

# Fitch U.S. High Yield Default Insight — 2011 Review

## Special Report

**1.5% in 2011:** The U.S. high yield default rate ended 2011 at 1.5%, falling below 2% for the second consecutive year. Over the past 32 years, the default rate has ended shy of 2% 16 times. Fitch projects that the rate will rise in 2012 to a range of 2.5%–3.0%, below the long-term average annual rate of 4.8% (1980–2011) but above 2010 and 2011’s benign levels. For a full discussion of Fitch’s 2012 forecast please see the December outlook report referenced in Related Research.

**Fewer Issuers, Offset by Size:** Twenty-nine issuers defaulted on \$15.9 billion in bonds in 2011, fewer than the 35 issuer defaults recorded in 2010 but including four large defaults: oil sands developer OPTI Canada, Inc.; paper company NewPage Group Inc.; power generator Dynegy Inc.; and American Airlines, Inc. These billion-dollar-plus bankruptcies helped push the par value of defaulted bonds in 2011 above 2010’s \$11.9 billion (and its 1.3% default rate). In the recent peak default year of 2009, 151 issuers defaulted on \$118.6 billion in bonds.

**Nine Sectors with Multiple Defaults:** The top industry default rates in 2011 included: paper and containers, 10.3%; transportation, 7.4%; and utilities, 5.9%. While the energy sector produced multiple defaults in 2011, its default rate remained fairly low at 2.6% given that the group is the second largest industry in the U.S. high yield market (12% of market volume at year end; banking and finance is the largest at 14%). Twelve of the 25 sectors tracked by Fitch saw some default activity in 2011, with nine producing multiple defaults.

**‘CCC’ Defaults Dominate:** Approximately 80% of 2011 defaulted issues were rated ‘CCC’ or lower at the beginning of the year, for a ‘CCC’ or lower par default rate of 6%, compared with 0.4% for the rest of the high yield market. Isolating ‘CCC’ or lower bonds trading at the distressed level of 80% of par or lower at the beginning of the year, Fitch calculates that 30% of these subsequently defaulted in 2011. As discussed in Fitch’s outlook, this consequential pool has doubled in size, from \$29 billion at the beginning of 2011 to roughly \$60 billion currently.

**2011 Market Loss Rate 0.6%:** The weighted average recovery rate on 2011 defaulted bonds was 59.4% of par and the median, 47.9%. The market loss given default rate was a modest 0.6%, nearly identical with 2010’s 0.5% and far removed from 2009’s 9.1%. The highest annual loss given default rate remains 2002’s 12.7%. Loss given default is calculated as the (default rate x [1 – recovery rate]).

### Related Research

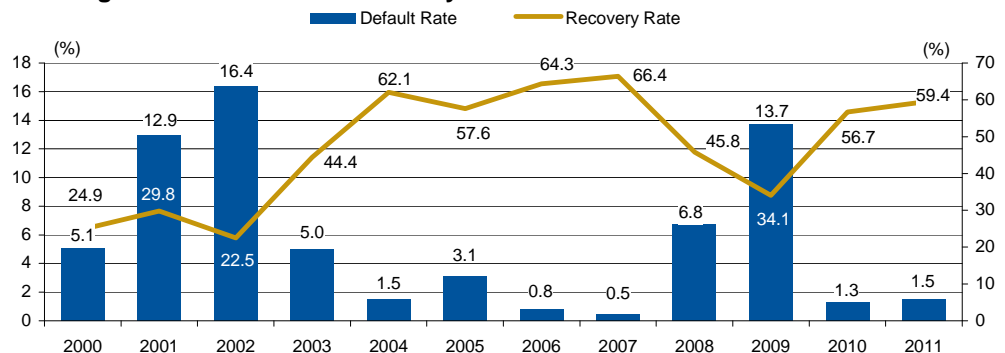
- [Fitch U.S. High Yield Default Insight — 2012 Outlook, Dec. 22, 2011](#)
- [Bridging the Refinancing Cliff Volume IV, Dec. 1, 2011](#)
- [U.S. Leveraged Finance Multiples EV-aluator, Nov. 15, 2011](#)
- [Fitch 50 — Structural Profiles of 50 Leveraged Credits, July 20, 2011](#)
- [High Yield Default and Recovery Rate Volatility in Recession and Recovery, March 17, 2011](#)
- [Defaults Surge, Recoveries Sink in 2009: Understanding the Fundamental and Cyclical Drivers of Corporate Recovery Rates, July 6, 2009](#)

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**U.S. High Yield Default and Recovery Rates — 2000–2011**



Source: Fitch U.S. High Yield Default Index, Advantage Data.

## Default and Recovery: A Steady Long-Term Inverse Relationship

### 2011 Default Tab = \$6.5 Billion

Despite the usual variability in outcomes, recovery rates remained firm in 2011, adding to the well documented historical pattern of above-average recovery rates in low default years. The weighted average recovery rate was 59.4% of par, slightly higher than 2010's 56.7% and up from the recent 2009 low of 34.1%. The strongest industry-specific recovery rates included telecommunication at 78.1% of par; energy, 76.2%; and transportation, 66.6%. The weakest resided in automotive, 24.6% of par (just one default); banking and finance, 34.2%; and building and materials, 37.1%. Of course, given a limited number of defaults in 2011 these results are strongly influenced by issuer-specific circumstances as well as industry dynamics. For a look at industry recovery rates over a longer term horizon please see page 10.

### High Yield Default, Recovery, and Loss Rates by Industry (2009–2011)

(%)	2009			2010			2011		
	Default Rate	Recovery Rate	Loss Rate	Default Rate	Recovery Rate	Loss Rate	Default Rate	Recovery Rate	Loss Rate
Automotive	44.2	15.3	37.4	0.5	—	—	0.8	24.6	0.6
Banking and Finance	24.3	63.8	8.8	1.5	43.2	0.8	0.5	34.2	0.3
Broadcasting and Media	31.7	11.8	28.0	5.5	35.1	3.6	0.3	—	—
Building and Materials	8.9	51.2	4.3	2.2	53.8	1.0	1.3	37.1	0.8
Cable	36.4	43.1	20.7	—	—	—	—	—	—
Chemicals	18.0	25.0	13.5	—	—	—	—	—	—
Computers and Electronics	16.2	25.4	12.1	0.3	9.6	0.3	—	—	—
Consumer Products	16.8	30.6	11.7	—	—	—	—	—	—
Energy	2.4	43.0	1.4	1.1	61.3	0.4	2.6	76.2	0.6
Food, Beverage, and Tobacco	3.0	6.0	2.8	1.5	—	—	—	—	—
Gaming, Lodging, and Restaurants	22.4	19.2	18.1	1.3	69.0	0.4	1.7	49.3	0.9
Healthcare and Pharmaceutical	—	—	—	1.8	52.6	0.9	—	—	—
Industrial/Manufacturing	8.7	21.8	6.8	0.8	62.1	0.3	—	—	—
Insurance	—	—	—	—	—	—	—	—	—
Leisure and Entertainment	15.4	32.0	10.4	—	—	—	—	—	—
Metals and Mining	3.6	51.8	1.7	1.2	49.5	0.6	0.3	—	—
Miscellaneous	5.7	14.4	4.9	0.3	98.6	0.0	—	—	—
Paper and Containers	25.9	17.8	21.3	1.0	86.9	0.1	10.3	42.9	5.9
Real Estate	12.0	61.1	4.7	—	—	—	—	—	—
Retail	0.6	1.1	0.6	3.0	44.6	1.6	2.0	58.5	0.8
Supermarkets and Drug Stores	4.5	97.5	0.1	3.1	89.5	0.3	—	—	—
Telecommunications	6.2	20.3	4.9	1.2	100.6	0.0	0.6	78.1	0.1
Textiles and Furniture	11.7	15.6	9.9	—	—	—	—	—	—
Transportation	8.5	43.8	4.8	1.7	80.6	0.3	7.4	66.6	2.5
Utilities	0.2	17.6	0.2	—	—	—	5.9	64.9	2.1
<b>Total Market</b>	<b>13.7</b>	<b>34.1</b>	<b>9.1</b>	<b>1.3</b>	<b>56.7</b>	<b>0.5</b>	<b>1.5</b>	<b>59.4</b>	<b>0.6</b>

<sup>a</sup>Recovery rate based on price of defaulted issues 30 days after default. <sup>b</sup>Loss rate = Default Rate X (1-Recovery Rate). Source: Fitch U.S. High Yield Default Index, Advantage Data.

While the market's loss rate — combining the year's default and recovery results — was just 0.6% in 2011 (or \$6.5 billion), three sectors experienced substantially higher rates: paper and containers, 5.9%; transportation, 2.5%; and utilities, 2.1%.

Just 14% of the year's defaulted issuers (four companies) completed distressed debt exchanges (DDEs) in 2011, down from seven in 2010 (20% of issuer defaults) and a high of 45 in 2009 (30% of issuer defaults). The weighted average recovery rate on the DDEs (affecting a

#### Related Criteria

Corporate Rating Methodology, Aug. 12, 2011

combined \$0.9 billion in bonds) was 62.7% of par in 2011, close to the rate excluding DDEs of 59.2% of par.

**Valuation, Structure Critical, Bond ‘Label’ Less So**

Examining recovery rates by seniority, 2011 produced average and median recoveries of 68.4% and 74.7%,

respectively, for senior secured bonds; 50% and 22% for senior unsecured bonds; and 29.4% and 23.1% for the limited sample of subordinated issues. The low median for senior unsecured bonds underscores a theme Fitch has noted regularly in the agency’s default research — namely, that there is significant variability around average recovery metrics. The specific circumstances of each defaulted issuer, particularly valuation and debt structure, remain paramount, especially at the unsecured level, which is more sensitive to these two factors. The Bond Seniority table above, for example, offers insight into the varied debt mix of defaults in 2011. The desire to capture recovery variability more effectively led Fitch to launch Recovery Ratings in 2005. For more on this please see the criteria report referenced on page 2 and Fitch’s extensive research on valuation and structural recovery drivers noted in Related Research.

**Bond Seniority Mix of 2011 Defaults**

Type	Issuers	(%)
Senior Secured Only	9	31.0
Senior Unsecured Only	15	51.7
Subordinated Only	2	6.9
Senior Secured with Senior Unsecured	1	3.4
Senior Secured with Subordinated	2	6.9
Senior Unsecured and Subordinated	0	0.0
All Seniorities	0	0.0
<b>Total Issuers</b>	<b>29</b>	<b>100.0</b>

Source: Fitch U.S. High Yield Default Index.

**Recovery Rates by Seniority — Bonds**

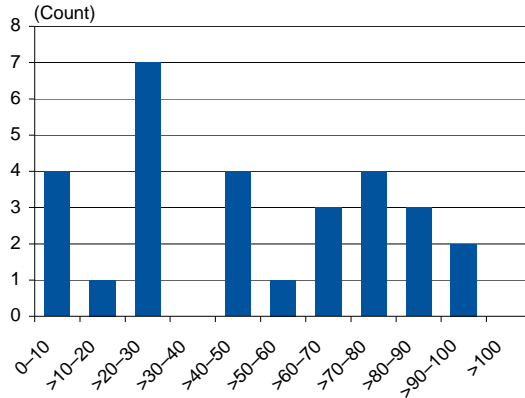
	Weighted Average Recovery Rate (%)	Median Recovery Rate <sup>a</sup> (%)	Number of Issues with Price Data
<b>2009</b>			
Senior Secured	36.8	25.4	38
Senior Unsecured	36.0	31.0	258
Senior Subordinated	19.2	14.9	48
<b>Total Defaulted Issues</b>	<b>34.1</b>	<b>24.9</b>	<b>344</b>
<b>2010</b>			
Senior Secured	64.3	55.3	15
Senior Unsecured	69.3	81.6	10
Senior Subordinated	28.3	16.9	11
<b>Total Defaulted Issues</b>	<b>56.7</b>	<b>50.0</b>	<b>36</b>
<b>2011</b>			
Senior Secured	68.4	74.7	19
Senior Unsecured	50.0	22.0	32
Senior Subordinated	29.4	23.1	4
<b>Total Defaulted Issues</b>	<b>59.4</b>	<b>47.9</b>	<b>55</b>

<sup>a</sup>Similar seniorities collapsed into one observation. Note: Additional historical data on page 11. Source: Fitch U.S. High Yield Default Index, Advantage Data.

**Recoveries More Skewed in High Default Years**

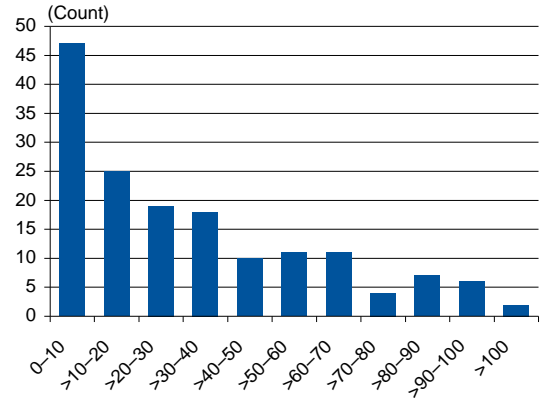
The distribution of recoveries in 2011 versus 2009 shows that in high default years, recoveries tend to be more skewed to the downside. This, of course, is also evident in the drop in median and average recovery rates during these periods. The deep slide in valuation in a recessionary environment, combined with tight credit conditions, and the nature of defaults that tend to occur immediately with an economic downturn (the weakest companies file first) drive the bulk of these results. As shown below, in a low default environment the distribution of recoveries tends to be more random.

**2011 Distribution of Bond Recoveries**



Source: Fitch Ratings, Advantage Data.

**2009 Distribution of Bond Recoveries**

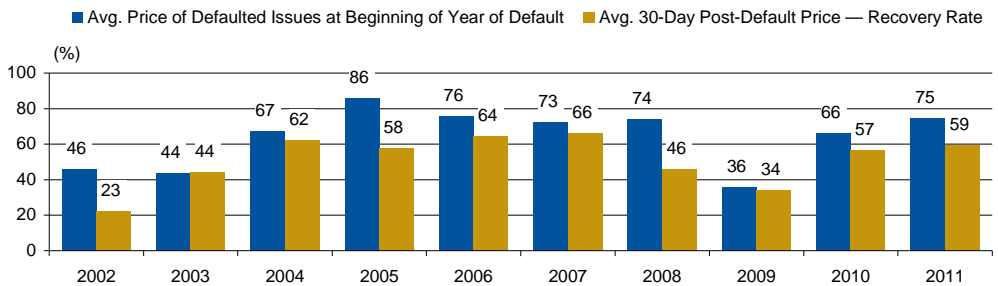


Source: Fitch Ratings, Advantage Data.

**Mark to Market Losses on 2011 Defaults Similar to 2006–2007 Period**

Fitch notes that the weighted average price of defaulted issues in 2011 at the beginning of the year was 75% of par. On a mark-to-market basis, the year's defaults therefore resulted in an additional erosion in par value of roughly 16% (75%–59% post default price, or recovery rate).

**Price Movement of Defaulted Bonds**



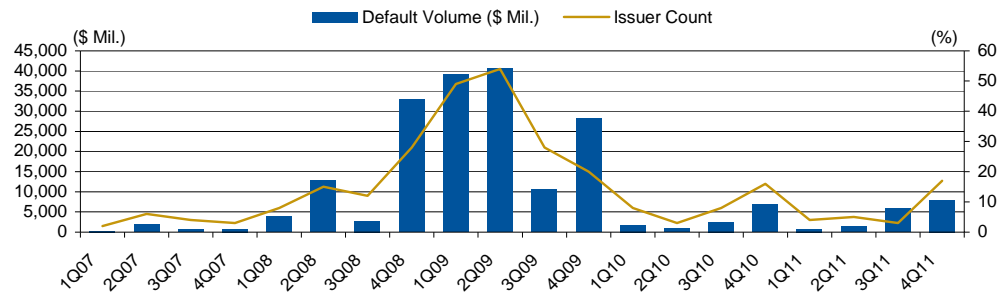
Source: Fitch Ratings, Bloomberg, Advantage Data.

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## Default Watch

### Fitch U.S. High Yield Default Index — Quarterly Issuer and Volume Trends



Source: Fitch U.S. High Yield Default Index.

## Distribution of Defaults by Source

	Par Value (\$ Bil.)	(%)	Issuers	(%)	Issues	(%)
<b>2010</b>						
Chapter 11 Filing	5.0	42.1	13	37.1	20	41.7
Missed Payment	4.8	40.4	15	42.9	21	43.8
Distressed Exchange	2.1	17.5	7	20.0	7	14.6
<b>Total</b>	<b>11.9</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>48</b>	<b>100.0</b>
<b>2011</b>						
Chapter 11 Filing	13.5	84.7	17	58.6	37	63.8
Missed Payment	1.5	9.2	7	24.1	10	17.2
Distressed Exchange	0.9	5.4	4	13.8	10	17.2
Chapter 15 Filing	0.1	0.6	1	3.4	1	1.7
<b>Total</b>	<b>15.9</b>	<b>100.0</b>	<b>29</b>	<b>100.0</b>	<b>58</b>	<b>100.0</b>

Source: Fitch U.S. High Yield Default Index.

## Industry Default Rates

(%)	Industry	Average Annual 1980–2011	2010	2011
7.0	Automotive	7.0	0.5	0.8
7.2	Banking and Finance	7.2	1.5	0.5
5.0	Broadcasting and Media	5.0	5.5	0.3
4.3	Building and Materials	4.3	2.2	1.3
4.9	Cable	4.9	—	—
2.8	Chemicals	2.8	—	—
2.8	Computers and Electronics	2.8	0.3	—
3.0	Consumer Products	3.0	—	—
2.1	Energy	2.1	1.1	2.6
3.7	Food, Beverage, and Tobacco	3.7	1.5	—
4.5	Gaming, Lodging, and Restaurants	4.5	1.3	1.7
2.2	Healthcare and Pharmaceutical	2.2	1.8	—
3.1	Industrial/Manufacturing	3.1	0.8	—
4.7	Insurance	4.7	—	—
5.0	Leisure and Entertainment	5.0	—	—
3.8	Metals and Mining	3.8	1.2	0.3
2.0	Miscellaneous	2.0	0.3	—
4.8	Paper and Containers	4.8	1.0	10.3
2.2	Real Estate	2.2	—	—
4.2	Retail	4.2	3.0	2.0
5.1	Supermarkets and Drug Stores	5.1	3.1	—
9.2	Telecommunications	9.2	1.2	0.6
6.5	Textiles and Furniture	6.5	—	—
6.4	Transportation	6.4	1.7	7.4
5.5	Utilities	5.5	—	5.9
<b>4.8</b>	<b>Total Index</b>	<b>4.8</b>	<b>1.3</b>	<b>1.5</b>

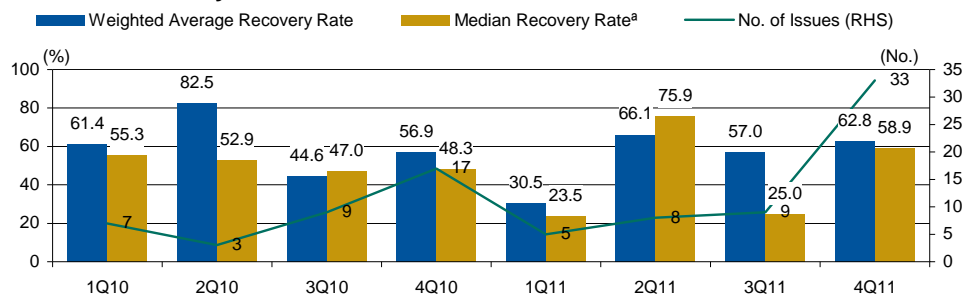
Source: Fitch U.S. High Yield Default Index.

List of U.S. High Yield Bond Defaults on Trailing 12-Month Basis

Month	Issuer	Par Value (\$ Mil.)	Default Date	Default Source	Industry
January 2011	No Default Activity				
February 2011	No Default Activity				
March 2011	Sbarro Inc.	150.0	3/1/11	Missed Payment	Gaming, Lodging, and Restaurants
	Ahern Rentals Inc.	236.7	3/15/11	Missed Payment	Banking and Finance
	Harry & David	198.4	3/28/11	Chapter 11 Filing	Retail
	Keystone Automotive Operating	172.7	3/28/11	Distressed Exchange	Automotive
	<b>Subtotal</b>	<b>757.7</b>			
April 2011	Satelites Mexicanos	436.1	4/6/11	Chapter 11 Filing	Telecommunication
	<b>Subtotal</b>	<b>436.1</b>			
May 2011	Perkins & Marie Callender's Inc.	322.0	5/1/11	Missed Payment	Gaming, Lodging, and Restaurants
	Hipotecaria Su Casita SA	150.0	5/4/11	Missed Payment	Banking and Finance
	<b>Subtotal</b>	<b>472.0</b>			
June 2011	Nebraska Book Co.	375.0	6/27/11	Chapter 11 Filing	Retail
	NBC Acquisition Corp.	77.0	6/27/11	Chapter 11 Filing	Retail
	<b>Subtotal</b>	<b>452.0</b>			
July 2011	OPTI Canada Inc.	2,575.0	7/13/11	Chapter 11 Filing	Energy
	<b>Subtotal</b>	<b>2,575.0</b>			
August 2011	No Default Activity				
September 2011	NewPage Corp.	2,998.8	9/7/11	Chapter 11 Filing	Paper and Containers
	NewPage Holding Corp.	229.0	9/7/11	Chapter 11 Filing	Paper and Containers
	<b>Subtotal</b>	<b>3,227.8</b>			
October 2011	Real Mex Restaurants Inc.	130.0	10/4/11	Chapter 11 Filing	Gaming, Lodging, and Restaurants
	Hovnanian Enterprises	195.0	10/31/11	Distressed Exchange	Building and Materials
	William Lyon Homes Inc.	283.3	10/31/11	Missed Payment	Building and Materials
	<b>Subtotal</b>	<b>608.3</b>			
November 2011	River Rock Entertainment	200.0	11/1/11	Missed Payment	Gaming, Lodging, and Restaurants
	NGC Corp Cap Trust I	200.0	11/7/11	Chapter 11 Filing	Utilities
	Dynegy Holdings LLC	3,371.8	11/7/11	Chapter 11 Filing	Utilities
	Trailer Bridge Inc.	82.5	11/16/11	Chapter 11 Filing	Transportation
	General Maritime Corp.	300.0	11/17/11	Chapter 11 Filing	Transportation
	PMI Group Inc.	400.0	11/23/11	Chapter 11 Filing	Banking and Finance
	American Airlines Inc.	1,656.1	11/29/11	Chapter 11 Filing	Transportation
	AMR Corp.	167.3	11/29/11	Chapter 11 Filing	Transportation
	<b>Subtotal</b>	<b>6,377.7</b>			
December 2011	St. Louis Post-Dispatch	126.4	12/12/11	Chapter 11 Filing	Broadcasting and Media
	GMX Resources Inc.	198.0	12/14/11	Distressed Exchange	Energy
	Fibertower Corp.	124.2	12/15/11	Missed Payment	Telecommunication
	Delta Petroleum Corp.	150.0	12/15/11	Chapter 11 Filing	Energy
	Dune Energy Inc.	297.0	12/22/11	Distressed Exchange	Energy
	Crystallex International Corp.	100.0	12/23/11	Chapter 15 Filing	Metals and Mining
	<b>Subtotal</b>	<b>995.6</b>			

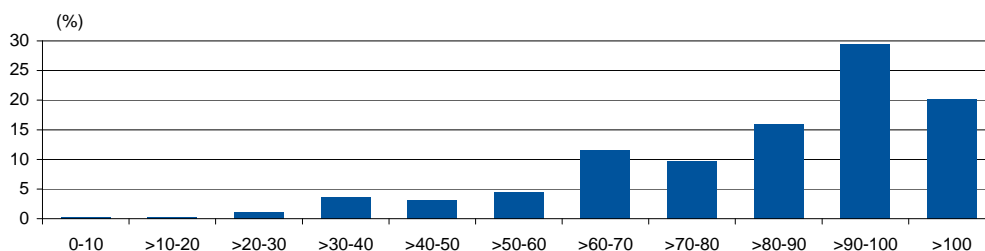
Source: Fitch U.S. High Yield Default Index.

**Trends in Recovery Rates**



<sup>a</sup>Similar seniorities collapsed into one observation.  
Source: Fitch U.S. High Yield Default Index, Advantage Data.

**'CCC' or Lower Par Value Price Distribution**  
(As of Dec. 31, 2011)



Source: Fitch Ratings, Bloomberg, Advantage Data.

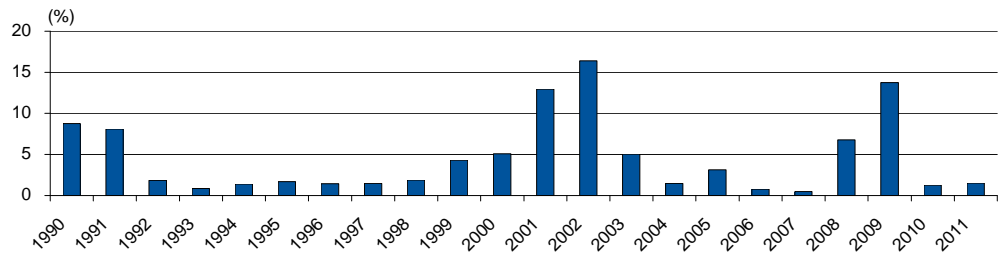
**Recovery Rates by Industry**

Industry	Weighted Average Recovery Rate (%)	Number of Issues with Price Data
<b>2010</b>		
Telecommunication	100.6	1
Miscellaneous	98.6	1
Supermarkets and Drug Stores	89.5	1
Paper and Containers	86.9	1
Transportation	80.6	1
Gaming, Lodging, and Restaurants	69.0	3
Industrial/Manufacturing	62.1	1
Energy	61.3	3
Building and Materials	53.8	3
Healthcare and Pharmaceutical	52.6	3
Metals and Mining	49.5	2
Retail	44.6	3
Banking and Finance	43.2	5
Broadcasting and Media	35.1	7
Computers and Electronics	9.6	1
<b>Total Defaulted Issues</b>	<b>56.7</b>	<b>36</b>
<b>2011</b>		
Telecommunication	78.1	2
Energy	76.2	7
Transportation	66.6	8
Utilities	64.9	8
Retail	58.5	5
Gaming, Lodging, and Restaurants	49.3	5
Paper and Containers	42.9	5
Building and Materials	37.1	10
Banking and Finance	34.2	4
Automotive	24.6	1
<b>Total Defaulted Issues</b>	<b>59.4</b>	<b>55</b>

Source: Fitch U.S. High Yield Default Index, Advantage Data.

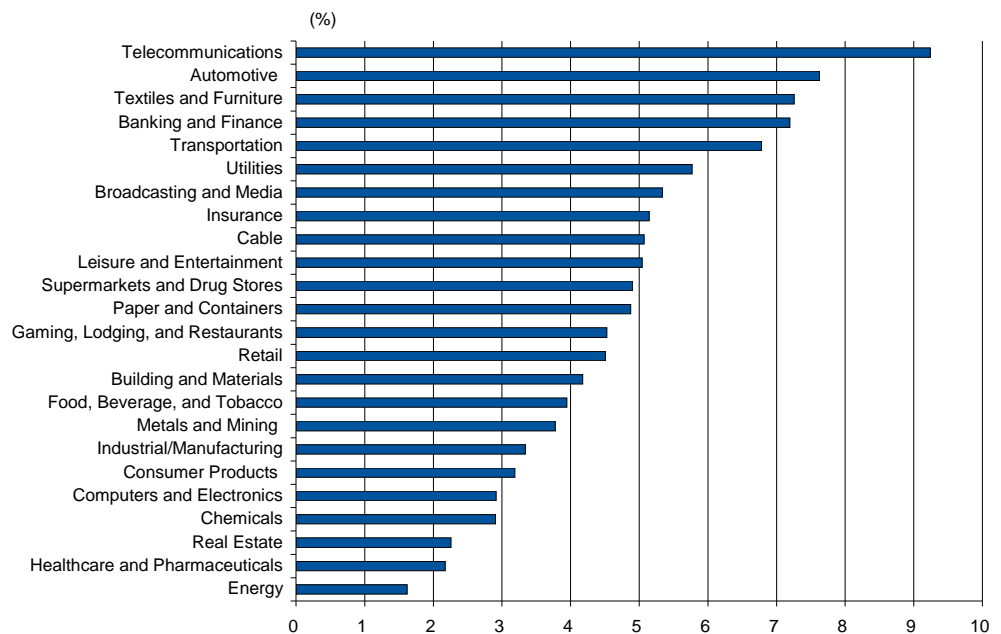
Historical Default and Recovery

Annual Default Rates — 1990–2011



Source: Fitch U.S. High Yield Default Index.

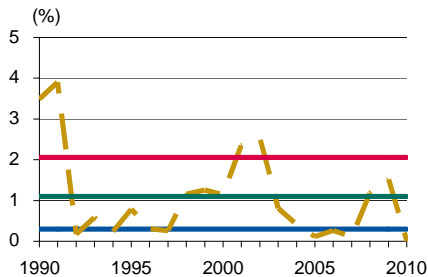
Average Annual Industry Default Rates — 1990–2011



Source: Fitch U.S. High Yield Default Index.

'BB' Default Rate Cyclicity<sup>a</sup>

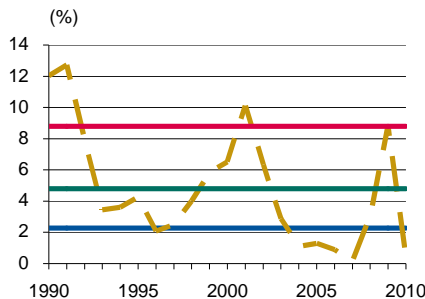
— Benign Environment Avg. Default Rate  
 — Annual Default Rate  
 — Avg. Annual Default Rate  
 — Stress Environment Avg. Default Rate



<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

'B' Default Rate Cyclicity<sup>a</sup>

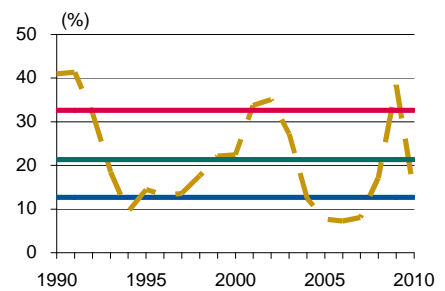
— Benign Environment Avg. Default Rate  
 — Annual Default Rate  
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<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

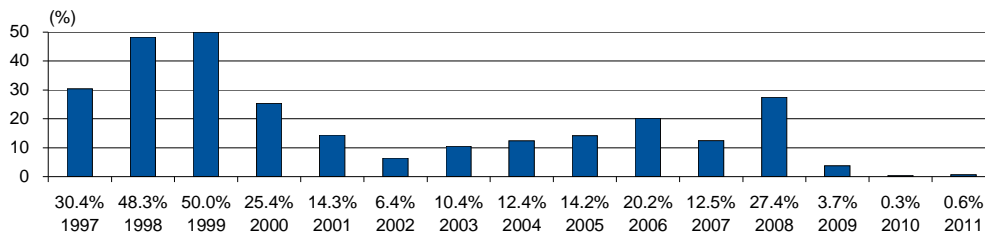
'CCC' Default Rate Cyclicity<sup>a</sup>

— Benign Environment Avg. Default Rate  
 — Annual Default Rate  
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 — Stress Environment Avg. Default Rate



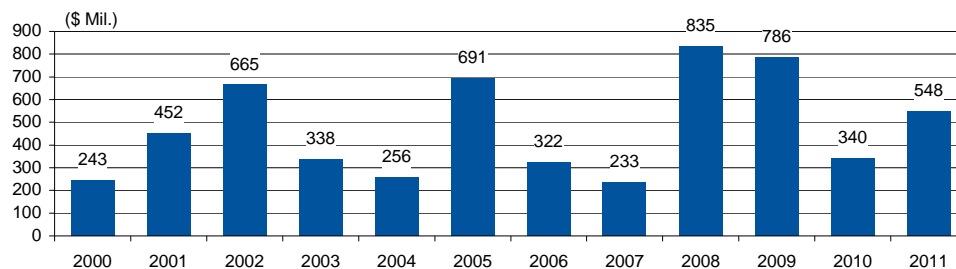
<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

**High Yield Default Rates by Vintage**



Note: Cumulative vintage default rates are shown above the year.  
Source: Fitch U.S. High Yield Default Index.

**Average Par Value of Bond Defaults per Issuer (2000–2011)**



Source: Fitch U.S. High Yield Default Index.

Industry Default Rates — 2000–2011

(%)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Automotive	4.4	28.3	4.2	—	0.8	10.5	6.5	2.1	2.2	44.2	0.5	0.8
Banking and Finance	3.2	21.8	5.1	1.8	0.2	1.1	0.3	—	29.2	24.3	1.5	0.5
Broadcasting and Media	0.3	4.1	7.9	1.6	2.9	0.5	1.2	1.6	9.9	31.7	5.5	0.3
Building and Materials	16.2	4.3	3.7	0.6	—	—	0.6	—	8.6	8.9	2.2	1.3
Cable	—	1.2	34.4	1.2	—	—	—	—	—	36.4	—	—
Chemicals	2.0	10.5	4.7	4.7	1.5	—	—	—	2.4	18.0	—	—
Computers and Electronics	4.8	3.1	7.6	0.4	1.3	—	0.0	—	—	16.2	0.3	—
Consumer Products	9.6	12.5	3.2	—	1.8	—	1.3	1.8	—	16.8	—	—
Energy	1.1	0.3	2.4	2.8	0.6	—	—	—	1.9	2.4	1.1	2.6
Food, Beverage, and Tobacco	15.6	12.4	5.3	9.3	1.4	—	0.8	1.6	6.0	3.0	1.5	—
Gaming, Lodging, and Restaurants	2.4	3.2	2.1	1.7	5.8	—	0.4	—	14.5	22.4	1.3	1.7
Healthcare and Pharmaceutical	6.8	3.4	—	12.3	0.6	0.6	—	1.3	0.3	—	1.8	—
Industrial/Manufacturing	2.7	8.4	5.2	5.5	1.8	6.9	0.7	—	2.4	8.7	0.8	—
Insurance	15.0	—	35.2	15.6	—	—	2.8	—	—	—	—	—
Leisure and Entertainment	14.4	17.8	1.2	—	—	—	—	5.4	16.9	15.4	—	—
Metals and Mining	6.7	16.4	20.2	9.6	5.5	1.3	—	—	—	3.6	1.2	0.3
Miscellaneous	5.1	2.8	2.2	0.5	1.9	0.1	0.6	—	1.4	5.7	0.3	—
Paper and Containers	3.2	10.9	8.2	0.6	1.1	0.8	3.3	0.9	6.5	25.9	1.0	10.3
Real Estate	—	—	—	—	—	—	—	—	1.6	12.0	—	—
Retail	3.4	5.6	11.8	2.5	0.6	0.7	—	1.6	3.3	0.6	3.0	2.0
Supermarkets and Drug Stores	13.8	3.6	2.3	1.1	—	3.3	—	0.3	—	4.5	3.1	—
Telecommunications	5.1	23.9	43.5	11.0	2.2	—	—	0.1	1.2	6.2	1.2	0.6
Textiles and Furniture	9.5	12.2	13.2	14.2	3.0	3.6	1.7	—	—	11.7	—	—
Transportation	18.1	5.7	13.2	8.8	1.4	24.2	2.7	—	—	8.5	1.7	7.4
Utilities	—	34.2	14.0	9.8	0.2	14.9	—	—	—	0.2	—	5.9
<b>Total Market</b>	<b>5.1</b>	<b>12.9</b>	<b>16.4</b>	<b>5.0</b>	<b>1.5</b>	<b>3.1</b>	<b>0.8</b>	<b>0.5</b>	<b>6.8</b>	<b>13.7</b>	<b>1.3</b>	<b>1.5</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg.

Industry Recovery Rates — 2000–2011

(%)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Automotive	11.9	12.0	16.9	—	81.6	53.2	59.2	73.1	9.1	15.3	—	24.6
Banking and Finance	15.1	77.5	27.0	25.6	—	73.9	94.6	—	57.2	63.8	43.2	34.2
Broadcasting and Media	33.0	22.3	33.9	31.0	46.7	—	96.9	67.4	33.3	11.8	35.1	—
Building and Materials	27.6	33.3	20.9	35.6	—	—	26.0	—	25.6	51.2	53.8	37.1
Cable	—	53.4	41.1	30.8	—	—	—	—	—	43.1	—	—
Chemicals	12.8	29.4	19.0	41.2	52.4	—	—	—	9.6	25.0	—	—
Computers and Electronics	13.5	13.5	14.5	62.1	69.4	—	—	—	—	25.4	9.6	—
Consumer Products	16.4	24.7	13.3	—	43.6	—	39.6	15.3	—	30.6	—	—
Energy	53.9	8.0	49.0	59.2	71.7	—	—	—	28.8	43.0	61.3	76.2
Food, Beverage, and Tobacco	22.3	30.9	29.8	17.3	20.1	—	12.6	75.8	24.9	6.0	—	—
Gaming, Lodging, and Restaurants	28.5	15.8	76.7	79.2	86.9	—	101.4	—	28.5	19.2	69.0	49.3
Healthcare and Pharmaceutical	17.0	18.6	—	55.3	63.0	60.0	—	70.0	0.1	—	52.6	—
Industrial/Manufacturing	19.7	16.2	31.9	26.9	74.2	69.9	66.9	—	7.8	21.8	62.1	—
Insurance	27.0	—	9.4	10.5	—	—	44.6	—	—	—	—	—
Leisure and Entertainment	17.1	11.0	59.8	—	—	—	—	98.7	39.8	32.0	—	—
Metals and Mining	13.1	11.6	35.9	33.5	44.0	61.3	—	—	—	51.8	49.5	—
Miscellaneous	14.5	22.0	8.8	22.6	79.9	—	116.1	—	21.5	14.4	98.6	—
Paper and Containers	29.4	8.6	64.4	39.8	51.6	48.4	55.1	53.6	61.1	17.8	86.9	42.9
Real Estate	—	—	—	—	—	—	—	—	9.3	61.1	—	—
Retail	22.4	7.4	48.2	44.7	—	—	—	24.6	37.1	1.1	44.6	58.5
Supermarkets and Drug Stores	49.0	21.9	48.6	58.6	—	55.6	—	65.0	—	97.5	89.5	—
Telecommunications	32.8	11.5	13.5	34.0	53.8	—	—	9.0	10.9	20.3	100.6	78.1
Textiles and Furniture	15.0	11.3	27.6	23.5	33.9	42.2	68.6	—	—	15.6	—	—
Transportation	32.7	30.6	18.5	39.8	20.6	29.3	70.2	—	—	43.8	80.6	66.6
Utilities	—	60.1	30.0	72.9	—	71.1	—	—	—	17.6	—	64.9
<b>Total Market</b>	<b>24.9</b>	<b>29.8</b>	<b>22.5</b>	<b>44.4</b>	<b>62.1</b>	<b>57.6</b>	<b>64.3</b>	<b>66.4</b>	<b>45.8</b>	<b>34.1</b>	<b>56.7</b>	<b>59.4</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg, Advantage Data.

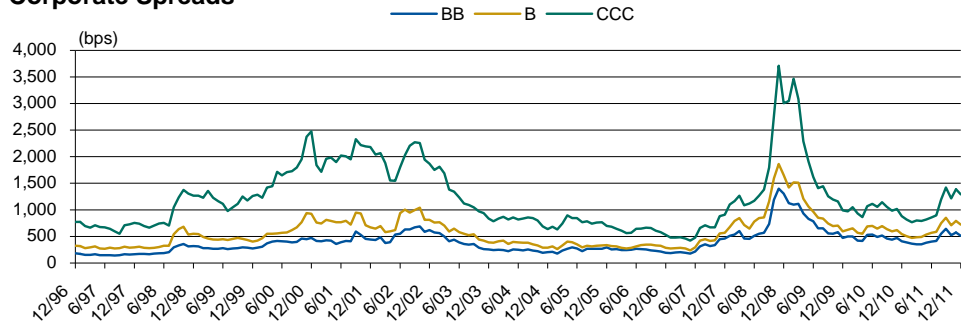
Recovery Rates by Seniority — Bonds

(%)	Weighted Average Recovery Rate	Median Recovery Rate <sup>a</sup>	Number of Issues with Price Data
<b>2000</b>			
Senior Secured	50.5	47.5	19
Senior Unsecured	18.4	13.3	74
Senior Subordinated	27.1	20.0	64
<b>Total Defaulted Issues</b>	<b>24.9</b>	<b>20.0</b>	<b>157</b>
<b>2001</b>			
Senior Secured	60.3	22.4	34
Senior Unsecured	27.8	12.8	234
Senior Subordinated	16.7	16.6	71
<b>Total Defaulted Issues</b>	<b>29.8</b>	<b>15.8</b>	<b>339</b>
<b>2002</b>			
Senior Secured	44.9	41.3	22
Senior Unsecured	21.2	20.5	267
Senior Subordinated	24.3	19.5	30
<b>Total Defaulted Issues</b>	<b>22.5</b>	<b>21.9</b>	<b>319</b>
<b>2003</b>			
Senior Secured	69.8	63.2	13
Senior Unsecured	47.0	39.7	104
Senior Subordinated	29.4	26.6	32
<b>Total Defaulted Issues</b>	<b>44.4</b>	<b>36.6</b>	<b>149</b>
<b>2004</b>			
Senior Secured	89.2	73.7	8
Senior Unsecured	52.8	47.6	32
Senior Subordinated	55.1	54.2	9
<b>Total Defaulted Issues</b>	<b>62.1</b>	<b>51.6</b>	<b>49</b>
<b>2005</b>			
Senior Secured	89.1	84.5	27
Senior Unsecured	41.2	57.8	42
Senior Subordinated	12.4	19.3	6
<b>Total Defaulted Issues</b>	<b>57.6</b>	<b>61.3</b>	<b>75</b>
<b>2006</b>			
Senior Secured	93.4	96.9	5
Senior Unsecured	67.5	60.0	18
Senior Subordinated	35.7	26.0	9
<b>Total Defaulted Issues</b>	<b>64.3</b>	<b>60.0</b>	<b>32</b>
<b>2007</b>			
Senior Secured	81.8	93.9	5
Senior Unsecured	63.4	74.6	10
Senior Subordinated	56.7	44.4	8
<b>Total Defaulted Issues</b>	<b>66.4</b>	<b>69.1</b>	<b>23</b>
<b>2008</b>			
Senior Secured	32.3	29.5	27
Senior Unsecured	54.4	25.1	70
Senior Subordinated	23.8	7.3	25
<b>Total Defaulted Issues</b>	<b>45.8</b>	<b>19.6</b>	<b>122</b>
<b>2009</b>			
Senior Secured	36.8	25.4	38
Senior Unsecured	36.0	31.0	258
Senior Subordinated	19.2	14.9	48
<b>Total Defaulted Issues</b>	<b>34.1</b>	<b>24.9</b>	<b>344</b>
<b>2010</b>			
Senior Secured	64.3	55.3	15
Senior Unsecured	69.3	81.6	10
Senior Subordinated	28.3	16.9	11
<b>Total Defaulted Issues</b>	<b>56.7</b>	<b>50.0</b>	<b>36</b>
<b>2011</b>			
Senior Secured	68.4	74.7	19
Senior Unsecured	50.0	22.0	32
Senior Subordinated	29.4	23.1	4
<b>Total Defaulted Issues</b>	<b>59.4</b>	<b>47.9</b>	<b>55</b>

<sup>a</sup>Similar seniorities per issuer collapsed into one observation.  
Source: Fitch U.S. High Yield Default Index, Advantage Data.

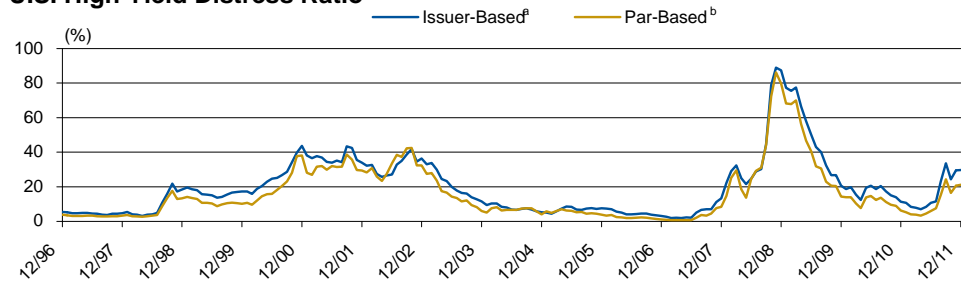
Credit Availability Indicators

Corporate Spreads



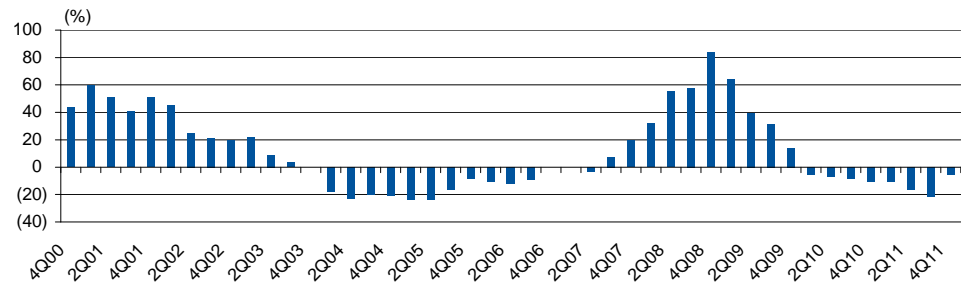
Source: Bank of America Merrill Lynch.

U.S. High Yield Distress Ratio



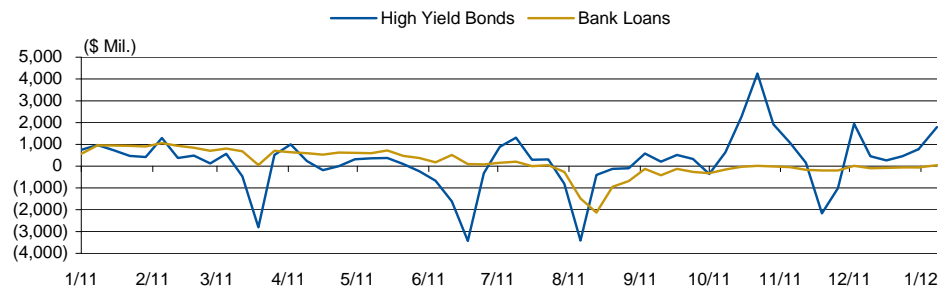
<sup>a</sup>Calculated as a proportion of tickers with at least one bond trading at OAS of 1,000 bps or more. <sup>b</sup>Calculated as a proportion of face value (expressed in USD) trading at OAS of 1,000 bps or more. Source: Bank of America Merrill Lynch.

Federal Reserve Senior Loan Officer Survey — Percentage of Banks Tightening Standards on C&I Loans



Source: Federal Reserve.

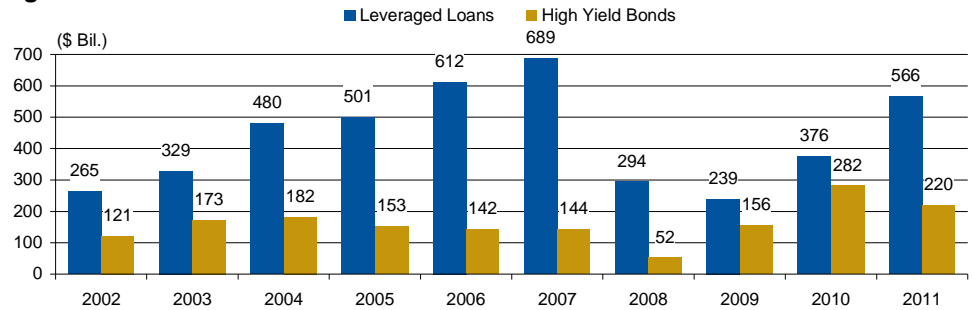
High Yield Bond and Bank Loan Mutual Fund Flows



Source: Lipper FMI.

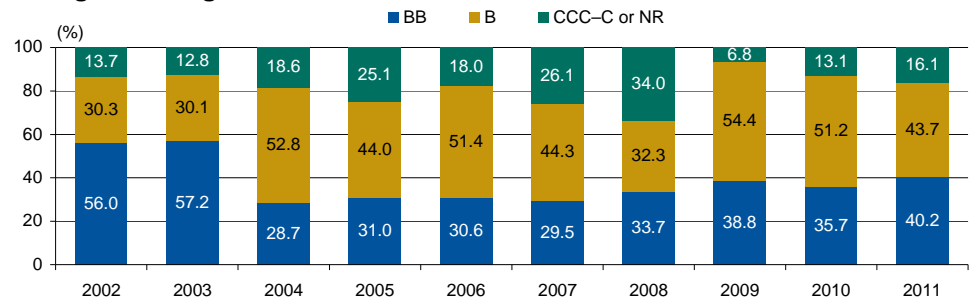
Issuance Trends

High Yield Bond and Loan Issuance



Source: Fitch Ratings, Thomson Reuters LPC, Bloomberg.

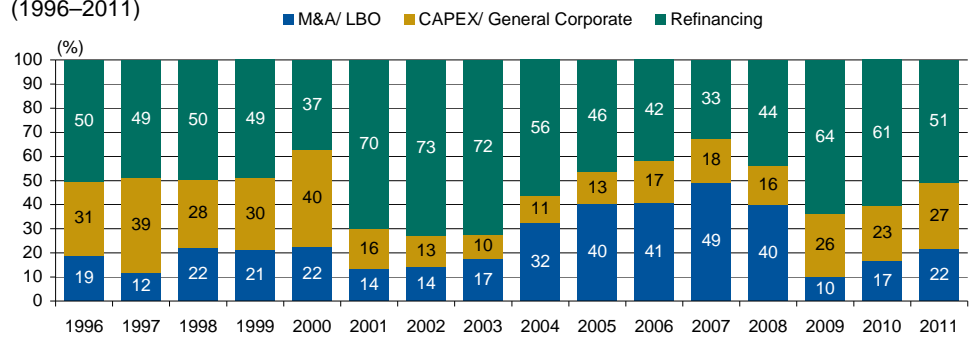
Rating Mix of High Yield Bond New Issuance



NR – Not rated.  
Source: Fitch Ratings, Bloomberg.

Global High Yield Use of Proceeds

(1996–2011)



Source: Bank of America Merrill Lynch.

## U.S. High Yield Bond New Issuance by Industry

(\$ Bil.)

Industry	2010	% of Total	2011	% of Total
Automotive	4.6	1.6	8.1	3.7
Banking and Finance	31.7	11.2	21.0	9.6
Broadcasting and Media	10.5	3.7	4.9	2.2
Building and Materials	8.9	3.1	8.2	3.7
Cable	4.6	1.6	7.7	3.5
Chemical	15.4	5.4	1.1	0.5
Computers and Electronics	16.8	6.0	7.4	3.4
Consumer Products	8.1	2.9	5.9	2.7
Energy	36.8	13.0	40.7	18.5
Food, Beverage, and Tobacco	5.9	2.1	3.2	1.5
Gaming, Lodging, and Restaurants	10.8	3.8	7.3	3.3
Healthcare and Pharmaceutical	17.7	6.3	22.2	10.1
Industrial/Manufacturing	8.8	3.1	3.8	1.7
Insurance	0.8	0.3	0.2	0.1
Leisure and Entertainment	3.7	1.3	2.9	1.3
Metals and Mining	12.5	4.4	12.5	5.7
Miscellaneous	13.6	4.8	9.5	4.3
Paper and Containers	9.1	3.2	4.6	2.1
Real Estate	8.7	3.1	6.2	2.8
Retail	7.0	2.5	5.3	2.4
Supermarkets and Drug Stores	0.9	0.3	0.3	0.1
Telecommunication	20.1	7.1	19.1	8.7
Textiles and Furniture	2.2	0.8	1.1	0.5
Transportation	12.5	4.4	5.6	2.6
Utilities	10.1	3.6	11.0	5.0
<b>Total Issuance</b>	<b>281.8</b>	<b>100.0</b>	<b>219.9</b>	<b>100.0</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg.

High Yield Market Profile

Size and Rating Mix — December 2011

Amount Outstanding (\$ Bil.)	Number of Issuers	Rating	% Par Value	Weighted Average Coupon	Median Coupon
1,053.4	1,321	BB	42.6	7.36	7.18
		B	38.7	8.55	8.50
		CCC-C or NR	18.7	9.77	9.63
		All	100.0	8.27	8.00

NR – Not rated.

Source: Fitch U.S. High Yield Default Index, Bloomberg.

High Yield Industry Composition — December 2011

Industry	Amount Outstanding (\$ Bil.)	% of Market Volume	% of Sector Volume Rated 'BB'	% of Sector Volume Rated 'B'	% of Sector Volume Rated 'CCC' or NR	Weighted Average Coupon	Median Coupon
Automotive	24.8	2.4	43.1	48.9	7.9	8.09	8.13
Banking and Finance	136.0	12.9	61.5	32.9	5.6	7.18	7.00
Broadcasting and Media	39.8	3.8	22.8	40.6	36.6	8.74	8.50
Building and Materials	41.6	3.9	38.1	46.1	15.8	7.81	7.25
Cable	26.4	2.5	66.9	31.7	1.4	8.13	8.00
Chemical	19.4	1.8	49.2	29.2	21.6	8.34	8.27
Computers and Electronics	46.3	4.4	19.4	36.9	43.7	9.30	8.88
Consumer Products	19.4	1.8	33.6	31.3	35.1	8.57	8.38
Energy	132.2	12.6	47.4	43.1	9.5	7.97	7.75
Food, Beverage, and Tobacco	21.2	2.0	39.0	33.2	27.8	8.78	8.63
Gaming, Lodging, and Restaurants	46.1	4.4	21.4	45.0	33.6	9.10	8.63
Healthcare and Pharmaceutical	68.8	6.5	36.0	51.1	12.9	8.20	8.00
Industrial/Manufacturing	22.4	2.1	56.2	26.4	17.4	8.07	7.78
Insurance	9.5	0.9	83.9	1.8	14.3	8.31	7.96
Leisure and Entertainment	13.3	1.3	17.5	58.2	24.3	9.47	9.13
Metals and Mining	37.5	3.6	51.5	40.8	7.7	7.84	7.75
Miscellaneous	51.3	4.9	19.2	45.9	34.9	9.51	9.13
Paper and Containers	23.4	2.2	37.7	34.6	27.7	8.32	8.50
Real Estate	34.7	3.3	67.4	25.2	7.4	8.53	7.50
Retail	28.2	2.7	48.7	18.9	32.4	8.21	7.75
Supermarkets and Drug Stores	8.2	0.8	0.0	72.3	27.7	8.48	8.00
Telecommunication	105.3	10.0	34.4	43.8	21.8	8.43	8.13
Textiles and Furniture	8.0	0.8	26.7	61.4	12.0	7.69	7.63
Transportation	29.3	2.8	43.2	42.7	14.1	8.62	8.63
Utilities	60.2	5.7	53.2	23.9	22.9	8.30	7.69
<b>Total</b>	<b>1,053.4</b>	<b>100.0</b>	<b>42.6</b>	<b>38.7</b>	<b>18.7</b>	<b>8.27</b>	<b>8.00</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg.

### Concentration of Bonds Rated 'B-' or Lower by Industry

(% of Sector Volume)

Industry	2009	2010	2011
Automotive	74.3	19.9	11.9
Banking and Finance	58.6	17.2	15.6
Broadcasting and Media	66.5	47.1	41.1
Building and Materials	28.3	29.8	26.9
Cable	5.6	11.2	13.6
Chemical	33.4	25.4	28.9
Computers and Electronics	71.3	66.7	55.1
Consumer Products	75.1	45.8	41.8
Energy	19.2	19.8	21.0
Food, Beverage, and Tobacco	36.0	30.1	40.9
Gaming, Lodging, and Restaurants	59.3	57.8	58.4
Healthcare and Pharmaceutical	49.0	39.7	35.1
Industrial/Manufacturing	29.6	27.3	26.9
Insurance	10.9	11.9	14.3
Leisure and Entertainment	50.3	53.4	55.3
Metals and Mining	22.9	23.4	17.7
Miscellaneous	49.4	53.1	59.2
Paper and Containers	37.7	31.9	36.1
Real Estate	47.5	28.0	19.7
Retail	39.6	30.9	40.2
Supermarkets and Drug Stores	52.5	44.3	42.8
Telecommunication	33.1	31.9	32.0
Textiles and Furniture	28.8	19.3	16.8
Transportation	33.9	31.6	30.4
Utilities	33.1	36.2	34.4
<b>Total</b>	<b>41.6</b>	<b>32.1</b>	<b>31.2</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg.

High Yield Maturity Schedule by Rating: 2012–2015

(\$ Bil.)	2012		2013		2014		2015	
	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding
Rating Bucket								
BB	21.0	4.7	21.5	4.8	31.2	7.0	32.9	7.3
B	5.4	1.3	13.3	3.3	20.7	5.1	47.6	11.7
CCC–C	2.1	1.2	5.3	3.0	14.5	8.0	41.2	22.8
NR	1.0	6.2	0.9	5.3	1.4	8.5	2.5	15.7
<b>Total</b>	<b>29.5</b>	<b>2.8</b>	<b>41.0</b>	<b>3.9</b>	<b>67.8</b>	<b>6.4</b>	<b>124.1</b>	<b>11.8</b>

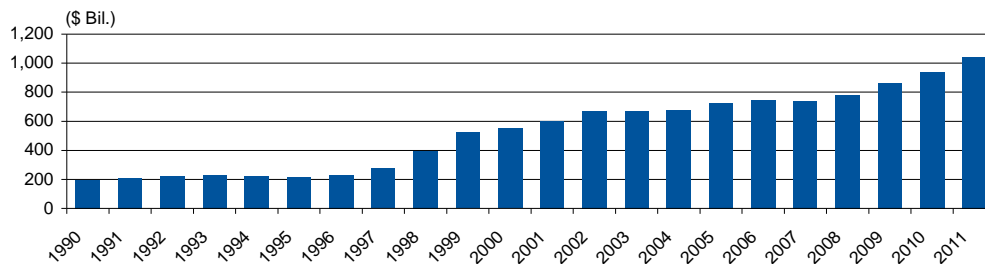
Source: Fitch U.S. High Yield Default Index, Bloomberg.

High Yield Maturity Schedule by Industry: 2012–2015

(\$ Bil.)	2012		2013		2014		2015	
	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding
Automotive	0.1	0.3	0.0	0.0	1.4	5.5	1.0	4.2
Banking and Finance	14.5	10.6	10.5	7.7	13.7	10.1	21.9	16.1
Broadcasting and Media	0.9	2.2	2.4	6.1	2.9	7.3	5.0	12.7
Building and Materials	1.5	3.6	1.5	3.5	2.7	6.5	5.5	13.3
Cable	0.7	2.8	0.5	1.9	2.5	9.3	1.6	5.9
Chemical	0.6	3.1	0.4	2.1	1.0	5.0	0.7	3.3
Computers and Electronics	0.1	0.2	1.5	3.3	1.6	3.4	6.4	13.8
Consumer Products	0.1	0.5	0.4	1.8	0.2	0.9	1.9	9.7
Energy	3.1	2.3	1.3	1.0	5.9	4.5	8.2	6.2
Food, Beverage, and Tobacco	0.2	0.8	0.5	2.4	2.8	13.3	1.5	7.1
Gaming, Lodging, and Restaurants	1.4	3.1	3.5	7.5	4.5	9.8	6.1	13.3
Healthcare and Pharmaceutical	1.0	1.4	1.3	1.9	2.7	3.9	6.6	9.7
Industrial/Manufacturing	0.2	0.7	1.3	5.8	1.7	7.4	0.7	3.2
Insurance	0.1	1.4	0.3	3.5	0.7	7.4	1.0	10.2
Leisure and Entertainment	0.3	2.2	0.2	1.7	0.9	7.1	0.0	0.0
Metals and Mining	0.8	2.2	1.1	2.9	0.5	1.3	5.5	14.6
Miscellaneous	0.5	0.9	1.9	3.8	4.5	8.8	14.5	28.2
Paper and Containers	0.2	1.1	1.6	7.0	2.8	12.0	1.9	8.3
Real Estate	1.6	4.6	2.2	6.3	2.8	8.0	5.9	16.9
Retail	0.4	1.3	1.1	3.8	1.3	4.5	1.8	6.2
Supermarkets and Drug Stores	0.3	3.4	0.2	2.2	0.5	6.0	1.1	14.0
Telecommunication	0.6	0.6	4.4	4.2	5.8	5.5	14.5	13.7
Textiles and Furniture	0.3	4.2	0.0	0.0	1.1	13.2	1.3	16.6
Transportation	0.2	0.6	1.2	4.2	0.9	3.2	4.7	16.1
Utilities	0.0	0.0	1.6	2.6	2.5	4.2	4.7	7.9
<b>Total</b>	<b>29.5</b>	<b>2.8</b>	<b>41.0</b>	<b>3.9</b>	<b>67.8</b>	<b>6.4</b>	<b>124.1</b>	<b>11.8</b>

Source: Fitch U.S. High Yield Default Index, Bloomberg.

**U.S. High Yield Market Growth**  
(1990–2011)



Source: Fitch U.S. High Yield Default Index.

**High Yield Industry Composition: 2000–2011**

(%)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Automotive	1.6	2.2	1.8	2.4	2.6	4.3	5.2	4.7	4.3	3.5	1.8	2.1
Banking and Finance	6.9	7.5	4.0	3.6	3.5	9.6	14.0	13.1	13.1	12.7	15.1	14.3
Broadcasting and Media	5.2	4.9	4.4	4.4	4.0	3.8	4.6	5.4	5.7	5.1	3.8	3.7
Building and Materials	2.7	2.7	2.5	2.7	2.9	3.0	3.0	2.9	3.8	4.0	3.6	3.7
Cable	7.0	6.5	7.2	4.1	4.7	4.2	4.1	3.9	3.7	4.0	2.6	2.4
Chemicals	2.7	3.2	3.3	4.0	4.3	3.6	3.0	2.4	1.9	1.8	2.2	2.2
Computers and Electronics	3.8	3.0	3.1	3.7	4.4	4.6	4.6	4.8	5.1	4.9	4.4	4.5
Consumer Products	1.7	1.4	1.2	1.3	1.2	1.2	1.3	1.1	0.9	0.8	1.1	1.6
Energy	5.9	4.9	6.7	10.5	10.9	9.5	9.3	9.2	9.1	9.2	10.5	11.8
Food, Beverage, and Tobacco	2.5	1.9	1.9	2.7	2.8	2.4	2.4	2.4	2.1	2.0	2.1	2.0
Gaming, Lodging, and Restaurants	4.4	4.3	4.9	5.7	5.7	4.7	4.9	5.2	5.4	5.3	4.7	4.5
Healthcare and Pharmaceutical	4.1	3.6	3.5	4.7	4.5	4.4	4.6	5.2	5.5	5.5	6.1	6.3
Industrial/Manufacturing	3.2	3.7	3.5	3.7	3.6	3.4	2.8	2.8	2.5	2.3	2.2	2.1
Insurance	0.7	0.9	1.3	0.8	0.8	0.8	0.7	0.9	1.0	1.5	1.7	1.2
Leisure and Entertainment	1.9	1.4	1.2	1.6	1.7	1.3	1.3	1.3	1.1	1.0	1.1	1.2
Metals and Mining	3.2	2.6	2.2	2.3	2.7	2.9	2.8	2.8	3.0	3.2	3.1	3.0
Miscellaneous	6.7	5.9	6.1	6.2	5.0	3.9	4.4	5.0	4.7	4.5	4.7	4.8
Paper and Containers	2.8	2.6	3.1	4.1	4.4	4.0	4.0	3.8	3.6	3.8	3.5	3.0
Real Estate	1.3	1.1	1.2	1.4	1.4	1.2	1.4	2.1	2.7	2.9	2.6	3.0
Retail	2.6	2.8	3.3	2.8	2.5	2.5	2.5	2.7	3.3	4.1	4.2	3.2
Supermarkets and Drug Stores	1.4	1.1	1.1	1.3	1.4	1.3	1.5	1.8	1.3	0.9	0.9	0.8
Telecommunications	18.5	19.6	20.5	12.1	11.1	9.9	8.3	7.5	8.1	9.1	9.0	9.3
Textiles and Furniture	1.5	1.4	1.3	1.4	1.3	1.2	1.0	0.8	0.6	0.8	0.9	0.8
Transportation	3.3	3.6	3.7	3.3	3.0	2.9	1.9	1.8	1.4	1.7	2.4	2.9
Utilities	4.2	7.3	6.9	9.0	9.6	9.4	6.4	6.4	6.0	5.5	5.6	5.8
<b>Total Market</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Based on average outstandings per period.

Source: Fitch U.S. High Yield Default Index, Bloomberg.

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