Risks and Rewards in High Yield Bonds

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What is a High Yield Bond?

- Bonds rated below the top 4 rating tiers by rating agencies (S&P, Moody's, Fitch)
- Also referred to as "non-investment grade", "speculative grade" or "junk bonds"
- Familiar High Yield Issuers*
 - Sprint Nextel
 - Chrysler
 - Liberty Mutual
 - Sears
 - Rite Aid
 - Sirius XM Radio

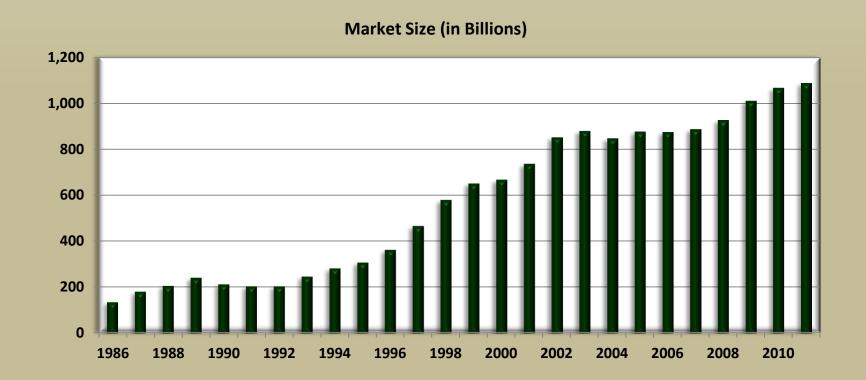
- Goodyear
- Toys R Us
- ◆ E*Trade
- Bank of America
- Hertz
- Burger King



^{*} Company names are for illustrative purposes only. Their inclusion is not meant to be an endorsement of any company, bond issue or security.

High Yield Market Overview

- Over \$1 trillion market
- New issuance of \$913 billion since 2009
- Inflows of over \$26.2 billion into the market YTD in 2012



Two Components of High Yield Return: Principal and Coupon

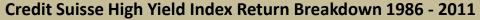
Coupon:

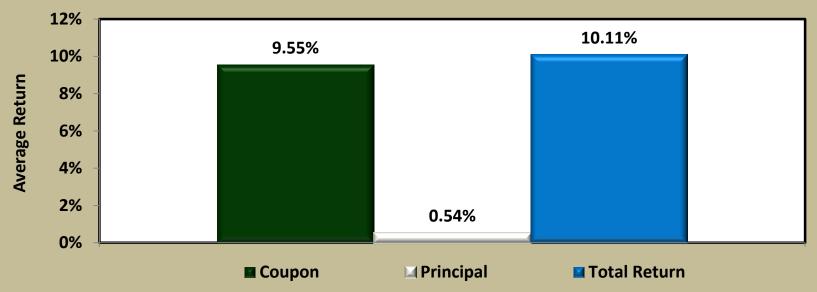
- Drives the return
- Cushions the downside
- Generates cash

Principal:

- Capital gains generated by purchasing bonds at a discount
- Active management is key to avoidance of defaults and principal loss

Total Return meets/exceeds actuarial assumptions!







High Yield Correlations Between Various Assets: 1980 - 2011

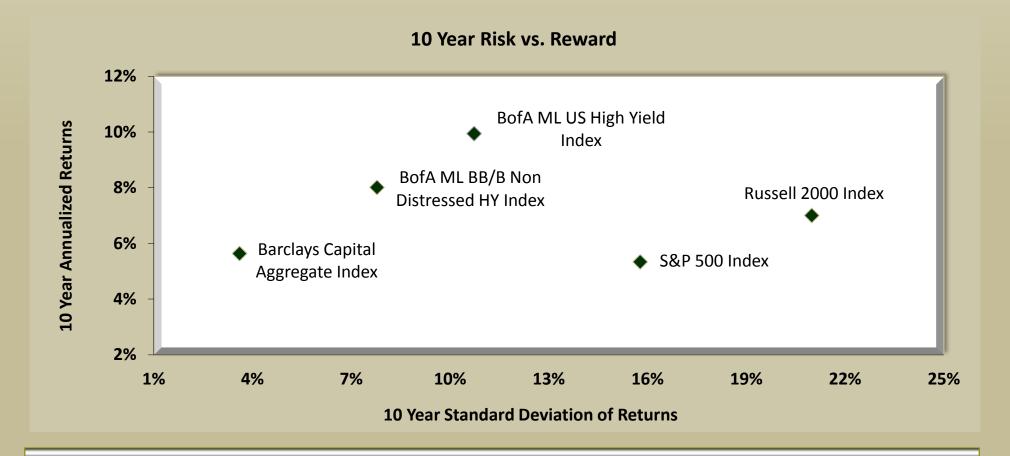
- Low correlation to other fixed income asset classes
- High yield has a higher correlation to equity, though experiences significantly less volatility

January 1980 to December 2011	US 30 Day TBill	US Inter Gov.	US Long Term Gov	ML Mortg	ML Corp.	Barclay Agg. Bond	S&P 500	Russell 2000	MSCI EAFE	Gold
High Yield Bonds	-0.02	0.25	0.22	0.42	0.61	0.45	0.55	0.57	0.50	0.08



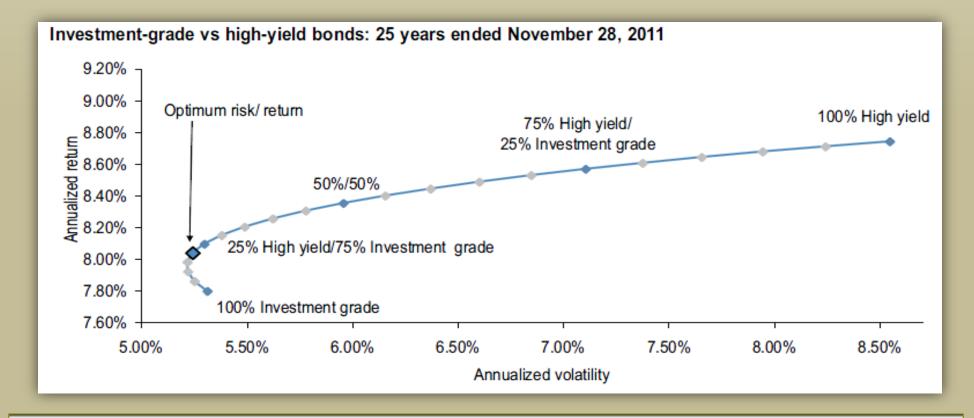
Risk vs. Reward

- Since 1980, High Yield has outperformed the Russell 2000 while slightly underperforming the S&P 500 with half the volatility
- High yield bonds have produced a negative calendar year return <u>only four times since 1980!</u>



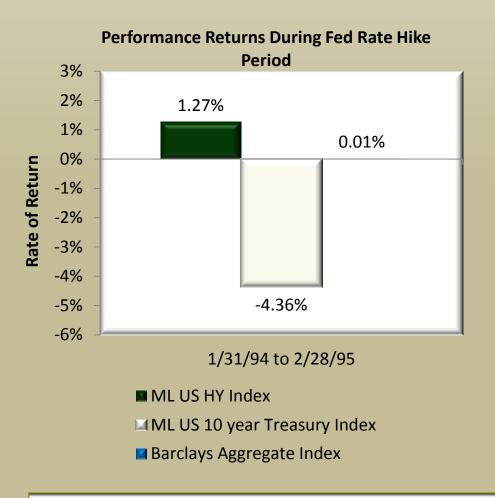
The Optimal Portfolio Allocation: Investment Grade and High Yield

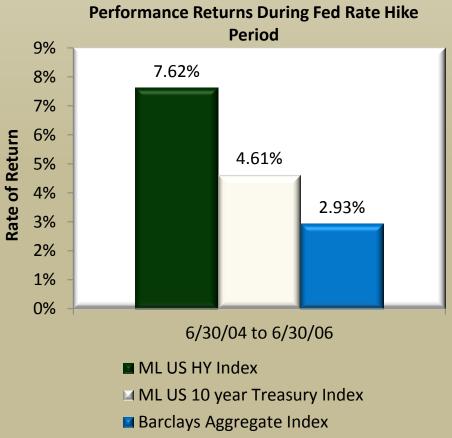
- With low default expectations through 2013, we see a distinct benefit of adding high yield to an investment grade portfolio
- Based on a 25 year analysis, the volatility of a portfolio declines until a mix of 15% high yield and 85% investment grade securities is reached



High Yield in a Rising Rate Environment

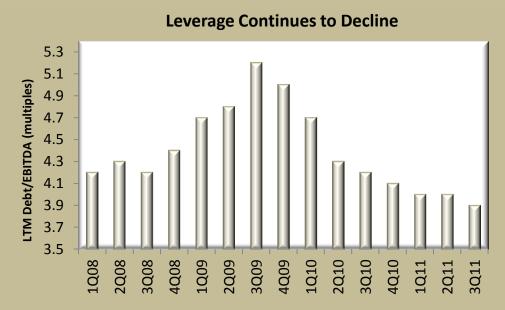
- High yield has historically performed well in rising rate environments
- These two periods were mid-cycle, during an improving economy

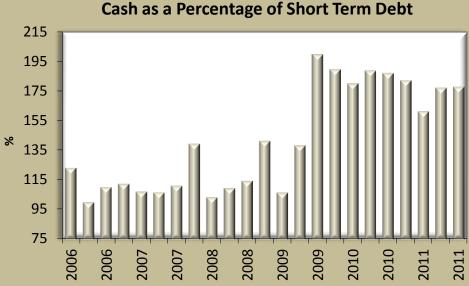




High Yield Fundamentals: U.S. Corporate Fundamentals Remain Solid

- Despite tepid GDP growth, credit metrics for high yield issuers have steadily improved
 - Leverage/debt outstanding has decreased
 - Cash on hand and interest coverage ratios have improved
 - Maturities have been pushed out lowering default risk
- Upside catalysts remain as corporate deleveraging/refinancing continues and strategic
 M&A increases



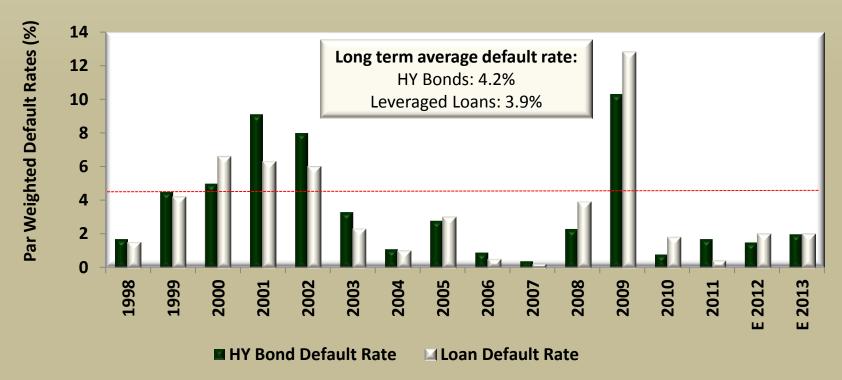


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High Yield Fundamentals: Default Rates Expected to Remain Near Record-Low Levels

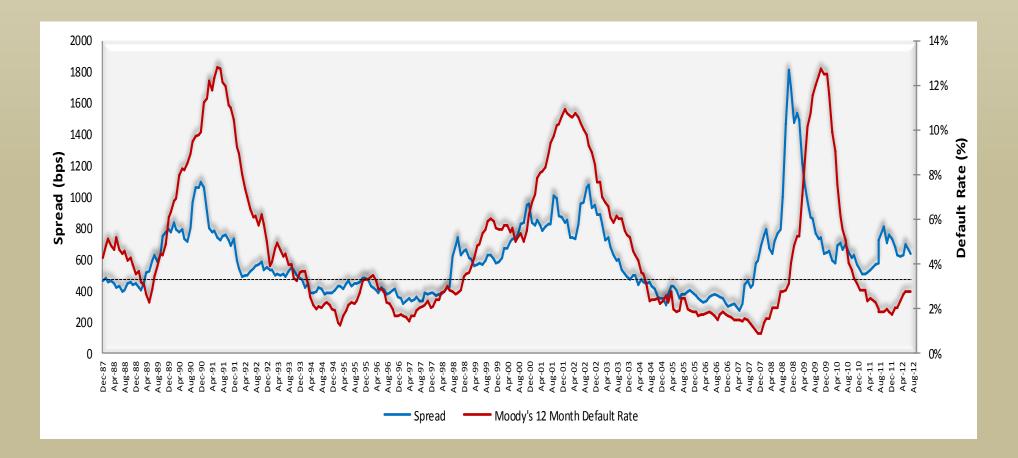
- Default rates are well below historic averages and are expected to remain low due to the lack of lower quality new issuance
- The primary risk of default rates rising stems from several large LBO's with maturities in
 2014 that appear unable to refinance

High Yield Bond and Loan Default Rates to Remain Low for the Next Two Years



Current Valuation

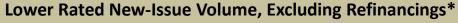
 Despite low yields relative to historic levels, the spread pickup versus treasuries adequately compensates investors for default risk

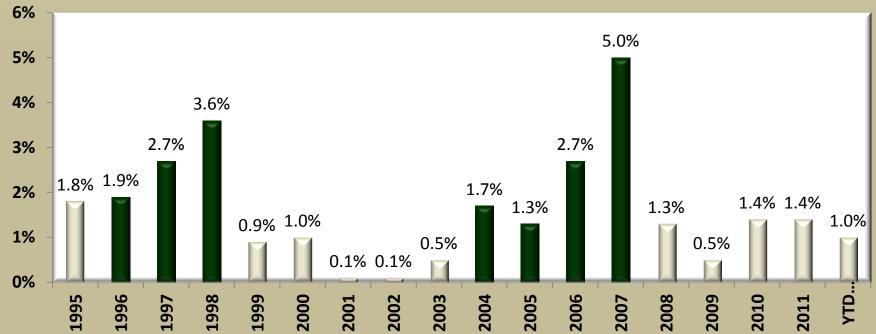




High Yield Technicals: New Issuance has been Very Healthy

- Low quality, non-refinance issuance has remained low
- 60% of issuance has been to refinance existing debt
- Speculative issuance for acquisitions and LBOs remains below the key 25% level
- We expect High Yield companies to be net beneficiaries of acquisition activity



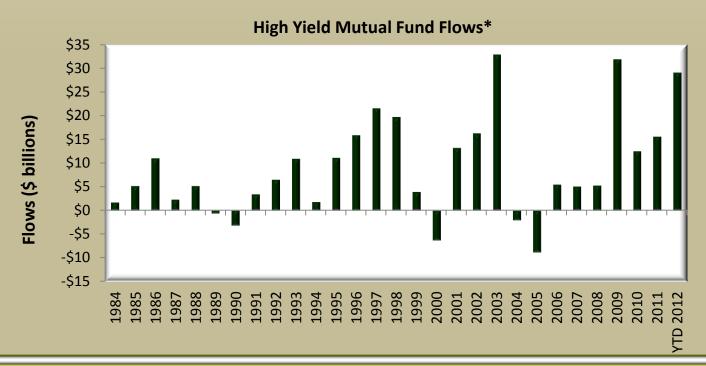


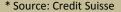




High Yield Technicals: Inflows

- With yields across most other fixed income assets near all-time lows, the current yield to worst of the high yield market of 6.8% is extremely attractive
- Inflows continue to be strong after a robust 2011
 - YTD, inflows into high yield bond funds are \$26.2 billion (compared to \$15.6 billion for 2011)
- The need for yield combined with stable U.S. economic data, strong corporate balance sheets and low default expectations will continue to fuel inflows







Outlook

Economy

- Moderate GDP growth
- Continued low interest rates and inflation remains in check
- Capital expenditure and employment improve, but unemployment remains elevated

High Yield Market

- Negative real interest rates and strong credit fundamentals fuel continued demand
- Default rate remains below long term average
- Upside catalyst from M&A as large, cash-rich companies spur growth through acquisitions
- Security selection will continue to drive returns and avoiding defaults is paramount
- Expect coupon type returns over the next 12-18 months



Risks/Rewards in High Yield Bonds

Risks:

- US recession
- Macro fears fuel a flight to quality
- Decreased liquidity of secondary market

Rewards:

- Generates high levels of cash/income
- Low correlation to other fixed income asset classes
- Increases diversification, lowers volatility and improves risk adjusted returns
- Lower sensitivity to rising interest rates
- Equity like returns with half the volatility
- Meets/exceeds actuarial assumptions!



The Case for a Strategic Allocation to High Yield – The Three P's

Protection:

- High yield bonds are senior in the capital structure
- Increases diversification and risk adjusted returns and lowers total portfolio volatility
- High coupon cushions downside during economic downturns
- Short duration nature offers protection from rising rates

Paid to Wait:

- High Yield is currently yielding 6.8% with an average coupon of 8.0%*
- Coupon has historically accounted for 94% of High Yield total returns**

Performance:

- Provides meaningful real returns due to high coupons
- Since 1980, high yield has produced equity-like returns with half the volatility
- Has historically outperformed other fixed income asset classes in rising rate environments
- Meets/exceeds actuarial assumptions



^{*} Source: BofA Merrill Lynch

^{**} Source: Credit Suisse

Performance Disclosure

This information should not be considered as a recommendation to purchase or sell a particular security.

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Appendix

High Yield Correlations Between Various Assets: 1980 - 2011

January 1980 to December 2011	US 30 Day TBill	US Inter. Gov.	US Long Term Gov	ML Mortg	ML Corp.	Barc Agg. Bond	Barc AAA Corp.	S&P 500	Russell 2000	DJ Wilsh 5000	MSCI EAFE	Gold	US Inflat	FTSE NAREI T - All
US Inter. Term Gov.	0.07													
US Long Term Gov	-0.01	0.89												
ML Mortgage	0.06	0.06	0.85	0.79										
ML Corp.	0.02	0.81	0.81	0.85										
Barclay Agg. Bond	0.07	0.93	0.90	0.94	0.94									
Barclay AAA Corp.	0.03	0.88	0.89	0.88	0.94	0.96								
S&P 500	0.03	0.06	0.09	0.17	0.31	0.20	0.21							
Russell 2000	-0.01	-0.04	-0.01	0.08	0.21	0.10	0.11	0.83						
DJ Wilshire 5000	0.02	0.04	0.07	0.15	0.30	0.18	0.19	0.99	0.90					
MSCI EAFE	-0.01	0.03	0.04	0.12	0.26	0.15	0.15	0.66	0.60	0.66				
Gold	-0.18	0.07	0.03	0.04	0.08	0.05	0.03	0.03	0.09	0.06	0.17			
US Inflation	0.39	-0.13	-0.21	-0.10	-0.12	-0.12	-0.17	-0.04	-0.05	-0.04	-0.06	0.03		
FTSE NAREIT - All	-0.04	0.08	0.08	0.15	0.32	0.20	0.20	0.58	0.67	0.61	0.48	0.10	-0.02	
High Yield Bonds	-0.02	0.25	0.22	0.42	0.61	0.45	0.43	0.55	0.57	0.58	0.50	0.08	0.00	0.59

Source: Credit Suisse

Risk/Reward versus Various Asset Classes

January 1980 to December 2011	Annualized Total Return	Annualized Standard Deviation	Highest Annual Return	Lowest Annual Return	Annual Median Return	# of Positive Return Years	# of Negative Return Years	Sharpe Ratio
US 30 Day TBill	4.90	0.97	13.97	0.05	4.81	32	0	0.00
US Int. Gov.	8.73	6.44	29.10	-3.59	9.33	29	3	0.62
US Long-term Gov.	10.24	12.29	40.36	-13.26	9.65	26	6	0.49
ML Mortgage	8.82	7.24	40.15	-1.60	7.31	31	1	0.57
ML Corp.	9.12	7.73	35.53	-6.82	9.11	29	3	0.58
Barclay Agg.	8.69	6.16	32.62	-2.92	7.86	30	2	0.64
Barclay AAA Corp.	8.65	8.12	39.32	-3.64	8.01	28	4	0.50
S&P 500	11.06	17.49	37.43	-37.00	15.43	26	6	0.43
Russell 2000	10.36	22.57	47.25	-33.79	17.41	22	10	0.34
DJ Wilshire 5000	10.90	17.91	36.40	-37.33	15.99	25	7	0.41
MSCI EAFE	9.38	19.78	69.94	-43.06	11.59	23	9	0.31
Gold	3.48	19.11	31.92	-32.15	2.65	19	13	0.01
US Inflation	3.44	1.25	12.40	0.09	3.14	32	0	-1.17
FTSE NAREIT All REITs	10.66	19.14	38.47	-37.34	15.16	25	7	0.39
High Yield Bonds	10.60	9.66	54.22	-26.17	10.93	28	4	0.63

High Yield Technicals: Historical Spreads

Monthly Credit Suisse High Yield Index Spread to Worst (bps)												Annual Performance Returns	End (of Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Credit Suisse High Yield Index	Moody's Default Rate	Fed Fund Rate
1988	480	458	467	447	417	424	391	406	443	451	434	448	13.66 %	3.48%	8.75 %
1989	419	406	451	517	525	591	629	583	636	745	771	790	0.39%	6.06%	8.25%
1990	774	837	794	773	793	736	718	798	970	1060	1058	1096	-6.38%	9.85%	7.00%
1991	1058	909	802	772	784	743	723	746	754	724	686	729	43.76%	10.43%	4.00%
1992	589	538	490	500	499	521	544	555	563	583	532	548	16.65%	4.94%	3.00%
1993	534	534	502	506	502	508	487	524	546	531	494	481	18.91%	3.59%	3.00%
1994	471	422	442	389	387	390	423	414	376	384	382	388	-0.98%	1.91%	5.50%
1995	406	426	424	414	447	461	426	446	447	457	482	484	17.38%	3.26%	5.50%
1996	473	426	418	402	385	417	398	375	383	404	412	355	12.42%	1.64%	5.25%
1997	347	315	335	352	334	339	357	337	335	381	373	386	12.63%	2.01%	5.50%
1998	384	371	378	377	395	417	416	619	691	743	624	657	0.58%	3.41%	4.75%
1999	659	613	605	559	564	574	564	594	632	628	601	573	3.28%	5.56%	5.50%
2000	581	608	668	671	714	728	733	773	829	837	949	959	-5.21%	6.05%	6.50%
2001	832	822	852	819	787	809	831	824	1012	993	877	868	5.80%	10.51%	1.75%
2002	834	854	744	739	736	823	954	968	1064	1080	929	947	3.10%	8.35%	1.25%
2003	887	884	825	727	742	676	625	593	599	536	509	486	27.94%	5.19%	1.00%
2004	469	494	495	440	474	456	448	456	430	408	357	346	11.95%	2.16%	2.25%
2005	354	307	373	431	430	406	353	379	377	393	398	388	2.26%	1.93%	4.25%
2006	364	350	334	325	329	359	370	377	371	357	350	318	11.91%	1.70%	5.25%
2007	300	305	316	302	271	315	435	462	423	438	575	589	2.65%	0.85%	4.25%
2008	690	760	790	674	636	711	764	794	1000	1471	1816	1706	-26.17%	3.10%	0.25%
2009	1480	1538	1495	1214	1096	978	867	858	764	731	738	634	54.22%	12.50%	0.25%
2010	643	657	591	572	688	708	660	698	642	613	632	571	14.42%	3.10%	0.25%
2011	534	508	505	511	536	569	580	723	811	703	759	728	5.47%	1.70%	0.25%
2012	680	624	621	629	699	660	640						8.54%	2.70%	0.25%

Average Spread: 603