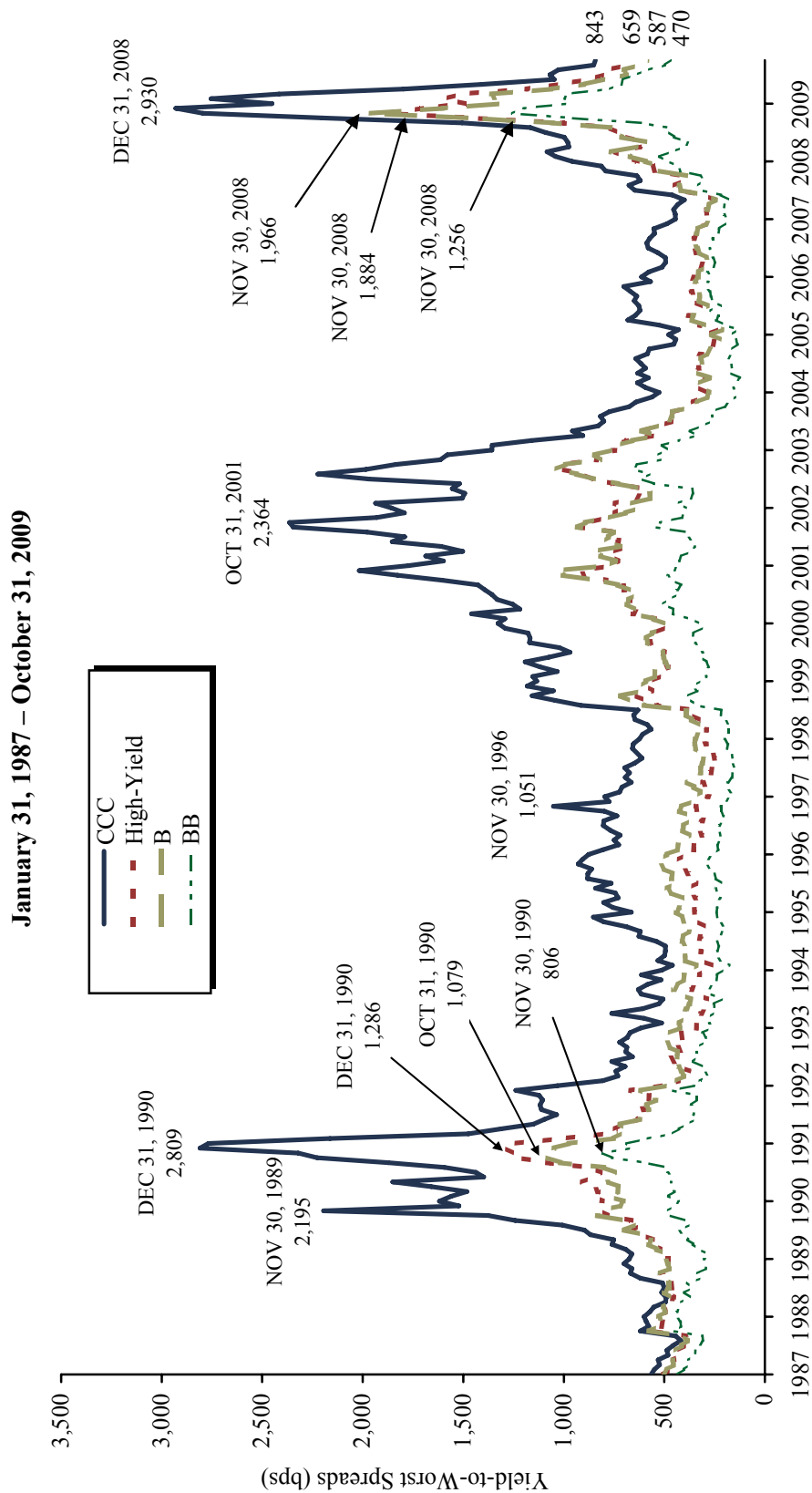


Sources: Barclays Capital and Thomson Datastream.

Note: Yield spreads are based on the difference between the weighted-average yield-to-worst (the lower of yield-to-maturity and yield-to-call) of the Barclays Capital U.S. Corporate High Yield Bond Index and the yield-to-maturity for ten-year Treasury securities.

Table G

**YIELD SPREADS FOR SELECTED HIGH-YIELD BOND RATING CATEGORIES RELATIVE TO TEN-YEAR TREASURIES**



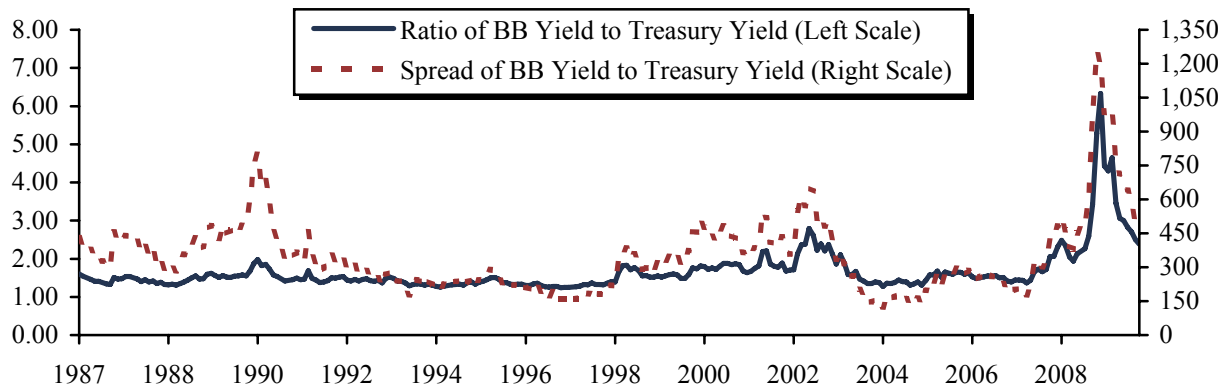
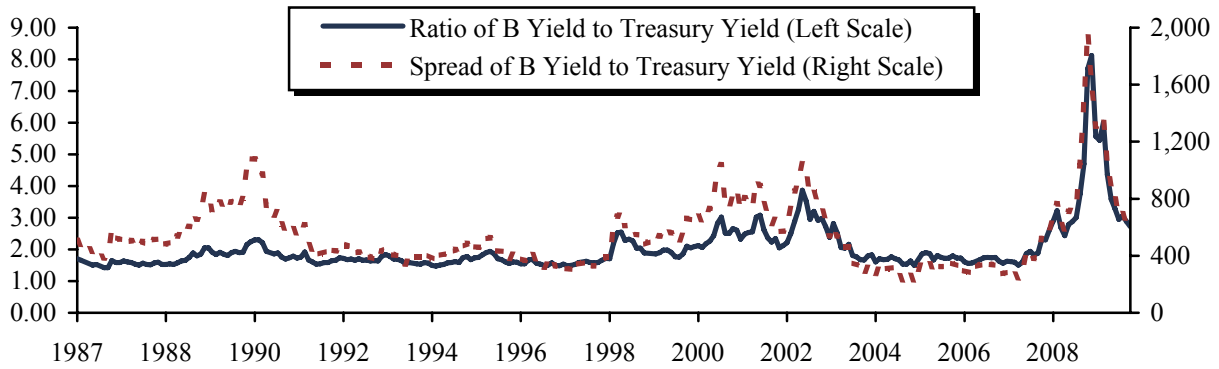
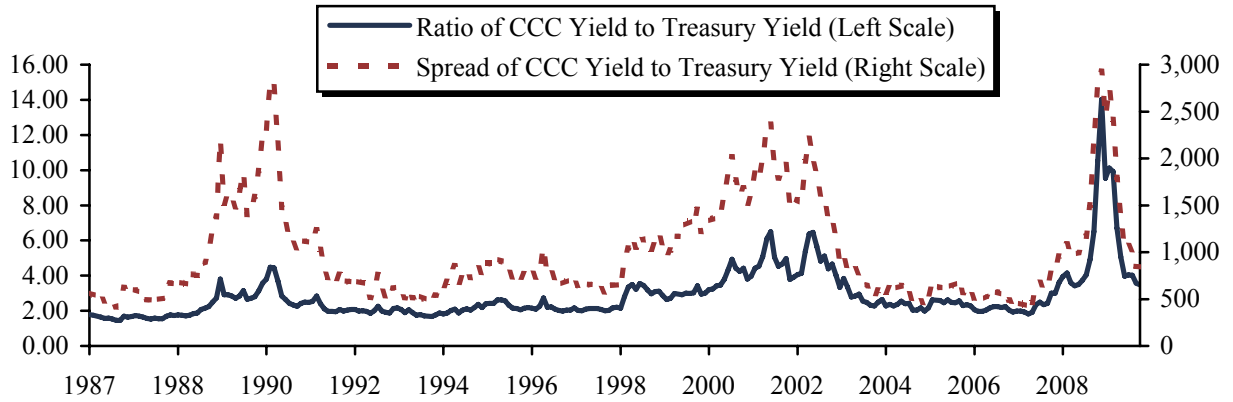
Sources: Barclays Capital and Thomson Datastream.

Notes: Yield spreads are based on the difference between the weighted-average yield-to-worst (the lower of yield-to-maturity and yield-to-call) for each high-yield rating category and the yield-to-maturity for ten-year Treasury securities. Credit ratings are shown in the equivalent S&P rating category.  
234m (modified)

Table H

**RATIO OF HIGH-YIELD BOND YIELDS TO YIELDS OF TEN-YEAR TREASURIES**

January 31, 1987 – October 31, 2009



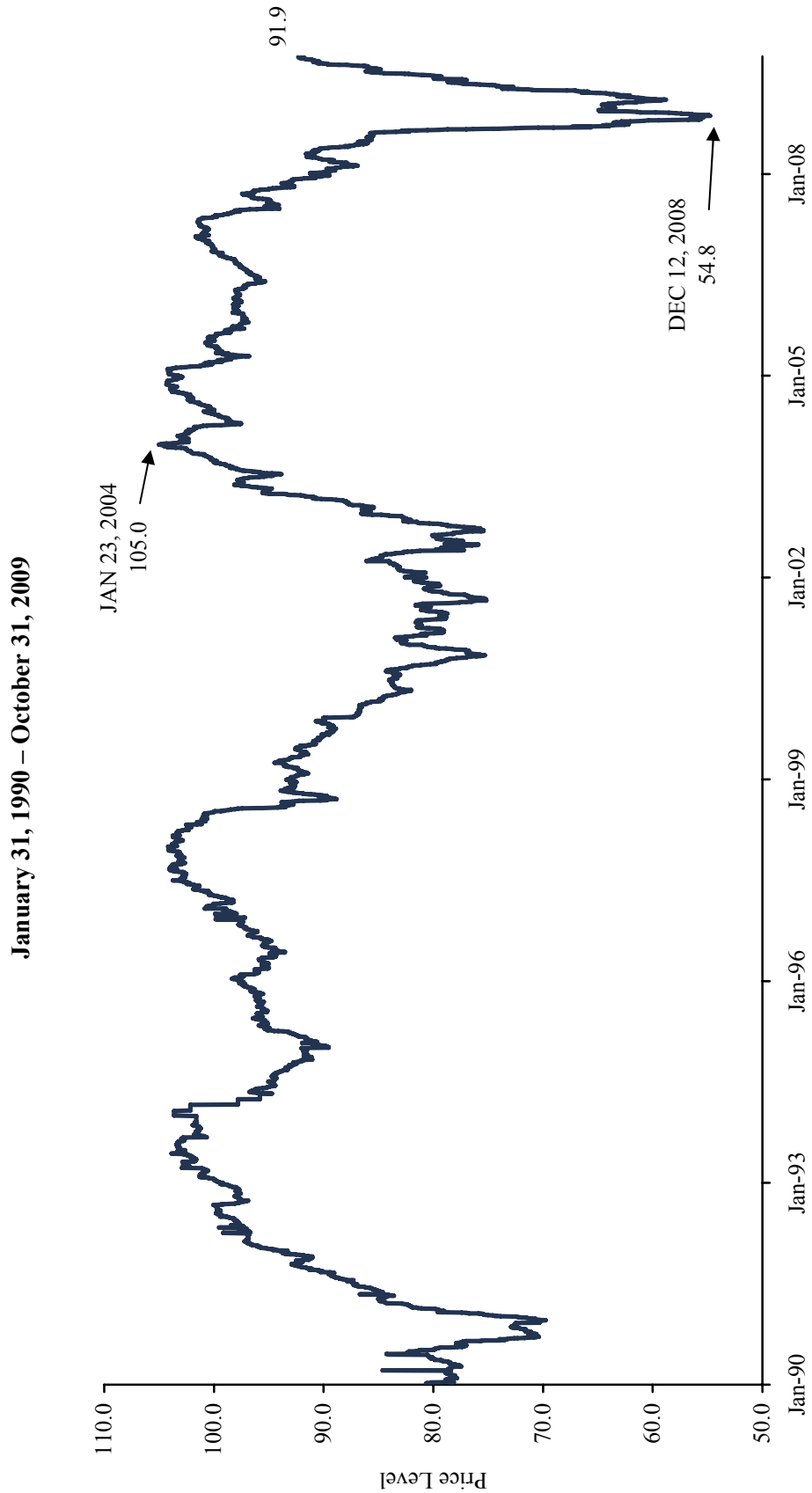
Sources: Barclays Capital and Thomson Datastream.

Notes: Yield ratios are based on the ratio between the weighted-average yield-to-worst (the lower of yield-to-maturity and yield-to-call) for each high-yield rating category and the yield-to-maturity for ten-year Treasury securities. Credit ratings are shown in the equivalent S&P rating category.

233m (modified)



**Table I**  
**PRICE OF THE B OF A MERRILL LYNCH HIGH YIELD MASTER II INDEX**  
**January 31, 1990 – October 31, 2009**



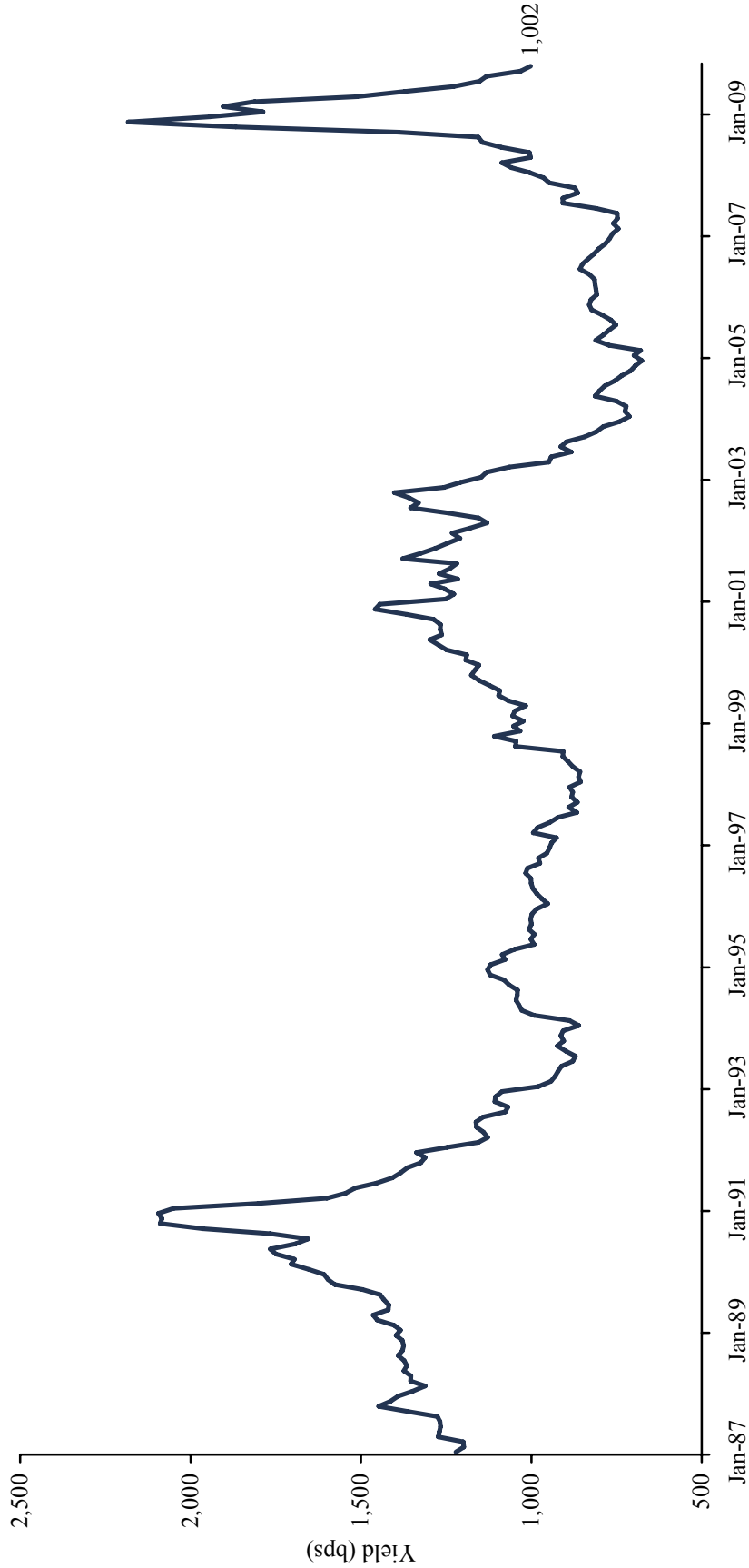
Source: BofA Merrill Lynch.

Notes: Data are daily. Monthly data are shown from December 31, 1993, through May 30, 1994, as daily data are not available for this time period.

Table J

**YIELD OF THE BARCLAYS CAPITAL U.S. CORPORATE HIGH YIELD BOND INDEX**

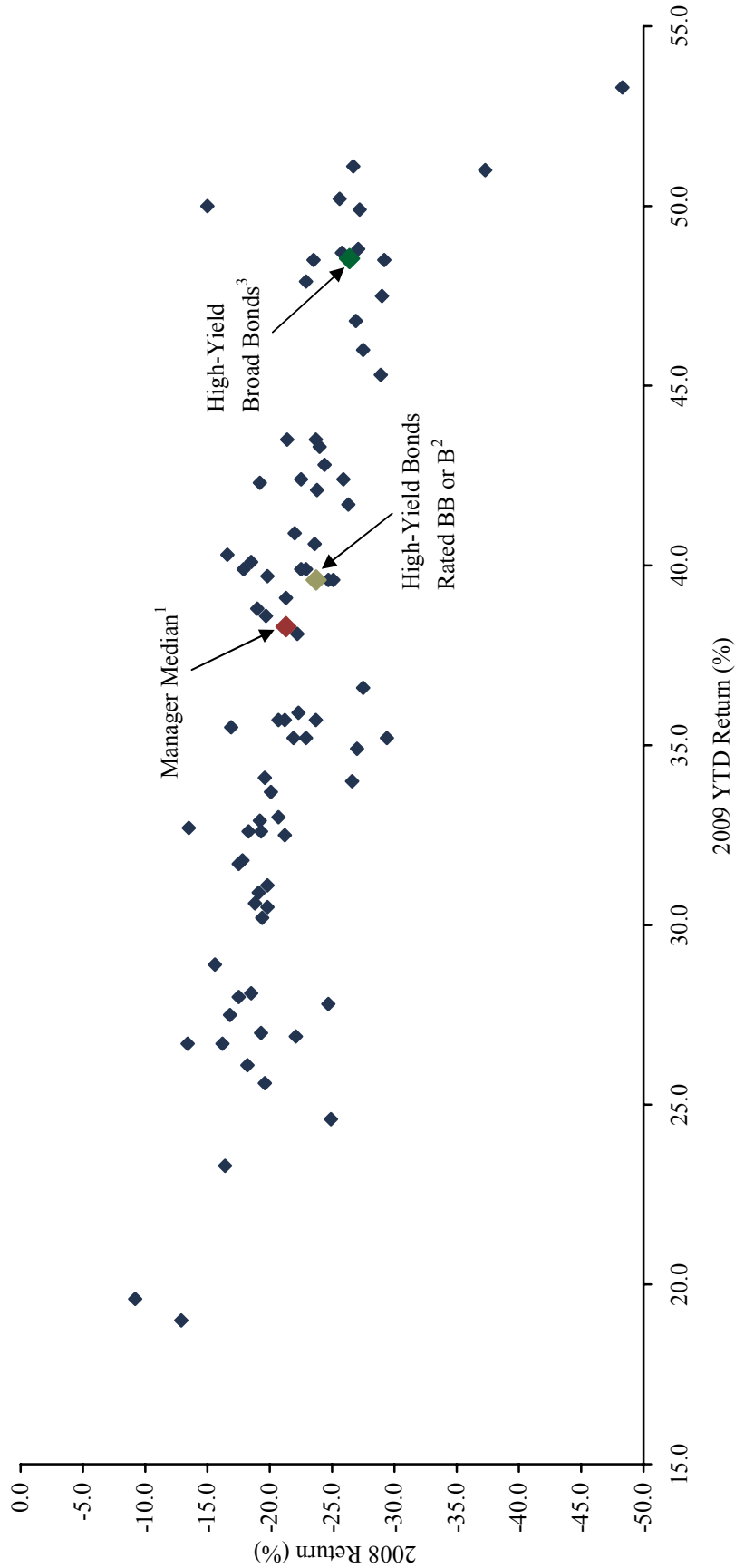
January 31, 1987 – October 31, 2009



Source: Barclays Capital.

Notes: Data are monthly. Graph represents the yield-to-worst of the Barclays Capital U.S. Corporate High Yield Bond Index.

**Table K**  
**RETURNS OF HIGH-YIELD BOND MANAGERS AND INDICES**



Sources: BofA Merrill Lynch and Cambridge Associates LLC Investment Manager Database.

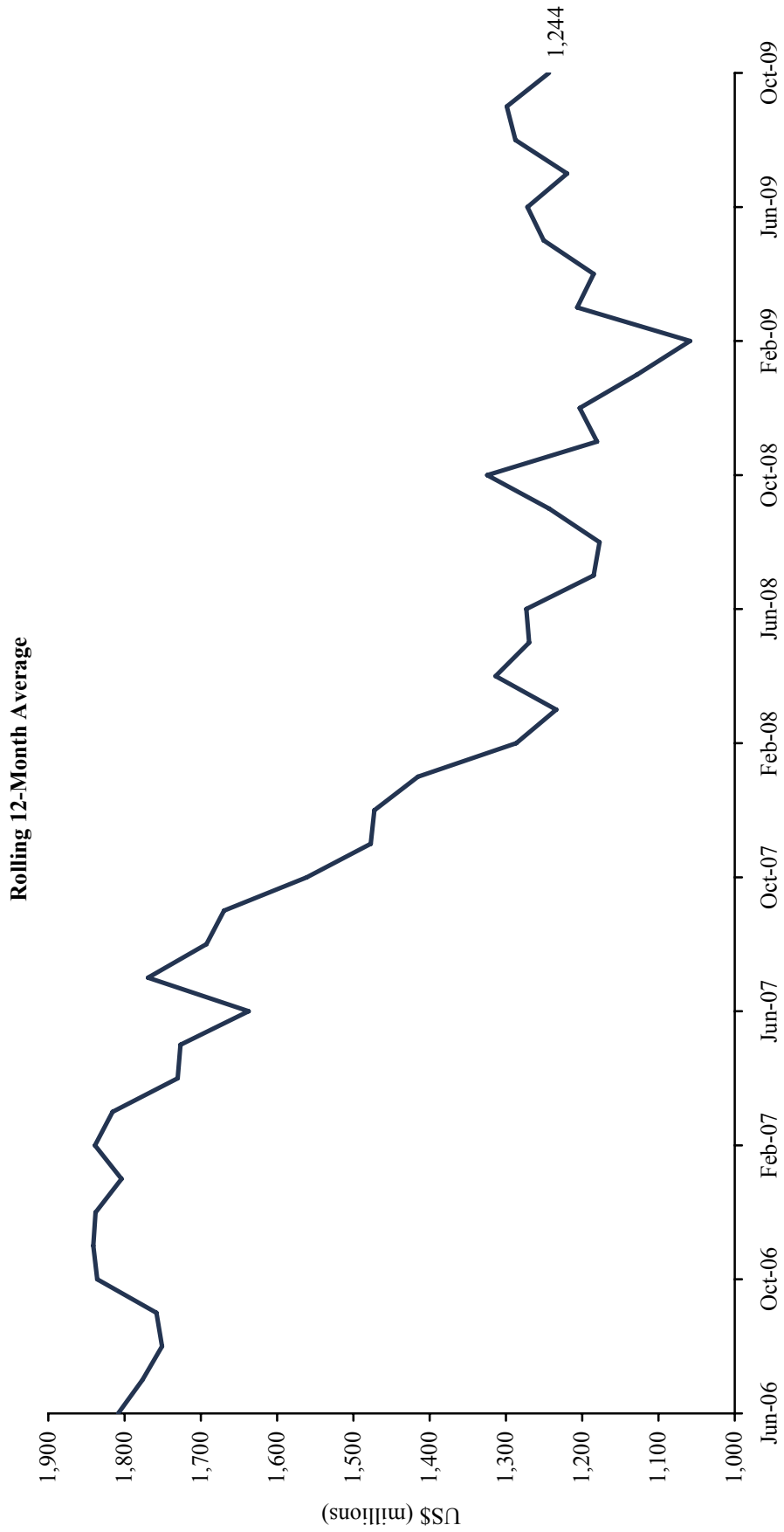
Notes: The individual funds shown represent funds for which the performance from 2008 and 2009 year-to-date is available. Data for 2009 are through September 30.

<sup>1</sup> Cambridge Associates High-Yield Bonds Manager Median.

<sup>2</sup> BofA Merrill Lynch U.S. High Yield BB-B Rated Index.

<sup>3</sup> BofA Merrill Lynch U.S. High Yield Master II Index.

**Table L**  
**U.S. HIGH-YIELD MONTHLY TRADING VOLUME**  
**June 30, 2006 – October 31, 2009**

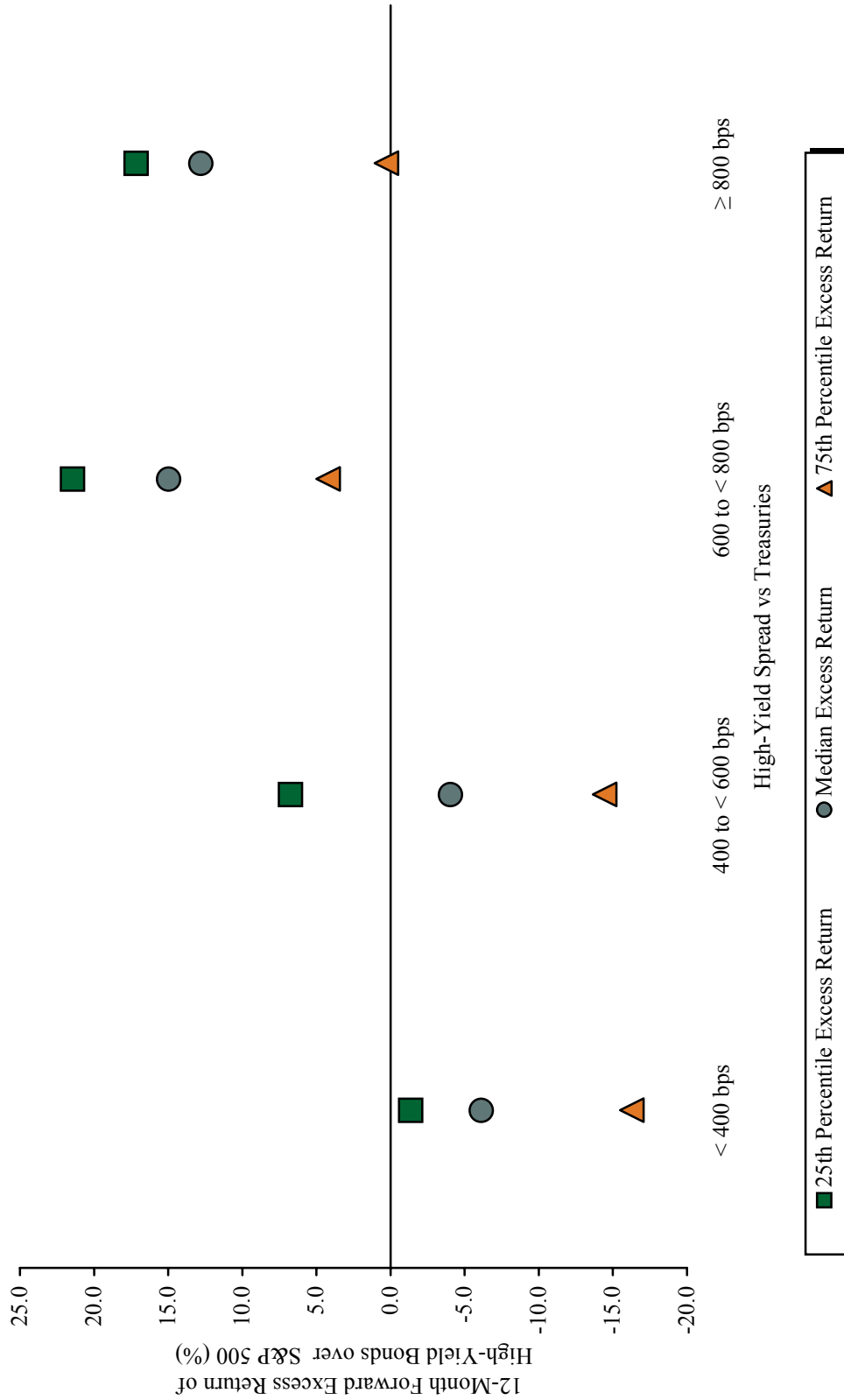


Source: Bloomberg L.P.

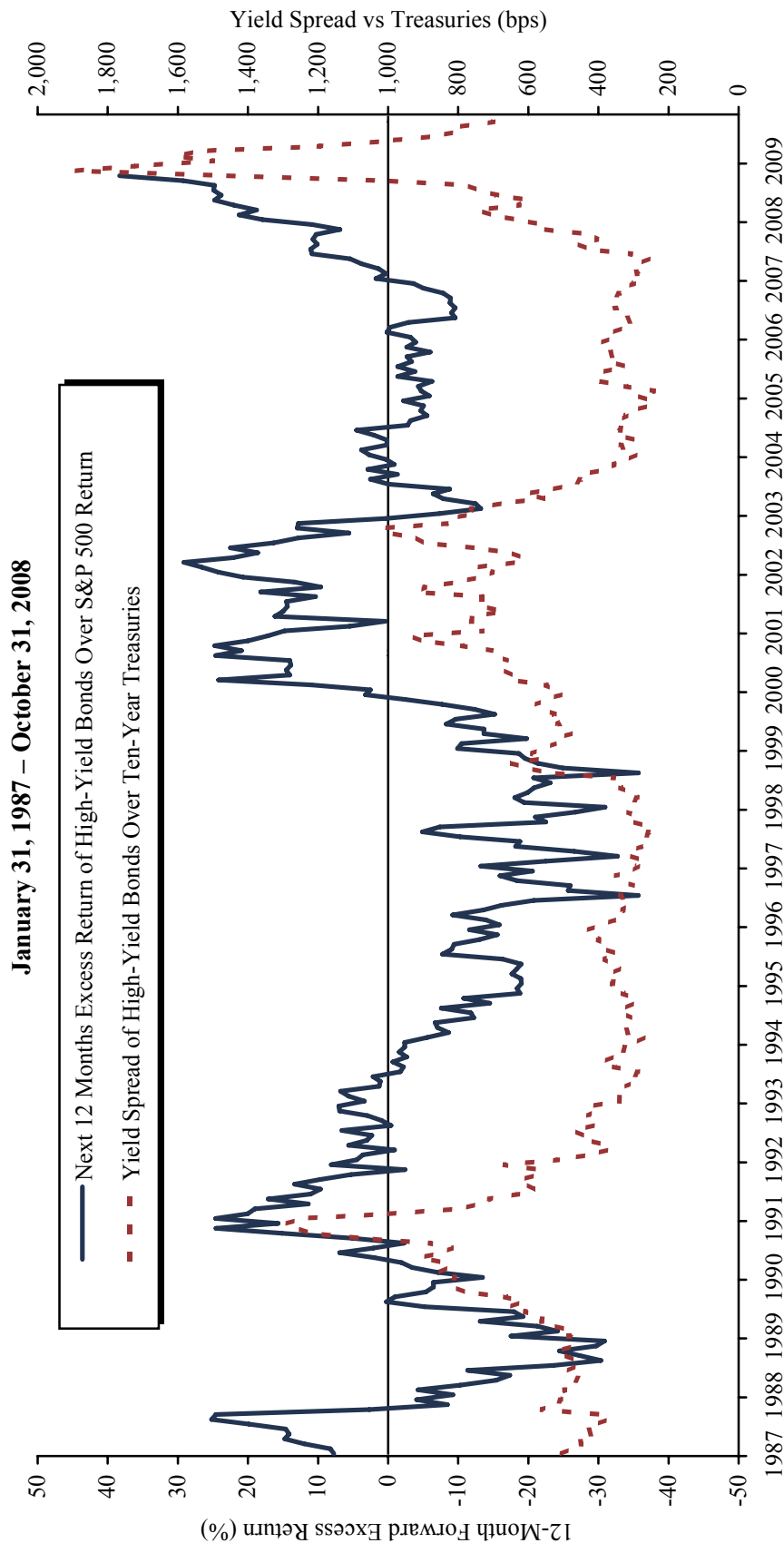
Table M

12-MONTH FORWARD EXCESS RETURNS OF HIGH-YIELD BONDS OVER U.S. EQUITIES

January 1, 1987 – October 31, 2008



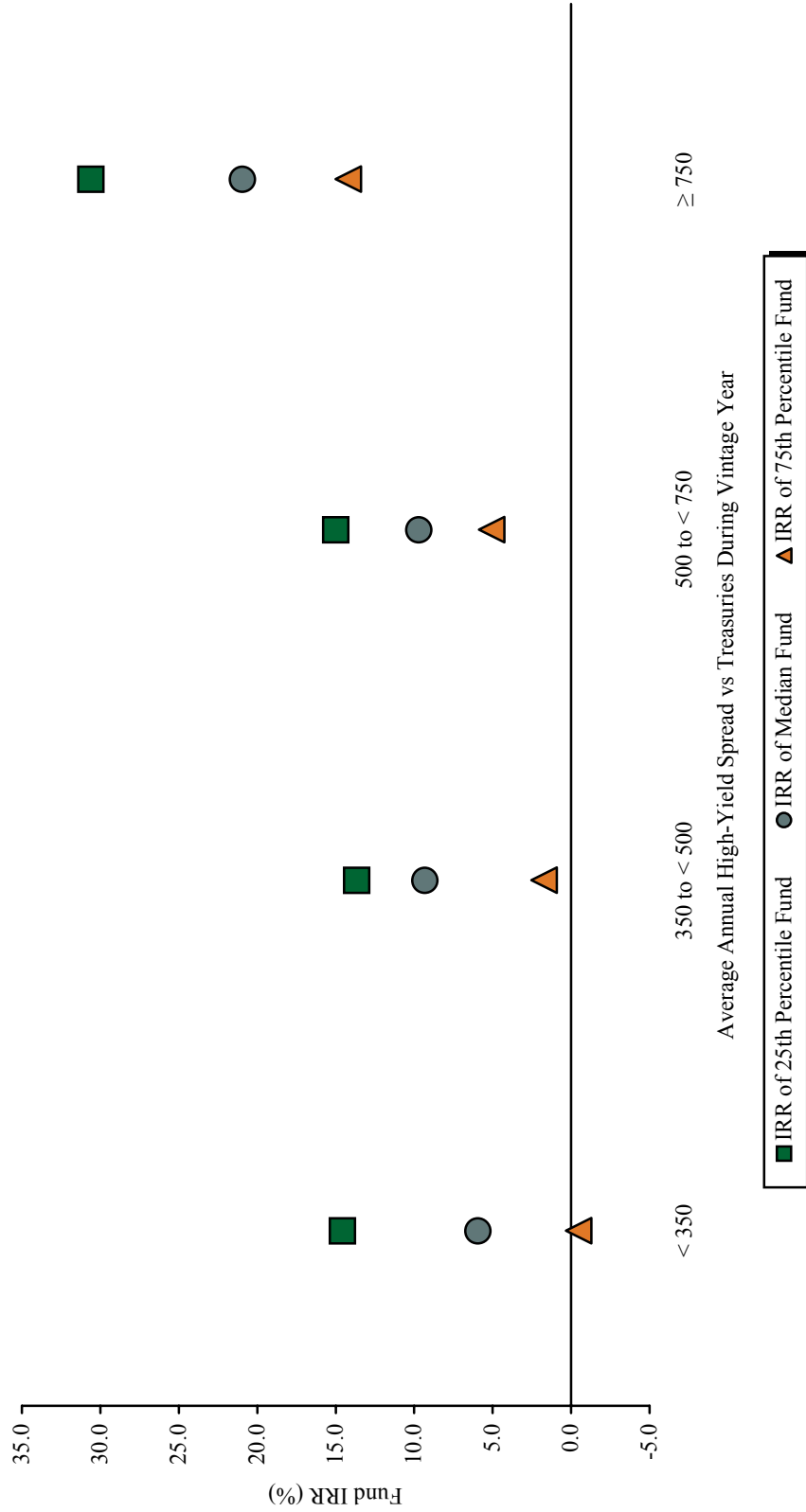
**Table M (continued)**  
**12-MONTH FORWARD EXCESS RETURNS OF HIGH-YIELD BONDS OVER U.S. EQUITIES**  
**January 31, 1987 – October 31, 2008**



Sources: Barclays Capital and Thomson Datastream.

Notes: Forward excess return indicates the difference between the subsequent 12-month total return of the Barclays Capital U.S. Corporate High Yield Bond Index and the S&P 500 Index. Yield spread refers to the current difference between the yield-to-worst of the Barclays Capital U.S. Corporate High Yield Bond Index and the yield-to-maturity of the ten-year Treasury note. Percentile ranks are calculated on the basis of 0 being the best and 100 being the worst.

**Table N**  
**IRR OF DISTRESSED SECURITIES FUNDS COMPARED TO AVERAGE YIELD SPREAD OF HIGH-YIELD BONDS DURING YEAR OF VINTAGE**



Sources: Barclays Capital, Cambridge Associates LLC Non-Marketable Alternative Assets Database, and Thomson Datastream.

Notes: Vintage years represent funds inception from 1988 through 2005. Percentile ranks are calculated on the basis of 0 being the best and 100 being the worst. Data are as of June 30, 2009. High-yield represents the Barclays Capital U.S. Corporate High Yield Bond Index.

## Appendix

### BANK LOANS

Bank loans, also called leveraged loans, fell to unprecedented lows during the fourth quarter of last year, as hedge funds sold them to deleverage. In December, the average loan price was just 62 cents on the dollar (before 2007, it had never dipped below 85 cents). Today, they are priced at 85 cents on average, still slightly below the pre-crisis historical trough but up 36% from the December lows (Table A-1).

Default losses in this cycle have been worse than ever before, with high default rates and very low recovery rates relative to history. Nearly 11% of issuers have defaulted in the 12 months ended October 31, according to Moody's. Average recoveries so far this year are running at 44 cents on the dollar for senior secured loans, compared with 58 cents last year and a long-term average of 70 cents, according to J.P. Morgan.

The universe of bank loans is shrinking, with very low new loan issuance (because the collateralized loan obligation market remains closed) and a large fraction of new high-yield fixed-rate bonds being issued to prepay existing loans.

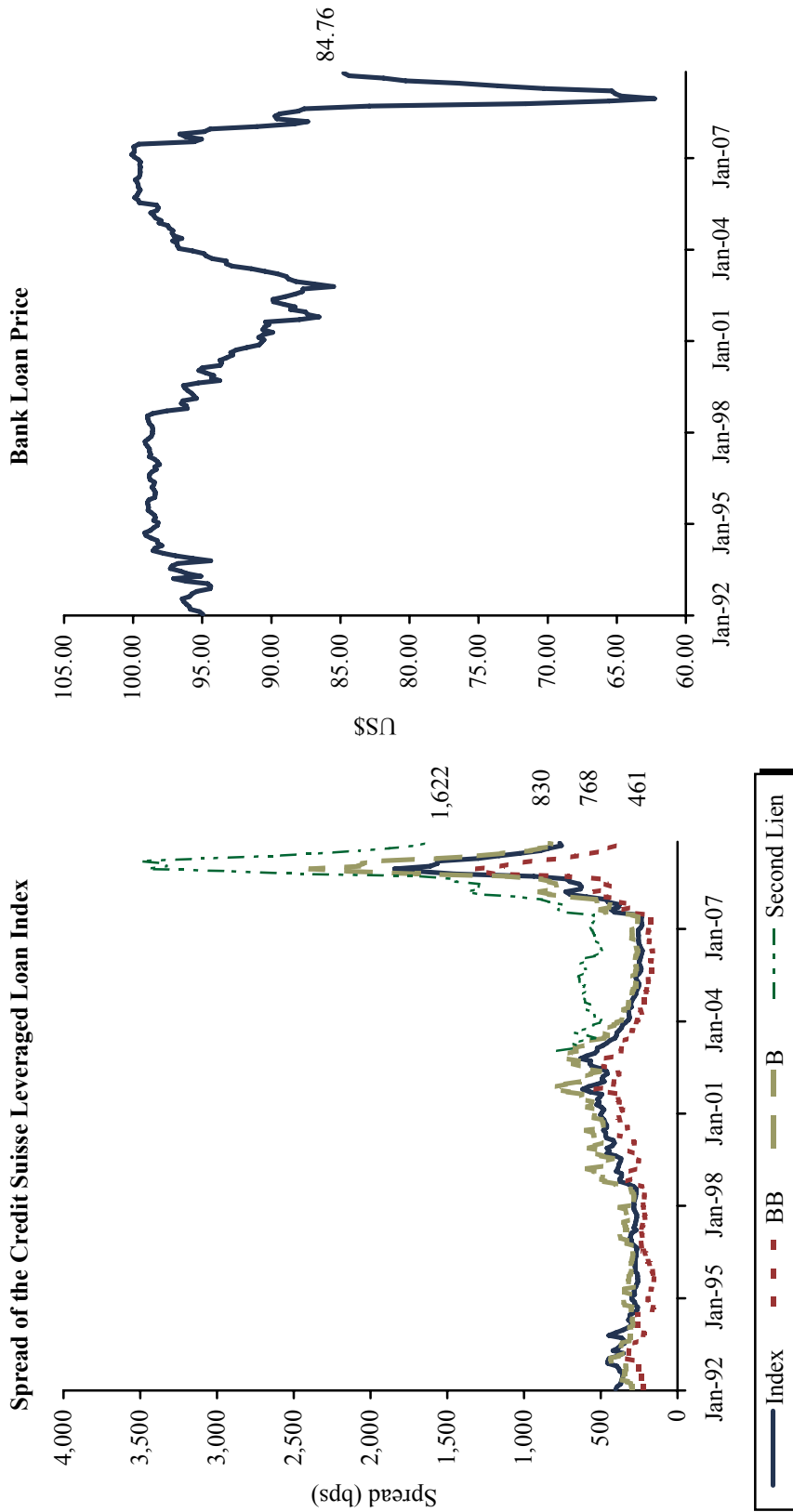
Prices of bank loans have both risen and evened out. Last December, fully 30% of the loans in the Credit Suisse index were priced below 60 cents on the dollar, and now just 5% are (Table A-2). The universe of loans priced above 90 cents has risen from just 33% as recently as May to 60% today. Returns for loans in the bottom two rating tiers have been 41% for the lowest tier and 44% for the second-lowest tier year-to-date, while the upper third of loans by credit rating have returned a more modest 25%. The opportunities for continued improvement in prices still exist, but clearly with the majority of loans within 10 percentage points of par value, future returns will certainly not match recent returns.



Table A-1

**BANK LOAN SPREADS AND PRICES**

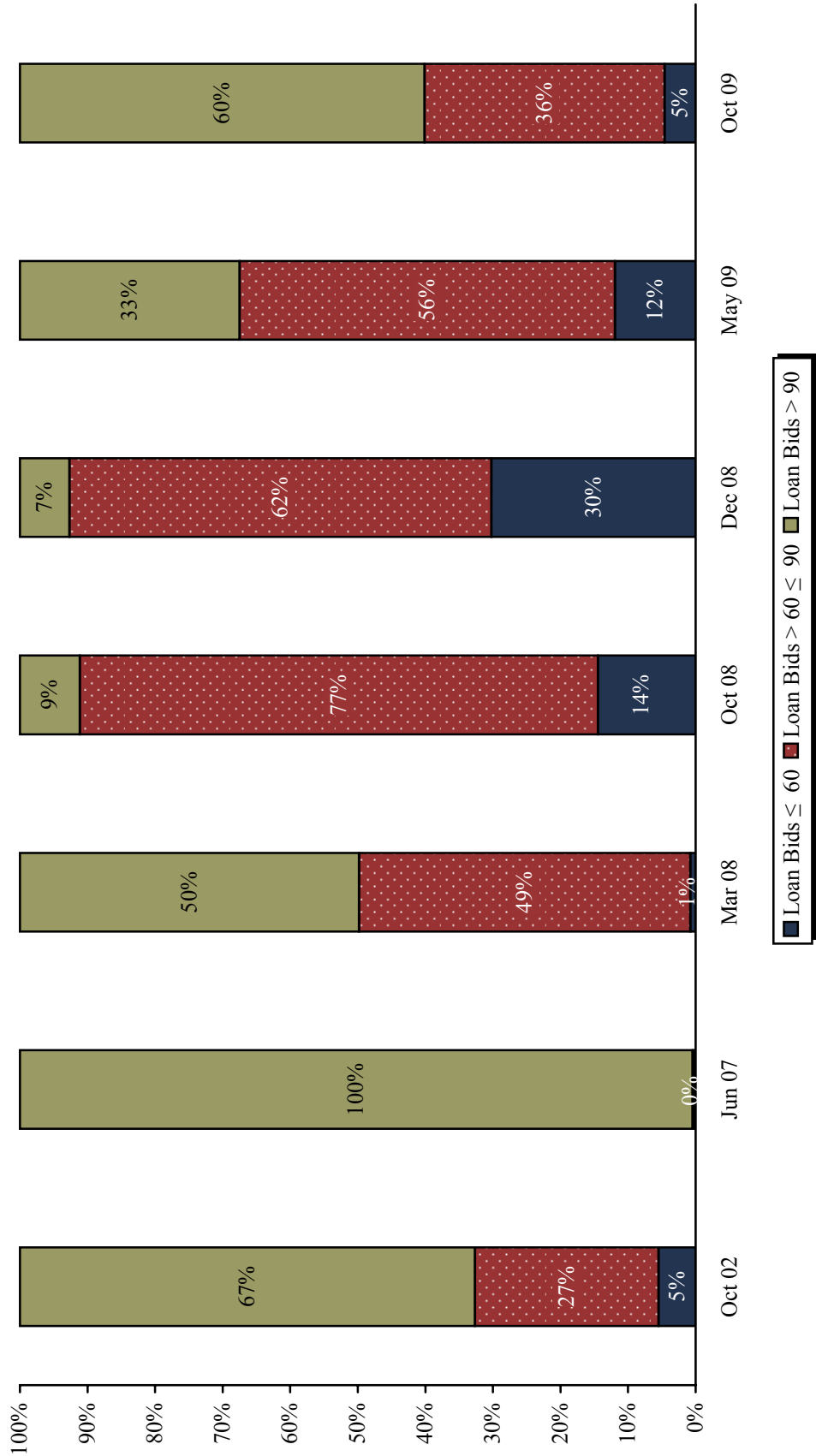
January 31, 1992 – October 31, 2009



Source: Credit Suisse.

Notes: Discount margin assumes a three-year life. All data are monthly.

**Table A-2**  
**DISTRIBUTION OF BANK LOAN PRICES**



Source: Credit Suisse.

Note: Index used is Credit Suisse Leveraged Loan Index.