

**New York University Salomon Center
Leonard N. Stern School of Business**

Special Report on

**Defaults and Returns in the High-Yield Bond Market:
Third-Quarter 2009 Review**

By

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with

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Defaults in the third quarter of 2009 were \$9.38 billion, resulting in a quarterly default rate of 0.81%, a marked decrease from the two prior quarters. The default rate for the first nine months of 2009 was 8.07%, and the trailing 12-month default rate increased slightly to 11.51%, up from 11.09% as of midyear.

The S&P/LSTA 12-month, dollar-denominated default rate on leveraged loans increased to 9.75% from 9.15% at the end of the second quarter, while the issuer default rate increased to 7.17% from 6.21%.

The recovery rate on defaulted bond issues for the nine months ended September 30, 2009 was 26.0%, still well below the historical average of 45.1%, and slightly higher than the second-quarter rate of 22.7%. Recoveries on the 44 debt exchanges thus far in 2009 were 40.4%, while for the remaining defaulting issues it was 21.5%. Default losses for the first nine months of the year were 634bp, significantly larger than the 120bp loss through the third quarter of 2008.

Returns on high-yield bonds for the nine months ended September 30 were 46.24%. The excess return to 10-yr US Treasury bonds was 52.77%, on pace for the largest level of outperformance in our data series. Spreads for high-yield bonds over the same 10-yr Treasury benchmark (on a yield-to-maturity basis) were 6.71% as of the end of September, tightening 231bp from the second quarter.

US high-yield bond issuance in the third quarter was \$45.7 billion, resulting in a three-quarter total of \$107.8 billion, more than twice the issuance for all of 2008 (\$50.3 billion). However, third-quarter new issuance was slightly lower than the second quarter of 2009 (\$50.5 billion). Leveraged loan issuance declined in the third quarter to \$14.3 billion, compared to \$15.0 billion in the second quarter, and was significantly lower than the \$134.1 billion issued during the third quarter of 2008. The proportion of high-yield bonds issued at B- or lower was rather low at 17.5% year to date, well below the average of 34% for the last five years.

As market spreads have tightened dramatically, the distress ratio of high-yield bonds yielding more than 1,000bp over 10-yr Treasuries has decreased even further — from 40.8% at the end of the second quarter of 2009 to 26.8% in the third quarter. The ratio has been steadily decreasing since its high in November 2008 of 85%.

We estimate that the face value of the defaulted and distressed debt market decreased to about \$1.96 trillion as of September 30, 2009, down from \$2.47 trillion at the end of second-quarter 2009. The primary reason for the decrease was the drop in the distress ratio. Our market value estimate decreased to \$1.13 trillion (from \$1.45 trillion one quarter earlier).

Finally, the return on a portfolio of defaulted bonds and bank loans for the first nine months of the year was 38.84%, with bonds significantly outperforming defaulted loans — 67.56% versus 21.20%. The former figure is second only to the annual return generated in 2003.

Defaults and Default Rates

High-yield bond defaults decreased significantly in the third quarter, dropping from \$43.86 billion in new defaults in the second quarter to \$9.38 billion in the third. The resulting year-to-date default rate was 8.07% (Figure 1). The third-quarter rate (0.81%) is the lowest quarterly measure since the third-quarter 2008. (Appendix A). According to our estimates, the US and Canadian dollar-denominated default rate for the last 12 months rose to 11.51% from 11.09% at the end of the second quarter, and was lower than the 12-month issuer-denominated default rate calculated by Moody's (12.92%), but higher than that calculated by S&P (10.76%, initial estimate). Fitch's dollar-denominated default rate for the last 12 months was 13.60%, and 10.30% year to date.

Twenty-eight high-yield issuers defaulted in the third quarter, compared to 43 in the second quarter, and only 11 one year earlier (Appendix B). The largest issuers to default this year have been: Charter Communications, Inc.; General Motors Corp.; R.H. Donnelley Corp.; Harrah's Operating Co.; and Abitibi Bowater, Inc. All five companies had defaults of \$5 billion or more. Additionally, there have been 28 companies thus far in 2009 which have had combined bond and leveraged loan defaults of more than \$1 billion, four of those having combined defaults greater than \$10 billion. In all, there were 328 defaulted issues so far this year, which is edging closer to the annual high of 344 issuers in 2002.

CIT Group's default on November 1, 2009 will be adding approximately \$21.9 billion in defaults to our 2009 total, raising the annual default rate by close to 2%.

In our default statistics, we include those bonds from distressed exchanges actually tendered. For example, in the Ford Motor Co. exchange, \$3.35 billion of bonds were exchanged of the \$8.2 billion outstanding and subject to the exchange offer. Thus far in 2009, there have been 44 distressed exchanges, involving 39 companies, comprising \$21.0 billion of defaults (22.6% of the total). See Appendix C for the list of 2009 distressed exchanges.

The default rate for the last 12 months in the US leveraged loan market was 7.17% based on issuers, and 9.75% weighted by issuance, according to S&P/LCD calculations. These rates represent a slight increase versus the second quarter (6.21% and 9.15%, respectively). There were 49 leveraged loan defaults (by issuer) in the first nine months of 2009 (Appendix D).

According to our comparison of high-yield bond defaults (Appendix B) and leveraged loan defaults (Appendix D), in the first nine months of the year 23 firms defaulted on both bonds and loans, 80 defaulted on bonds only, and 26 defaulted on loans only.

Figure 2 shows the quarterly and four-quarter moving average default rate since 1989. Due to a decrease in defaults in the third quarter, if we simply extrapolate the first nine-month default rate for the rest of the year, the 2009 rate (10.77%) will be

lower than the average of our forecasts of a 13.63% default rate (see our 2008 annual report¹ for details on that forecast).

Our forecast for the next 12 months ending September 30, 2010 is for a default rate of 9.42% if the economy double dips back into a recession in 2010, and 6.70% if it does not.

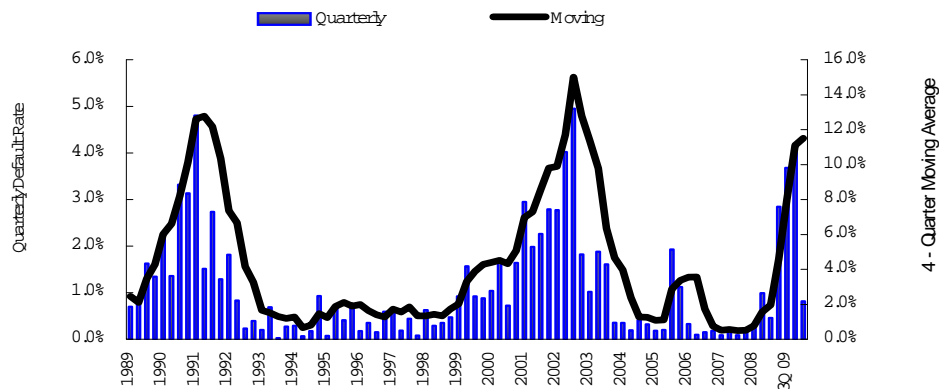
¹ *Altman High-Yield Bond Default and Return Report: 2008 in Review and Market Outlook*, John Fenn, Citi, February 12, 2008.

Figure 1. Historical Default Rates – Straight Bonds Only, Not Including Defaulted Issues From Par Value Outstanding, 1971-3Q 09 (Dollars in Millions)

Year	Par Value		Default Rates (%)	
	Outstanding ^a (\$)	Defaults (\$)		
3Q 09	1,152,952	93,095	8.074	
2008	1,091,000	50,763	4.653	
2007	1,075,400	5,473	0.509	
2006	993,600	7,559	0.761	
2005	1,073,000	36,209	3.375	
2004	933,100	11,657	1.249	
2003	825,000	38,451	4.661	
2002	757,000	96,858	12.795	
2001	649,000	63,609	9.801	
2000	597,200	30,295	5.073	
1999	567,400	23,532	4.147	
1998	465,500	7,464	1.603	
1997	335,400	4,200	1.252	
1996	271,000	3,336	1.231	
1995	240,000	4,551	1.896	
1994	235,000	3,418	1.454	
1993	206,907	2,287	1.105	
1992	163,000	5,545	3.402	
1991	183,600	18,862	10.273	
1990	181,000	18,354	10.140	
1989	189,258	8,110	4.285	
1988	148,187	3,944	2.662	
1987	129,557	7,486	5.778	
1986	90,243	3,156	3.497	
1985	58,088	992	1.708	
1984	40,939	344	0.840	
1983	27,492	301	1.095	
1982	18,109	577	3.186	
1981	17,115	27	0.158	
1980	14,935	224	1.500	
1979	10,356	20	0.193	
1978	8,946	119	1.330	
1977	8,157	381	4.671	
1976	7,735	30	0.388	
1975	7,471	204	2.731	
1974	10,894	123	1.129	
1973	7,824	49	0.626	
1972	6,928	193	2.786	
1971	6,602	82	1.242	
			Standard	
Arithmetic Average Default Rate		1971 to 2008	3.136	3.031
		1978 to 2008	3.407	3.226
		1985 to 2008	4.055	3.365
Weighted Average Default Rate ^b		1971 to 2008	3.937	
		1978 to 2008	3.947	
		1985 to 2008	3.981	
Median Annual Default Rate		1971 to 2008	1.802	

^a As of midyear. ^b Weighted by par value of amount outstanding for each year.
Source: NYU Salomon Center.

Figure 2. Quarterly Default Rate and the Four-Quarter Moving Average, 1989-3Q 09



Source: NYU Salomon Center.

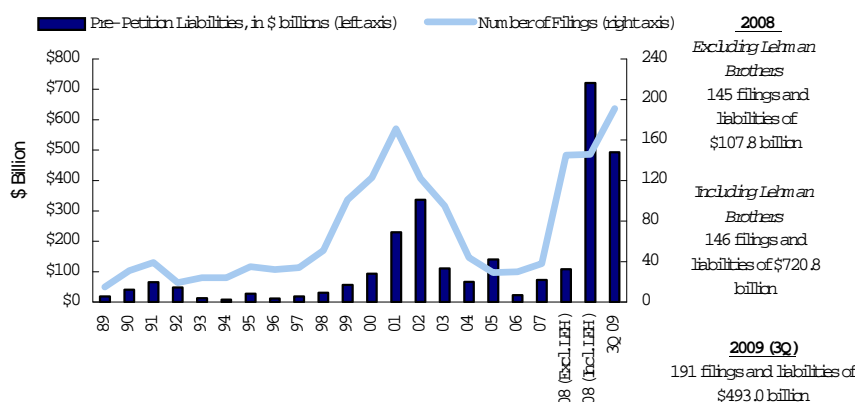
Bankruptcies

The total liabilities for Chapter 11 bankruptcies increased to \$493.0 billion in the third quarter from \$462.6 in the second. As noted in prior publications this year, the total liabilities for filings in 2009 are larger than any prior year, except for last year, which included the Lehman Brothers' filing. Figure 3 shows there were 191 filings in the first nine months where liabilities were greater than \$100 million (with 43 more than \$1 billion), compared with 92 one year earlier, and 146 for all of 2008. General Motors Corp. was the largest bankruptcy filing in the first nine months of 2009, with \$172.8 billion in liabilities. With the CIT bankruptcy on November 1, 2009, the dollar liabilities in 2009 of bankruptcies increased to approximately \$557.7 billion.

Appendix E lists this year's large Chapter 11 bankruptcies. Our bankruptcy list includes a large number of LBOs. So far this year, there were 59 bankrupt LBOs (six in which the PE firm had only a minority interest), ten more than the 49 such filings for all of 2008.²

² See Pehub.com.

Figure 3. Total Filings and Liabilities^a of Public Companies Filing for Chapter 11 Protection, 1989-3Q 09



^a Minimum \$100 million in liabilities.
Sources: NYU Salomon Center and Appendix D.

Industry Defaults

Thirty-one of the 103 defaulting issuers were general manufacturers, 18 were media and communications companies, and 12 were leisure and entertainment companies. The remaining 42 defaulting issuers were spread over a broad range of industries (Figure 4). Appendix F presents a more detailed breakdown of all 103 defaulting issuers. Figure 5 shows the dollar amount of defaulted issues by industry from 1990 to the present. The media and communications industry dominates the 2009 total (as well as the entire sample period) because of the Charter Communications and R.H. Donnelley bankruptcy filings, while general manufacturing was bloated by the Abitibi Bowater bankruptcy filing and auto/motor carriers, General Motors and Ford.

Figure 4. Corporate Bond Defaults by Industry (Number of Companies)

Industry	1970-89	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	3Q 09	Total	
Auto/Motor Carrier	6	3					1				1			1		4	3		8	8		35	
Conglomerates		5	1	3	3							1			1	1							15
Energy	35		4	2	3		1		1	13	1	1		8	9		1		1	4	5		88
Financial Services	21	7	14	3	2	1	2	1	2	6	1	6	4	5	6	2	3	2		5	6		99
Leisure/Entertainment	9	8	2	4	3	4	3	1	5	5	8	9	6	5	6			3		10	12		103
General Manufacturing	26	5	8	8	7	3	8	6	7	6	16	23	43	22	13	17	12	6	7	10	31		284
Health Care	4	2	1	1	1		2			2	8	6	3	4	3		2		1	1			41
Miscellaneous Industries	16	4	4	3	1	1	1		3	3	16	34	38	25	16	6	1	4	3	4	4		187
Real Estate/Construction	14	7	5	1			2	1	2	1	4	6	4	3		2	1			6	9		68
REIT	12			1										1									14
Retailing	10	6	15	6	4	5	6	3	6	6	12	7	12	5	5	3	2	2	3	5	5		128
Comm. & Media	17	3	4	1	1	3	2	2	1	6	11	8	39	26	21	6	3	2	4	10	18		188
Transportation (Non Auto)	9	1	2			2			2	1	8	5	7	7	6	2	5	1			5		63
Utilities	2			1				1	1			1		0	0								6
Total	186	47	62	34	22	19	28	15	29	37	98	107	156	112	86	39	34	23	19	63	103	1,319	

Source: NYU Salomon Center.

Figure 5. Corporate Bond Defaults by Industry (Dollars in Millions)

Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	3Q 09	Total	
Auto/Motor	468	90				215		300	100	430	120	3,737	285		280	3,573	2,692		1,382	16,597	30,269	
Carrier																						
Conglomerates													100	690	275							1,065
Energy		60	103	600		75	100			3,812	217	4,200	4,085	11,857		8,895		50	1,511	989	36,553	
Financial Services	928	696	536		78	687	700	66	689	375	1,968	5,062	3,803	1,079	110	541	156		26,973	4,914	49,361	
Leisure/Entertainment	498	1,191	159		138	435	293		245	1,100	2,891	3,437	21,242	633	1,286	6,861	715		6,022	10,395	57,541	
General Manufacturing	2,675	3,695	488	118		616	641	123	247	2,092	2,507	3,138	2,455	2,108	225	1,396	1,486	2,379	3,747	23,138	53,275	
Health Care	18	1,120				75			125	2,214	1,715	692	115	3,843		360		520	150		10,947	
Miscellaneous Industries	1,968	4,911	1,378	1,056	317	1,286	832	461	1,290	7,615	8,352	9,715	5,594	4,494	1,977	569	409	1,396	1,505	1,535	56,659	
Real Estate/Construction	2,605	417	113	49	75	190		258	383	385	252	1,110	1,088	77	1,783	174			2,158	4,174	15,292	
Retailing	4,443	2,937	1,489	18	2,814	395	164	2,504	1,241	2,052	3,081	1,586	4,092	877	749	1,059	332	363	1,412	1,015	32,623	
Communications & Media							460	286	1,549	2,980	5,983	34,827	47,953	7,603	2,551	150	1,496	765	5,310	29,662	141,575	
Transportation (Non Auto)	1,028	1,452			301	562			1,125	310	2,890	1,430	4,711	2,086	2,421	12,376	272			676	31,640	
Utilities		1,452	617	85			275	202		75			1,150	1,417							5,273	
Total	14,631	18,021	4,883	1,926	3,723	4,536	3,465	4,200	6,994	23,440	29,976	68,934	96,673	36,764	11,657	35,954	7,559	5,473	50,169	93,095	522,072	

Source: NYU Salomon Center.

Fallen Angel Defaults

Ninety of the defaulted issues were from 20 issuers who were originally rated investment grade at issuance. This results in an issuer-denominated fallen angel default rate of 7.01% so far this year. Figure 6 shows the fallen angel proportion of defaults from 1977 to the present. About 27% of the 328 defaulting issues in the first three quarters were fallen angels prior to default, slightly above the average from 1977 to the present of 26%. The 2009 fallen angel proportion in dollars was 25.9%, far lower than for the same period in 2008 (47%), but still a substantial amount.

Figure 6. Fallen Angel Defaulted Issues by Original Rating (1977-3Q 09)

	Total Number of Defaulted Issues ^a	Originally Rated Investment Grade (%)
3Q 09	328	27
2008	154	31
2007	35	11
2006	52	13
2005	184	49
2004	79	19
2003	203	33
2002	322	39
2001	258	14
2000	142	16
1999	87	13
1998	39	31
1997	20	0
1996	24	13
1995	29	10
1994	16	0
1993	24	0
1992	59	25
1991	163	27
1990	117	16
1989	66	18
1988	64	42
1987	31	39
1986	55	15
1985	26	4
1984	14	21
1983	7	43
1982	20	55
1981	1	0
1980	4	25
1979	1	0
1978	1	100
1977	2	100
Total	2,627	26%

^a Where we could find an original rating from either S&P or Moody's.
Sources: Moody's, NYU Salomon Center, and S&P.

Default Losses and Recoveries

The weighted-average recovery rate on defaulting issues so far in 2009 has increased slightly since the second quarter. The recovery rate was 26.0% for the first nine months of 2009 (Figure 7), resulting in a default loss of 634bp. This loss includes the foregone coupon of 36.7bp and is for all high-yield company defaults, without an adjustment for fallen angels. If adjusted for fallen angels (90 issues), the loss would have been slightly smaller at 629.1bp (Figure 7). As was true in the prior quarter, in a reversal of the norm, the recovery rate on fallen angels was slightly lower than on original issue noninvestment-grade bonds. This was primarily the result of the GM default, which recovered roughly 10%.

Figure 8 shows loss statistics from 1978–2008, with an arithmetic average annual loss rate of 2.29% (2.67% on a weighted-average basis), significantly lower than the losses experienced thus far in 2009.

Figure 7. Third-Quarter 2009 Default Loss Rate (In Percent)

	Unadjusted for	Only Fallen	All Except	Price Adjusted
	Fallen Angels	Angels	Fallen Angels	for Fallen Angels
Background Data				
Average Default Rate	8.074	7.018	8.523	8.133
Average Price at Default ^a	26.028	21.618	27.874	26.254
Average Price at Downgrade ^a		86.30		
Average Recovery	26.028	25.049	27.874	27.142
Average Loss of Principal	73.972	74.951	72.126	72.858
Average Coupon Payment	9.097	7.425	9.524	8.980
Default Loss Computation				
Default Rate	8.074	7.018	8.523	8.133
X Loss of Principal	73.972	74.951	72.126	72.858
Default Loss of Principal	5.973	5.260	6.147	5.926
Default Rate	8.074	7.018	8.523	8.133
X Loss of 1/2 Coupon	4.548	3.712	4.762	4.490
Default Loss of Coupon	0.367	0.261	0.406	0.365
Default Loss of Principal and Coupon	6.340	5.520	6.553	6.291

^a If default date price is not available, end-of-month price is used.

Sources: NYU Salomon Center and various dealer quotes.

Figure 8. Default Rates and Losses,^a 1978-3Q 09

Year	Par Value (\$MM) Outstanding ^a (\$)	Default (\$)	Default Rate (%)	Weighted Price After Default (\$)	Weighted Coupon (%)	Default Loss (%) ^b
3Q 09	1,152,952	93,095	8.07	26.0	9.10	6.34
2008	1,091,000	50,169	4.60	42.5	8.23	2.83
2007	1,075,400	5,473	0.51	66.6	9.64	0.19
2006	993,600	7,559	0.76	65.3	9.33	0.30
2005	1,073,000	36,209	3.37	61.1	8.61	1.46
2004	933,100	11,657	1.25	57.7	10.30	0.59
2003	825,000	38,451	4.66	45.5	9.55	2.76
2002	757,000	96,858	12.79	25.3	9.37	10.15
2001	649,000	63,609	9.80	25.5	9.18	7.76
2000	597,200	30,295	5.07	26.4	8.54	3.95
1999	567,400	23,532	4.15	27.9	10.55	3.21
1998	465,500	7,464	1.60	35.9	9.46	1.10
1997	335,400	4,200	1.25	54.2	11.87	0.65
1996	271,000	3,336	1.23	51.9	8.92	0.65
1995	240,000	4,551	1.90	40.6	11.83	1.24
1994	235,000	3,418	1.45	39.4	10.25	0.96
1993	206,907	2,287	1.11	56.6	12.98	0.56
1992	163,000	5,545	3.40	50.1	12.32	1.91
1991	183,600	18,862	10.27	36.0	11.59	7.16
1990	181,000	18,354	10.14	23.4	12.94	8.42
1989	189,258	8,110	4.29	38.3	13.40	2.93
1988	148,187	3,944	2.66	43.6	11.91	1.66
1987	129,557	7,486	5.78	75.9	12.07	1.74
1986	90,243	3,156	3.50	34.5	10.61	2.48
1985	58,088	992	1.71	45.9	13.69	1.04
1984	40,939	344	0.84	48.6	12.23	0.48
1983	27,492	301	1.09	55.7	10.11	0.54
1982	18,109	577	3.19	38.6	9.61	2.11
1981	17,115	27	0.16	72.0	15.75	0.15
1980	14,935	224	1.50	21.1	8.43	1.25
1979	10,356	20	0.19	31.0	10.63	0.14
1978	8,946	119	1.33	60.0	8.38	0.59
Arithmetic Average 1978-2008			3.40	45.07	10.72	2.29
Weighted Average 1978-2008			3.94			2.67

^a Excludes defaulted issues. ^b Default loss rate adjusted for fallen angels is 9.3% in 2002, 1.82% in 2003, 0.59% in 2004, 1.56% in 2005, 0.039% in 2006, 0.20% in 2007, 3.42% in 2008, and 6.29% in the third quarter of 2009.

Source: NYU Salomon Center.

Figure 9. Weighted Average (by Issue) Recovery Rates on Defaulted Bonds by Seniority Per \$100 Face Amount, 1978–3Q 09

Default Year	Senior Secured			Senior Unsecured			Senior Subordinated			Subordinated			Discount and Zero Coupon			All Seniorities	
	No.	%	\$	No.	%	\$	No.	%	\$	No.	%	\$	No.	%	\$	No.	\$
3Q 09	27	11.38	74	173	73.25	90	28	12.14	39	4	2.12	57	4	2.12	23	236	26.03
2008	18	14.30	52	79	63.49	56	23	18.30	25	4	3.21	09	1	1.27	125	42.52	
2007	10	36.87	24	10	36.47	70	6	21.63	98	2	7.46	53	0	0.00	28	66.65	
2006	9	18.90	60	26	52.60	90	8	16.50	24	1	2.60	33	6	12.78	31	50.65	
2005	67	54.76	50	44	36.45	88	7	6.32	67	0	0.00	5	4	74.21	123	61.10	
2004	27	39.63	67	33	48.56	77	2	3.37	44	0	0.00	7	10	43.06	69	57.72	
2003	57	28.53	51	108	53.45	40	29	14.35	98	1	0.38	00	8	4.32	27	45.58	
2002	37	11.52	81	254	75.21	82	21	6.32	79	0	0.00	28	28	8.26	47	340.25	
2001	9	3.40	95	187	67.28	84	48	17.18	37	0	0.00	37	37	13.15	05	281.25	
2000	13	8.39	58	47	29.25	40	61	37.25	96	26	16.26	62	17	10.23	61	164.26	
1999	14	11.26	90	60	47.42	54	40	31.23	56	2	2.13	88	11	9.17	30	127.27	
1998	6	18.70	38	21	62.39	57	6	18.17	54	0	0.00	1	3	17.00	34	40.46	
1997	4	16.74	90	12	48.70	94	6	24.31	89	1	4.60	00	2	8.19	00	25.57	
1996	4	17.59	08	4	17.50	11	9	38.48	99	4	17.44	23	3	13.11	99	24.45	
1995	5	15.44	64	9	27.50	50	17	52.39	01	1	3.20	00	1	3.17	50	33.41	
1994	5	23.48	66	8	36.51	14	5	23.19	81	3	14.37	04	1	5.50	22	39.44	
1993	2	6.55	75	7	22.33	38	10	31.51	50	9	28.28	38	4	13.31	75	32.38	
1992	15	22.59	85	8	12.35	61	17	25.58	20	22	33.49	13	5	7.19	82	67.50	
1991	4	3.44	12	69	44.55	84	37	24.31	91	38	24.24	30	9	6.27	89	157.40	
1990	12	10.32	18	31	27.29	02	38	33.25	01	24	21.18	83	11	9.15	63	116.24	
1989	9	12.82	69	16	21.53	70	21	28.19	60	30	39.23	95				76.35	
1988	13	21.67	96	19	31.41	99	10	16.30	70	20	32.35	27				62.43	
1987	4	13.90	68	17	55.72	02	6	19.56	24	4	13.35	25				31.66	
1986	8	14.48	32	11	20.37	72	7	13.35	20	30	54.33	39				56.36	
1985	2	7.74	25	3	11.34	81	7	26.36	18	15	56.41	45				27.41	
1984	4	29.53	42	1	7.50	50	2	14.65	88	7	50.44	68				14.50	
1983	1	13.71	00	3	38.67	72				4	50.41	79				8.55	
1982				16	80.39	31				4	20.32	91				20.38	
1981	1	100.72	00													1.72	
1980				2	50.26	71				2	50.16	63				4.21	
1979										1	100.31	00				1.31	
1978				1	100.60	00										1.60	
Total/Avg	387	15.57	75	1279	50.36	24	471	18.30	04	259	10.30	85	161	6.25	49	2,557	36.72
Median		57.42			45.64			32.73			29.69			18.25			41.77
Standard Dev ^a		18.39			13.74			14.62			17.46			20.49			14.19

^a Standard deviations are calculated based on the yearly averages.

Sources: NYU Salomon Center and various dealer quotes.

Figure 9 lists the average recovery by seniority for 1978–2009. The recoveries on all seniorities were significantly lower than the historical norms. Thus far in 2009, 27 of the defaulting issues were senior secured, with an average recovery rate of 38.7%, compared to a historical average of 57.6%. One hundred seventy-three were senior unsecured, with an average recovery rate of 25.9%, compared to a historical average of 36.2%. Twenty-eight were senior subordinated, with an average recovery of 14.4%, compared to a historical average of 30.0%. Four were subordinated, with an average recovery of 12.6%, compared to a historical average of 30.9%. Four were either issued as discount or zero coupon notes, with an average recovery of 12.2%, compared to a historical average of 25.5%. Ninety-two issues could not be priced.

Distressed Exchanges in 2009

Distressed exchanges (DEs) in the first nine months of 2009 accounted for about 37.9% of the defaulted issuers (39 out of 103), but only 22.6% of the defaulted dollar amount. From 1984 through the third quarter of 2009, DEs accounted for about 10.2% of all defaulting issuers and 12.2% of all defaulted dollar amounts

(Figure 10). The pace at which DEs were being sought as a restructuring alternative seems to have slowed toward the end of the third quarter, as there were no significant exchange offers yet to be completed.

Figure 10 indicates the “popular” emergence of DEs over the last 21 months compared to the last 25 years. Indeed, during this period, approximately 48% (53 of 110) of all DEs took place. As we have compiled in a recent study, about 46% of all DEs up to 2007 resulted in a subsequent Chapter 11 or 7 bankruptcy filing and 30% of the DE firms were acquired. The data would appear to indicate a DE is oftentimes just a short-term fix.³

Figure 10. High-Yield Bond Distressed Exchange Default and Recovery Statistics, 1984–3Q 09

Year	D/E Defaults (\$)	Total Defaults (\$)	D/E Defaults (%) to Total \$	D/E Defaults (No. of Issuers)	Total Defaults (No. of Issuers)	D/E Defaults (%) to Total No. of Issuers	D/E All Default Recovery Rate ^a	All Default Recovery Rate ^a	Difference Between D/E & All Default Recovery Rate
3Q 09	21,008.04	93,094.73	22.6	39	103	37.9	40.40	26.03	14.37
2008	30,329.42	50,763.26	59.7	14	64	21.9	52.41	42.50	9.91
2007	146.83	5,473.00	2.7	1	19	5.3	85.17	66.65	18.52
2006	0.00	7,559.00	0.0	0	0	0	NA	NA	NA
2005	6,861.00	36,209.00	18.9	1	34	2.9	78.61	62.96	15.65
2004	537.88	11,657.00	4.6	5	39	12.8	58.05	57.72	0.33
2003	1,080.12	38,451.00	2.8	8	86	9.3	78.52	45.58	32.94
2002	764.80	96,858.00	0.8	3	112	2.7	61.22	25.30	35.92
2001	1,267.60	63,609.00	2.0	5	156	3.2	33.12	25.62	7.50
2000	50.00	30,295.00	0.2	1	107	0.9	77.00	26.74	50.26
1999	2,118.40	23,532.00	9.0	6	98	6.1	65.39	27.90	37.49
1998	461.10	7,464.00	6.2	2	37	5.4	17.34	40.46	(23.12)
1997	0.00	4,200.00	0.0	0	0	0.0	NA	NA	NA
1996	0.00	3,336.00	0.0	0	0	0.0	NA	NA	NA
1995	0.00	4,551.00	0.0	0	0	0.0	NA	NA	NA
1994	0.00	3,418.00	0.0	0	0	0.0	NA	NA	NA
1993	0.00	2,287.00	0.0	0	0	0.0	NA	NA	NA
1992	0.00	5,545.00	0.0	0	0	0.0	NA	NA	NA
1991	76.00	18,862.00	0.4	1	62	1.6	31.30	40.67	(9.37)
1990	1,044.00	18,354.00	5.7	7	47	14.9	43.15	24.66	18.49
1989	548.90	8,110.00	6.8	6	26	23.1	44.53	35.97	8.56
1988	390.30	3,944.00	9.9	3	24	12.5	28.40	43.45	(15.05)
1987	33.60	7,486.00	0.4	2	15	13.3	40.70	66.63	(25.93)
1986	114.80	3,156.00	3.6	3	23	13.0	47.68	36.60	11.08
1985	323.30	992.00	32.6	2	19	10.5	55.04	41.78	13.26
1984	100.10	344.00	29.1	1	12	8.3	44.12	50.62	(6.50)
Totals/Averages	\$67,256.18	\$549,550.00	12.2%	110	1,083	10.2%	51.69 ^b	41.47 ^b	10.23

NA: Not Applicable. ^a Weighted average recovery rates for each year. ^b Arithmetic average of the weighted average annual recovery rates; only those years with DEs counted. The arithmetic average of each individual DE (77) for the entire sample period was 46.70% and the average for the non-DE defaults was 36.23%.

Source: NYU Salomon Center.

Recovery Rates on Distressed Exchanges

Because DEs are not as dramatic a reflection of a firm’s distressed status as a bankruptcy or nonpayment of cash interest on debt, one might expect the recovery rate on DE defaults to be higher than other, more serious distressed situations. Of course, one reason for the larger recoveries in DEs is lenders need to be offered a “premium” in order to be persuaded to participate in the exchange.

³ *The Re-emergence of Distressed Exchanges in Corporate Restructurings*, E. Altman and B. Karlin, NYU Salomon Center Working Paper, 2009 (see E. Altman’s website) and published in *The Journal of Credit Risk*, Summer 2009.

Figure 10 shows the arithmetic average recovery rate on all DE defaults was 51.7% for 1984–2009 (first nine months), compared to 41.5% for all defaults, and 36.2% for all non-DE defaults. In 2008, DEs recovered 52.2%, while non-DE defaults recovered only 27.1%. As the third-quarter 2009 recovery rate on DEs equaled 40.4% versus 26.0% on all defaults, the spread has widened significantly since earlier this year, particularly the first quarter when the recovery on all defaults was higher than on that of DEs.

Age of Defaults

Figure 11 summarizes the distribution of defaults after original issuance from 1991 through the first nine months of 2009. With 328 defaults so far this year, the normal pattern of low defaults in the first year after issuance, followed by increased default rates in years two through four, is being experienced. Through the third quarter, 38% of defaults had occurred within two to four years after issuance (compared to the long-term average of 48%). There was a somewhat interesting increase in six-year-old issues and a disproportionately large cohort of bonds issued ten or more years prior to default. Most of the bonds that defaulted ten or more years after issuance were originally issued with investment-grade ratings.

Figure 11. Distribution of Years to Default From Original Issuance Date (By Years of Default), 1991–3Q 09

Years to Default	1991		1992		1993/1994		1995		1996/1997		1998		1999		2000		2001	
	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total
1	0	0	0	0	3	8	1	3	7	14	2	6	32	26	19	10	40	12
2	18	13	0	0	6	16	9	28	7	14	5	15	37	30	51	28	69	21
3	26	19	7	13	5	14	7	22	7	14	10	30	15	12	56	31	87	26
4	29	21	10	19	2	5	3	9	17	36	3	9	14	11	14	8	65	19
5	35	26	8	15	4	11	1	3	4	8	10	30	7	6	13	7	27	8
6	10	7	12	22	8	22	2	6	5	10	2	6	8	6	5	3	14	4
7	4	3	5	9	7	19	2	6	0	0	1	3	10	8	12	7	21	6
8	10	7	4	7	0	0	2	6	0	0	0	0	2	2	4	2	5	1
9	3	2	0	0	0	0	4	13	0	0	0	0	0	0	3	2	4	1
10+	2	1	8	15	2	5	1	3	2	4	0	0	0	0	6	3	3	1
Total	137	100	54	100	37	100	32	100	49	100	33	100	125	100	183	100	335	100

Years to Default	2002		2003		2004		2005		2006		2007		2008		3Q 09		1991–3Q 09	
	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	No. of Issues	% of Total	Issues	Total
1	29	8	18	9	8	10	16	9	2	4	1	3	9	6	18	5	205	9
2	51	15	30	15	7	9	13	7	4	8	1	3	18	12	29	9	355	15
3	61	18	26	13	8	10	9	6	6	12	6	17	34	22	52	16	422	18
4	56	16	23	11	6	8	22	12	5	10	9	26	30	19	44	13	352	15
5	45	13	40	20	10	13	14	8	4	8	3	9	20	13	33	10	278	12
6	21	6	20	10	16	21	17	9	9	17	4	11	10	6	50	15	213	9
7	8	2	25	12	9	12	13	7	6	12	2	6	9	6	13	4	147	6
8	7	2	3	1	6	8	11	6	7	13	5	14	6	4	14	4	86	4
9	12	3	5	2	1	1	5	3	6	12	1	3	7	5	15	5	66	3
10+	54	16	13	6	6	8	64	34	3	6	3	9	11	7	60	18	238	10
Total	344	100	203	100	77	100	184	100	52	100	35	100	154	100	328	100	2,362	100

Source: NYU Salomon Center.

Returns, Yields, and Spreads

Figure 12 shows the return on high-yield bonds through the first nine months of 2009 was 46.24%. The excess return versus 10-yr US Treasury bonds was 52.77%, and a clear reversal of the result for 2008, when the underperformance was 46.21%. It is interesting to note that the historical average excess return dropped to just 65bp at the end of 2008, but if the outperformance in 2009 remains at 52.77%, the average annual spread will increase to 2.33%, a more normally expected excess return. The spread between the yield to maturity on high-yield bonds and 10-yr Treasuries decreased in the third quarter from 902bp to 671bp, the lowest spread in more than a year (see Figure 13.)

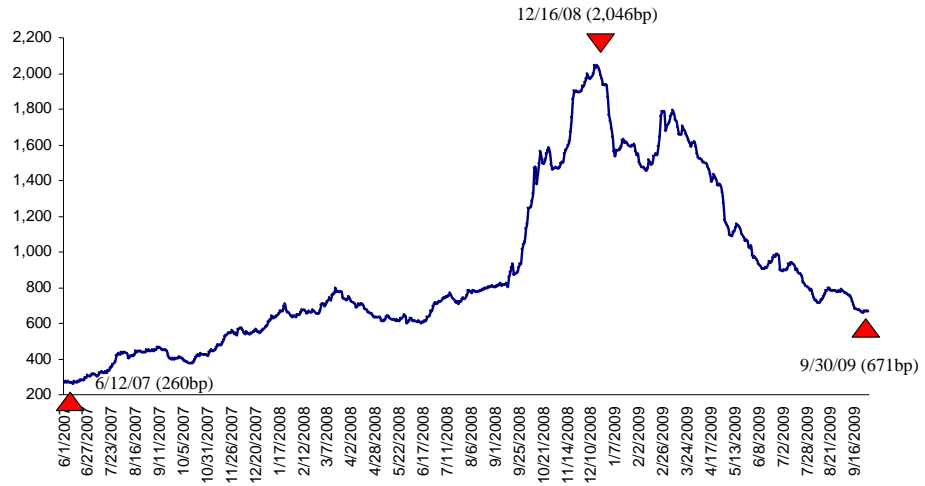
Figure 12. Annual Returns, Yields, and Spreads on 10-Yr Treasury and High-Yield Bonds,^a 1978-3Q 09

Year	Return (%)			Yield To Maturity (%)		
	HY	Treasury	Excess	HY	Treasury	Spread
3Q 09	46.24	(6.53)	52.77	10.01	3.30	6.71
2008	(25.91)	20.30	(46.21)	19.53	2.22	17.31
2007	1.83	9.77	(7.95)	9.69	4.03	5.66
2006	11.85	1.37	10.47	7.82	4.70	3.11
2005	2.08	2.04	0.04	8.44	4.39	4.05
2004	10.79	4.87	5.92	7.35	4.21	3.14
2003	30.62	1.25	29.37	8.00	4.26	3.74
2002	(1.53)	14.66	(16.19)	12.38	3.82	8.56
2001	5.44	4.01	1.43	12.31	5.04	7.27
2000	(5.68)	14.45	(20.13)	14.56	5.12	9.44
1999	1.73	(8.41)	10.14	11.41	6.44	4.97
1998	4.04	12.77	(8.73)	10.04	4.65	5.39
1997	14.27	11.16	3.11	9.20	5.75	3.45
1996	11.24	0.04	11.20	9.58	6.42	3.16
1995	22.40	23.58	(1.18)	9.76	5.58	4.18
1994	(2.55)	(8.29)	5.74	11.50	7.83	3.67
1993	18.33	12.08	6.25	9.08	5.80	3.28
1992	18.29	6.50	11.79	10.44	6.69	3.75
1991	43.23	17.18	26.05	12.56	6.70	5.86
1990	(8.46)	6.88	(15.34)	18.57	8.07	10.50
1989	1.98	16.72	(14.74)	15.17	7.93	7.24
1988	15.25	6.34	8.91	13.70	9.15	4.55
1987	4.57	(2.67)	7.24	13.89	8.83	5.06
1986	16.50	24.08	(7.58)	12.67	7.21	5.46
1985	26.08	31.54	(5.46)	13.50	8.99	4.51
1984	8.50	14.82	(6.32)	14.97	11.87	3.10
1983	21.80	2.23	19.57	15.74	10.70	5.04
1982	32.45	42.08	(9.63)	17.84	13.86	3.98
1981	7.56	0.48	7.08	15.97	12.08	3.89
1980	(1.00)	(2.96)	1.96	13.46	10.23	3.23
1979	3.69	(0.86)	4.55	12.07	9.13	2.94
1978	7.57	(1.11)	8.68	10.92	8.11	2.81
Arithmetic Annual Average						
1978-2008	9.58	8.93	0.65	12.33	7.09	5.24
Standard Deviation	13.54	11.44	14.61	3.19	2.76	2.97
Compound Annual Average						
1978-2008	8.76	8.38	0.38			

^a End-of-year yields.

Source: Yield Book[®].

Figure 13. Spread Between High-Yield Bonds YTM and 10-Yr Treasury Notes, 1 Jun 07-30 Sep 09



Source: Yield Book.

New Issues and Other Changes in the High-Yield Market

US high-yield bond issuance in the third quarter decreased slightly from the second quarter (\$50.5 billion) to \$45.7 billion. However, this can be contrasted with \$11.7 billion in the first-quarter 2009 and only \$5.1 billion one year earlier. Concurrently, new issuance of leveraged loans diminished, with S&P estimating only about \$14 billion of new, US leveraged loans were brought to market versus \$44 billion a year earlier. A total of approximately \$45 billion in new leveraged loans were issued in the first nine months of 2009. Clearly, the bond market has been the primary venue to refinance the loan market in 2009.

The size of the high-yield bond market, adjusting for fallen angels, rising stars, defaults, and other changes, was approximately \$1.18 trillion at the end of September 2009, according to our calculations. This represents an increase from nine months earlier of \$95 billion, attributable to a large increase in the dollar amount of downgraded “fallen angels” (\$124 billion) as well as a significant increase in new issuance within the last two quarters (see Figure 14). While the increase in the size of the high-yield bond market due to new issuance is welcome news, the downgrade versus upgrade differential amount of \$113.6 billion is an indicator of further deterioration in credit fundamentals.

Figure 14. Size of the High-Yield Bond Market, 3Q 09 (Dollars in Billions)

	YTD (\$)
Size of Market (as of Dec 08)	1,083.6
New Issues	107.8
Fallen Angels	124.4 ^a
Rising Stars	(10.8) ^b
Defaults	(93.1)
Calls	(9.6)
Repurchases/Tenders	(17.4)
Maturities	(12.4)
Exchanges	5.0
Size of Market (as of Sep 09)	1,177.4

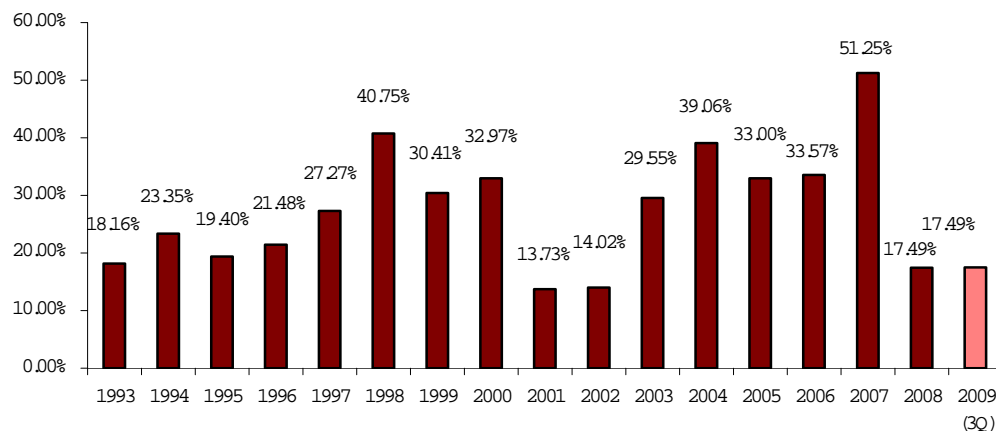
^a First downgrade to non-investment grade by either Moody's or S&P. ^b Must be investment grade with both Moody's and S&P.

Sources: NYU Salomon Center and Citi.

Credit Quality and Trends in New Issuance

Figure 15 shows the proportion of new issues rated B- or lower by S&P for the first nine months of 2009 and annually for 1993–2008. The proportion of this low-quality segment was 17.49% through the first three quarters of 2009 (coincidentally equivalent to the 17.49% measure for all of 2008), but significantly below the average of 34.38% for the last five years. This trend is consistent with the demand for quality experienced in all debt markets, and is indicative of a diminution in the expected default rate for the two- to four-year horizon.

Figure 15. Percentage of New High-Yield Issuance Rated B- or Below, 1993-3Q 09 (Based on the Amount of Issuance)



Source: Standard and Poor's Global Fixed Income Research.

Proportion and Size of the Defaulted and Distressed Public and Private Debt Markets

The defaulted and distressed debt segment of the high-yield and defaulted debt market in the United States was about 41.0% at the end of the third quarter of 2009, the lowest since the second quarter of 2008 (Figure 16). The primary reason for the steady decrease since December 31, 2008, was the drop in the distress ratio of issues trading at least 1,000bp over the 10-yr US Treasury bond to 21.4% at the end of the third quarter of 2009. This 21.4% level is based on the combined high-yield and defaulted bond population. The distress ratio for just the high-yield market was 26.8%.

The defaulted bond total is calculated by adding the new defaults of 2009 (\$93.10 billion) to the existing defaulted bonds as of year-end 2008, subtracting the bonds of firms whose reorganization plans were deemed effective and who have emerged from Chapter 11 (\$8.18 billion — see Appendix G) and, finally, by deducting the value of bonds that defaulted as part of a distressed exchange. In the third quarter of 2009, the defaulted bond proportion decreased slightly to 20.2%, as the amount of defaults due to a distressed exchange exceeded those occurring for other reasons. At the same time, the total amount of high-yield bonds increased.

Figure 17 shows our estimate of the size of the defaulted and distressed debt markets for both public and privately issued debt. At \$298.3 billion as of September 30, 2009, the face value amount of public defaulted bonds was \$63.9 billion greater than at year-end 2008 (\$234.4 billion).

The distressed proportion of the total high-yield bond market decreased significantly in the third quarter as spreads tightened. The estimated face value amount of distressed public debt is \$315.5 billion, down by 33% in the quarter from a second-quarter total of \$470.4 billion and by 64% from year-end 2008.

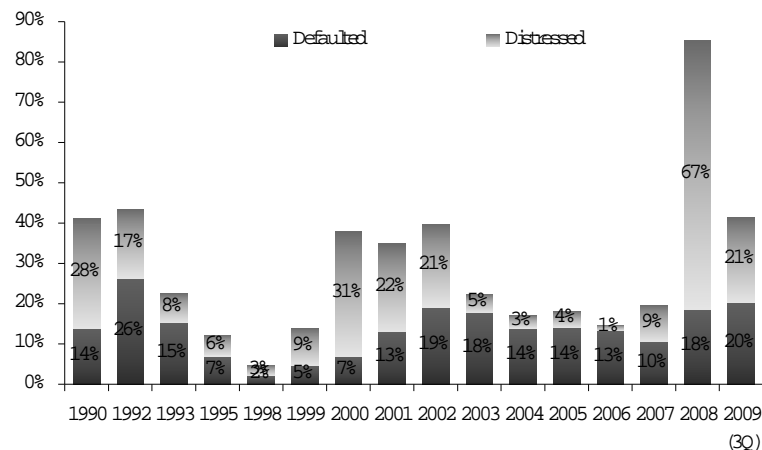
Our private debt estimate is based on a 2.2:1 ratio of private-to-public debt among troubled companies. We expect to revise the public-to-private debt ratio upwards by year-end 2009 since loans played a prominent role in the leveraged financing of firms in recent years. In Figure 17, we observe that the face value

of the combined public and private defaulted and distressed debt amounted to \$1.96 trillion as of September 30, 2009, down \$502.0 billion in one quarter, and by \$1.63 trillion since year-end 2008. These enormous changes in the size of the distressed and defaulted debt market, in such a short timeframe, shows further evidence of how significantly the credit markets have improved.

Our market value estimates are based on current market conditions for public and private bond and loan markets, and our Altman-NYU Salomon Center indexes of performance for these securities. Consistent with our observations of both newly defaulted and existing defaulted loan issues in our index, we have chosen to increase our ratios from year-end 2008. When applied, the average price of our public bonds and private loans indexes results in a market value estimate of defaulted and distressed debt of about \$1.29 trillion — again, down from the second quarter and nine months earlier.

Figure 18 shows our estimates for the total face and market values of defaults and distressed debt from 1990–2009. The current volumes are second in size to those observed in 2008. The dollars under management that comprise the demand for these securities and other distressed assets has increased considerably over the past year, mainly due to positive returns in 2009 and increased flows into distressed funds.

Figure 16. Defaulted and Distressed^a Debt as a Percentage of Total High-Yield Plus Defaulted Debt Market,^b 1990–3Q 09^c



^a Defined as the option-adjusted spread greater than or equal to 1,000bp over comparable-duration Treasuries. ^b \$1.476 trillion as of September 30, 2009. ^c Some years not available as no estimates were attempted.

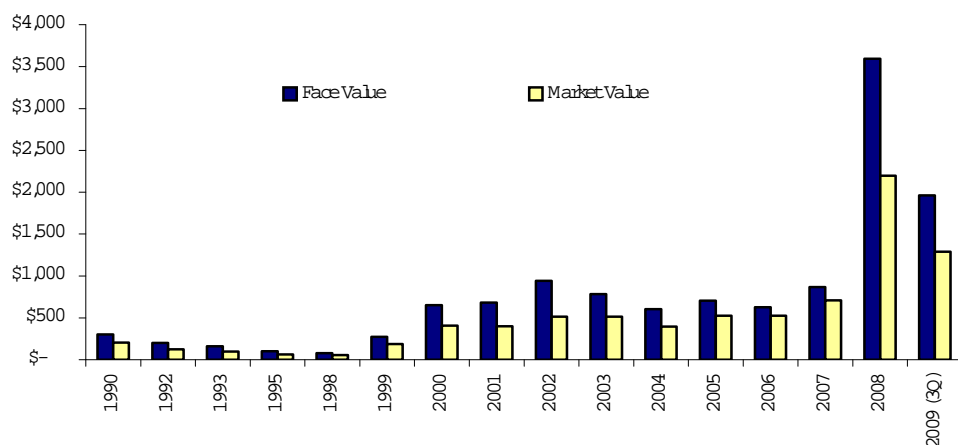
Source: NYU Salomon Center.

Figure 17. Estimated Face and Market Values of Defaulted and Distressed Debt, 2007-3Q 09, (Dollars in Billions)

	Face Value (\$)			Market Value (\$)			Market/ Face Ratio
	31 Dec 07	31 Dec 08	30 Sep 09	31 Dec 07	31 Dec 08	30 Sep 09	
Public Debt							
Defaulted	\$127.3	\$234.4	\$298.3a	\$76.4	\$40.7	\$104.4	0.35
Distressed	\$113.6	\$888.5	\$315.5b	\$85.2	\$488.7	\$236.7	0.75
Total Public	\$240.9	\$1,122.9	\$613.8	\$161.6	\$529.4	\$341.1	
Private Debt							
Defaulted	331.0	515.6	656.2c	281.4	299.1	393.7	0.60
Distressed	295.3	1,954.8	694.2c	265.7	1,368.3	555.4	0.80
Total Private	626.3	2,470.4	1,350.4	547.1	1,667.4	949.1	
Total Public and Private	867.2	3,593.2	1,964.2	708.7	2,196.8	1,290.1	

^a Calculated using: (2008 defaulted population) + (2009 defaults) - (2009 Emergences) - (2009 Distressed Restructurings). ^b Based on 26.8% of the high-yield bond market (\$1,177.4 billion) as of 30 Sep 09. ^c Based on a private/public ratio of 2.2.
Source: NYU Salomon Center.

Figure 18. Size of the US Defaulted and Distressed Debt Market, 1990-3Q 09 (Dollars in Billions)



Source: NYU Salomon Center.

Recent Performance of Defaulted Debt

Through the first nine months of 2009, the Altman-NYU Salomon Center Defaulted Bond Index was up 67.56%. Defaulted bank loans also were providing year-to-date gains of 21.20%. Our combined, long-only index of defaulted bonds and bank loans was up 38.84% for the first nine months. All three indexes posted year-to-date returns at the end of the third quarter exceeding those of the first three quarters of 2003, the prior high year.

Forecasting Default Rates and Recoveries

Using our standard mortality rate forecasting method, our forecasts were higher than the actual rates in 2006 and 2007 and accurate in 2008. We expected that our 2009 default rate forecast would be significantly on the low side, using the same methodology. After all, the mortality rate incidences of the past have been only partially based on six recession periods covering about six-and-a-half years of the 38 years in our sample period (1971–2008). As such, a nonrecessionary, macroeconomic climate dominates the statistics and, with a severe recession in place coming into 2009, we expected the mortality rate methodology to underestimate the actual default results. Indeed, we forecasted 7.98% for all of 2009 and the year-to-date rate of 8.07% is already greater. The rate increased to 10.3% as of November 1, 2009, mainly due to CIT's \$21.9 billion of bond defaults.

For this reason, we also considered scenario analysis and market-based statistics to provide useful estimates of the near-future results, and will not rely solely on the mortality rate method.

Mortality Rate-Based Forecast

Utilizing the updated mortality rate statistics (see our 2008 annual report),⁴ and inputting new issuance statistics per rating class over the past ten years, the 2009 default rate estimate was 7.98%, with a recovery rate of about 30% (Figure 19). As discussed above, we are at this level of defaults after three quarters.

Figure 19. Mortality Rate-Based Forecasts of Default and Recovery Rates in the High-Yield Bond Market, 2007–09

Year	Default Rate (%)	Default Amount (\$		Recovery Rate (%)
			Billion)	
2007 (Forecast)	2.50	\$27.5		59.4
2007 (Actual)	0.51	\$5.5		66.6
2008 (Forecast)	4.64	\$53.1		35.8/39.6 ^a
2008 (Actual)	4.60	\$50.2		42.5
2009 (Forecast)	7.98	\$86.4		30.0/31.8 ^a

^a Based on the log-linear and linear default/recovery rate regressions.
Sources: Mortality Rates for 2009, and NYU Salomon Center.

Scenario-Based Forecasts

As we discussed in our 2008 annual report, we also used scenario analysis to forecast default rates. Based on recent industry research, we analyzed the default rates during the two most recent recessions, 1991 and 2001. Our forecasts are based on the proportional breakdown of the three major high-yield rating categories (Ba, B, and Caa) just before these recessions and the subsequent default experience from those categories.⁵ We then applied the breakdown of rating class percentages as of year-end 2008 to estimate default rates for 2009, given the 1991 and 2001 recession scenarios.

The resulting default rate forecast for 2009 was 15.4% given a 1991 default scenario, and 12.3% given a 2001 scenario, both of which are much higher than our mortality

⁴ *Altman High-Yield Bond Default and Return Report: 2008 in Review and Market Outlook*, John Fenn, Citi, February 12, 2008.

⁵ Martin Fridson first reported this scenario approach in his article in the *Distressed Debt Investor*, September 28, 2006.

rate estimate and assume that factors such as market conditions, structure, etc., will remain quite similar as in the two prior recessions.

If we update the scenario analysis with our most recent estimate (September 2009), when the proportion of Caa bonds was 17%, the one-year scenario-based forecasts would be 12.12% and 15.84%, respectively for September 2010 (column 3, Figure 20). While most analysts now believe that the recession is over, we provide estimates of the default rates under a recession scenario since it is possible that the economy could relapse.

Market-Based Methods for Forecasting Defaults

In addition, we added two alternative methods for forecasting default rates to our reports. The first relies on the market spreads on high-yield bonds compared to 10-yr Treasuries. The second utilizes the proportion of high-yield bonds selling at 1,000bp over 10-yr Treasuries. In both cases, we regress the market-based measure in period (t) and the subsequent one-year default rate in period (t+1). Based on spreads as of December 31, 2007, this method forecast a 4.62% default rate for 2008. Inputting the most up-to-date spread of 6.71%, as of September 30, 2009, the resulting one-year default rate forecast falls to 6.08%, about one-third the level as of year-end 2008.

A second market-based method utilizes the distress ratio — that is, the proportion of the high-yield bond market trading at least 1,000bp over Treasuries. Using the September 30, 2009, distress ratio of 26.7% into the model reveals an expected 6.05% default rate for the end of the third quarter of 2010.

An important caveat for market-based measures as indicators of future default rates is the potentially large impact of the liquidity premium demanded by investors on measures such as spreads or the distress ratio. This has been especially relevant given the stressed condition of credit markets, particularly at the end of 2008. It is difficult to know how much of the spread is a result of a flight to quality away from risky markets (or the “flight to risk” as seems to have taken place by the third quarter of 2009).

Because we are mainly concerned with the market’s underlying estimates about default and recovery rates, the liquidity premium’s impact should be considered. This premium has lessened dramatically over the first three quarters of 2009 as investors have become more confident about the measures taken by the government to fix the capital markets, and asset managers are again willing to invest in risky debt markets.

Figure 20. One-Year Default and Recovery Forecasts: Summary of Forecast Models

Model	2009 Default Rate Forecast (%)	2009 Recovery Rate Forecast (%) ^a	2010 (9/30) Default Rate Forecast (%)	2010 (9/30) Default Rate Forecast (%)
Mortality Rate	7.98	30.00	7.98	7.98
Scenario (2001)	12.30	25.22	12.12	n/a
Scenario (1991)	15.40	23.75	15.84	n/a
Yield-Spread	18.32	20.35	6.08 ^b	6.08 ^b
Distress Ratio	14.16	24.74	6.05 ^c	6.05 ^c
Average of Models	13.63	24.27	9.62	6.70

^aBased on the log-linear regression, see our Annual Report, February 12, 2009. ^bBased on Sep. 30, 2009 yield-spread. ^cBased on Sep. 30, 2009 Distress Ratio.

Source: NYU Salomon Center.

Default and Recovery Conclusions

Based on the five methods outlined above, our forecasted default rate on high-yield bonds for the next 12 months (as of September 2010) is 9.42%. (See Figure 20). However, if we exclude the recession scenarios – since the likelihood of a double dip in 2010 appears to be decreasing – the resulting forecasted default rate would be 6.70%. These forecasts compare to Moody’s more “bullish” forecast of just 4.4% (as of October 6, 2009) and S&P’s revised downward forecast of 6.9% (as of October 24, 2009). The latter was revised downward from 13.9% as of September 2009.

Appendix A

Quarterly Default Rate Comparison: Altman/NYU-SC and Moody's High-Yield Bond Market, 1989-3Q 09

Quarter	Par Value Bonds Outstanding (\$Bn)	Bonds Defaulted by Quarter (\$Bn)	Quarterly Default Rates (%)	Altman/NYU-SC 12-Month Moving Average (%)	Moody's 12- Month Issuer Based Moving Average (%)
1989					
1Q	165.00	1.15	0.70	2.45	3.25
2Q	172.00	1.40	0.81	2.11	2.70
3Q	189.26	3.07	1.62	3.47	4.39
4Q	185.00	2.49	1.35	4.29	5.93
Total		8.11			
1990					
1Q	185.00	4.16	2.25	6.01	7.02
2Q	185.00	2.51	1.36	6.61	8.71
3Q	181.00	6.01	3.32	8.20	9.80
4Q	181.00	5.67	3.13	10.14	10.92
Total		18.35			
1991					
1Q	182.00	8.74	4.80	12.67	13.24
2Q	182.00	2.75	1.51	12.73	13.99
3Q	183.00	5.01	2.74	12.18	13.03
4Q	183.00	2.36	1.29	10.31	10.97
Total		18.86			
1992					
1Q	183.20	3.33	1.82	7.35	8.33
2Q	151.10	1.26	0.83	6.52	6.54
3Q	163.00	0.37	0.23	4.84	5.84
4Q	151.89	0.59	0.39	3.40	5.73
Total		5.55			
1993					
1Q	193.23	0.38	0.20	1.71	5.34
2Q	193.23	1.33	0.69	1.39	4.93
3Q	206.91	0.05	0.03	1.22	4.52
4Q	190.42	0.52	0.27	1.10	3.79
Total		2.29			
1994					
1Q	232.60	0.67	0.29	1.35	3.06
2Q	230.00	0.16	0.07	0.60	1.90
3Q	235.00	0.41	0.17	0.76	2.37
4Q	235.00	2.18	0.93	1.45	2.11
Total		3.42			
1995					
1Q	240.00	0.17	0.07	1.24	1.42
2Q	240.00	1.68	0.70	1.85	2.41
3Q	240.00	0.98	0.41	2.09	2.60
4Q	240.00	1.72	0.72	1.90	3.56
Total		4.55			
1996					
1Q	255.00	0.44	0.17	2.01	3.71
2Q	255.00	0.89	0.35	1.58	3.00
3Q	271.00	0.41	0.15	1.36	2.20
4Q	271.00	1.59	0.59	1.23	1.95
Total		3.34			
1997					
1Q	296.00	1.85	0.63	1.75	1.87
2Q	318.40	0.60	0.19	1.51	1.92
3Q	335.40	1.48	0.44	1.74	2.33
4Q	335.40	0.27	0.08	1.25	2.20
Total		4.20			
1998					
1Q	379.00	2.37	0.63	1.41	2.69
2Q	425.70	1.22	0.29	1.41	3.12
3Q	465.50	1.62	0.35	1.29	2.96
4Q	481.60	2.26	0.47	1.60	3.83
Total		7.46			

Quarterly Default Rate Comparison: Altman/NYU-SC and Moody's High-Yield Bond Market, 1989-3Q 09 (Continued)

Quarter	Par Value Bonds Outstanding (\$Bn)	Bonds Defaulted by Quarter (\$Bn)	Quarterly Default Rates (%)	Altman/NYU-SC 12-Month Moving Average (%)	Moody's 12-Month Issuer Based Moving Average (%)
1999					
1Q	515.00	4.76	0.92	2.05	3.88
2Q	537.20	8.42	1.57	3.31	5.08
3Q	567.40	5.24	0.92	3.85	5.87
4Q	580.00	5.11	0.88	4.15	5.80
Total		23.53			
2000					
1Q	584.00	6.06	1.04	4.28	6.36
2Q	595.60	9.97	1.67	4.52	6.61
3Q	597.50	4.32	0.72	4.27	6.64
4Q	608.15	9.95	1.64	5.07	7.03
Total		30.29			
2001					
1Q	613.20	18.07	2.95	6.96	7.61
2Q	648.60	12.82	1.98	7.37	7.88
3Q	649.00	14.65	2.26	8.56	9.64
4Q	647.70	18.07	2.79	9.80	10.60
Total		63.61			
2002					
1Q	669.00	18.54	2.77	9.89	11.00
2Q	674.00	27.07	4.02	11.71	10.03
3Q	757.00	37.48	4.95	15.01	8.63
4Q	756.30	13.77	1.82	12.80	6.96
Total		96.86			
2003					
1Q	750.00	7.62	1.02	11.36	5.57
2Q	774.50	14.54	1.88	9.79	5.80
3Q	825.00	13.25	1.61	6.56	5.77
4Q	856.00	3.04	0.36	4.66	5.48
Total		38.45			
2004					
1Q	886.00	3.07	0.35	3.96	4.73
2Q	919.60	1.75	0.19	2.38	4.01
3Q	933.10	3.80	0.41	1.27	3.11
4Q	948.50	3.04	0.32	1.25	3.01
Total		11.66			
2005					
1Q	939.30	1.68	0.18	1.08	3.02
2Q	952.00	1.87	0.20	1.11	2.42
3Q	1,073.00	20.71	1.93	2.87	2.62
4Q	1,066.10	11.95	1.12	3.37	2.54
Total		36.21			
2006					
1Q	1,039.00	3.39	0.33	3.56	2.43
2Q	1,022.35	0.96	0.09	3.47	2.65
3Q	993.60	1.47	0.15	1.71	2.46
4Q	970.40	1.74	0.18	0.76	2.08
Total		7.56			
2007					
1Q	1,053.90	0.87	0.08	0.52	1.80
2Q	1,066.80	1.82	0.17	0.56	1.92
3Q	1,075.40	0.88	0.08	0.50	1.67
4Q	1,069.90	1.91	0.18	0.51	0.90
Total		5.47			
2008					
1Q	1,089.9	3.57	0.33	0.76	1.74
2Q	1,083.4	13.68	1.26	1.83	2.43
3Q	1,091.0	4.87	0.45	2.22	3.40
4Q	1,086.8	31.49	2.90	4.65	4.43
Total		50.76			

Quarterly Default Rate Comparison: Altman/NYU-SC and Moody's High-Yield Bond Market, 1989-3Q 09 (Continued)

Quarter	Par Value Bonds Outstanding (\$Bn)	Bonds Defaulted by Quarter (\$Bn)	Quarterly Default Rates (%)	Altman/NYU-SC 12-Month Moving Average (%)	Moody's 12-Month Issuer Based Moving Average (%)
2009					
1Q	1,083.6	39.86	3.68	8.01	8.00
2Q	1,082.6	43.86	4.05	11.09	11.00
3Q	1,153.0	9.38	0.81	11.51	12.92
Total		93.09			

Sources: NYU Salomon Center and Moody's (1989-2009).

Appendix B

Defaulted Corporate Straight Bond Issues, 3Q 09

Company	Bond Issue	Coupon		Outstanding Amount (\$MM)	Default Date
		(%)	Maturity Date		
Lyondell Basell (Equistar Chem., LP)	Senior secured	7.55	2/15/2026	150.00	1/6/2009
Lyondell Basell (Lyondell Chemical)	Senior secured	9.80	2/1/2020	225.00	1/6/2009
Lyondell Basell (Lyondell Chemical)	Senior secured	10.25	11/1/2010	100.00	1/6/2009
Lyondell Basell (Millennium America)	Senior unsecured	7.63	11/15/2026	241.00	1/6/2009
Lyondell Basell (Basell Finance Co. BV)	Senior unsecured	8.10	3/15/2027	300.00	1/6/2009
Lyondell Basell (Industries AF)	Senior secured	8.38	8/15/2015	615.00	1/6/2009
Merisant Co.	Senior sub.	9.50	7/15/2013	0.30	1/9/2009
Merisant Co.	Senior sub.	9.50	7/15/2013	224.71	1/9/2009
Merisant Co.	Senior sub.	12.25	5/15/2014	136.04	1/9/2009
Nortel Networks Ltd.	Senior unsecured	9.00	7/15/2011	999.80	1/14/2009
Nortel Networks Ltd.	Unsecured	6.88	9/1/2023	200.00	1/14/2009
Nortel Networks Ltd. (Nortel Networks Cap.)	Unsecured	7.88	6/15/2026	150.00	1/14/2009
Nortel Networks Ltd.	Senior unsecured	10.13	7/15/2013	550.00	1/14/2009
Nortel Networks Ltd.	Senior unsecured	10.75	7/15/2016	450.00	1/14/2009
Nortel Networks Ltd.	Senior unsecured	9.00	7/15/2011	0.20	1/14/2009
Nortel Networks Ltd.	Senior unsecured	10.75	7/15/2016	675.00	1/14/2009
Virgin River Casino Corp.	Senior secured	9.00	1/15/2012	125.00	1/15/2009
Virgin River Casino Corp.	Senior sub.	0.00	1/15/2013	66.00	1/15/2009
Spansion, LLC	Senior unsecured	11.25	1/15/2016	250.00	1/15/2009
Eurofresh, Inc.	Senior notes	11.50	1/15/2013	170.00	1/15/2009
Eurofresh, Inc.	Senior sub.	0.00	1/15/2014	44.17	1/15/2009
Arantes International, Ltd.	Senior notes	10.25	6/19/2013	150.00	1/19/2009
Smurfit-Stone Container Corp.	Senior unsecured	8.00	3/15/2017	675.00	1/26/2009
Smurfit-Stone Container (Finance Canada)	Senior unsecured	7.38	7/15/2014	200.00	1/26/2009
Smurfit-Stone Container (Jefferson Smurfit)	Senior unsecured	7.50	6/1/2013	300.00	1/26/2009
Smurfit-Stone Container (Jefferson Smurfit)	Senior unsecured	8.25	10/1/2012	700.00	1/26/2009
Smurfit-Stone Container Corp.	Senior unsecured	8.38	7/1/2012	400.00	1/26/2009
Bonten Media Acquisition Co.	Senior sub.	9.00	6/1/2015	27.60	1/30/2009
Station Casinos, Inc.	Senior unsecured	6.00	4/1/2012	450.00	2/1/2009
Station Casinos, Inc.	Senior sub.	6.63	3/15/2018	300.00	2/1/2009
Station Casinos, Inc.	Senior unsecured	7.75	8/15/2016	400.00	2/1/2009
Station Casinos, Inc.	Senior sub.	6.50	2/1/2014	450.00	2/1/2009
Station Casinos, Inc.	Senior sub.	6.88	3/1/2016	700.00	2/1/2009
New Asat Finance Ltd.	Senior notes	9.25	2/1/2011	150.00	2/1/2009
Indalex Holding Corp.	Senior secured	11.50	2/1/2014	198.06	2/2/2009
Vitro SAB de CV	Senior unsecured	8.63	2/1/2012	300.00	2/2/2009
Vitro SAB de CV	Senior unsecured	9.13	2/1/2017	2.37	2/2/2009
Vitro SAB de CV	Senior unsecured	9.13	2/1/2017	697.63	2/2/2009
Vitro SAB de CV	Senior unsecured	11.75	11/1/2013	224.21	2/2/2009
Spectrum Brands, Inc.	Senior sub.	7.38	2/1/2015	700.00	2/3/2009
Spectrum Brands, Inc.	Senior sub.	12.50	10/2/2013	329.77	2/3/2009
Spectrum Brands, Inc. (Rayovac Corp.)	Senior sub.	8.50	10/1/2013	2.87	2/3/2009
Intelsat Ltd.	Senior unsecured	6.50	11/1/2013	346.45	2/11/2009
Intelsat Ltd.	Senior unsecured	7.63	4/15/2012	114.16	2/11/2009
Pliant Corp.	Senior secured	11.13	9/1/2009	250.00	2/11/2009
Pliant Corp.	Senior secured	11.13	6/15/2009	7.80	2/11/2009
Pliant Corp.	Senior secured	11.63	6/15/2009	391.89	2/11/2009
Aleris International, Inc.	Senior unsecured	9.00	11/15/2014	0.09	2/12/2009
Aleris International, Inc.	Senior unsecured	9.75	12/15/2014	598.00	2/12/2009
Aleris International, Inc.	Senior unsecured	9.00	12/15/2014	105.38	2/12/2009
Aleris International, Inc.	Senior sub.	10.00	12/15/2016	399.00	2/12/2009
Muzak, LLC	Senior sub.	9.88	3/15/2009	115.00	2/12/2009
Muzak, LLC (Muzak Finance)	Senior notes	10.00	2/15/2009	220.00	2/12/2009
Muzak, LLC (Muzak Holdings, LLC)	Senior discount	13.00	3/15/2010	75.00	2/12/2009
Young Broadcasting, Inc.	Senior sub.	8.75	1/15/2014	140.00	2/13/2009
Young Broadcasting, Inc.	Senior sub.	10.00	3/1/2011	345.70	2/13/2009

Defaulted Corporate Straight Bond Issues, 3Q 09 (Continued)

Company	Bond Issue	Coupon (%)	Maturity Date	Outstanding Amount (\$MM)	Default Date
U.S. Shipping Partners, LP	Senior secured	13.00	8/15/2014	100.00	2/15/2009
American Achievement Grp Hldg Corp.	Senior unsecured	12.75	10/1/2012	104.30	2/25/2009
Spancion, LLC ^a	Senior secured	4.39	6/1/2013	625.00	3/1/2009
Independencia International S.A.	Senior unsecured	9.88	1/31/2017	225.00	3/2/2009
Independencia International S.A.	Senior unsecured	9.88	5/15/2015	300.00	3/2/2009
Freescale Semiconductor, Inc. ^a	Senior unsecured	5.87	12/15/2014	281.22	3/10/2009
Freescale Semiconductor, Inc.	Senior unsecured	8.88	12/15/2014	844.58	3/10/2009
Freescale Semiconductor, Inc.	Senior sub.	10.13	12/15/2016	958.08	3/10/2009
Milacron Escrow Corp.	Senior secured	11.50	5/15/2011	225.00	3/10/2009
Fleetwood Enterprises, Inc.	Senior sub.	14.00	12/15/2011	81.40	3/10/2009
Masonite Corp.	Senior sub.	11.00	4/6/2015	412.00	3/16/2009
Masonite Corp.	Senior sub.	11.00	4/6/2015	354.70	3/16/2009
Masonite Corp.	Senior sub.	11.00	4/6/2015	3.13	3/16/2009
True Temper Sports, Inc.	Senior sub.	8.38	9/15/2011	125.00	3/16/2009
Primus Telecommunication Group, Inc.	Senior secured	14.25	5/20/2011	67.09	3/16/2009
Primus Telecommunication Group, Inc.	Senior secured	14.25	5/20/2011	108.21	3/16/2009
Primus Telecommunication Group, Inc.	Senior notes	8.00	1/15/2014	191.00	3/16/2009
Great Lakes Chem. Corp. (Chemtura)	Senior unsecured	7.00	7/15/2009	370.00	3/18/2009
Chemtura Corp.	Senior unsecured	6.88	6/1/2016	500.00	3/18/2009
Witco Corp. (Chemtura Corp.)	Senior unsecured	6.88	2/1/2026	150.00	3/18/2009
OSI Restaurant Partners, LLC	Senior unsecured	10.00	6/15/2015	240.00	3/20/2009
Freescale Semiconductor, Inc.	Senior unsecured	9.13	12/15/2014	956.80	3/24/2009
Kraton Polymers, LLC	Senior sub.	8.13	1/15/2014	30.00	3/26/2009
CCH II, LLC	Senior unsecured	10.25	10/1/2013	238.51	3/27/2009
CCH II, LLC	Senior unsecured	10.25	10/1/2013	11.49	3/27/2009
CCH II, LLC	Senior unsecured	10.25	10/1/2013	364.20	3/27/2009
CCH I, LLC	Senior secured	11.00	10/1/2015	4.13	3/27/2009
CCH I, LLC	Senior secured	11.00	10/1/2015	457.88	3/27/2009
CCH II, LLC	Senior unsecured	10.25	10/1/2013	364.20	3/27/2009
Charter Communications Op., LLC	Senior secured	8.00	4/30/2012	1100.00	3/27/2009
Charter Communications Op., LLC	Senior secured	8.38	4/30/2014	770.00	3/27/2009
Charter Communications Op., LLC	Senior secured	10.88	9/15/2014	545.90	3/27/2009
CCO Holdings, LLC	Senior unsecured	8.75	11/15/2013	800.00	3/27/2009
CCH II, LLC	Senior unsecured	10.25	9/15/2010	360.93	3/27/2009
CCH II, LLC	Senior unsecured	10.25	9/15/2010	1498.58	3/27/2009
CCH I, LLC	Senior secured	11.00	10/1/2015	3524.01	3/27/2009
CCH I, LLC	Senior secured	11.00	10/1/2015	0.99	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	9.63	11/15/2009	25.56	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	9.92	4/1/2011	51.26	3/27/2009
CCH I, LLC	Senior unsecured	9.92	4/1/2014	470.91	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	10.00	4/1/2009	53.26	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	10.00	5/15/2011	69.54	3/27/2009
CCH I, LLC	Senior unsecured	10.00	5/15/2014	0.50	3/27/2009
CCH I, LLC	Senior unsecured	10.00	5/15/2014	298.60	3/27/2009
CCH II, LLC	Senior unsecured	10.25	1/15/2010	1.56	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	10.75	10/1/2009	4.32	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	11.13	1/15/2011	46.95	3/27/2009
CCH I, LLC	Senior unsecured	11.13	1/15/2014	150.70	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	11.75	1/15/2010	13.00	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	11.75	5/15/2011	54.23	3/27/2009
CCH I, LLC	Senior unsecured	11.75	5/15/2014	814.59	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	12.13	1/15/2012	75.17	3/27/2009
CCH I, LLC	Senior unsecured	12.13	1/15/2015	0.20	3/27/2009
Charter Communications Holdings, LLC	Senior unsecured	13.50	1/15/2011	59.66	3/27/2009
CCH I, LLC	Senior unsecured	13.50	1/15/2014	580.67	3/27/2009
NXP B.V.	Senior notes	9.50	10/15/2015	244.00	3/30/2009
NXP B.V. ^a	Senior secured	3.84	10/15/2013	154.00	3/30/2009
NXP B.V.	Senior secured	7.88	10/15/2014	22.00	3/30/2009
Sensata Technologies B.V.	Senior unsecured	8.00	5/1/2014	109.99	3/30/2009
Hexion U.S. Finance Corp. ^a	Senior secured	5.38	11/15/2014	80.00	3/31/2009
Hexion U.S. Finance Corp.	Senior secured	9.75	11/15/2014	92.00	3/31/2009

Defaulted Corporate Straight Bond Issues, 3Q 09 (Continued)

Company	Bond Issue	Coupon (%)	Maturity Date	Outstanding Amount (\$MM)	Default Date
Barrington Broadcasting, LLC	Senior sub.	10.50	8/15/2014	67.80	3/31/2009
Berry Plastics Corp.	Senior sub.	10.25	3/1/2016	24.00	3/31/2009
Idearc, Inc.	Senior unsecured	8.00	11/15/2016	2849.88	3/31/2009
Idearc, Inc.	Senior unsecured	8.00	11/15/2016	0.13	3/31/2009
Hollinger International Pub., Inc.	Senior unsecured	9.00	12/15/2010	9.40	3/31/2009
Medianews Group, Inc.	Senior sub.	6.88	10/1/2013	300.00	4/1/2009
Aventine Renewable Energy Holdings, Inc.	Senior unsecured	10.00	4/1/2017	300.00	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	5.50	7/1/2010	86.80	4/1/2009
Harrah's Operating Co., Inc. (Park Place Entertainment)	Senior sub.	7.88	3/15/2010	44.19	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	8.00	2/1/2011	1.44	4/1/2009
Harrah's Operating Co., Inc. (Park Place Entertainment)	Senior sub.	8.13	5/15/2011	47.09	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	5.38	12/15/2013	66.23	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	5.63	6/1/2015	274.13	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	6.50	6/1/2016	267.17	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	5.75	10/1/2017	202.95	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	10.75	2/1/2018	1,104.20	4/1/2009
Harrah's Operating Co., Inc.	Senior unsecured	10.75	2/1/2016	3,456.57	4/1/2009
155 E. Tropicana, LLC	Senior secured	8.75	4/1/2012	130.00	4/1/2009
CMP Susquehanna Corp.	Senior sub.	9.88	5/15/2014	175.46	4/3/2009
Ford Motor Co.	Senior unsecured	9.50	6/1/2010	155.56	4/3/2009
Ford Motor Co.	Senior unsecured	7.45	7/16/2031	1,904.97	4/3/2009
Ford Motor Co.	Senior unsecured	6.50	8/1/2018	120.94	4/3/2009
Ford Motor Co.	Senior unsecured	8.88	1/15/2022	92.09	4/3/2009
Ford Motor Co.	Senior unsecured	7.13	11/15/2025	86.35	4/3/2009
Ford Motor Co.	Senior unsecured	7.50	8/1/2026	56.63	4/3/2009
Ford Motor Co.	Senior unsecured	6.63	2/15/2028	20.71	4/3/2009
Ford Motor Co.	Senior unsecured	6.63	10/1/2028	103.49	4/3/2009
Ford Motor Co.	Senior unsecured	6.38	2/1/2029	171.20	4/3/2009
Ford Motor Co.	Senior unsecured	8.90	1/15/2032	231.92	4/3/2009
Ford Motor Co.	Senior unsecured	9.95	2/15/2032	69.67	4/3/2009
Ford Motor Co.	Senior unsecured	7.75	6/15/2043	76.89	4/3/2009
Ford Motor Co.	Senior unsecured	7.40	11/1/2046	39.78	4/3/2009
Ford Motor Co.	Senior unsecured	9.98	2/15/1947	26.94	4/3/2009
Ford Motor Co.	Senior unsecured	7.70	5/15/2097	196.78	4/3/2009
Energy Partners, Ltd.	Senior unsecured	0.00	4/15/2013	150.00	4/15/2009
Energy Partners, Ltd.	Senior unsecured	9.75	4/15/2014	300.00	4/15/2009
Broder Brothers Co.	Senior notes	11.25	10/15/2010	225.00	4/15/2009
Majestic Holdco, LLC	Senior secured	12.50	10/15/2011	63.50	4/15/2009
Six Flags, Inc.	Senior unsecured	9.75	4/15/2013	142.44	4/15/2009
French Lick Resorts & Casino, LLC	1st Mortgage	10.75	4/15/2014	31.70	4/15/2009
Abitibi Bowater, Inc. (Abitibi Cons Canada)	Senior secured	13.75	4/1/2011	413.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.) ^a	Senior unsecured	4.32	3/15/2010	234.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.)	Senior unsecured	6.50	6/15/2013	400.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons Finance)	Unsecured	7.88	8/1/2009	7.84	4/16/2009
Abitibi Bowater, Inc. (Bowater CAN Finance)	Senior notes	7.95	11/15/2011	600.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.)	Senior unsecured	9.00	8/1/2009	248.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.)	Senior unsecured	9.38	12/15/2021	200.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.)	Senior unsecured	9.50	10/15/2012	125.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons CAN) ^a	Senior unsecured	4.81	6/15/2011	200.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons CAN)	Senior unsecured	6.00	6/20/2013	350.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Consolidated, Inc.)	Senior unsecured	7.40	4/1/2018	100.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons, Inc.)	Senior unsecured	7.50	4/1/2028	250.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons Canada)	Senior unsecured	7.75	6/15/2011	200.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons Canada)	Senior unsecured	8.38	4/1/2015	450.00	4/16/2009
Abitibi Bowater, Inc. (Bowater, Inc.)	Senior unsecured	8.50	8/1/2029	250.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons, Inc.)	Senior unsecured	8.55	8/1/2010	395.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons, Inc.)	Senior unsecured	8.85	8/1/2030	450.00	4/16/2009
Abitibi Bowater, Inc. (Abitibi Cons Canada)	Senior unsecured	15.50	7/15/2010	292.97	4/16/2009
Abitibi Bowater, Inc. (Bowater Pulp & Paper Canada) ^b	Senior unsecured	10.26	1/15/2011	4.40	4/16/2009

Defaulted Corporate Straight Bond Issues, 3Q 09 (Continued)

Company	Bond Issue	Coupon (%)	Maturity Date	Outstanding Amount (\$MM)	Default Date
Abitibi Bowater, Inc. (Bowater Pulp & Paper Canada) ^b	Senior unsecured	10.50	6/15/2010	20.40	4/16/2009
Abitibi Bowater, Inc. (Bowater Pulp & Paper Canada) ^b	Senior unsecured	10.60	1/15/2011	70.00	4/16/2009
Abitibi Bowater, Inc. (Bowater Pulp & Paper Canada) ^b	Senior unsecured	10.63	6/15/2010	2.70	4/16/2009
Rouse Co.	Senior unsecured	3.63	3/15/2049	400.00	4/16/2009
Rouse Co.	Senior unsecured	5.38	11/26/2013	450.00	4/16/2009
Rouse Co. (Rouse Co. LP/TRC Co-Issr)	Senior unsecured	6.75	5/1/2013	800.00	4/16/2009
Rouse Co.	Senior unsecured	7.20	9/15/2012	400.00	4/16/2009
Rouse Co.	Senior unsecured	8.00	4/30/2009	200.00	4/16/2009
Dayton Superior Corp.	Senior sub.	13.00	6/15/2009	154.73	4/19/2009
Source Interlink Companies, Inc.	Senior unsecured	11.25	7/15/2015	465.00	4/21/2009
Chrysler, LLC	Senior unsecured	12.38	5/1/2020	20.06	4/30/2009
Sabre Holdings Corp.	Senior unsecured	7.35	8/1/2011	76.00	4/30/2009
Thornburg Mortgage, Inc.	Senior sub.	18.00	3/31/2015	115.53	5/1/2009
Thornburg Mortgage, Inc.	Senior unsecured	8.00	5/15/2013	305.00	5/1/2009
Thornburg Mortgage, Inc.	Senior sub.	18.00	3/31/2015	1,133.18	5/1/2009
Thornburg Mortgage, Inc.	Senior secured	18.00	3/31/2015	16.82	5/1/2009
Energy Partners, Ltd.	Senior notes	8.75	8/1/2010	4.50	5/1/2009
Panolam Industries Intl, Inc.	Senior sub.	10.75	10/1/2013	151.00	5/1/2009
Inn of the Mountain Gods Resort & Casino	Senior unsecured	12.00	11/15/2010	200.00	5/15/2009
Greentown China Holdings, Ltd.	Senior secured	9.00	11/8/2013	361.33	5/19/2009
Ion Media Networks, Inc.a	Secured	4.38	1/15/2012	400.00	5/19/2009
Ion Media Networks, Inc.	Senior secured	8.38	1/15/2013	448.07	5/19/2009
Harrah's Operating Co., Inc.	Senior secured	10.00	12/15/2015	26.65	5/20/2009
Harrah's Operating Co., Inc.	Senior secured	10.00	12/15/2018	38.12	5/20/2009
McClatchy Co. (Knight Ridder)	Senior unsecured	4.63	11/1/2014	20.00	5/21/2009
McClatchy Co. (Knight Ridder)	Senior unsecured	7.13	6/1/2011	130.00	5/21/2009
Visteon Corp.	Senior unsecured	12.25	12/31/2016	206.39	5/27/2009
Visteon Corp.	Senior unsecured	7.00	3/10/2014	450.00	5/27/2009
Visteon Corp.	Senior unsecured	8.25	8/1/2010	206.00	5/27/2009
Metaldyne Corp.	Senior sub.	11.00	6/15/2012	34.09	5/27/2009
Metaldyne Corp.	Senior unsecured	10.00	11/1/2013	4.60	5/27/2009
R.H. Donnelley Corp. (Dex Media West, LLC)	Senior unsecured	5.88	11/15/2011	8.72	5/28/2009
R.H. Donnelley Corp. (Dex Media, Inc.)	Senior unsecured	8.00	11/15/2013	500.00	5/28/2009
R.H. Donnelley Corp. (Dex Media West, LLC)	Senior unsecured	8.50	8/15/2010	385.00	5/28/2009
R.H. Donnelley Corp. (Dex Media, Inc.)	Senior unsecured	9.00	11/15/2013	388.24	5/28/2009
R.H. Donnelley Corp. (Dex Media, Inc.)	Senior discount	9.00	11/15/2013	361.00	5/28/2009
R.H. Donnelley Corp. (Dex Media West, LLC)	Senior sub.	9.88	8/15/2013	761.70	5/28/2009
R.H. Donnelley, Inc.	Senior unsecured	11.75	5/15/2015	412.87	5/28/2009
R.H. Donnelley Corp.	Senior unsecured	6.88	1/15/2013	206.79	5/28/2009
R.H. Donnelley Corp.	Senior discount	6.88	1/15/2013	320.78	5/28/2009
R.H. Donnelley Corp.	Senior discount	6.88	1/15/2013	483.49	5/28/2009
R.H. Donnelley Corp.	Senior unsecured	8.88	1/15/2016	1,012.84	5/28/2009
R.H. Donnelley Corp.	Senior unsecured	8.88	10/15/2017	4.00	5/28/2009
R.H. Donnelley Corp.	Senior unsecured	8.88	10/15/2017	1,235.26	5/28/2009
Hawaii Superferry, Inc.	US Government Gty	5.73	5/30/2027	68.72	5/30/2009
Hawaii Superferry, Inc.	US Government Gty	5.80	2/28/2030	71.01	5/30/2009
Caraustar Industries, Inc.	Senior unsecured	7.25	5/1/2010	29.00	5/31/2009
Caraustar Industries, Inc.	Senior unsecured	7.38	6/1/2009	189.75	5/31/2009
General Motors Corp.	Pass thru Certs	8.95	7/2/2009	19.18	6/1/2009
General Motors Corp.	Senior unsecured	6.75	5/1/2028	600.00	6/1/2009
General Motors Corp.	Senior unsecured	7.13	7/15/2013	1,000.00	6/1/2009
General Motors Corp.	Senior unsecured	7.20	1/15/2011	1,500.00	6/1/2009
General Motors Corp.	Senior unsecured	7.38	5/23/2048	425.00	6/1/2009
General Motors Corp.	Senior unsecured	7.40	9/1/2025	500.00	6/1/2009

Defaulted Corporate Straight Bond Issues, 3Q 09 (Continued)

Company	Bond Issue	Coupon (%)	Maturity Date	Outstanding Amount (\$MM)	Default Date
General Motors Corp.	Senior unsecured	7.70	4/15/2016	500.00	6/1/2009
General Motors Corp.	Senior unsecured	7.75	3/15/2036	377.38	6/1/2009
General Motors Corp.	Senior unsecured	8.10	6/15/2024	400.00	6/1/2009
General Motors Corp.	Senior unsecured	8.25	7/15/2023	1,250.00	6/1/2009
General Motors Corp.	Senior unsecured	8.38	7/15/2033	3,000.00	6/1/2009
General Motors Corp.	Senior unsecured	8.80	3/1/2021	524.79	6/1/2009
General Motors Corp.	Senior unsecured	9.40	7/15/2021	15.00	6/1/2009
General Motors Corp.	Senior unsecured	9.40	7/15/2021	299.80	6/1/2009
General Motors Corp.	Senior unsecured	9.45	11/1/2011	48.17	6/1/2009
Six Flags, Inc.	Senior unsecured	9.63	6/1/2014	314.79	6/1/2009
Six Flags, Inc.	Senior unsecured	9.63	6/1/2014	1.10	6/1/2009
Lear Corp.	Senior unsecured	8.75	12/1/2016	589.93	6/1/2009
Lear Corp.	Senior unsecured	8.50	12/1/2013	298.00	6/1/2009
Finlay Fine Jewelry Corp.	Senior unsecured	8.38	6/1/2012	40.60	6/1/2009
Hawker Beechcraft Acquisition Co., LLC	Senior unsecured	8.50	4/1/2015	89.10	6/2/2009
Hawker Beechcraft Acquisition Co., LLC	Senior unsecured	8.88	4/1/2015	109.87	6/2/2009
Hawker Beechcraft Acquisition Co., LLC	Senior sub.	9.75	4/1/2017	75.50	6/2/2009
William Lyon Homes Inc.	Senior unsecured	10.75	4/1/2013	2.38	6/5/2009
William Lyon Homes Inc.	Senior unsecured	7.50	2/15/2014	21.71	6/5/2009
William Lyon Homes Inc.	Senior unsecured	7.63	12/15/2012	29.05	6/5/2009
Affinity Group, Inc.	Senior sub.	9.00	2/15/2012	14.60	6/5/2009
Hexion Specialty Chemicals, Inc.	Senior unsecured	7.88	2/15/2023	10.78	6/8/2009
Hexion Specialty Chemicals, Inc.	Senior unsecured	8.38	4/15/2016	5.03	6/8/2009
Hexion Specialty Chemicals, Inc.	Senior unsecured	9.20	3/15/2021	5.29	6/8/2009
Momentive Performance Matls, Inc.	Senior unsecured	9.75	12/1/2014	48.40	6/9/2009
Momentive Performance Matls, Inc.	Senior unsecured	10.13	12/1/2014	140.90	6/9/2009
Momentive Performance Matls, Inc.	Senior sub.	11.50	12/1/2016	118.10	6/9/2009
Fontainebleau Las Vegas Hldgs, LLC	2nd Mortgage Notes	10.25	6/15/2015	675.00	6/9/2009
Six Flags, Inc.	Senior unsecured	8.88	2/1/2010	131.08	6/13/2009
Six Flags, Inc.	Senior unsecured	12.25	7/15/2016	400.00	6/13/2009
Buffalo Thunder Development Authority	Senior secured	9.38	12/15/2014	245.00	6/15/2009
Extended Stay America	Senior sub.	9.88	6/15/2011	8.15	6/15/2009
Interactive Health, LLC	Senior notes	7.25	4/1/2011	83.97	6/15/2009
Advanta Capital Trust 1	Junior sub.	8.99	12/17/2026	10.80	6/15/2009
McClatchy Co. (Knight Ridder)	Senior unsecured	4.63	11/1/2014	11.10	6/25/2009
McClatchy Co. (Knight Ridder)	Senior unsecured	5.75	9/1/2017	53.40	6/25/2009
McClatchy Co. (Knight Ridder)	Debentures	6.88	3/15/2029	23.80	6/25/2009
McClatchy Co. (Knight Ridder)	Senior unsecured	7.13	6/1/2011	3.80	6/25/2009
McClatchy Co. (Knight Ridder)	Debentures	7.15	11/1/2027	10.80	6/25/2009
Allis-Chalmers Energy, Inc.	Senior unsecured	8.50	3/1/2017	44.20	6/26/2009
Allis-Chalmers Energy, Inc.	Senior unsecured	9.00	1/15/2014	30.56	6/26/2009
Beazer Homes USA, Inc.	Senior unsecured	8.63	5/15/2011	5.00	6/30/2009
Beazer Homes USA, Inc.	Senior unsecured	8.38	4/15/2012	27.40	6/30/2009
Beazer Homes USA, Inc.	Senior unsecured	6.50	11/15/2013	17.01	6/30/2009
Beazer Homes USA, Inc.	Senior unsecured	6.88	7/15/2015	34.76	6/30/2009
Beazer Homes USA, Inc.	Senior unsecured	8.13	6/15/2016	24.33	6/30/2009
Medianews Group, Inc.	Senior sub.	6.38	4/1/2014	150.00	7/1/2009
NXP B.V.	Senior notes	9.50	10/15/2015	57.50	7/1/2009
NXP B.V. ^a	Senior secured	3.88	10/15/2013	121.60	7/1/2009
NXP B.V.	Senior secured	7.88	10/15/2014	90.10	7/1/2009
Lear Corp.	Senior unsecured	5.75	8/1/2014	400.00	7/7/2009
Rathgibson, Inc.	Senior unsecured	11.25	2/15/2014	200.00	7/13/2009
Hovnanian Enterprises, Inc.	Senior unsecured	8.21	4/1/2012	49.43	7/20/2009
Hovnanian Enterprises, Inc.	Senior unsecured	6.92	1/15/2014	51.92	7/20/2009
Georgia Gulf Corp.	Senior unsecured	9.50	10/15/2014	486.80	7/24/2009
Georgia Gulf Corp.	Senior sub.	10.75	10/15/2016	158.10	7/24/2009
Georgia Gulf Corp.	Senior unsecured	7.13	12/15/2013	91.00	7/24/2009
Unisys Corp.	Senior unsecured	6.88	3/15/2010	235.09	7/28/2009
Unisys Corp.	Senior unsecured	8.00	10/15/2012	331.96	7/28/2009

Defaulted Corporate Straight Bond Issues, 3Q 09 (Continued)

Company	Bond Issue	Coupon (%)	Maturity Date	Outstanding	
				Amount (\$MM)	Default Date
Unisys Corp.	Senior unsecured	8.50	10/15/2015	133.99	7/28/2009
Unisys Corp.	Senior unsecured	12.50	1/15/2016	59.38	7/28/2009
Hights Cross Communications, Inc.	Senior discount	12.50	8/15/2011	135.00	8/1/2009
Commercial Vehicle Group, Inc.	Senior notes	8.00	7/1/2013	52.20	8/3/2009
Cooper-Standard Automotive, Inc.	Senior unsecured	7.00	12/15/2012	200.00	8/3/2009
Cooper-Standard Automotive, Inc.	Senior sub.	8.38	12/15/2014	323.00	8/3/2009
American Achievement Group Hldg Corp.	Senior unsecured	12.75	10/1/2012	65.34	8/5/2009
Finlay Fine Jewelry Corp.	Senior secured	8.38	6/1/2012	173.98	8/5/2009
Finlay Fine Jewelry Corp.	Senior secured	11.38	6/1/2012	22.80	8/5/2009
Duane Reade, Inc.	Senior sub.	9.75	8/1/2011	143.29	8/6/2009
CIT Group, Inc.	Senior unsecured	0.97	8/17/2009	598.10	8/14/2009
Colonial BancGroup, Inc.	Subordinated notes	8.88	3/15/1938	250.00	8/14/2009
Colonial BancGroup, Inc. (Colonial Bank)	Subordinated notes	9.38	6/1/2011	56.80	8/14/2009
Colonial BancGroup, Inc. (Colonial Bank)	Subordinated notes	6.38	12/1/2015	280.00	8/14/2009
Colonial BancGroup, Inc. (CBG Florida REIT)	Unsecured	7.11	5/15/1949	300.00	8/14/2009
Novamerican Steel, Inc.	Senior secured	11.50	11/15/2015	315.00	8/14/2009
Hights Cross Communications, Inc. (Operating Co.)	Senior unsecured	11.75	8/15/2011	138.80	8/15/2009
Little Traverse Bay Bands Odawa Indians	Senior notes	10.25	2/15/2014	122.00	8/15/2009
Stanley-Martin Communities, LLC	Senior sub.	9.75	8/15/2010	133.32	8/15/2009
E Trade Financial Corp.	Senior unsecured	8.00	6/15/2011	429.62	8/19/2009
E Trade Financial Corp.	Senior unsecured	12.50	11/30/2014	1,310.00	8/19/2009
Readers Digest Association, Inc.	Senior sub.	9.00	2/15/2017	600.00	8/24/2009
Clear Channel Communications, Inc.	Senior unsecured	6.25	3/15/2011	20.20	8/27/2009
Clear Channel Communications, Inc.	Senior unsecured	4.40	3/15/2011	56.04	8/27/2009
Clear Channel Communications, Inc.	Senior unsecured	5.00	3/15/2012	19.95	8/27/2009
Clear Channel Communications, Inc.	Senior unsecured	5.75	1/15/2013	116.40	8/27/2009
Clear Channel Communications, Inc.	Senior unsecured	5.50	9/15/2014	199.55	8/27/2009
Beazer Homes USA, Inc.	Senior unsecured	8.63	5/15/2011	47.70	9/1/2009
Beazer Homes USA, Inc.	Senior unsecured	6.50	11/15/2013	13.50	9/1/2009
Beazer Homes USA, Inc.	Senior unsecured	6.88	7/15/2015	31.40	9/1/2009
Beazer Homes USA, Inc.	Senior unsecured	8.13	6/15/2016	31.70	9/1/2009
Samsonite Corp.	Senior sub.	8.88	6/1/2011	0.26	9/1/2009
MxEnergy Holdings, Inc. ^a	Senior unsecured	8.43	8/1/2011	158.79	9/18/2009
Velocity Express Corp.	Senior secured	18.00	12/30/2010	86.01	9/24/2009
Appleton Papers, Inc.	Senior sub.	9.75	6/15/2014	109.73	9/25/2009
Appleton Papers, Inc.	Senior unsecured	8.13	6/15/2011	91.94	9/25/2009
Citizens Republic Bancorp, Inc.	Subordinated	5.75	2/1/2013	108.00	9/25/2009
Newpage Corp.	Senior secured	10.00	5/1/2012	22.97	9/25/2009
Newpage Corp. ^a	Senior secured	6.73	5/1/2012	2.24	9/25/2009
Total				93,095	
Total Number of Issues					328
Total Number of Companies					103

^a FRN. ^b Yankee bond.

Source: NYU Salomon Center.

Appendix C

Distressed Exchanges, 3Q 09

Issuer Name	Distressed Exchange Date	Amount Exchanged (\$ Millions)
Bonten Media Acquisition Co.	1/30/2009	27.60
Intelsat Ltd.	2/11/2009	460.61
American Achievement Group Holding Corp.	2/25/2009	104.30
Freescale Semiconductor, Inc.	3/10/2009	3,040.67
OSI Restaurant Partners, LLC	3/20/2009	320.00
Kraton Polymers, LLC	3/26/2009	30.00
Sensata Technologies B.V.	3/30/2009	109.99
NXP B.V.	3/30/2009	420.00
Berry Plastics Corp.	3/31/2009	24.00
Hexion U.S. Finance Corp.	3/31/2009	172.00
Barrington Broadcasting, LLC	3/31/2009	67.80
Harrah's Operating Co., Inc.	4/01/2009	5,550.78
CMP Susquehanna Corp.	4/03/2009	175.46
Ford Motor Co.	4/03/2009	3,353.91
French Lick Resort & Casino, LLC	4/15/2009	31.70
Sabre Holdings Corp.	4/30/2009	76.00
Greentown China Holdings, Ltd.	5/19/2009	361.33
Harrah's Operating Co., Inc.	5/20/2009	64.77
McClatchy Co. (Knight Ridder)	5/21/2009	150.00
Hawker Beechcraft Acquisition Co., LLC	6/02/2009	274.47
William Lyon Homes, Inc.	6/05/2009	53.14
Affinity Group, Inc.	6/05/2009	14.60
Hexion Specialty Chemicals, Inc.	6/08/2009	21.10
Momentive Performance Materials, Inc.	6/09/2009	307.40
Advanta Capital Trust I	6/15/2009	10.80
Interactive Health, LLC	6/15/2009	83.97
McClatchy Co. (Knight Ridder)	6/25/2009	102.90
Allis-Chalmers Energy, Inc.	6/26/2009	74.76
Beazer USA Homes, Inc.	6/30/2009	108.50
NXP B.V.	7/01/2009	269.20
Hovnanian Enterprises, Inc.	7/20/2009	101.35
Georgia Gulf Corp.	7/24/2009	735.90
Unisys Corp.	7/28/2009	760.41
Commercial Vehicle Group, Inc.	8/03/2009	52.20
American Achievement Group Holding Corp.	8/05/2009	65.34
Duane Reade, Inc.	8/06/2009	143.29
CIT Group, Inc.	8/14/2009	598.10
E Trade Financial Corp.	8/19/2009	1,739.62
Clear Channel Communications, Inc.	8/27/2009	412.13
Beazer USA Homes, Inc.	9/01/2009	124.30
MxEnergy Holdings, Inc.	9/18/2009	158.79
Appleton Papers, Inc.	9/25/2009	201.66
Citizens Republic Bancorp, Inc.	9/25/2009	108.00
Newpage Corp.	9/25/2009	25.20
Total \$ Amount of Distressed Exchanges		\$21,008.04
Total Number of Issuers		39

Source: NYU Salomon Center.

Appendix D

Leveraged Loan Defaults, 3Q 09

<u>Company</u>	<u>Default Date</u>
United States Shipping, LLC	6 Jan 09
LyondellBasell Industries	6 Jan 09
Northeast Biofuels, LLC	14 Jan 09
Foamex International, Inc.	23 Jan 09
Smurfit-Stone Container Corp.	26 Jan 09
Spectrum Brands, Inc.	3 Feb 09
Cygnus Business Media, Inc.	10 Feb 09
Aleris International, Inc.	12 Feb 09
Young Broadcasting, Inc.	17 Feb 09
Bearing Point, Inc.	18 Feb 09
Masonite Corp.	16 Mar 09
General Growth Properties, Inc.	17 Mar 09
True Temper Sports, Inc.	17 Mar 09
Charter Communications Holdings, LLC	27 Mar 09
Idearc, Inc.	31 Mar 09
Riviera Holdings Corp.	1-Apr-09
Rhodes Homes	1-Apr-09
United Subcontractors, Inc.	1-Apr-09
MediaNews Group, Inc.	1-Apr-09
Airborne Health, Inc.	28-Apr-09
Mark IV Industries, Inc.	30-Apr-09
GSC Group, Inc.	5-May-09
November 2005 Land Investors, LLC	12-May-09
Atrium Companies, Inc.	18-May-09
JG Wentworth, LLC	19-May-09
Paxson Communications Television, Inc.	20-May-09
Visteon Corp.	28-May-09
Metaldyne Corp.	28-May-09
R.H. Donnelley Corp.	29-May-09
General Motors Corp.	1-Jun-09
Fontainebleau Resorts, LLC	10-Jun-09
Six Flags, Inc.	14-Jun-09
Building Materials Holding Corp.	16-Jun-09
Wembley	23-Jun-09
Express Energy Services Operating, LP	2-Jul-09
Panolam Industries International, Inc.	2-Jul-09
Lear Corp.	1-Jul-09
J.L. French Automotive Castings, Inc.	13-Jul-09
New Vision Television, LLC	14-Jul-09
Euramax International	14-Jul-09
Wilton Paper Crafts, Inc.	20-Jul-09
Hicks Sports Group, LLC	31-Jul-09
CanWest Media, Inc.	31-Jul-09
Cooper Standard Automotive, Inc.	3-Aug-09
Dynea North America	10-Aug-09
Readers Digest Association, Inc.	25-Aug-09
Trident Exploration Corp.	9-Sep-09
Stallion Oilfield Services, Ltd	21-Sep-09
Targus Group International, Inc.	30-Sep-09
Total Number of Companies	49

Source: S&P LCD.

Appendix E

Figure 25. 3Q 09 Chapter 11 Filings by Liability Size – Liabilities Greater Than \$100 Million (Dollars in Millions)

Company	Date of Filing	Liabilities (\$)
General Motors Corp.	Jun-09	172,810.00
Chrysler, LLC	Apr-09	55,200.00
General Growth Properties, Inc.	Apr-09	27,293.73
Thornburg Mortgage, Inc.	May-09	24,700.00
Charter Communications, Inc.	Mar-09	24,185.67
Lyondell Chemical Co.	Jan-09	19,337.00
R.H. Donnelley Corp.	May-09	12,374.08
Nortel Networks, Inc.	Jan-09	10,867.00
Idearc, Inc.	Mar-09	9,515.00
Abitibi Bowater, Inc.	Apr-09	8,783.00
Extended Stay America, Inc.	Jun-09	7,600.00
Station Casinos, Inc.	Jul-09	6,482.64
Smurfit-Stone Container Corp.	Jan-09	5,582.00
Visteon Corp.	May-09	5,324.03
Lear Corp.	Jul-09	4,536.00
Spectrum Brands, Inc.	Feb-09	4,445.81
Aleris International, Inc.	Feb-09	4,233.60
Six Flags, Inc.	Jun-09	3,431.65
Reader's Digest Association, Inc.	Aug-09	3,400.00
Masonite Corp.	Mar-09	2,641.59
Spansion, Inc.	Mar-09	2,398.00
BearingPoint, Inc.	Feb-09	2,231.84
Source Interlink Companies, Inc.	Apr-09	1,995.50
Ion Media Networks, Inc.	May-09	1,936.00
Cooper Standard Holdings, Inc.	Aug-09	1,785.04
Trump Entertainment Resorts	Feb-09	1,737.73
Samsonite Corp.	Sep-09	1,500.00
Opus West, LP	Jul-09	1,460.00
Hayes Lemmerz International, Inc.	May-09	1,405.20
Herbst Gaming, Inc.	Mar-09	1,241.94
Tronox, Inc.	Jan-09	1,221.60
Freedom Communications, Inc.	Sep-09	1,077.00
Magnachip Semiconductor, LLC	Jun-09	1,041.00
Tarragon Corp.	Jan-09	1,035.58
Pliant Corp.	Feb-09	1,032.63
Chemtura Corp.	Mar-09	1,020.00
^a BNC Mortgage, LLC	Jan-09	1,000.00
^a Qimonda N.A. Corp.	Feb-09	1,000.00
^a Mark IV Industries, Inc.	Apr-09	1,000.00
^a Fontainebleau Las Vegas Holdings, LLC	Jun-09	1,000.00
^a Crescent Resources, LLC	Jun-09	1,000.00
^a Sea Launch Co., LLC	Jun-09	1,000.00
^a Taylor, Bean & Whitaker Mortgage Corp.	Aug-09	1,000.00
Young Broadcasting, Inc.	Feb-09	980.43
Magna Entertainment Corp.	Mar-09	958.59
Wl Homes, LLC	Feb-09	937.00
Apex Silver Mines Ltd.	Jan-09	930.91
Metaldyne Corp.	May-09	929.00
Sun-Times Media Group, Inc.	Mar-09	801.00
^b Milacron, Inc.	Mar-09	752.00
^b Bodie Electrical Contractors of FL, Inc.	Jan-09	750.00
^b Good Samaritan Hospice USA, Inc.	Feb-09	750.00
^b Primus Telecommunication Group, Inc.	Mar-09	750.00
^b DBSD North America, Inc.	May-09	750.00
^b Plant Insulation Co.	May-09	750.00
^b UTGR, Inc.	Jun-09	750.00
^b Eastwind Maritime, Inc.	Jun-09	750.00

Figure 25. 3Q 09 Chapter 11 Filings by Liability Size – Liabilities Greater Than \$100 Million (Dollars in Millions) (Continued)

Company	Date of Filing	Liabilities (\$)
^b CCS Medical, Inc.	Jul-09	750.00
^b Trident Resources Corp.	Sep-09	750.00
Energy Partners Ltd.	May-09	708.37
Journal Register Co.	Feb-09	706.27
Star Tribune Holdings Corp.	Jan-09	661.10
Fleetwood Enterprises, Inc.	Mar-09	623.55
US Shipping Partners, LP	Apr-09	606.53
Merisant Worldwide, Inc.	Jan-09	560.70
BankUnited Financial Corp.	May-09	559.74
Silicon Graphics, Inc.	Apr-09	526.55
Muzak Holdings, LLC	Feb-09	503.00
Aventine Renewable Energy Holdings, Inc.	Apr-09	490.66
Building Materials Holding Corp.	Jun-09	481.31
Sportsman's Warehouse, Inc.	Mar-09	452.10
Transmeridian Exploration, Inc.	Mar-09	451.68
Vineyard National Bancorp.	Jul-09	449.77
Eddie Bauer Holding, Inc.	Jun-09	426.71
Dayton Superior Corp.	Apr-09	405.87
Pacific Energy Resources, Ltd.	Mar-09	398.00
Finlay Enterprises, Inc.	Aug-09	385.48
Barzel Industries, Inc.	Sep-09	384.60
Colonial Bancgroup, Inc.	Aug-09	380.00
Foamex International, Inc.	Feb-09	379.71
Caraustar Industries, Inc.	May-09	376.85
Pacific Ethanol, Inc.	May-09	347.93
Arclin US Holdings, Inc.	Jul-09	347.30
Meruelo Maddux Properties, Inc.	Mar-09	342.02
Crusader Energy Group, Inc.	Mar-09	325.84
Guaranty Financial Group, Inc.	Aug-09	323.41
TXCO Resources, Inc.	May-09	322.83
Rathgibson, Inc.	Jul-09	319.20
Fortunoff Holdings, LLC	Feb-09	305.80
Broadstripe, LLC	Jan-09	303.64
Midway Games, Inc.	Feb-09	281.03
Hartmarx Corp.	Jan-09	261.22
^c Recycled Paper Greetings	Jan-09	250.00
^c Goody's, LLC	Jan-09	250.00
^c ARG Enterprises, Inc.	Jan-09	250.00
^c Shane Co.	Jan-09	250.00
^c Hereford Biofuels Holdings, LLC	Jan-09	250.00
^c Fulton Homes Corp.	Jan-09	250.00
^c Cascade Grain Products, LLC	Jan-09	250.00
^c Renew Energy, LLC	Jan-09	250.00
^c Ennis Homes, Inc.	Feb-09	250.00
^c Bruno's Supermarkets, LLC	Feb-09	250.00
^c Philadelphia Newspapers, LLC	Feb-09	250.00
^c Ritz Camera Centers, Inc.	Feb-09	250.00
^c Ennstone, Inc.	Feb-09	250.00
^c CCI Funding I, LLC	Feb-09	250.00
^c Regal Jets, LLC	Feb-09	250.00
^c GTS Property Portfolios B-3, LLC	Mar-09	250.00
^c G.I. Joe's Holding Corp.	Mar-09	250.00
^c FRGR Managing Member, LLC	Mar-09	250.00
^c Gulfstream Apartment Portfolio, LLC	Mar-09	250.00
^c Forum Health Outreach Laboratories, Inc.	Mar-09	250.00
^c Drug Fair Group, Inc.	Mar-09	250.00
^c Greenbrier Hotel Corp.	Mar-09	250.00
^c Indalex Holdings Finance, Inc.	Mar-09	250.00
^c MMC Precision Holdings Corp.	Mar-09	250.00
^c Bi-Lo, LLC	Mar-09	250.00

Figure 25. 3Q 09 Chapter 11 Filings by Liability Size – Liabilities Greater Than \$100 Million (Dollars in Millions) (Continued)

Company	Date of Filing	Liabilities (\$)
° United Subcontractors, Inc.	Mar-09	250.00
° Bethany Rolling Hills, LLC	Apr-09	250.00
° Nexpak Corp.	Apr-09	250.00
° L.A. Hotel Venture, LLC	Apr-09	250.00
° Titlemax Holdings, LLC	Apr-09	250.00
° Eurofresh, Inc.	Apr-09	250.00
° Amaravathi Ltd. Partnership	Apr-09	250.00
° Park Lane I, LLC	Apr-09	250.00
° Banex 1, LLC	Apr-09	250.00
° Accredited Home Lenders Holding	May-09	250.00
° Crown Village Farm, LLC	May-09	250.00
° Filene's Basement, Inc.	May-09	250.00
° Hill Country Galleria, LP	May-09	250.00
° Coyotes Hockey, LLC	May-09	250.00
° Dewey Ranch Hockey, LLC	May-09	250.00
° AGT Crunch Acquisition, LLC	May-09	250.00
° Crucible Materials Corp.	May-09	250.00
° White Energy, Inc.	May-09	250.00
° November 2005 Land Investors, LLC	May-09	250.00
° River Woods, LLC	May-09	250.00
° Trilogy Development Co., LLC	May-09	250.00
° J.G. Wentworth	May-09	250.00
° H Holding, Inc.	May-09	250.00
° Carver Italia, LLC	Jun-09	250.00
° American Housing Foundation	Jun-09	250.00
° MIG, Inc. (Metromedia Intl Group, Inc.)	Jun-09	250.00
° First Republic Group Realty, LLC	Jun-09	250.00
° Provident Royalties, LLC	Jun-09	250.00
° 2008 Asset Holding Corp.	Jun-09	250.00
° Global Safety Textiles Holdings, LLC	Jun-09	250.00
° Phoenix Kingdom II, LLC	Jul-09	250.00
° Basha's, Inc.	Jul-09	250.00
° J.L. French Automotive Castings, Inc.	Jul-09	250.00
° NV Broadcasting, LLC	Jul-09	250.00
° Ennis Land Development, Inc.	Jul-09	250.00
° Protostar Ltd.	Jul-09	250.00
° Commerceconnect Media Holdings, Inc.	Aug-09	250.00
° Escada (USA), Inc.	Aug-09	250.00
° Radlax Gateway Hotel, LLC	Aug-09	250.00
° Cabi Downtown, LLC	Aug-09	250.00
° Lifemasters Supported Self Care, Inc.	Sep-09	250.00
° Lewis Equipment Co., Inc.	Sep-09	250.00
° Holley Performance Products, Inc.	Sep-09	250.00
° Galleria (Hong Kong) Ltd.	Sep-09	250.00
The Fairchild Corp.	Mar-09	228.10
Monaco Coach Corp.	Mar-09	208.82
Wilton Holdings, Inc.	Jul-09	208.00
Norwood Promotional Products Holdings, Inc.	May-09	205.00
Jazz Pharmaceuticals, Inc.	Dec-08	204.73
Gottschalks, Inc.	Jan-09	197.07
Cynergy Data, LLC	Sep-09	186.18
Tierra Del Sol Resort, Inc.	May-09	184.00
Oscient Pharmaceuticals Corp.	Jul-09	183.28
Northeast Biofuels, LP	Jan-09	174.00
Cabrini Medical Center	Jul-09	167.00
American Community Newspapers, LLC	Apr-09	151.80
Grede Foundries, Inc.	Jun-09	148.24
Hallwood Energy, LP	Mar-09	145.00
Baseline Oil & Gas Corp.	Aug-09	138.91
Aurora Oil & Gas Corp.	Jul-09	134.39

Figure 25. 3Q 09 Chapter 11 Filings by Liability Size – Liabilities Greater Than \$100 Million (Dollars in Millions) (Continued)

Company	Date of Filing	Liabilities (\$)
Proliance International, Inc.	Jul-09	133.50
Contech U.S., LLC	Jan-09	131.66
St. Mary's Hospital, Passaic, NJ	Mar-09	128.00
Velocity Express Corp.	Sep-09	120.60
Jackson Green, LLC	Jan-09	120.00
St. Lawrence Homes, Inc.	Feb-09	116.38
Saratoga Resources, Inc.	Mar-09	110.63
Nova Biosource Fuels, Inc.	Mar-09	110.54
Meadowcraft, Inc.	Mar-09	110.52
Anchor Blue Retail Group, Inc.	May-09	107.61
CIB Marine Bancshares, Inc.	Sep-09	107.21
Affiliated Foods Southwest, Inc.	May-09	101.50
Everest Holdings, LLC	Aug-09	100.00
Dixie Pellets, LLC	Sep-09	100.00
Total Liabilities		493,012.24

^a Liabilities >\$1 billion per petition. ^b Liabilities between \$500 million and \$1 billion according to petition. Midpoint of range used as estimate.

^c Liabilities of \$100-500 million, according to petition. Midpoint of range used as estimate.

Sources: NYU Salomon Center and New Generation Research.

Appendix F

Figure 26. Defaults by Industry, 3Q 09

Company	Industry
155 E. Tropicana, LLC	Casino Hotels
Abitibi Bowater, Inc.	Paper Mills
Advanta Capital Trust 1	Personal Credit Institutions
Affinity Group, Inc.	Amusement & Recreation Services
Aleris International, Inc.	Secondary Smelting & Refining of Nonferrous Mtls
Allis-Chalmers Energy, Inc.	Oil, Gas Field Services
American Achievement Group Holding Corp.	Wholesale-Jewelry, Watches, Precious Stones & Metals
Appleton Papers, Inc.	Converted Paper & Paperboard Products
Arantes International, Ltd.	Beef Cattle Feedlots
Aventine Renewable Energy Holdings, Inc.	Industrial Organic Chemicals
Barrington Broadcasting, LLC	Television Broadcasting Stations
Beazer Homes USA, Inc.	Operative Builders
Berry Plastics Corp.	Plastic Products, NEC
Bonten Media Acquisition Co.	Television Broadcasting Stations
Broder Brothers Co.	Wholesale-Apparel, Goods & Notions
Buffalo Thunder Development Authority	Hotels & Motels
Caraustar Industries, Inc.	Paperboard Mills
Charter Communications Holdings, LLC	Cable & Other Pay Television Services
Chemtura Corp.	Plastic Material, Synth Resin/Rubber, Cellulos (No Glass)
Chrysler, LLC	Motor Vehicles & Passenger Car Bodies
CIT Group, Inc.	Finance Lessors
Citizens Republic Bancorp, Inc.	National Commercial Banks
Clear Channel Communications, Inc.	Radio Broadcasting Stations
CMP Susquehanna Corp.	Radio Broadcasting Stations
Colonial BancGroup, Inc.	State Commercial Banks
Commercial Vehicle Group, Inc.	Motor Vehicle Parts & Accessories
Cooper-Standard Automotive, Inc.	Motor Vehicle Parts & Accessories
Dayton Superior Corp.	Steel Pipes & Tubes
Duane Reade, Inc.	Drug Stores & Proprietary Stores
E Trade Fianancial Corp.	Savings Institution, Federally Chartered
Energy Partners Ltd.	Crude Petroleum & Natural Gas
Eurofresh, Inc.	Agricultural Operations
Extended Stay America, Inc.	Hotels & Motels
Finlay Fine Jewelry Corp.	Jewelry Stores
Fleetwood Enterprises, Inc.	Motor Homes
Fontainebleau Las Vegas Holdings, LLC	Hotels & Motels
Ford Motor Co.	Motor Vehicles & Passenger Car Bodies
Freescale Semincinductor, Inc.	Semiconductors & Related Devices
French Lick Resorts & Casino, LLC	Casino Hotels
General Motors Corp.	Motor Vehicles & Passenger Car Bodies
Georgia Gulf Corp.	Industrial Inorganic Chemicals
Greentown China Holdings, Ltd.	Land Subdividers and Developers, Except Cemetaryies
Hights Cross Communications, Inc.	Miscellaneous Publishing
Harrah's Operating Co., Inc.	Miscellaneous Amusements & Recreation
Hawaii Superferry, Inc.	Ferries
Hawker Beechcraft Acquisition Co., LLC	Aircraft & Parts
Hexion U.S. Finance Corp./Hexion Specialty Chemicals, Inc.	Plastics, Materials, Synth Resins & Nonvulcan Elastomers
Hollinger Publishing International, Inc.	Newspapers: Publishing or Publishing & Printing
Hovnanian Enterprises, Inc.	Operative Builders
Idearc, Inc.	Miscellaneous Publishing
Indalex Holding Corp.	Rolling, Drawing & Extruding of Non-ferrous Materials
Independencia International S.A.	Meat Products

Figure 26. Defaults by Industry, 3Q 09 (Continued)

Company	Industry
Inn of the Mountain Gods Resort & Casino	Miscellaneous Amusements & Recreation
Intelsat Ltd.	Communication Services, NEC
Interactive Health, LLC	Household Furniture
Ion Media Networks, Inc.	Television Broadcasting Stations
Kraton Polymers, LLC	Plastics, Materials, Synth Resins & Nonvulcan Elastomers
Lear Corp.	Motor Vehicle Parts & Accessories
Little Traverse Bay Bands Odawa Indians	Casino Hotels
Lyondell Chemical Co.	Industrial Organic Chemicals
Majestic Holdco, LLC	Casino Hotels
Masonite Corp.	Lumber & Wood Products (No Furniture)
McClatchy Co.	Newspapers: Publishing or Publishing & Printing
Medianews Group, Inc	Newspapers: Publishing or Publishing & Printing
Merisant Co.	Industrial Organic Chemicals
Metaldyne Corp.	Motor Vehicle Parts & Accessories
Milacron Escrow Corp.	Special Industry Machinery, NEC
Momentive Performance Materials, Inc.	Industrial Organic Chemicals
Muzak, LLC	Services - Business Services, NEC
MxEnergy Holdings, Inc.a	Natural Gas Distribution
New Asat Finance Ltd.	Semiconductors & Related Devices
Newpage Corp.	Paper Mills
Nortel Networks Ltd.	Telephone & Telegraph Apparatus
Novamerican Steel, Inc.	Steel Works, Blastfurnaces & Rolling & Finishing Mills
NXP B.V.	Semiconductors & Related Devices
OSI Restaurant Partners, LLC	Retail - Eating Places
Panolam Industries International, Inc.	Miscellaneous Furniture & Fixtures
Pliant Corp.	Plastics, Foil & Coated Paper Bags
Primus Telecommunication Group, Inc.	Telephone Communications (No Radiophone)
R.H. Donnelley Corp.	Miscellaneous Publishing
Rathgibson, Inc.	Steel Pipes & Tubes
Readers Digest Association, Inc.	Books: Publishing or Publishing & Printing
Rouse Co.	Operators of Non-Residential Buildings
Sabre Holdings Corp.	Transportation Services
Samsonite Corp.	Leather & Leather Products
Sensata Technologies B.V.	Industrial Instruments for Measurement, Display & Control
Six Flags, Inc.	Miscellaneous Amusements & Recreation
Smurfit-Stone Container Corp.	Paperboard Mills
Source Interlink Companies, Inc.	Direct Mail & Advertising Services
Spansion, LLC	Semiconductors & Related Devices
Spectrum Brands, Inc.	Miscellaneous Electrical Machinery, Equipment & Supplies
Stanley-Martin Communities, LLC	Operative Builders
Station Casinos, Inc.	Casino Hotels
Thornburg Mortgage, Inc.	Real Estate Investment Trusts
True Temper Sports, Inc.	Sporting & Athletic Goods, NEC
U.S. Shipping Partners, LP	Water Transportation
Unisys Corp.	Computer Integrated Systems Design
Velocity Express Corp.	Air Courier Services
Virgin River Casino Corp.	Real Estate Operators
Visteon Corp.	Motor Vehicle Parts & Accessories
Vitro SAB de CV	Glass Containers
William Lyon Homes, Inc.	Operative Builders
Young Broadcasting, Inc.	Television Broadcasting Stations

Source: NYU Salomon Center.

Appendix G

Figure 27. 2009 Emergences From Default (Dollars in Millions)

	Restructured Bonds (\$)
First Quarter	
Delta Financial Corp.	150
Key Plastics, LLC	115
Kimball Hill, Inc.	203
Sea Containers, Ltd.	272
Total First Quarter	\$740
Second Quarter	
Buffets Holdings, Inc.	300
Constar International, Inc.	395
Masonite Corp.	770
Motor Coach Industries Int'l, Inc.	152
Total Second Quarter	\$1,617
Third Quarter	
Bally Total Fitness Holding Corp.	479
Caraustar Industries, Inc.	219
Primus Telecommunications Group, Inc.	366
Propex, Inc.	150
Quebecor World (USA), Inc.	1,453
Spectrum Brands, Inc.	1,033
Tropicana Entertainment, LLC	960
WCI Communities, Inc.	525
Total Third Quarter	\$5,184
Total	\$8,181

Sources: New Generation Research and the NYU Salomon Center Defaulted Bonds Database.

