

Corporates / U.S.

## Fitch U.S. High Yield Default Insight — 2012 Review

**Special Report** 

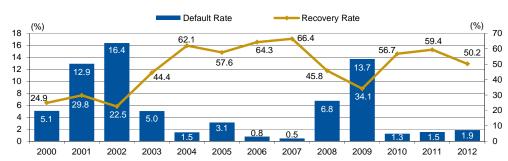
**Default Rate 1.9%:** For the third consecutive year, the U.S. high yield par default rate remained well below average, ending 2012 at 1.9% and up just modestly from 1.5% in 2011. Thirty-two issuers defaulted on \$20.5 billion in bonds compared with 29 issuers and \$15.9 billion in 2011. The year produced a considerable number of large defaults, including Edison Mission (\$3.7 billion), Residential Capital (\$2.8 billion), Energy Future Holdings (\$1.8 billion), and ATP Oil & Gas (\$1.5 billion). An additional four came close to or topped a billion.

**Recovery Rate 50.2%:** The weighted average recovery rate on the year's defaults was 50.2% of par and the median rate was 38.9%. Both measures, while still good, slipped from 2011's more robust 59.4% average and 47.9% median. Still, with a par weighted average recovery rate of 50.2% and a default rate of 1.9%, the market's loss rate was 0.9% in 2012 — by all accounts a benign figure. The loss rate was 0.6% in 2011 and in 2009 hit 9.1%.

Constructive Outlook for 2013: Fitch Ratings is projecting that default activity in 2013 will remain in line with 2012. The default rate is expected to end the year at 2%, barring a bankruptcy filing from Energy Future Holdings, which due to its large size has the potential to push the rate above 3%. Of course, with the U.S. economy still running on easy money fuel, the constructive outlook for defaults is heavily dependent on steady, if not, stellar macro conditions. Fitch is projecting U.S. GDP growth of 2.3% in 2013. This assumes political discord in Washington will not have a material impact on the economy. Fitch believes that the default rate would at least double if the economy slides back into recession or very low growth. Another area of concern over the coming year is the extent to which the availability of capital — driven by the very same easy money that is supporting growth — will reverse some of the conservatism of the past several years. See Fitch's "2013 Default Outlook" (December 2012).

**Long Term Average 4.6%:** The average annual default rate over the period 1980 through 2012 now stands at 4.6%. However, given the sensitivity of speculative grade default patterns to macro conditions, funding, and the changing credit quality/rating mix of companies that make up the high yield universe, this long-term average has fluctuated over 10-year investment horizons from 3.1% (1990–1999) to 6.7% (1994–2003). It is no surprise that the past turbulent decade has produced both the highest and lowest annual default rates (16.4% and 0.5% in 2002 and 2007, respectively). Fitch calculates a par weighted average recovery rate of 36.5% over the period 2000–2012 and a median rate of 25%. These averages also need to be viewed in context of the period covered and the mix of companies defaulting at different points in time. Full details by seniority, industry, and year begin on page 14.

#### U.S. High Yield Default and Recovery Rates — 2000–2012



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

#### Related Research

Risk Radar Update (January 2013) The Credit Outlook (January 2013) 2013 Outlook: U.S. Corporate Credit (January 2013)

Fitch U.S. High Yield Default Insight — 2013 Outlook (December 2012)

#### **Analysts**

Mariarosa Verde +1 212 908-0791 mariarosa.verde@fitchratings.com

Eric Rosenthal +1 212 908-0286 eric.rosenthal@fitchratings.com

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### Play it Again Sam — Default Rate Remains Low

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### **Few Surprises**

Defaults in 2012 continued to come from the very bottom of the rating scale — 90% of defaulted issues were rated 'CCC' or lower at the beginning of the year. This has been a steady trend over the past several years. As Fitch has noted in prior research, from peak to trough, default rates vary by multiples across all three speculative-grade rating categories. Not surprisingly, however, 'CCC' default risk remains significant even during periods of good economic growth. On a par basis, the default rate at this level was close to 10% in 2012.

Fourteen industries experienced some default activity in 2012; this was up from 12 in 2011. The utility sector had the unenviable title of producing the year's top default rate of 10.5%. This was due overwhelmingly to Edison Mission's bankruptcy filing and Energy Future Holdings' distressed debt exchanges, both of which occurred in December. Paper and containers — an industry that has been a consistent source of defaults in recent years, some due to cyclical pressures and some due to exposure to print media — followed with a 7.7% default rate. Six additional sectors produced multiple defaults: transportation (4.4% default rate); banking and finance (3.3%); gaming, lodging and restaurants (2.8%); broadcasting and media (2.0%); energy (1.2%, currently the largest in U.S. high yield at \$168 billion or 15% of market volume);

# High Yield Default, Recovery, and Loss Rates by Industry (2010–2012)

		2010		2011			2012		
(%)	Default Rate	Recovery Rate	Loss Rate	Default Rate	Recovery Rate	Loss Rate	Default Rate	Recovery Rate	Loss Rate
Automotive	0.5	_	_	0.8	24.6	0.6	_	_	_
Banking and Finance	1.5	43.2	0.8	0.5	34.2	0.3	3.3	56.6	1.4
Broadcasting and Media	5.5	35.1	3.6	0.3	_	_	2.0	53.1	0.9
Building and Materials	2.2	53.8	1.0	1.3	37.1	0.8	_	_	_
Cable	_	_	_	_	_	_	_	_	_
Chemicals	_	_	_	_	_	_	1.0	47.4	0.5
Computers and Electronics	0.3	9.6	0.3	_	_	_	_	_	_
Consumer Products	_	_	_	_	_	_	4.7	74.0	1.2
Energy	1.1	61.3	0.4	2.6	76.2	0.6	1.2	26.5	0.9
Food, Beverage, and Tobacco	1.5	_	_	_	_	_	_	_	_
Gaming, Lodging, and Restaurants	1.3	69.0	0.4	1.7	49.3	0.9	2.8	81.6	0.5
Healthcare and Pharmaceutical	1.8	52.6	0.9	_	_	_	0.5	32.1	0.3
Industrial/Manufacturing	0.8	62.1	0.3	_	_	_	_	_	_
Insurance	_	_	_	_	_	_	_	_	
Leisure and Entertainment	_	_	_	_	_	_	_	_	_
Metals and Mining	1.2	49.5	0.6	0.3	_	_	0.6	46.0	0.3
Miscellaneous	0.3	98.6	0.0	_	_	_	0.8	73.1	0.2
Paper and Containers	1.0	86.9	0.1	10.3	42.9	5.9	7.7	30.7	5.3
Real Estate	_	_	_	_	_	_	_	_	_
Retail	3.0	44.6	1.6	2.0	58.5	0.8	1.0	18.6	0.8
Supermarkets and Drug Stores	3.1	89.5	0.3	_	_	_	_	_	_
Telecommunication	1.2	100.6	0.0	0.6	78.1	0.1	0.3	70.1	0.1
Textiles and Furniture	_	_	_	_	_	_	_	_	_
Transportation	1.7	80.6	0.3	7.4	66.6	2.5	4.4	23.0	3.4
Utilities	_	_	_	5.9	64.9	2.1	10.5	53.1	4.9
Total Market	1.3	56.7	0.5	1.5	59.4	0.6	1.9	50.2	0.9

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

#### **Related Criteria**

Corporate Rating Methodology (August 2012)

### U.S. High Yield Default Stats and Drivers: 2011 Versus 2012

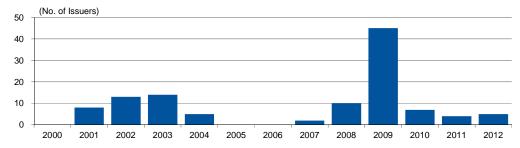
(Year Ending Dec. 31)	2011	2012
U.S. High Yield Par Default Rate (%)	1.5	1.9
U.S. High Yield Defaulted Issuer Count	29	32
Weighted Average Recovery Rate (%)	59.4	50.2
Median Recovery Rate (%)	47.9	38.9
U.S. GDP Growth (%)	1.7	2.2
Unemployment (%)	8.6	7.7
10-Year Treasury Yield (%)	1.9	1.7
U.S. Speculative Grade Par Downgrade/Upgrade Ratio (x)	0.4	1.1
Federal Reserve Senior Loan Officer Survey <sup>a</sup> (%)	(5.9)	(7.6)
BofA Merrill Lynch High Yield Spread to Treasuries (bps)	705	524
BofA Merrill Lynch Distress Ratio (%)	17.9	9.9
High Yield Issuance (\$ Bil.)	220	307
CCC or Lower High Yield Issuance (%)	16	16
Leveraged Loan Issuance (\$ Bil.)	566	664
B or Lower Leveraged Loan Issuance <sup>b</sup> (%)	25	29
High Yield Market Size (\$ Bil.)	1,053	1,134
Weighted Average Coupon (%)	8.3	8.0
Median Coupon (%)	8.0	7.9
B- or Lower (%)	31.2	32.2
<sup>a</sup> Negative reading denotes loosening. <sup>b</sup> Excludes non-rated loans Source: Fitch Ratings, Bloomberg, Thomson Reuters LPC.		

and healthcare and pharmaceutical (0.5%). Some of these defaults were relatively small and were due to issuer-specific troubles rather than systemic industry challenges. Kodak's January 2012 bankruptcy was the sole default in consumer products (4.7% rate).

#### 2-to-1 Survival Rate on DDEs

The mix of issuer defaults originating from a bankruptcy filing, missed payment, or distressed debt exchange (DDE) was unremarkable in 2012 versus historical patterns. Bankruptcy was the leading cause of default (16 of the 32 issuers), followed by missed payment (11 issuers), and lastly by DDEs (five). The weighted average recovery rate on the DDEs of 69.1% was again higher than the non-DDE average recovery rate of 46.5%.

#### Distressed Debt Exchanges — 2000-2012



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



### Weighted Average Bond Recovery Rate: DDE Versus Non-DDE

2008 (Excluding DDE's)	Weighted Avg. Recovery Rate (%)	Number of Issues	2008 (DDE's)	Weighted Avg. Recovery Rate (%)	Number of Issues
Senior Secured	30.4	24	Senior Secured	34.4	3
Senior Unsecured	30.5	26	Senior Unsecured	60.2	44
Senior Subordinated	24.5	24	Senior Subordinated	4.6	1
Total Defaulted Issues	28.6	74	Total Defaulted Issues	55.3	48
2009 (Excluding DDE's)			2009 (DDE's)		
Senior Secured	35.2	198	Senior Secured	63.7	12
Senior Unsecured	34.0	26	Senior Unsecured	39.9	60
Senior Subordinated	17.4	35	Senior Subordinated	29.6	13
Total Defaulted Issues	32.9	259	Total Defaulted Issues	40.6	85
2010 (Excluding DDE's)			2010 (DDE's)		
Senior Secured	61.5	13	Senior Secured	93.7	2
Senior Unsecured	41.9	5	Senior Unsecured	86.8	5
Senior Subordinated	28.3	11	Senior Subordinated	_	_
Total Defaulted Issues	48.6	29	Total Defaulted Issues	88.2	7
2011 (Excluding DDE's)			2011 (DDE's)		
Senior Secured	67.7	18	Senior Secured	89.6	1
Senior Unsecured	49.3	24	Senior Unsecured	59.1	8
Senior Subordinated	30.8	3	Senior Subordinated	24.6	1
Total Defaulted Issues	59.2	45	Total Defaulted Issues	62.7	10
2012 (Excluding DDE's)			2012 (DDE's)		
Senior Secured	63.6	15	Senior Secured	100.6	1
Senior Unsecured	36.8	25	Senior Unsecured	66.5	8
Senior Subordinated	11.4	4	Senior Subordinated	69.0	5
Total Defaulted Issues	46.5	44	Total Defaulted Issues	69.1	14
DDE – Distressed debt exc Source: Fitch Ratings, Adva					

The reduction in debt associated with DDEs is uniformly less than the debt reduction associated with bankruptcy. Their efficacy in keeping companies solvent is, therefore, not guaranteed. Of the 65 companies that have completed DDEs since 2008, 21 have in fact had either one or multiple subsequent events of default (see table on page 5); however, a larger share — 44 companies — has not. Therefore, the record to date is favorable for the recent batch of exchanges.

With regard to the missed payments, in the April 2012 edition of Fitch's default insight, we noted that most of these eventually file. Already of the 11 missed payments in 2012, five have filed for bankruptcy.

### Distressed Debt Exchanges with Subsequent Default Events — 2008–2012

Issuer	Industry	Original Debt Exchange	Subsequent Debt Exchange	Missed Payment	Bankruptcy
French Lick Resorts and Casino	Gaming, Lodging, and Restaurants	April 2008	April 2009		
Primus Telecomm Group	Telecommunication	May 2008			March 2009
Residential Capital LLC	Banking and Finance	June 2008	Dec. 2008	May 2012	May 2012
Six Flags Inc.	Leisure and Entertainment	June 2008			June 2009
Metaldyne Corp.	Automotive	Nov. 2008			May 2009
Finlay Fine Jewelry Corp.	Retail	Nov. 2008		July 2009	
Neff Corp.	Banking and Finance	Dec. 2008			May 2010
Harrahs Operating Co Inc.	Gaming, Lodging, and Restaurants	Dec. 2008	April 2009		
American Achievement Group Holding	Miscellaneous	March 2009	Aug. 2009		
Nxp Bv/Nxp Funding LLC	Computers and Electronics	March 2009	July 2009		
Wolverine Tube Inc.	Metals and Mining	April 2009			Oct. 2010
Hawker Beechcraft Acquisition Co.	Transportation	June 2009		May 2012	May 2012
Affinity Group Inc.	Miscellaneous	June 2009		Sept. 2009	
William Lyon Homes Inc.	Building and Materials	June 2009	Oct. 2009	Oct. 2011	
Advanta Capital Trust I	Banking and Finance	June 2009			Nov. 2009
Fairpoint Communications	Telecommunication	July 2009			Oct. 2009
NewPage Corp.	Paper and Containers	Oct. 2009			Sept. 2011
Catalyst Paper	Paper and Containers	March 2010		Jan. 2012	
Reddy Ice	Miscellaneous	March 2010			April 2012
Titan Petrochemicals	Energy	July 2010		March 2012	
Energy Future Holdings <sup>a</sup>	Utilities	Dec. 2012	Dec. 2012, Jan. 201	3	
a= =					

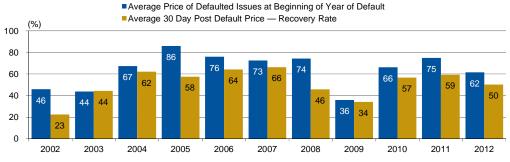
<sup>&</sup>lt;sup>a</sup>Energy Future Holdings completed two separate DDE's in December and announced another exchange to close in January. Source: Fitch U.S. High Yield Default Index.

#### Market Loss Rate 0.9%

The weighted average recovery rate on 2012 defaults was 50.2% of par. The market's loss rate combining the year's default and recovery results was 0.9%. This translates into a dollar loss for the year of \$10.2 billion. Among the sectors with above average default rates, loss rates were similarly high: paper and containers, 5.3%; utilities, 4.9%; and transportation, 3.4%. These rates refer to loss from par value, however, 2012 defaults were already trading at a discount to par at the beginning of the year. The weighted average price of the defaulted issues was 61.5% at the start of the year. On a market-to-market basis, the actual event of default resulted in an additional erosion in par value of 11.3%. Therefore, the mark-to-market loss for the year was \$2.3 billion.

It is important to note that in periods of overall price appreciation, defaults can and often do occur from relatively high price points. This is visible in the bar chart below which shows the beginning of the year trading prices of bonds that defaulted over the period 2000–2012.

#### **Price Movement of Defaulted Bonds**



Source: Fitch Ratings, Bloomberg, Advantage Data.

### Bespoke Approach Remains the Standard for Recovery Analysis

Examining recovery rates by seniority, 2012 produced average and median recovery rates of 64.7% and 62.0%, respectively, for senior secured bonds; 42.8% and 36.2% for senior unsecured bonds; and 38.3% and 26.6% for subordinated issues.

### Recovery Rates by Seniority — Bonds

	Weighted Avg.	Straight Avg.	Median	Number of Issues
(%)	Recovery Rate	Recovery Rate	Recovery Rate <sup>a</sup>	with Price Data
2011				
Senior Secured	68.4	73.4	74.7	19
Senior Unsecured	50.0	32.7	22.0	32
Senior Subordinated	29.4	30.7	23.1	4
Total Defaulted Issues	59.4	47.8	47.9	55
2012				
Senior Secured	64.7	59.1	62.0	16
Senior Unsecured	42.8	37.6	36.2	33
Senior Subordinated	38.3	33.4	26.6	9
Total Defaulted Issues	50.2	44.8	38.9	58

<sup>&</sup>lt;sup>a</sup>Similar seniorities collapsed into one observation. Note: Additional historical data on page 16. Source: Fitch U.S. High Yield Default Index, Advantage Data.

Twenty-five of the year's 32 defaulted issuers had just one bond seniority type outstanding at the time of default — senior secured, senior unsecured, or subordinated. A smaller group — seven — had some combination of either two or three seniority types.

Fitch also tracks loan recovery rates for companies in Fitch's index with actively traded loans outstanding at the time of default. There were just five observations in 2012 that met Fitch's criteria.

# Bond Seniority Mix of 2012 Defaults

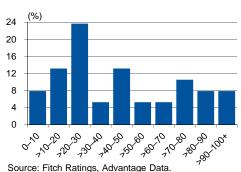
Туре	Issuers	(%)
Senior Secured Only	10	31.3
Senior Unsecured Only	11	34.4
Subordinated Only	4	12.5
Senior Secured with Senior Unsecured	3	9.4
Senior Secured with Subordinated	1	3.1
Senior Unsecured and Subordinated	2	6.3
All Seniorities	1	3.1
Total Issuers	32	100.0
Source: Fitch U.S. High Yield Default Index	ζ.	

The average recovery rate on the five loans

was 80.8%. Two defaults, Hawker Beechcraft and Houghton Mifflin Harcourt Publishers, had modest loan recovery rates of approximately 57% of par, while loan recovery rates topped 90% for the other three borrowers. A look at Hawker and Houghton's results for loans and bonds highlights that issuer-specific factors are critical in assessing recovery values. Hawker's senior unsecured bonds traded in the low teens shortly after default, while the company's subordinated issues experienced a near total loss of par value.

However, Houghton's bonds were senior secured and traded close to the company's senior secured loans following default. (Fitch is utilizing the price of the defaulted instruments 30 days after default as the measure of recovery). A quick look at the distribution of recovery rates in 2012 also highlights the strong variability in recovery outcomes. Of note, Fitch's issuer and issue specific Recovery Ratings and the models used to derive them are available on Fitch's website.

## 2012 Distribution of Bond Recoveries



### Leveraged Loan Recovery Rates<sup>a</sup>

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average	70	68	68	74	94	98	79	96	68	60	83	97	81
Median	70	75	74	78	97	99	97	99	72	65	97	97	94
Number of Issues	23	37	37	35	11	7	3	6	16	35	7	2	5

<sup>a</sup>Based on companies in Fitch U.S. High Yield Default Index with actively traded loans at the time of default. Source: Fitch Ratings, Thomson Reuters LPC.

### Taking Inventory of the Market's Torrid Run

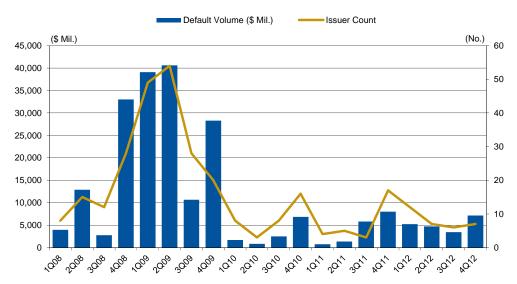
With issuance topping an extraordinary \$300 billion and the majority used to refinance existing debt, the market's massive churn continued in 2012. At the end of the year, 80% of market volume (\$1.13 trillion) consisted of bonds sold since 2009. Beyond pushing out debt maturities — for example, the \$23 billion in bonds maturing in 2013 is tiny compared with issuance volumes in recent years — another benefit began to accrue to high yield borrowers in 2012: a decline in their interest costs. The weighted average coupon slipped to 7.99% by year end from 8.27% at the beginning of the year. In the second half of the year, especially, issuance began to move more aggressively down the rating scale.

From July to year-end, the volume of 'CCC' rated issues rose 54% and made up 18% of overall issuance. Accompanying this trend, there was a significant increase in the issuance of paid-in-kind bonds. For the full year, in fact, paid-in-kind volume was higher than any other year since 2008, with nearly all of it occurring in second-half 2012. Simultaneously, the leveraged loan market saw a marked increase in covenant-light transactions. Fitch believes that this put downward pressure on the default rate as weaker borrowers were also able to refinance.

The increase in lower rated issuance and, secondarily, the negative rating drift that surfaced in 2012 as a result of the uneven recovery resulted in a moderate but visible deterioration in the market's rating mix over the course of 2012. The share of issues rated 'B-' or lower, for example, grew to 32.2% of outstandings. The pool rated 'CCC' or lower moved back up to 20% from 18.7% at the end of 2011. These are not excessive levels, and corporate fundamentals remain sound. However, across the dimensions of rating trends, profitability, and issuance quality, trends turned less favorable than in 2011. At the end of 2012, the sector with the largest dollar volume of 'B-' or lower rated bonds was energy (\$39.6 billion), followed by telecommunications (\$38.1 billion) and computers and electronics (\$28.0 billion). Market profile data begins on page 23.

### **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	(%)
2011						
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
Total	15.9	100.0	29	100.0	58	100.0
2012						
Chapter 11 Filing	13.1	63.9	15	46.9	29	46.8
Distressed Exchange	3.3	16.0	5	15.6	14	22.6
Missed Payment	3.1	15.0	11	34.4	16	25.8
Chapter 7 Filing	1.1	5.1	1	3.1	3	4.8
Total	20.5	100.0	32	100.0	62	100.0
Source: Fitch U.S. High Y	ield Default Index.					



### **Industry Default Rates**

(%

	Average Annual			
Industry	1980–2012	2010	2011	2012
Automotive	6.6	0.5	0.8	_
Banking and Finance	6.9	1.5	0.5	3.3
Broadcasting and Media	4.7	5.5	0.3	2.0
Building and Materials	3.9	2.2	1.3	_
Cable	4.7	_	_	_
Chemicals	2.7	_	_	1.0
Computers and Electronics	2.6	0.3	_	_
Consumer Products	3.2	_	_	4.7
Energy	2.0	1.1	2.6	1.2
Food, Beverage, and Tobacco	3.4	1.5	_	_
Gaming, Lodging, and Restaurants	4.4	1.3	1.7	2.8
Healthcare and Pharmaceutical	2.0	1.8	_	0.5
Industrial/Manufacturing	2.9	0.8	_	_
Insurance	4.5	_	_	
Leisure and Entertainment	4.6	_	_	_
Metals and Mining	3.5	1.2	0.3	0.6
Miscellaneous	1.9	0.3	_	0.8
Paper and Containers	4.9	1.0	10.3	7.7
Real Estate	2.0	_	_	_
Retail	3.9	3.0	2.0	1.0
Supermarkets and Drug Stores	4.9	3.1	_	_
Telecommunication	8.5	1.2	0.6	0.3
Textiles and Furniture	6.2	_	_	_
Transportation	6.3	1.7	7.4	4.4
Utilities	5.9	_	5.9	10.5
Total Index	4.6	1.3	1.5	1.9
Source: Fitch U.S. High Yield Default Inde	ex.			

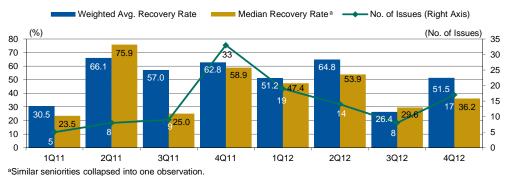


List of U.S. High Yield Bond Defaults on Trailing 12-Month Basis

Month	Issuer	Par Value (\$ Mil.)	Default Date	Default Source	Industry
January 2012	Aquilex Holdings LLC	225.0	01/15/12	Missed Payment	Energy
-	Catalyst Paper	640.4	01/15/12	Missed Payment	Paper and Containers
	Eastman Kodak Co.	1,000.0	01/19/12	Chapter 11 Filing	Consumer Products
	Subtotal	1,865.4			
ebruary 2012	Global Aviation Holdings Inc.	149.5	02/05/12	Chapter 11 Filing	Transportation
	LSP Energy LP	211.0	02/10/12	Chapter 11 Filing	Utilities
	Centrais Eletricas do Para SA	250.0	02/28/12	Chapter 11 Filing	Utilities
	Subtotal	610.4			
larch 2012	Circus & Eldorado/Silver Legacy	142.8	03/01/12	Missed Payment	Gaming, Lodging, and Restaurants
	DirectBuy Holdings Inc.	335.0	03/02/12	Missed Payment	Retail
	Mohegan Tribal Gaming	961.8	03/05/12	Distressed Exchange	Gaming, Lodging, and Restaurants
	Reichhold Industries Inc.	195.0	03/15/12	Missed Payment	Chemicals
	Titan Petrochemicals	105.9	03/19/12	Missed Payment	Energy
	Sino-Forest Corp.	999.5	03/30/12	Chapter 11 Filing	Paper and Containers
	Subtotal	2,739.9			
pril 2012	Reddy Ice Corp.	439.6	04/12/12	Chapter 11 Filing	Miscellaneous
	Dex One Corp.	98.2	04/19/12	Distressed Exchange	Broadcasting and Media
	Subtotal	537.8			
lay 2012	Hawker Beechcraft Acquisition Co.	630.6	05/01/12	Missed Payment	Transportation
	Verso Paper Holdings LLC	157.5	05/08/12	Distressed Exchange	Paper and Containers
	Residential Capital LLC	2,786.0	05/14/12	Chapter 11 Filing	Banking and Finance
	Houghton Mifflin Harcourt Publishers Inc.	300.0	05/21/12	Chapter 11 Filing	Broadcasting and Media
	Subtotal	3,874.0			
une 2012	Chukchansi Economic Development Authority	303.1	06/01/12	Distressed Exchange	Gaming, Lodging, and Restaurants
	Subtotal	303.1			
uly 2012	Patriot Coal Corp.	250.0	07/09/12	Chapter 11 Filing	Metals and Mining
	Subtotal	250.0			
ugust 2012	K-V Pharmaceutical Co.	225.0	08/04/12	Chapter 11 Filing	Healthcare and Pharmaceutical
	ATP Oil & Gas Corp.	1,500.0	08/17/12	Chapter 11 Filing	Energy
	Broadview Networks Holdings	300.0	08/22/12	Chapter 11 Filing	Telecommunication
	Subtotal	2,025.0			
eptember 2012	LifeCare Holdings Inc.	119.3	09/14/12	Missed Payment	Healthcare and Pharmaceutical
	Banco Cruzeiro do Sul SA	1,050.0	09/14/12	Chapter 7 Filing	Banking and Finance
	Subtotal	1,169.3			
October 2012	No Default Activity				
ovember 2012	LBI Media Holdings Inc.	41.8	11/14/12	Missed Payment	Broadcasting and Media
	LBI Media Inc.	448.8	11/14/12	Missed Payment	Broadcasting and Media
	Overseas Shipholding Group Inc.	509.6	11/14/12	Chapter 11 Filing	Transportation
	Rede Energia SA	496.6	11/23/12	Chapter 11 Filing	Utilities
	Subtotal	1,496.8		. <b>.</b>	
December 2012	Energy Future Holdings <sup>a</sup>	1,761.7	12/05/12	Distressed Exchange	Utilities
	Penson Worldwide Inc.	200.0	12/15/12	Missed Payment	Banking and Finance
	Edison Mission Energy	3,700.0	12/17/12	Chapter 11 Filing	Utilities
	Subtotal	5,661.7			

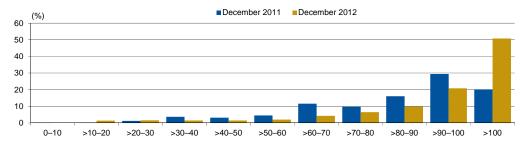
<sup>&</sup>lt;sup>a</sup>Includes two distressed debt exchanges from Dec. 5 to Dec. 19, 2012. Source: Fitch U.S. High Yield Default Index.

#### **Trends in Recovery Rates**



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

#### 'CCC' or Lower Par Value Price Distribution

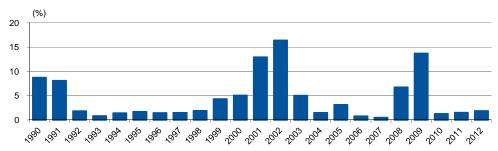


Source: Fitch Ratings, Bloomberg, Advantage Data.

Industry	Weighted Avg. Recovery Rate (%)	No. of Issues
2011		
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
Total Defaulted Issues	59.4	55
2012		
Gaming, Lodging, and Restaurants	81.6	8
Consumer Products	74.0	3
Miscellaneous	73.1	2
Telecommunication	70.1	1
Banking and Finance	56.6	8
Broadcasting and Media	53.1	4
Utilities	53.1	12
Chemicals	47.4	1
Metals and Mining	46.0	1
Healthcare and Pharmaceutical	32.1	2
Paper and Containers	30.7	5
Energy	26.5	3
Transportation	23.0	7
Retail	18.6	1
Total Defaulted Issues	50.2	58
Source: Fitch U.S. High Yield Default Index, Adv	antage Data.	

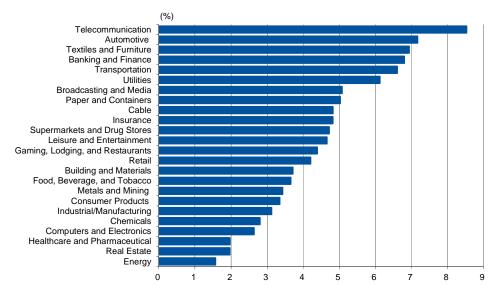
### **Historical Default and Recovery**

#### Annual Default Rates — 1990-2012



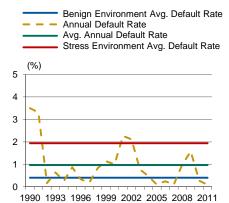
Source: Fitch U.S. High Yield Default Index.

### Average Annual Industry Default Rates — 1990–2012



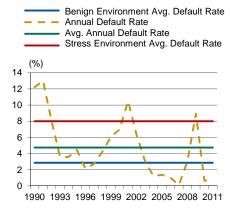
Source: Fitch U.S. High Yield Default Index.

### 'BB' Default Rate Cyclicalitya



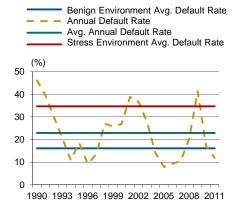
<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

### 'B' Default Rate Cyclicalitya



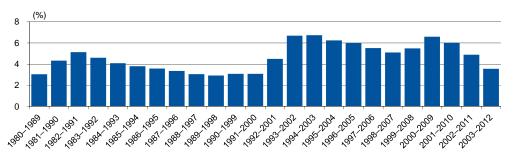
<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

### 'CCC' Default Rate Cyclicality<sup>a</sup>



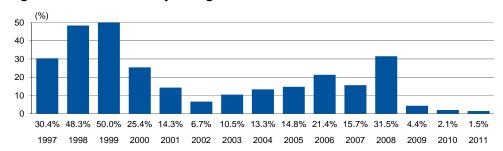
<sup>a</sup>Default rates based on market composites. Source: Fitch Ratings.

#### Average Annual High Yield Default Rate Over 10-Year Holding Periods



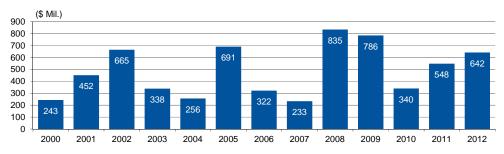
Source: Fitch U.S. High Yield Default Index.

#### **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 — 2000-2012



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



### Industry Default Rates — 2000–2012

														2000-2012
(%)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Automotive	4.4	28.3	4.2	_	0.8	10.5	6.5	2.1	2.2	44.2	0.5	0.8	_	8.7
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	3.3	7.3
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	2.0	6.0
Building and Materials	16.2	4.3	3.7	0.6	_	_	0.6	_	8.6	8.9	2.2	1.3	_	3.3
Cable	_	1.2	34.4	1.2	_	_	_	_	_	36.4	_	_	_	7.2
Chemicals	2.0	10.5	4.7	4.7	1.5	_	_	_	2.4	18.0	_	_	1.0	3.1
Computers and Electronics	4.8	3.1	7.6	0.4	1.3	_	0.0	_	_	16.2	0.3	_	_	2.4
Consumer Products	9.6	12.5	3.2	_	1.8		1.3	1.8	_	16.8	_	_	4.7	3.6
Energy	1.1	0.3	2.4	2.8	0.6	_	_	_	1.9	2.4	1.1	2.6	1.2	1.4
Food, Beverage, and Tobacco	15.6	12.4	5.3	9.3	1.4	_	0.8	1.6	6.0	3.0	1.5	_	_	3.7
Gaming, Lodging, and Restaurants	2.4	3.2	2.1	1.7	5.8	_	0.4	_	14.5	22.4	1.3	1.7	2.8	4.9
Healthcare and Pharmaceutical	6.8	3.4	_	12.3	0.6	0.6	_	1.3	0.3	_	1.8	_	0.5	1.6
Industrial/Manufacturing	2.7	8.4	5.2	5.5	1.8	6.9	0.7	_	2.4	8.7	0.8	_	_	3.4
Insurance	15.0	_	35.2	15.6	_	_	2.8	_	_	_	_	_	_	4.4
Leisure and Entertainment	14.4	17.8	1.2	_	_	_	_	5.4	16.9	15.4	_	_	_	4.8
Metals and Mining	6.7	16.4	20.2	9.6	5.5	1.3	_	_	_	3.6	1.2	0.3	0.6	3.7
Miscellaneous	5.1	2.8	2.2	0.5	1.9	0.1	0.6	_	1.4	5.7	0.3	_	0.8	1.6
Paper and Containers	3.2	10.9	8.2	0.6	1.1	8.0	3.3	0.9	6.5	25.9	1.0	10.3	7.7	6.3
Real Estate	_	_	_	_	_	_	_	_	1.6	12.0	_	_	_	1.6
Retail	3.4	5.6	11.8	2.5	0.6	0.7	_	1.6	3.3	0.6	3.0	2.0	1.0	2.6
Supermarkets and Drug Stores	13.8	3.6	2.3	1.1	_	3.3	_	0.3	_	4.5	3.1	_	_	2.2
Telecommunication	5.1	23.9	43.5	11.0	2.2		_	0.1	1.2	6.2	1.2	0.6	0.3	9.8
Textiles and Furniture	9.5	12.2	13.2	14.2	3.0	3.6	1.7	_	_	11.7	_	_	_	5.8
Transportation	18.1	5.7	13.2	8.8	1.4	24.2	2.7	_	_	8.5	1.7	7.4	4.4	7.9
Utilities	_	34.2	14.0	9.8	0.2	14.9	_	_	_	0.2	_	5.9	10.5	7.1
Total Market	5.1	12.9	16.4	5.0	1.5	3.1	0.8	0.5	6.8	13.7	1.3	1.5	1.9	5.1
Carrage Fitch II C I link Violat Data at Indae	DI	_												

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

### Industry Recovery Rates — 2000–2012

														2000–2012
(%)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Automotive	11.9	12.0	16.9	_	81.6	53.2	59.2	73.1	9.1	15.3	_	24.6	_	26.1
Banking and Finance	15.1	77.5	27.0	25.6	_	73.9	94.6	_	57.2	63.8	43.2	34.2	56.6	60.4
Broadcasting and Media	33.0	22.3	33.9	31.0	46.7	_	96.9	67.4	33.3	11.8	35.1	_	53.1	25.1
Building and Materials	27.6	33.3	20.9	35.6		_	26.0	_	25.6	51.2	53.8	37.1	_	35.9
Cable	_	53.4	41.1	30.8	_	_	_	_	_	43.1	_	_	_	42.0
Chemicals	12.8	29.4	19.0	41.2	52.4	_	_	_	9.6	25.0	_	_	47.4	28.6
Computers and Electronics	13.5	13.5	14.5	62.1	69.4	_	_	_	_	25.4	9.6	_	_	23.9
Consumer Products	16.4	24.7	13.3	_	43.6	_	39.6	15.3	_	30.6	_	_	74.0	35.5
Energy	53.9	8.0	49.0	59.2	71.7	_	_	_	28.8	43.0	61.3	76.2	26.5	52.6
Food, Beverage, and Tobacco	22.3	30.9	29.8	17.3	20.1	_	12.6	75.8	24.9	6.0	_	_	_	24.9
Gaming, Lodging, and Restaurants	28.5	15.8	76.7	79.2	86.9	_	101.4	_	28.5	19.2	69.0	49.3	81.6	37.3
Healthcare and Pharmaceutical	17.0	18.6	_	55.3	63.0	60.0	_	70.0	0.1	_	52.6	_	32.1	43.9
Industrial/Manufacturing	19.7	16.2	31.9	26.9	74.2	69.9	66.9	_	7.8	21.8	62.1	_	_	37.4
Insurance	27.0	_	9.4	10.5	_	_	44.6	_	_	_	_	_	_	13.2
Leisure and Entertainment	17.1	11.0	59.8	_	_	_	_	98.7	39.8	32.0	_	_	_	31.2
Metals and Mining	13.1	11.6	35.9	33.5	44.0	61.3	_	_	_	51.8	49.5	_	46.0	30.3
Miscellaneous	14.5	22.0	8.8	22.6	79.9	_	116.1	_	21.5	14.4	98.6	_	73.1	28.5
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	30.7	33.6
Real Estate	_	_	_	_	_	_	_	_	9.3	61.1	_	_	_	55.0
Retail	22.4	7.4	48.2	44.7	_	_	_	24.6	37.1	1.1	44.6	58.5	18.6	37.9
Supermarkets and Drug Stores	49.0	21.9	48.6	58.6	_	55.6	_	65.0	_	97.5	89.5	_	_	58.9
Telecommunication	32.8	11.5	13.5	34.0	53.8	_	_	9.0	10.9	20.3	100.6	78.1	70.1	17.4
Textiles and Furniture	15.0	11.3	27.6	23.5	33.9	42.2	68.6	_	_	15.6	_	_	_	22.4
Transportation	32.7	30.6	18.5	39.8	20.6	29.3	70.2	_	_	43.8	80.6	66.6	23.0	35.6
Utilities	_	60.1	30.0	72.9	_	71.1	_	_	_	17.6	_	64.9	53.1	60.2
Total Market	24.9	29.8	22.5	44.4	62.1	57.6	64.3	66.4	45.8	34.1	56.7	59.4	50.2	36.5
Source: Fitch U.S. High Yield Default Index, B	loomber	g, Advar	itage Da	ta.										



### Industry Recovery Rates by Seniority — 2000–2012

		Par Weighte	ed Average			Medi	ians	
(0/)	Senior	Senior	Senior	A.11	Senior	Senior	Senior	
(%)	Secured	Unsecured	Subordinated	All	Secured	Unsecured	Subordinated	All
Automotive	56.5	26.9	20.0	26.1	54.6	38.1	12.2	24.3
Banking and Finance	48.9	64.1	18.8	60.4	27.5	29.6	15.0	27.9
Broadcasting and Media	36.7	22.5	19.7	25.1	45.9	42.7	18.9	26.8
Building and Materials	68.7	30.1	29.5	35.9	38.0	28.0	19.7	27.5
Cable	39.4	42.2	63.2	42.0	49.7	36.8	67.5	37.0
Chemicals	33.2	31.4	20.8	28.6	23.9	26.4	22.7	24.6
Computers and Electronics	21.5	26.3	21.4	23.9	20.4	14.6	17.0	17.0
Consumer Products	73.7	26.6	19.0	35.5	55.9	26.1	14.4	21.6
Energy	55.6	48.6	68.9	52.6	58.4	44.6	49.6	49.5
Food, Beverage, and Tobacco	67.5	27.5	13.6	24.9	63.6	18.5	10.0	19.0
Gaming, Lodging, and Restaurants	56.8	28.5	33.7	37.3	63.2	27.9	21.1	32.8
Healthcare and Pharmaceutical	52.1	57.7	26.2	43.9	29.6	59.5	26.6	31.3
Industrial/Manufacturing	62.2	39.3	22.4	37.4	62.1	21.6	24.6	24.6
Insurance	_	10.8	25.6	13.2	_	10.4	10.6	10.5
Leisure and Entertainment	5.6	48.8	21.1	31.2	9.6	43.3	17.3	19.4
Metals and Mining	29.3	32.5	22.0	30.3	28.4	32.6	16.6	27.3
Miscellaneous	45.7	30.0	21.2	28.5	66.5	22.0	19.8	22.3
Paper and Containers	57.7	22.2	37.8	33.6	60.3	16.6	37.2	39.8
Real Estate	84.6	57.0	9.3	55.0	84.6	56.1	11.3	56.1
Retail	50.8	37.0	21.7	37.9	52.1	14.6	17.3	20.7
Supermarkets and Drug Stores	93.1	47.9	53.8	58.9	94.3	52.1	29.6	54.4
Telecommunication	60.1	15.2	33.6	17.4	52.2	13.3	17.9	14.3
Textiles and Furniture	57.0	22.6	20.7	22.4	57.0	20.7	16.9	20.2
Transportation	68.1	26.6	27.7	35.6	69.6	27.4	36.6	30.0
Utilities	86.8	50.3	8.7	60.2	85.3	52.4	11.5	64.6
All	56.7	34.2	24.8	36.5	52.1	24.6	19.5	25.0

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

### Industry Recovery Rates Observations Counts — 2000–2012

	Senior Secured Count	Senior Unsecured Count	Senior Subordinated Count	AII					
Automotive	2	46	21	69					
Banking and Finance	7	169	11	187					
Broadcasting and Media	21	42	27	90					
Building and Materials	5	39	18	62					
Cable	5	62	3	70					
Chemicals	7	25	16	48					
	·		14						
Computers and Electronics	9	17		40					
Consumer Products	5	12	9	26					
Energy	15	28	4	47					
Food, Beverage, and Tobacco	7	18	18	43					
Gaming, Lodging, and Restaurants	28	40	17	85					
Healthcare and Pharmaceutical	3	12	19	34					
Industrial/Manufacturing	9	22	27	58					
Insurance	0	14	3	17					
Leisure and Entertainment	2	13	13	28					
Metals and Mining	17	37	7	61					
Miscellaneous	5	24	16	45					
Paper and Containers	17	46	10	73					
Real Estate	1	5	2	8					
Retail	5	59	8	72					
Supermarkets and Drug Stores	2	7	7	16					
Telecommunication	11	244	24	279					
Textiles and Furniture	1	17	16	34					
Transportation	20	84	13	117					
Utilities	44	102	3	149					
All	248	1,184	326	1,758					
Source: Fitch U.S. High Yield Default Index, Bloomberg, Advantage Data.									

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### Recovery Rates by Seniority — Bonds

(%)	Weighted Avg.	Straight Avg.		Number of Issues
2000	Recovery Rate	Recovery Rate	Recovery Rate <sup>a</sup>	with Price Data
Senior Secured	50.5	53.9	47.5	19
Senior Unsecured	18.4	22.5	13.3	74
Senior Subordinated	27.1	23.6	20.0	64
Total Defaulted Issues	24.9	28.0	20.0	157
2001				
Senior Secured	60.3	35.8	22.4	34
Senior Unsecured	27.8	20.2	12.8	234
Senior Subordinated	16.7	20.3	16.6	71
Total Defaulted Issues	29.8	21.8	15.8	339
2002	44.0	46.6	44.0	22
Senior Secured Senior Unsecured	44.9 21.2	46.6 28.9	41.3 20.5	22 267
Senior Subordinated	24.3	25.7	19.5	30
Total Defaulted Issues	22.5	30.8	21.9	319
2003	22.0	30.0	21.3	010
Senior Secured	69.8	56.2	63.2	13
Senior Unsecured	47.0	42.8	39.7	104
Senior Subordinated	29.4	30.9	26.6	32
Total Defaulted Issues	44.4	40.5	36.6	149
2004				
Senior Secured	89.2	72.2	73.7	8
Senior Unsecured	52.8	50.6	47.6	32
Senior Subordinated	55.1	50.2	54.2	9
Total Defaulted Issues	62.1	54.4	51.6	49
2005				
Senior Secured	89.1	87.0	84.5	27
Senior Unsecured	41.2	54.1	57.8	42
Senior Subordinated	12.4	29.9	19.3	6
Total Defaulted Issues	57.6	58.7	61.3	75
2006	93.4	0F F	06.0	F
Senior Secured Senior Unsecured	93.4 67.5	95.5 51.1	96.9 60.0	5 18
Senior Subordinated	35.7	42.9	26.0	9
Total Defaulted Issues	64.3	55.1	60.0	32
2007	0-1.0	00.1	00.0	02
Senior Secured	81.8	82.9	93.9	5
Senior Unsecured	63.4	63.4	74.6	10
Senior Subordinated	56.7	50.1	44.4	8
Total Defaulted Issues	66.4	64.3	69.1	23
2008				
Senior Secured	32.3	38.8	29.5	27
Senior Unsecured	54.4	31.0	25.1	70
Senior Subordinated	23.8	19.1	7.3	25
Total Defaulted Issues	45.8	29.7	19.6	122
2009	22.2	07.0	0= 4	
Senior Secured	36.8	37.2	25.4	38
Senior Unsecured	36.0	33.5	31.0	258 48
Senior Subordinated	19.2	24.9	14.9	-
Total Defaulted Issues 2010	34.1	31.9	24.9	344
Senior Secured	64.3	60.0	55.3	15
Senior Unsecured	69.3	63.5	81.6	10
Senior Subordinated	28.3	26.8	16.9	11
Total Defaulted Issues	56.7	51.2	50.0	36
2011				
Senior Secured	68.4	73.4	74.7	19
Senior Unsecured	50.0	32.7	22.0	32
Senior Subordinated	29.4	30.7	23.1	4
Total Defaulted Issues	59.4	47.8	47.9	55
2012				
Senior Secured	64.7	59.1	62.0	16
Senior Unsecured	42.8	37.6	36.2	33
Senior Subordinated	38.3	33.4	26.6	9
Total Defaulted Issues	50.2	44.8	38.9	58
2000–2012			_,	
Senior Secured	56.6	52.9	51.4	248
Senior Unsecured	34.2	32.7	24.6	1,184
Senior Subordinated	24.8	26.2	19.5	326
Total Defaulted Issues	36.5	34.5	25.0	1,758

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

### Recovery Rates — Loans<sup>a</sup>

	Straight Avg.	Median	Number of Issues
(%)	Recovery Rate	Recovery Rate	with Price Data
2000	69.6	70.0	23
2001	68.0	75.0	37
2002	67.5	74.0	37
2003	73.5	78.0	35
2004	94.4	96.6	11
2005	97.9	98.8	7
2006	79.1	96.8	3
2007	96.3	98.8	6
2008	68.0	72.1	16
2009	59.6	65.5	35
2010	83.0	96.5	7
2011	97.5	97.5	2
2012	80.8	94.0	5
2000–2012	71.8	77.5	224

<sup>a</sup>Based on companies in Fitch U.S. High Yield Default Index with actively traded loans at the time of default. Source: Fitch U.S. High Yield Default Index, Thomson Reuters LPC.

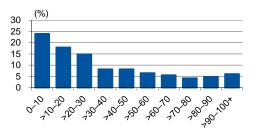
### Industry Recovery Rates — Loans: 2000–2012<sup>a</sup>

	Straight Avg.	Number of Issues
Industry (%)	Recovery Rate	with Price Data
Automotive	76.2	14
Banking and Finance	72.5	6
Broadcasting and Media	65.6	20
Building and Materials	76.7	10
Cable	85.0	6
Chemicals	80.6	10
Computers and Electronics	70.9	5
Consumer Products	68.5	6
Energy	83.7	6
Food, Beverage, and Tobacco	74.5	8
Gaming, Lodging, and Restaurants	77.7	8
Healthcare and Pharmaceutical	67.7	11
Industrial/Manufacturing	74.0	14
Insurance	65.0	1
Leisure and Entertainment	79.0	9
Metals and Mining	84.1	3
Miscellaneous	59.4	9
Paper and Containers	78.1	6
Real Estate	70.0	2
Retail	72.8	7
Supermarkets and Drug Stores	92.2	3
Telecommunication	61.1	37
Textiles and Furniture	78.6	8
Transportation	72.8	10
Utilities	69.0	5
Total	71.8	224
2		

<sup>a</sup>Based on companies in Fitch U.S. High Yield Default Index with actively traded loans at the time of default. Source: Fitch U.S. High Yield Default Index, Thomson Reuters LPC.

## Distribution of Bond Recoveries: 2000–2012

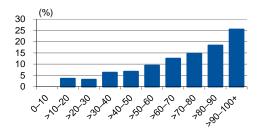
#### Average 34.5%, Median 25.0%



Source: Fitch Ratings, Advantage Data.

# Distribution of Loan Recoveries: 2000–2012

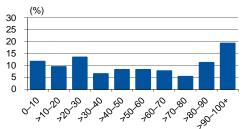
#### Average 71.8%, Median 77.5%



Source: Fitch Ratings, Thomson Reuters LPC.

## Distribution of Senior Secured Bond Recoveries: 2000–2012

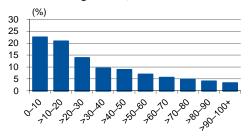
Average 52.9%, Median 51.4%



Source: Fitch Ratings, Advantage Data.

## Distribution of Senior Unsecured Bond Recoveries: 2000–2012

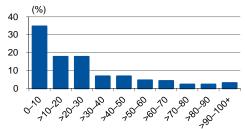
Average 32.7%, Median 24.6%



Source: Fitch Ratings, Advantage Data.

## Distribution of Subordinated Bond Recoveries: 2000–2012

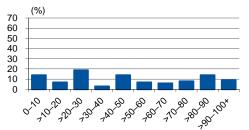
Average 26.2%, Median 19.5%



Source: Fitch Ratings, Advantage Data.

## Distribution of Bond Recoveries: 2010–2012

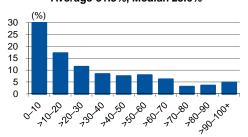
#### Average 47.8%, Median 47.5%



Source: Fitch Ratings, Advantage Data.

## Distribution of Bond Recoveries: 2008–2009

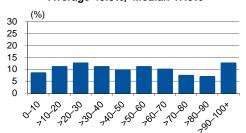
Average 31.3%, Median 23.6%



Source: Fitch Ratings, Advantage Data.

## Distribution of Bond Recoveries: 2003–2007

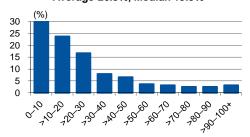
Average 49.8%, Median 47.5%



Source: Fitch Ratings, Advantage Data.

## Distribution of Bond Recoveries: 2000–2002

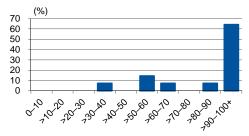
Average 26.5%, Median 19.3%



Source: Fitch Ratings, Advantage Data.

## Distribution of Loan Recoveries: 2010–2012

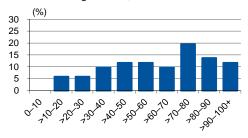
Average 84.3%, Median 96.2%



Source: Fitch Ratings, Thomson Reuters LPC.

## Distribution of Loan Recoveries: 2008–2009

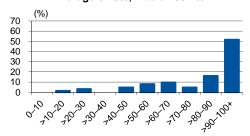
Average 62.3%, Median 65.5%



Source: Fitch Ratings, Thomson Reuters LPC.

## Distribution of Loan Recoveries: 2003–2007

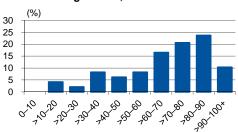
Average 82.5%, Median 90.7%



Source: Fitch Ratings, Thomson Reuters LPC

## Distribution of Loan Recoveries: 2000–2002

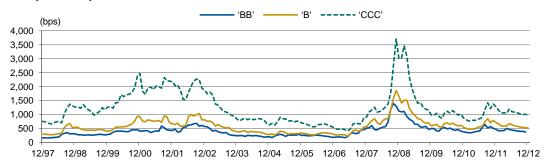
Average 68.2%, Median 72.7%



Source: Fitch Ratings, Thomson Reuters LPC.

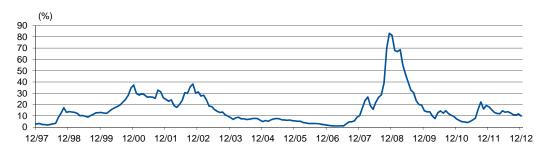
### **Credit Availability Indicators**

### **Corporate Spreads**



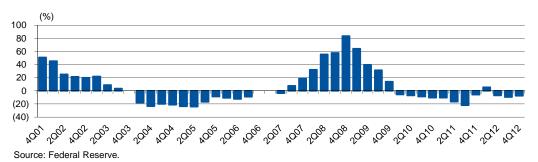
Source: Bank of America Merrill Lynch.

#### U.S. High Yield Distress Ratio

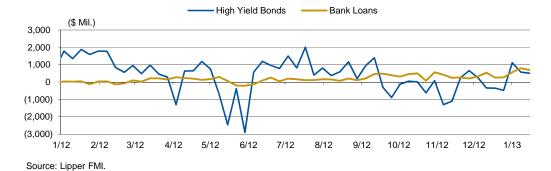


Note: High yield distress is defined as spreads > 1,000 bps. Source: Bank of America Merrill Lynch.

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

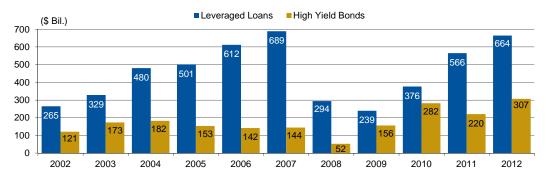


### **High Yield Bond and Bank Loan Mutual Fund Flows**



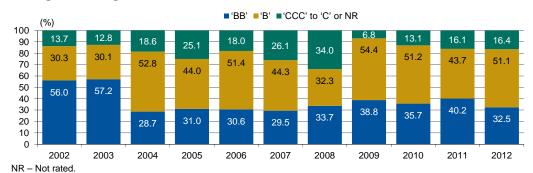
### **Issuance Trends**

### **High Yield Bond and Loan Issuance**



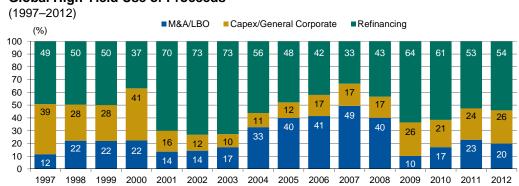
Source: Fitch Ratings, Thomson Reuters LPC, Bloomberg.

### **Rating Mix of High Yield Bond New Issuance**



Source: Fitch Ratings, Bloomberg.

### **Global High Yield Use of Proceeds**



M&A – Merger and acquisition. Source: Bank of America Merrill Lynch.

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

(\$ BII.)				
Industry	2011	% of Total	2012	% of Total
Automotive	8.1	3.7	1.5	0.5
Banking and Finance	21.0	9.6	35.5	11.6
Broadcasting and Media	4.9	2.2	18.1	5.9
Building and Materials	8.2	3.7	13.0	4.2
Cable	7.7	3.5	9.2	3.0
Chemicals	1.1	0.5	7.8	2.5
Computers and Electronics	7.4	3.4	14.7	4.8
Consumer Products	5.9	2.7	6.6	2.2
Energy	40.7	18.5	57.4	18.7
Food, Beverage, and Tobacco	3.2	1.5	5.7	1.8
Gaming, Lodging, and Restaurants	7.3	3.3	15.3	5.0
Healthcare and Pharmaceutical	22.2	10.1	23.5	7.7
Industrial/Manufacturing	3.8	1.7	4.7	1.5
Insurance	0.2	0.1	1.0	0.3
Leisure and Entertainment	2.9	1.3	3.1	1.0
Metals and Mining	12.5	5.7	14.8	4.8
Miscellaneous	9.5	4.3	22.6	7.3
Paper and Containers	4.6	2.1	4.3	1.4
Real Estate	6.2	2.8	4.9	1.6
Retail	5.3	2.4	11.2	3.7
Supermarkets and Drug Stores	0.3	0.1	0.9	0.3
Telecommunication	19.1	8.7	22.4	7.3
Textiles and Furniture	1.1	0.5	1.1	0.4
Transportation	5.6	2.6	4.1	1.3
Utilities	11.0	5.0	3.8	1.2
Total Issuance	219.9	100.0	307.2	100.0
Source: Fitch U.S. High Yield Default Index, Bloomberg.				

### **High Yield Market Profile**

### Size and Rating Mix — December 2012

Amount Outstanding (\$ Bil.)	No. of Issuers	Rating	% Par Value	Weighted Average Coupon	Median Coupon
1,134.4	1,356	BB	36.7	7.06	7.00
		В	43.3	8.03	8.13
		CCC-C or NR	20.0	9.65	9.63
		All	100.0	7.99	7.88

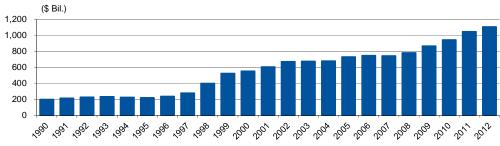
NR – Not rated.

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

### High Yield Industry Composition — December 2012

	Amount	% of	% of Sec	tor Volume		Weighted	
Industry	Outstanding (\$ Bil.)	Market Volume	'BB'	'B'	'CCC' or NR	Average Coupon	Median Coupon
Automotive	18.9	1.7	25.1	64.8	10.2	8.04	8.13
Banking and Finance	102.6	9.0	41.8	47.3	11.0	6.79	6.63
Broadcasting and Media	50.4	4.4	30.7	35.9	33.4	8.11	8.31
Building and Materials	48.2	4.3	39.7	45.2	15.0	7.82	7.50
Cable	33.4	2.9	70.1	25.1	4.9	7.16	7.69
Chemicals	18.7	1.7	30.8	38.6	30.7	7.75	8.38
Computers and Electronics	55.2	4.9	20.5	40.9	38.6	8.60	8.08
Consumer Products	22.5	2.0	10.6	58.9	30.4	7.90	7.88
Energy	167.7	14.8	42.8	48.5	8.7	7.78	7.75
Food, Beverage, and Tobacco	27.8	2.5	41.9	34.9	23.2	8.36	8.38
Gaming, Lodging, and Restaurants	53.4	4.7	16.6	53.1	30.3	8.91	8.88
Healthcare and Pharmaceutical	82.2	7.2	29.8	54.1	16.2	7.63	7.75
Industrial/Manufacturing	23.0	2.0	56.0	33.9	10.2	7.65	7.75
Insurance	6.8	0.6	78.3	7.0	14.8	7.63	7.48
Leisure and Entertainment	15.1	1.3	12.7	66.5	20.8	8.88	9.00
Metals and Mining	49.4	4.4	37.5	52.9	9.6	8.01	8.25
Miscellaneous	56.1	4.9	16.4	43.7	39.9	8.89	8.88
Paper and Containers	21.4	1.9	35.5	40.9	23.6	8.13	8.50
Real Estate	31.4	2.8	61.5	27.3	11.2	8.57	7.50
Retail	40.6	3.6	37.4	32.0	30.6	7.95	7.75
Supermarkets and Drug Stores	8.1	0.7	0.0	53.1	46.9	8.56	8.00
Telecommunication	111.0	9.8	35.9	43.7	20.3	8.20	8.00
Textiles and Furniture	6.5	0.6	17.6	67.4	15.1	7.35	7.25
Transportation	27.8	2.4	42.7	44.8	12.6	8.22	8.38
Utilities	56.2	5.0	56.9	11.4	31.7	8.49	7.63
Total	1,134.4	100.0	36.7	43.3	20.0	7.99	7.88
Source: Fitch U.S. High Yield Default	Index, Bloombe	erg.					

### U.S. High Yield Market Growth — 1990–2012



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

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

(	1%	of	Sector	Outsta	ndina)

(70 of occior outstartuing)				
Industry	2009	2010	2011	2012
Automotive	74.3	19.9	11.9	15.6
Banking and Finance	58.6	17.2	15.6	14.4
Broadcasting and Media	66.5	47.1	41.1	38.1
Building and Materials	28.3	29.8	26.9	23.1
Cable	5.6	11.2	13.6	17.8
Chemicals	33.4	25.4	28.9	42.3
Computers and Electronics	71.3	66.7	55.1	50.8
Consumer Products	75.1	45.8	41.8	39.6
Energy	19.2	19.8	21.0	23.6
Food, Beverage, and Tobacco	36.0	30.1	40.9	30.2
Gaming, Lodging, and Restaurants	59.3	57.8	58.4	49.3
Healthcare and Pharmaceutical	49.0	39.7	35.1	32.2
Industrial/Manufacturing	29.6	27.3	26.9	17.3
Insurance	10.9	11.9	14.3	19.2
Leisure and Entertainment	50.3	53.4	55.3	46.5
Metals and Mining	22.9	23.4	17.7	32.9
Miscellaneous	49.4	53.1	59.2	61.0
Paper and Containers	37.7	31.9	36.1	33.6
Real Estate	47.5	28.0	19.7	19.6
Retail	39.6	30.9	40.2	39.9
Supermarkets and Drug Stores	52.5	44.3	42.8	57.9
Telecommunication	33.1	31.9	32.0	34.3
Textiles and Furniture	28.8	19.3	16.8	21.1
Transportation	33.9	31.6	30.4	37.1
Utilities	33.1	36.2	34.4	33.4
Total	41.6	32.1	31.2	32.2
Source: Fitch U.S. High Yield Default Index, Blo	oomberg.			

### High Yield Maturity Schedule by Rating: 2013-2016

(\$ Bil.)

	2	013		2014		2015	2016			
Rating	(\$)	% of Total Outstanding								
ВВ	14.2	3.4	15.6	3.7	20.1	4.8	29.9	7.2		
В	6.0	1.2	16.7	3.4	27.9	5.7	31.9	6.5		
CCC-C	2.3	1.1	6.2	3.0	26.1	12.5	20.9	10.0		
NR	0.5	3.1	1.0	5.9	2.4	13.5	3.7	21.2		
Total	23.1	2.0	39.5	3.5	76.4	6.7	86.4	7.6		
Source: Fitch U.S. High Yield Default Index, Bloomberg.										

### High Yield Maturity Schedule by Industry: 2013–2016

(\$ Bil.)

2014		2015	2016		
% of Total Outstanding	(\$)	% of Total Outstanding	(\$)	% of Total Outstanding	
5.1	0.4	1.9	0.5	2.7	
9.9	12.3	12.0	6.2	6.0	
3.5	3.5	6.9	4.5	9.0	
3.1	4.2	8.7	6.5	13.5	
5.5	0.9	2.6	1.6	4.7	
0.6	0.4	2.1	1.4	7.6	
2.1	2.3	4.2	6.3	11.4	
0.0	0.4	1.8	1.7	7.7	
2.0	5.0	3.0	6.0	3.6	
6.4	2.9	10.3	3.9	14.1	
5.8	3.1	5.9	5.7	10.7	
2.2	3.7	4.4	4.5	5.5	
5.0	0.0	0.0	2.2	9.5	
2.6	0.4	5.9	0.2	2.2	
4.2	0.0	0.0	3.2	20.9	
1.5	3.5	7.1	2.7	5.6	
2.3	7.8	14.0	4.0	7.1	
3.9	2.0	9.3	1.6	7.2	
5.6	4.7	15.1	3.3	10.6	
1.3	1.6	3.9	1.4	3.4	
6.0	0.3	3.5	1.9	23.2	
1.5	8.9	8.0	8.7	7.8	
10.2	0.8	12.3	0.7	11.0	
0.6	2.8	9.9	1.4	5.1	
3.3	4.7	8.4	6.3	11.2	
3.5	76.4	6.7	86.4	7.6	
	0.6 3.3	0.6 2.8 3.3 4.7	0.6     2.8     9.9       3.3     4.7     8.4	0.6     2.8     9.9     1.4       3.3     4.7     8.4     6.3	



### High Yield Industry Composition: 2000–2012

<u>(%)</u>	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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	2.0
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	11.0
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	4.1
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	4.1
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	2.7
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	1.7
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	4.6
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	1.9
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	13.7
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	2.2
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	4.6
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	6.9
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	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	0.7
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	1.3
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	3.9
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	4.9
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	2.1
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	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	3.1
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	0.7
Telecommunication	18.5	19.6	20.5	12.1	11.1	9.9	8.3	7.5	8.1	9.1	9.0	9.3	9.8
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	0.7
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	2.6
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	5.6
Total Market	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Based on average outstandings per period. Source: Fitch U.S. High Yield Default Index, Bloomberg.



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