

# 2004 Outlook for Credit: Approaching the Spread Floor

Mark Howard  
Global Credit Strategist

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LEHMAN BROTHERS

# U.S. Fundamentals: An Accelerating Recovery

- ◆ Economic rebound to continue
  - Our economists forecast **at least** 4% U.S. GDP growth in 1H04
- ◆ Strong economy to fuel S&P 500 corporate profit growth of 10%-12%
- ◆ Credit quality to improve further in 2004, esp. in 1H, but likely to stall (though not reverse) during 2H
- ◆ Absence of shocks to lead to increased IT spending, CAPEX, and M&A
- ◆ Management “animal spirits” to rise, leading corporate event risk higher; however, bondholder-unfriendly actions likely to be the exception

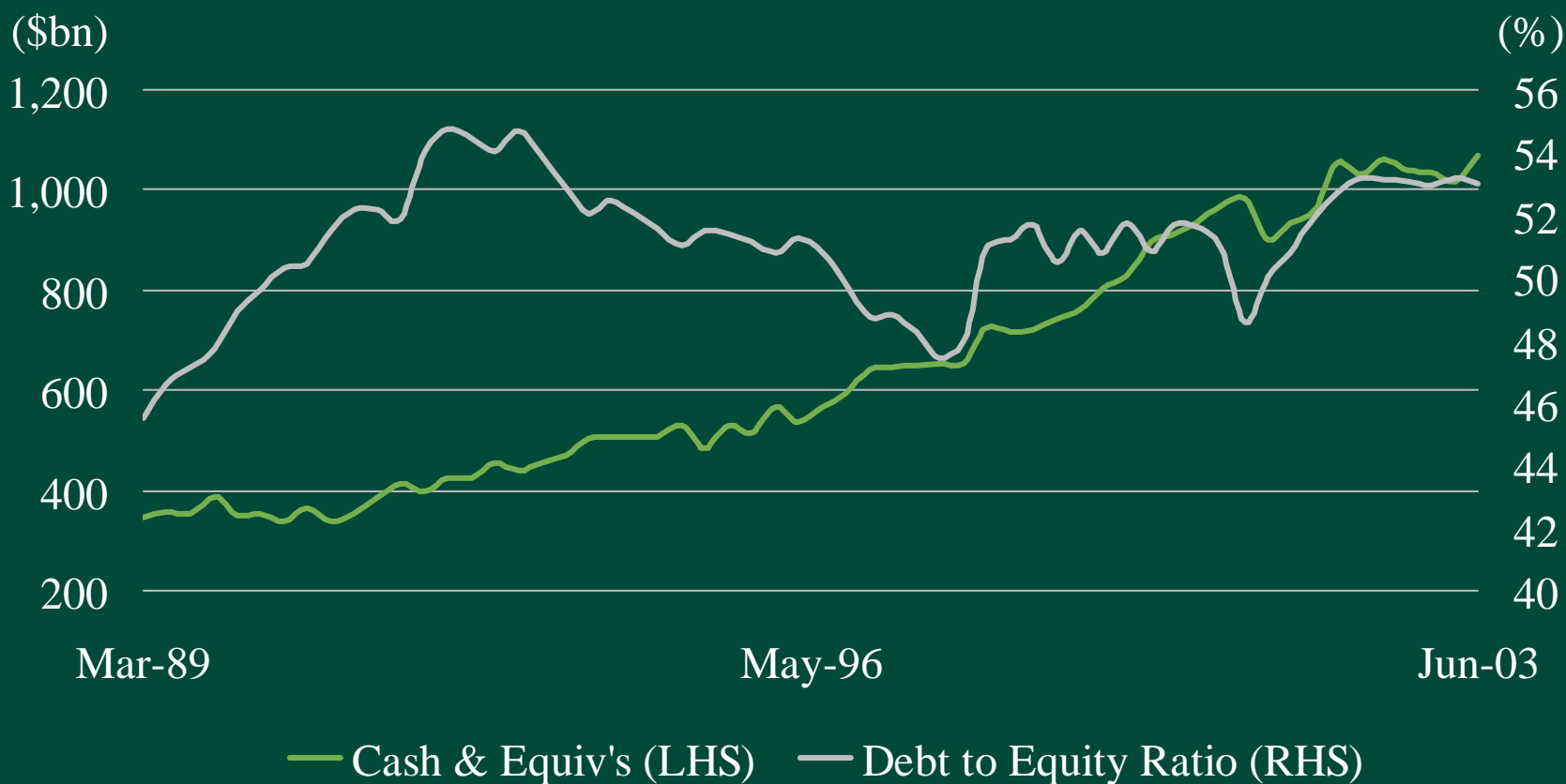
Avg Quarterly Growth Rates of Key Financial Measures (%)\*

	1999-2000 Boom	2001-2002 Bust	First-Half 2003 Early Recovery
Revenue	3.1	0.9	1.4
EBITDA	3.5	-0.8	1.9
Debt	4.9	1.5	0.0
CAPEX	2.6	-0.9	-1.6

\* Based on sample of 381 US industrial companies rated A to BB (110 A, 178 BBB, 93 BB) as of June 30, 2003. Rating based on market composites. Revenue, EBITDA, and CAPEX are trailing 12-month figures. Source: Fitch Ratings.

# Balance Sheets Starting to Improve

## Non-farm Non-financial Corporate Business Metrics



Source: Federal Reserve Flow of Funds.

# U.S. Technicals: Weaker, but Still Strong

## Demand Side

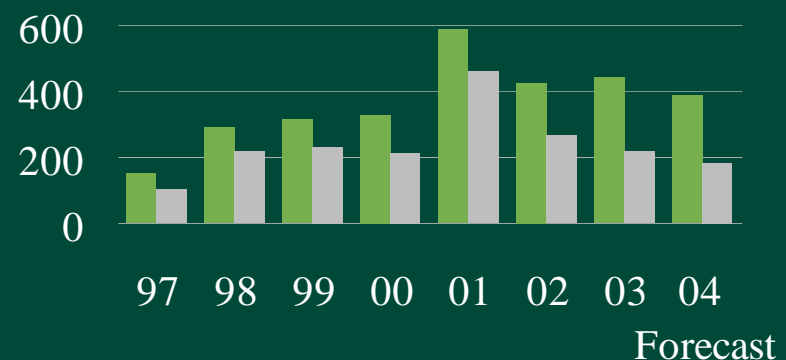
- ♦ Valuations still compelling relative to other asset classes (e.g. IG vs. MBS, HY vs. EMG)
- ♦ International demand for U.S. corp bonds should continue through 1H04
- ♦ Expect another record year for asset transfers by pension plan sponsors
- ♦ Hedge fund sponsorship should mature
- ♦ Insurance companies continue to search for yield and diversification opportunities

## Supply Side

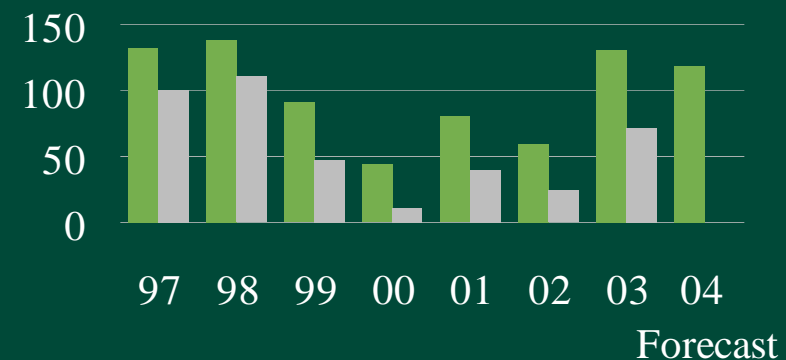
- ♦ IG: gross supply down 13%, to \$385 bn  
net supply down 17%, to \$184 bn
- ♦ HY: gross supply down 8-10%, to \$120 bn

Note: Supply Figures Are US Credit Strategy Estimates.

IG Gross and Net Fixed Rate Supply  
(\$ bn)



HY Gross and Net Fixed Rate Supply  
(\$ bn)



Gross Supply

Net Supply

# Credit Offers Better Relative Value

**Low reallocation risk from competing spread sectors**

	Index OAS				% of Credit Index OAS		
	Credit	MBS	Agency	ABS	MBS	Agency	ABS
8/94-7/97 Avg	59	52	18	44	89%	30%	75%
10/31/96	51	53	14	45	104%	28%	88%
1/31/97	52	44	14	39	86%	26%	75%
4/30/97	53	44	11	35	82%	20%	65%
7/31/97	46	40	8	37	86%	18%	80%
12/31/97	64	37	11	49	58%	17%	77%
3/31/98	69	48	13	48	69%	19%	69%
6/30/98	75	59	17	51	79%	23%	68%
8/31/98	119	86	29	73	72%	24%	61%
1/5/04	88	29	36	86	33%	41%	98%

# Sector Spread & Spread Factor Correlation with Treasury Curve (Long-Term Model)

## I. Industry Portfolio Spread Correlations with Treasury Curve Shifts

	AAA/AA	A	BBB
<b>FINANCIALS</b>			
Banking and Brokerage	-21%	-22%	-20%
Financial Companies, Insurance and REITS	-22%	-25%	-20%
<b>INDUSTRIALS</b>			
Basic Industries and Capital Goods	-20%	-33%	-28%
Consumer Cyclical	-26%	-31%	-24%
Consumer Non-Cyclical	-27%	-23%	-25%
Communication and Technology	-22%	-31%	-26%
Energy and Transportation	-30%	-30%	-31%
<b>UTILITIES</b>	-8%	-24%	-22%
<b>NON-CORPORATE</b>	-13%	-20%	-34%

## II. Industry Portfolio Spread Correlations with Treasury Curve Shifts

	AAA/AA	A	BBB
<b>FINANCIALS</b>			
Banking and Brokerage	9%	9%	18%
Financial Companies, Insurance and REITS	13%	23%	16%
<b>INDUSTRIALS</b>			
Basic Industries and Capital Goods	14%	16%	15%
Consumer Cyclical	9%	20%	24%
Consumer Non-Cyclical	15%	9%	8%
Communication and Technology	7%	12%	25%
Energy and Transportation	21%	17%	16%
<b>UTILITIES</b>	16%	19%	26%
<b>NON-CORPORATE</b>	-6%	15%	26%

## III. Additional Spread Factor Correlations with Treasury Curve Changes

	Treasury Shift	Treasury Twist
Credit Spread Twist (Steepening)	21%	-27%
Credit Spread Dispersion	-40%	35%

## IV. Effective Duration Multipliers for Industry / Rating Sectors

	AAA/AA	A	BBB
<b>FINANCIALS</b>			
Banking and Brokerage	92%	91%	83%
Financial Companies, Insurance and REITS	93%	88%	89%
<b>INDUSTRIALS</b>			
Basic Industries and Capital Goods	95%	91%	88%
Consumer Cyclical	94%	88%	81%
Consumer Non-Cyclical	93%	94%	91%
Communication and Technology	92%	88%	82%
Energy and Transportation	92%	91%	87%
<b>UTILITIES</b>	97%	92%	85%
<b>NON-CORPORATE</b>	97%	94%	76%



# Rates-Spreads Model: Implications for Credit Investors

- ◆ **Duration management of credit portfolios**
  - The effective sensitivity of credit bonds to interest rates is significantly less than that measured by modified duration
  - The spread component effectively “hedges” the interest rate component
  - Significant differences across industry/rating sectors
- ◆ **Cross-sector relative value from the curve**
  - Forecast the Treasury curve movements – current outlook: curve flattening
  - Translate into spread changes (assuming all else equal)
  - Rates outlook currently favors A/BBB Utilities, BBB Consumer Cyclicals, A Financials and BBB Communications and Technology
- ◆ **Intra-sector relative value from the curve**
  - Spread steepening/flattening trades
  - In-sector OAS compression/decompression trades
  - Current outlook: spread steepeners and OAS dispersion decrease



# What Changes Foreign Net Purchases?

## Krugman's Classical Example

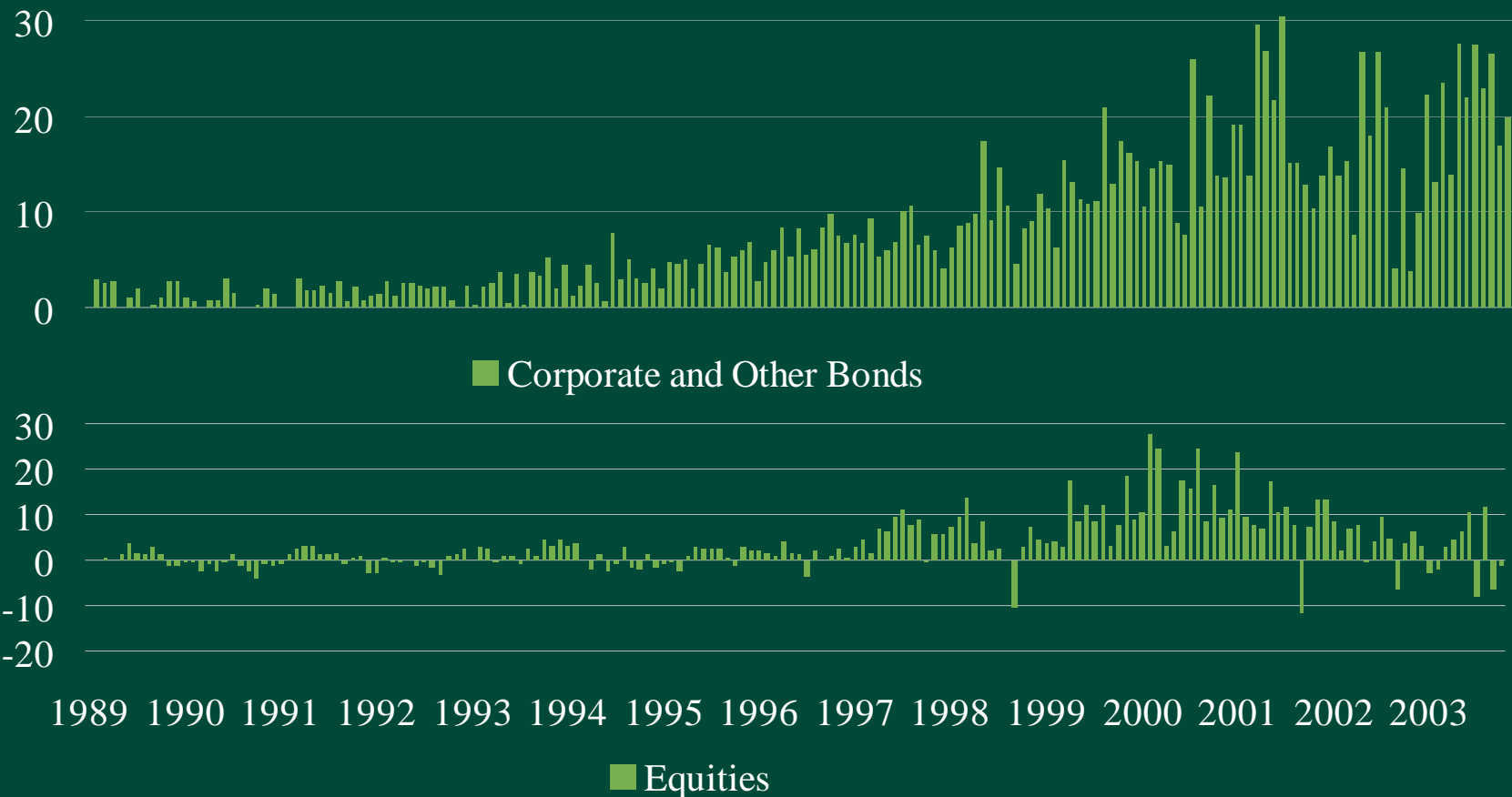
- ◆ Foreign buyers of the U.S. dollars being sent offshore via the current account deficit “lose confidence”
- ◆ Foreign exchange traders lower their bids
- ◆ The dollar depreciates on a trade-weighted basis
- ◆ A weaker dollar will, with a lag
  - Raise exports
  - Reduce imports
  - Narrow the current account deficit and thus the available dollars to be invested in U.S. assets



# Foreign Net Purchases Will Be Stable

## Corporates lack the cyclicalality of equity purchases

US\$ bn



Source: Department of the Treasury



# The Shock that Capped the '91-'97 Rally

## It started in Thailand...

- ◆ External to the U.S. economy: first Asia, then Russia
- ◆ Concentrated in higher-quality Sovereign sector
  - non-Corps were Aa2/AA vs. A2/A Corporate Bond Index average
  - Korea was AA-, Malaysia was A, even Indonesia was BBB
- ◆ VIX began trend increase in July 1997
- ◆ Market leverage was higher than today, and rising
- ◆ Lessons:
  - Locus of risk was outside of the core U.S. market
  - Relatively “safe” assets were affected, the inverse of a normal cycle
  - Liquidations in response to leverage cutoff affected broader market
  - Treasury yields were stable enough for “flight to quality”



# Secrets to Adding Alpha

## Fundamental Shifts in the Technical Backdrop

- ◆ Respect the Pension Fund Dynamic
  - Est. \$160 bn of Credit Transitioned Among Managers in 2003
  - Expect Asset Transfers to Be Even Higher in 2004
- ◆ Investment Philosophy Shift: Risk Budgeting on the Rise
- ➡ Material Market Implications:
  - Increased Focus on Benchmarks
  - Growth in Out-of-Index Strategies (HY, EMG, CDOs)
  - Heightened Application of Quantitative Models



# Monitoring Hedge Fund Activity in 2004

- ◆ With spreads much tighter, hedge funds will be much more active on the short side in selective names → expect more short squeezes when they are wrong
- ◆ Expect hedge funds to set up cheap market shorts using tight senior/sub relationships and tight curve relationships where available
- ◆ As more players with more capital chase fewer capital structure arbitrage opportunities, expect increased equity/equity volatility/credit correlation
- ◆ Hedge funds will use HY portfolio CDS and cash products to play the basis, increasing the correlation of that market with LIBOR yields
- ◆ With fewer opportunities in IG and HY bonds, hedge funds will be looking at other markets (ABS) and less liquid products (CTLs) for opportunities
- ◆ If spreads and volatility continue to decrease or stay stable, expect increased use of leverage to maintain returns – setting up increased risk from a 1998 style unwind trade



# 1H04 Outlook for U.S. High Yield

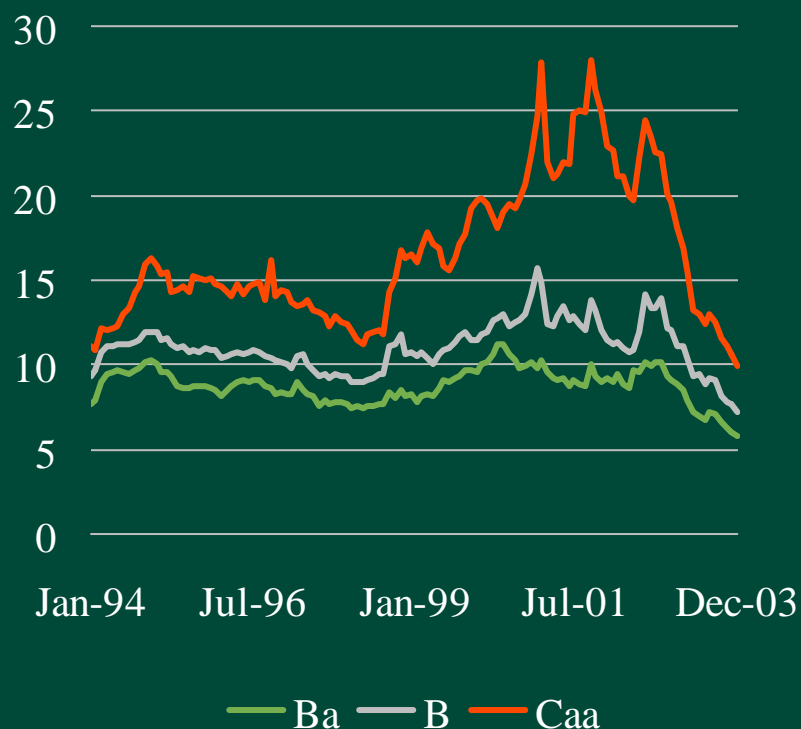
## Summary Themes, Forecasts, and Recommendations

- ◆ Total return on the H.Y. Index should reach 7-9% for the year, heavily skewed to the first and fourth quarters
- ◆ Strong fundamentals should drive continued improvement in defaults and recoveries
- ◆ We expect issuance to be flat or modestly lower compared to \$130 bn in 2003
- ◆ Demand trends remain robust (Hedge Funds, Insurance, Pensions, Int'l)
- ◆ Anticipate a modest “up in quality” trade during second quarter
- ◆ Hold potential rising stars as they cross over into IG – take advantage of high-grade buyers looking for yield
- ◆ Sell the richest Single B credits that won't garner sponsorship from X-over bid
- ◆ Monitor HY Structured Credit Market's Development

# Valuation from a Different Angle

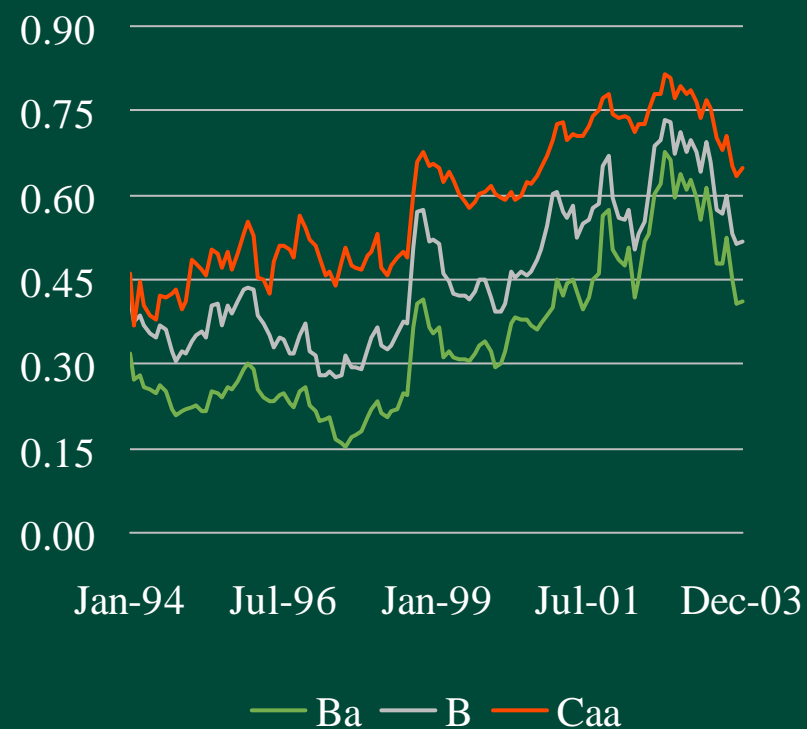
Yields are at all-time lows and spreads at 5-year tights, however...

Yield by Rating Category



...the spread component of yields are cheap compared to 10-year averages

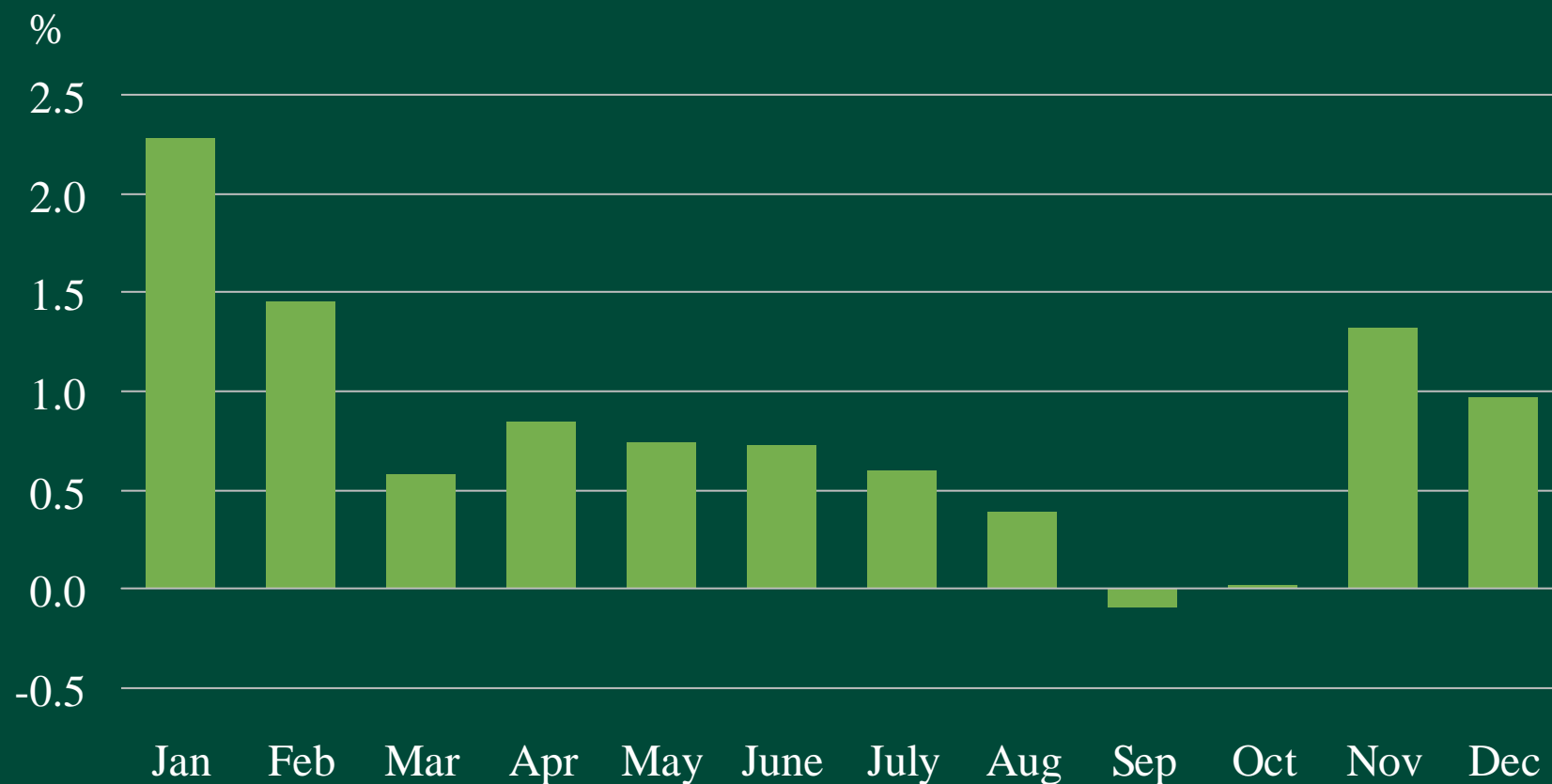
OAS as a % of Yld by Rating





# Seasonality Impacts High Yield Performance

## Average Monthly Total Return Since High Yield Index Inception (July 1983)



Total return on the HY Index should reach 7-9% for the year, heavily skewed to the 1st and 4th quarters.

# Diversification: The Upper Hand of Down-in-Quality

## Monthly Total Return Correlations July 1983 – December 2003

	High Yield	Ba	B	Caa	Cross- over	EM	U.S. Credit	S&P 500	Russell 2000	Govt	10yr Tsy	Lev. Loans
High Yield	1.000											
Ba	0.905	1.000										
B	0.980	0.854	1.000									
Caa	0.875	0.701	0.838	1.000								
Crossover <sup>(1)</sup>	0.855	0.970	0.752	0.644	1.000							
Emerging Markets <sup>(1)</sup>	0.505	0.466	0.493	0.391	0.446	1.000						
U.S. Credit	0.471	0.614	0.437	0.244	0.595	0.274	1.000					
S&P 500	0.503	0.512	0.502	0.395	0.512	0.535	0.340	1.000				
Russell 2000	0.530	0.502	0.526	0.457	0.471	0.507	0.113	0.732	1.000			
Government	0.240	0.393	0.209	0.034	0.297	0.066	0.906	0.198	-0.061	1.000		
10yr Treasury	0.217	0.376	0.185	0.014	0.270	0.041	0.905	0.183	-0.062	0.980	1.000	
Lev. Loans <sup>(2)</sup>	0.613	0.545	0.544	0.691	0.510	0.239	0.064	0.179	0.371	-0.229	-0.248	1.000

(1) EM & Crossover since January 1994.

(2) S&P/LSTA Leveraged Index since 1997.

# HY Structured Market Developments Are Positive

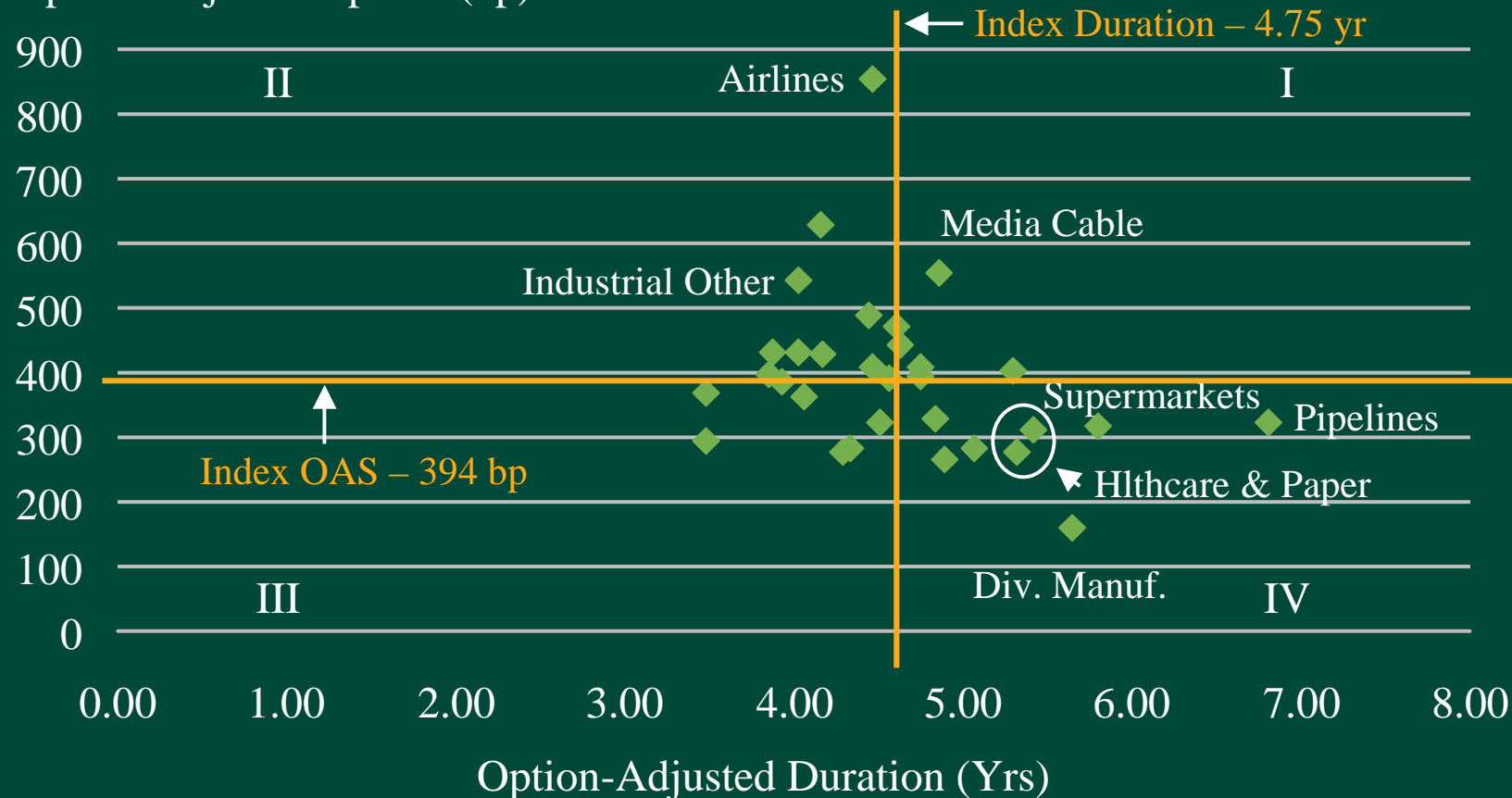
- ◆ Growth of H.Y. CDS market has initially improved secondary liquidity
- ◆ CDO bid should be negligible for bonds and declining for Leveraged Loans
- ◆ Investor bid related to TRAINS, CDX, IBOXX and other portfolio products is growing

# Treasury Sensitivity by Sector

## OA Spread vs. OA Duration

December 31, 2003

Option-Adjusted Spread (bp)



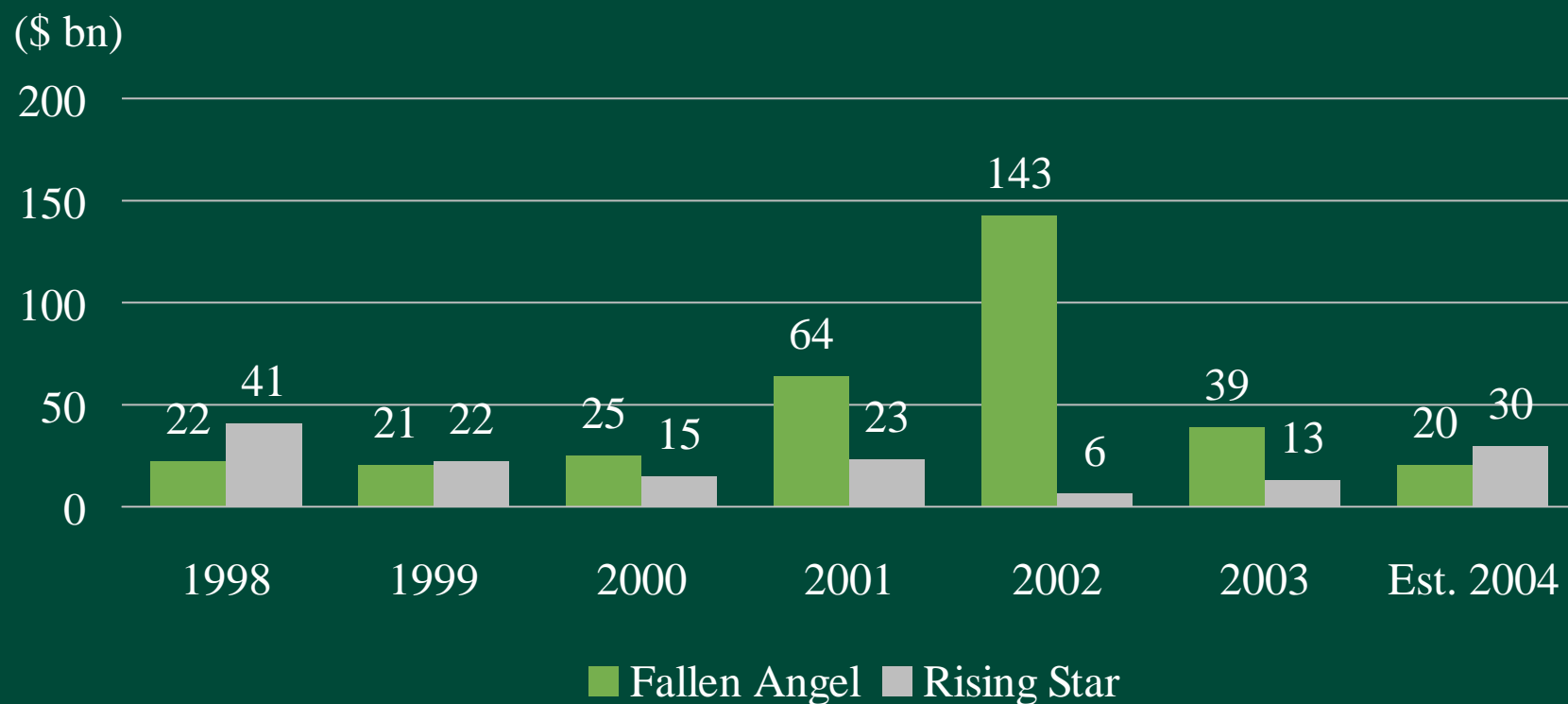
# Valuation Dynamics Support Research Analysts' Picks & Pans

## Tactical Sector Allocations: 3-Month Time Horizon December 31, 2003

Outperformers	Sensitivity Quadrant	Rel Yield	Underperformers	Sensitivity Quadrant	Rel Yield
Airlines	II	163%	Divers Manufacturing	IV	68%
Constr. Machinery	II	95%	Gaming	III	89%
Electrics	I	104%	Healthcare	IV	86%
Industrial Other	II	119%	Home Construction	III	82%
Media Cable	I	124%	Paper	IV	93%
Pipelines	IV	97%	Supermarkets	IV	92%
Wirelines	I	113%			

# Shifting Crossover Prospects

## U.S. Fallen Angels and Rising Stars

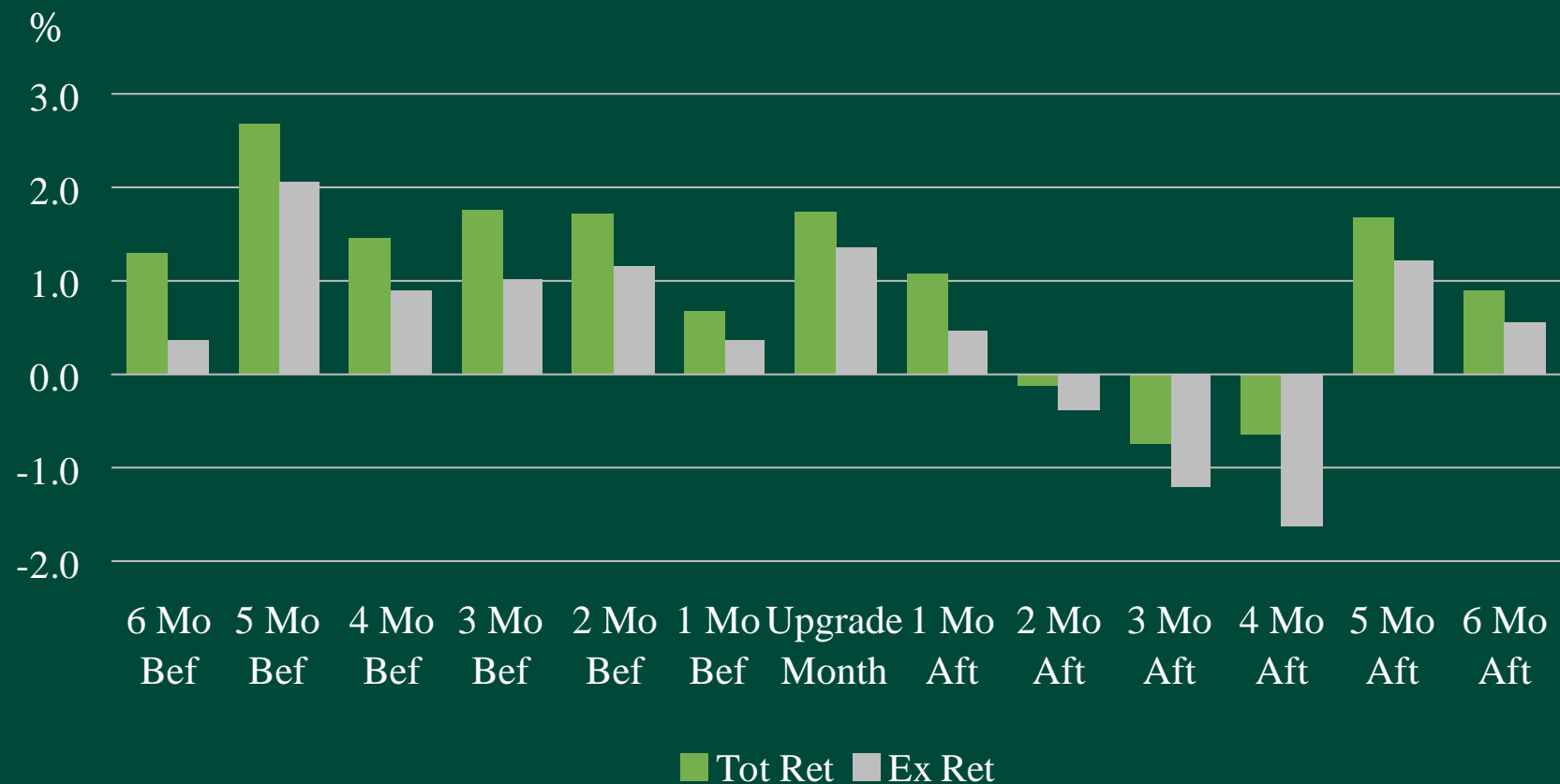


Based on Moody's rating criteria.



# Window of Opportunity

## Market-Weighted Average Rising-Star Performance January 1998 – October 2003



# Select Crossover Opportunities

## Potential Rising Stars

Issuer	Ratings	12/15/2003 Amt Outs (\$ 000s)	Achieve Investment-Grade Status?			
			1H04	2H04	2005	Remain HY
Tyco	Ba2/BBB- (pos/stbl)	8,395,000		X		
Georgia Pacific	Ba2/BB+ (neg/neg)	7,600,000			X	
HCA	Ba1/BBB- (stbl/stble)	6,760,125				X
J.C. Penney	Ba3/BB+ (stbl/neg)	4,285,703	X <sup>(1)</sup>			
MGM (sr. notes)	Ba1/BB+ (stbl/stbl)	3,910,000				X
Park Place (sr. notes)	Ba1/BB+ (stbl/stbl)	3,150,000				X
TELUS	Ba1/BBB (rev +/stbl)	3,041,000	X			
Delhaize	Ba1/BB+ (stbl/stbl)	2,842,142			X	
Dana Corp	Ba3/BB (rev dev/watch +)	2,200,000			X	
D.R. Horton	Ba1/BB (stbl/pos)	2,035,000			X	
Mandalay (sr. notes)	Ba2/BB+ (stbl/stbl)	2,000,000				X
Endesa	Ba2/BBB- (stbl/stbl)	1,967,281			X	
Yum!	Ba1/BB+ (rev +/pos)	1,850,000		X		
Lear	Ba1/BBB- (rev +/stbl)	1,396,825	X			
Pioneer	Ba1/BB+ (pos/pos)	1,239,169		X		
The Gap	Ba3/BB+ (pos/neg)	1,200,000		X		
Unisys	Ba1/BB+ (stbl/stbl)	1,050,000				X
iStar Financial	Ba1/BB+ (pos/pos)	1,035,000		X		
Saks	B1/BB (rev +/neg)	896,879			X	
Harrah's (sr. subs)	Ba1/BB+ (stbl/stbl)	750,000				X
XTO Energy	Ba2/BB (pos/pos)	749,750	X			
HCR-Manor Care	Ba1/BBB (pos/stbl)	550,000	X			
Toll Corp. (sr. subs)	Ba2/BB+ (stbl/stbl)	520,000				X
Sovereign Bancorp	Ba1/BBB- (rev +/stbl)	500,000	X			
Westar (sr. notes)	Ba2/BB- (neg/dev)	400,000		X		
Westar (1st Mtg)	Ba1/BBB- (neg/dev)	365,000		X		
American Axle	Ba1/BBB- (stbl/stbl)	300,000		X		
Foot Locker	Ba3/BB+ (rev +/stbl)	200,000		X		
Michael's Stores	Ba1/BB+ (stbl/stbl)	200,000		X		
Kansas Gas & Electric	Ba2/BB- (neg/dev)	152,079		X		

(1) Contingent on the sale of Eckerd.

# Introducing ESPRI for High Yield

- ◆ **ESPRI** – standing for **E**quity returns as **SP**read **I**ndicators – is a model that captures the information in equity returns and credit spreads in a **predictive** manner for selecting corporate bond portfolios.
- ◆ Bonds in the universe are sorted first on OAS level into three equal sized buckets and then, within each OAS bucket, by their issuer's past three months equity return into three further buckets of top 20%, middle 60% and bottom 20%. This forms a grid of nine portfolios.

<b>HH</b> <u>H</u> igh OAS <u>H</u> igh Eq Rtn	<b>HM</b> <u>H</u> igh OAS <u>M</u> ed Eq Rtn	<b>HL</b> <u>H</u> igh OAS <u>L</u> ow Eq Rtn
<b>MH</b> <u>M</u> ed OAS <u>H</u> igh Eq Rtn	<b>MM</b> <u>M</u> ed OAS <u>M</u> ed Eq Rtn	<b>ML</b> <u>M</u> ed OAS <u>L</u> ow Eq Rtn
<b>LH</b> <u>L</u> ow OAS <u>H</u> igh Eq Rtn	<b>LM</b> <u>L</u> ow OAS <u>M</u> ed Eq Rtn	<b>LL</b> <u>L</u> ow OAS <u>L</u> ow Eq Rtn

- ◆ We expect the **H**igh equity return portfolio to outperform the **L**ow equity return portfolio, **in each spread category**.
- ◆ ESPRI for High Yield has been backtested on fourteen years of data with consistently strong results.
- ◆ As with the investment grade version, the model is complementary to fundamental analysis.

# How does ESPRI for High Yield Perform?

- ◆ We test the model on three subdivisions of the Lehman Brothers High Yield Index, over the period January 1990 to September 2003.
- ◆ We report the average **monthly** excess return (over the respective universe) of each **ESPRI** portfolio, holding each portfolio for three months on an overlapping basis. The **information ratio** indicates the risk-adjusted return; a magnitude of greater than 0.5 would be statistically significant.

Crossovers				High Yield				Distressed			
3 Mth Eq Rtn				3 Mth Eq Rtn				3 Mth Eq Rtn			
H				H				H			
M				M				M			
L				L				L			
70.7				76.2				132.2			
(2.1)				(1.3)				(0.9)			
17.6				-16.5				19.2			
(0.5)				(-0.3)				(0.1)			
-86.9				-137.7				-44.4			
(-0.8)				(-0.9)				(-0.1)			
21.2				49.9				68.9			
(1.0)				(1.3)				(0.6)			
3.8				19.0				-33.8			
(0.2)				(0.7)				(-0.4)			
-23.4				-20.6				-136.5			
(-1.0)				(-0.7)				(-0.8)			
-3.0				20.4				51.7			
(-0.1)				(0.4)				(0.4)			
-12.7				6.6				-7.1			
(-0.4)				(0.1)				(-0.1)			
-17.0				-16.8				-96.1			
(-0.6)				(-0.3)				(-0.8)			

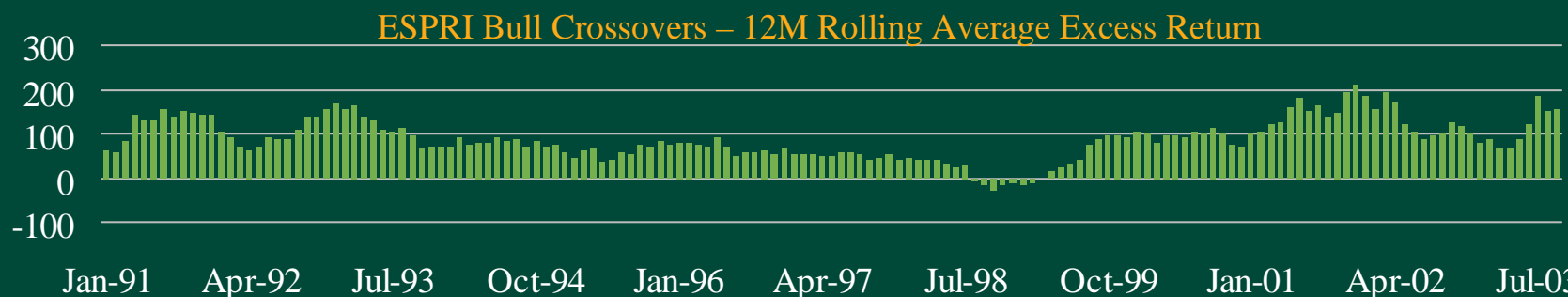
■ = Average Monthly Excess Return Over Universe (bp)

— = (Annualized Information Ratio)

- ◆ Example: For Crossovers, the High Spread, High equity return (HH – top left corner) category has average monthly excess returns of 70.7 bp over the Crossover universe.

# ESPRI Strategies

- ◆ The chart shows the 12 month rolling average monthly returns from an example ESPRI based investment strategy over the sample period.
- ◆ **ESPRI Bull Strategy:** Long bonds ranked HH, short bonds ranked LL. Net long carry.



- ◆ **ESPRI Bear Strategy:** Long bonds ranked LH, short bonds ranked HL. Net short carry, performs well in distressed/poor market conditions.
- ◆ **Extensions to ESPRI Strategies:**
  - The model continues to perform well at various investment horizons from one to twelve months.
  - The model has shown significant capabilities at providing early warning for serious credit deteriorations and rating migration.
  - Output from ESPRI can be combined with fundamental/strategic views to form a **OneScore for High Yield**.

# Model Outlook for Q1-2004

- ◆ Results based on ESPRI-HY run on December 31st 2003 - Three month investment horizon.

## Potential Outperformers—Bonds Ranked Predominantly\* HH (High Spread, High Equity Return)

<i>Company (Equity)</i>	<i>12/31/03 OAS (bp)</i>	<i>3M Eq Rtn</i>	<i>Last Month</i>	<i>Company (Equity)</i>	<i>12/31/03 OAS (bp)</i>	<i>3M Eq Rtn</i>	<i>Last Month</i>
Ak Steel Holding Corp	706	155.0%	HM	Mcdermott Intl Inc	604	109.3%	No Change
Allegheny Technologies Inc	472	103.4%	HM	Nash Finch Co	538	44.8%	No Change
Allmerica Financial Corp	445	29.2%	No Change	Oregon Steel Mills Inc	990	118.4%	HL
Americredit Corp	486	54.7%	LH	Pantry Inc	567	88.5%	No Change
Caraustar Industries Inc	434	60.1%	No Change	Polyone Corp	650	62.6%	No Change
Century Aluminum Co	498	77.4%	No Change	Reliant Resources Inc	418	43.8%	No Change
Chattem Inc	490	29.2%	No Change	Salton Inc	723	31.2%	No Change
Dura Automotive Sys	555	36.3%	HL	Six Flags Inc	462	43.0%	No Change
Extendicare Inc Cda	489	70.7%	No Change	Terra Industries Inc	522	69.7%	No Change
Giant Industries Inc	531	65.7%	No Change	Tesoro Petroleum Corp	460	72.2%	No Change
Inc Global Inc	496	54.9%	HL	Unifi Inc	683	34.4%	HL
Lyondell Chemical Co	515	34.7%	HM	Urs Corp	586	28.9%	HL
Mastec Inc	439	52.7%	No Change	Wesco Intl Inc	481	69.2%	No Change
				Wolverine Tube Inc	624	48.9%	HM

## Potential Underperformers—Bonds Ranked Predominantly\* LL (Low Spread, Low Equity Return)

<i>Company (Equity)</i>	<i>12/31/03 OAS (bp)</i>	<i>3M Eq Rtn</i>	<i>Last Month</i>	<i>Company (Equity)</i>	<i>12/31/03 OAS (bp)</i>	<i>3M Eq Rtn</i>	<i>Last Month</i>
Ahold(Kon)Nv	289	-12.8%	No Change	HOUSTON EXPLORATION CO	214	4.1%	No Change
Alaris Medical Inc	264	-8.4%	No Change	LA QUINTA CORP	296	2.9%	LM
Argosy Gaming Corp	300	6.5%	LM	OWENS & MINOR INC	245	-8.7%	No Change
Boyd Gaming Corp	253	6.3%	LM	RENT-A-CENTER INC	263	-6.9%	LM
Broadwing Inc	235	-0.8%	No Change	RIGGS NATL CORP WASH D C	295	3.9%	LM
EchoStar Commun Corp	235	-11.3%	ML	SPEEDWAY MOTORSPORTS INC	193	-1.0%	LH
Fisher Scientific Intl Inc	213	4.2%	LM	STATION CASINOS INC	282	0.5%	LM
Group 1 Automotive Inc	274	4.8%	No Change				

- ◆ \* Issuer ESPRI rankings are based on the dominant (by market value) ranking of the bonds of the issuer.



# Lehman Brothers High Yield Risk Model

The Lehman Brothers High Yield Risk Model translates the structural differences between a portfolio and a benchmark into a tracking error and beta.

	High Yield Simple Sample	hi-all (Statistics, Unhedged)	Difference: High Yield Simple Sample, hi-all
Count	7	1504	-1497
Coupon, Market Weighted (%)	8.874	8.595	0.279
Average Life (Yr)	4.21	7.12	-2.91
Yield, Dollar Duration Weighted (%/Yr)	7.151	8.453	-1.302
OAS (bps)	375.1	512.2	-137.1
OA Duration (Yr)	3.93	4.77	-0.85
OA Spread Duration (Yr)	3.67	4.52	-0.85
OA Convexity (Yr <sup>2</sup> /100)	0.06	0.17	-0.10
Total Tracking Error Volatility (bps/Month)			
Portfolio Beta			

Systematic Tracking Error Volatility (bps/Month)
Idiosyncratic Tracking Error Volatility (bps/Month)
Default Tracking Error Volatility (High Yield Only) (bps/Month)
Total Tracking Error Volatility (bps/Month)



# Risk Model Benefits

- ◆ Details exposure of a portfolio to risk factors
- ◆ Decomposes total risk into market risk and default risk
  - Market risk
    - Systematic risk
    - Issuer-specific non-systematic risk
  - Default risk
- ◆ Blends investment grade and high yield risk models
- ◆ Identifies tracking error minimization trades
- ◆ Employs Lehman Brothers extensive index database
- ◆ Delivered through POINT



# 1H04 Outlook for U.S. Investment Grade Credit

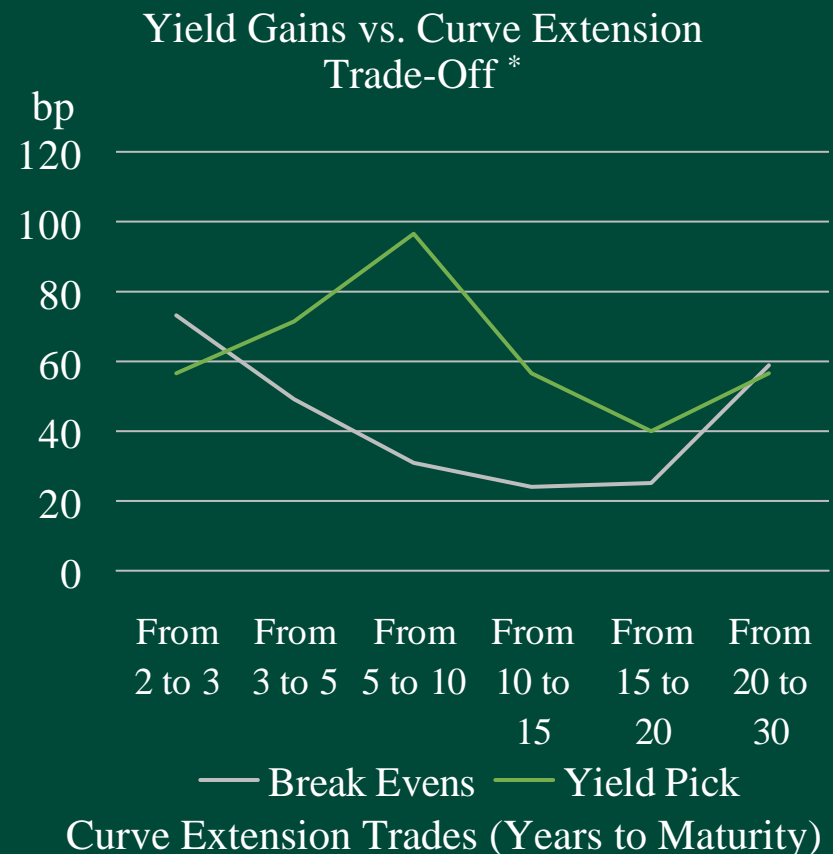
## Summary Themes, Forecasts, and Recommendations

- ◆ Improving fundamentals and steady technicals will support further spread compression
- ◆ Gross supply to drop 13%, net supply to its lowest level since 1997
- ◆ Currency volatility won't eliminate 1H04 international demand for U.S. corporates
- ◆ Pension fund activities will buttress out-of-index strategies
- ◆ Event risk on the rise, but still mostly a positive for credit
- ◆ Not an environment for outright duration bets: barbell still a reasonable strategy
- ◆ 1H04 key sector views: buy autos, electrics, and some telcos in 1Q04; underweight the banks
- ◆ Rate / curve concerns likely to cause credit to stall during 2Q04
- ◆ Finding “shorts” will become increasingly important later in 2004

# Credit Curve Positioning: Not an Environment for Outright Duration Bets

## 2004 Curve View

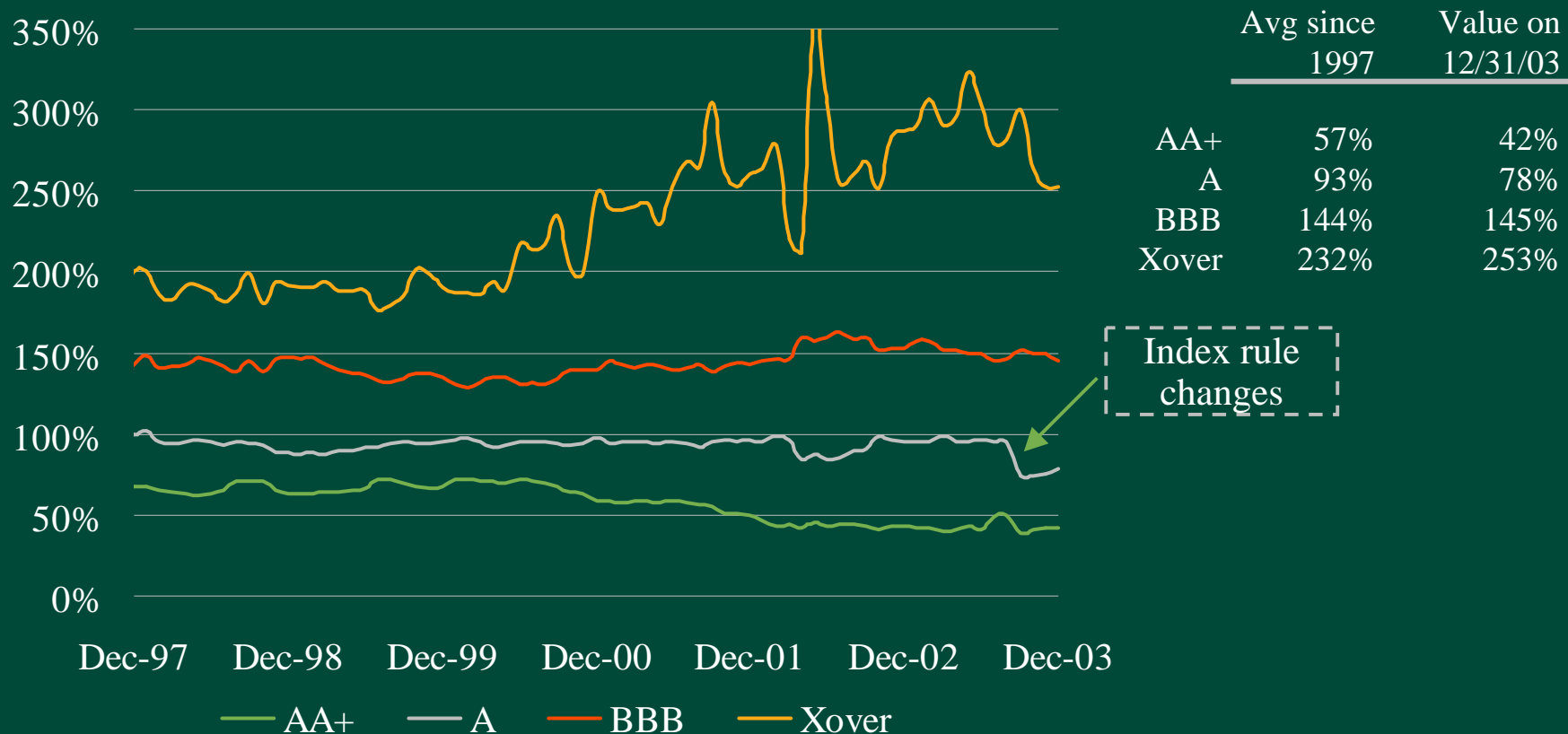
- ◆ Expect: higher rates and flatter Treasury curve in 2004, although timing uncertain
  - Limit outright duration bets, maximize carry
- ◆ Credit curve is not uniformly steep
  - Look for 'sweet spots' at off-the-run parts of the curve
- ◆ We think the 2 to 3 yr and 20 to 30 yr extensions provide the greatest protection against rising rates
  - Barbell/convexity strategy



\* All calculations based on a 12-month holding period. Data as of 12/26/03.

# Lower-Quality Credit Valuations Still Attractive Relative to Historical Levels

## OAS by Quality as % of US Credit Index OAS





# Identifying Corporate Action Risk

## Prepare for More Aggressive Management Actions in 2004

- ◆ **Financial Engineering** – equity re-caps, share and/or debt buybacks, and other capital structure initiatives
  - ◆ **Strategic Transformations** – material business transformations that may or may not immediately affect the company's capitalization
  - ◆ **Why Now?**
    - Back-to-basics mentality following challenges in 2002 and 2003
    - Growing conviction around sustainability of economic recovery
    - Substantial capital accumulation by financial sponsors → LBOs on the rebound
  - ◆ **Drilling down on the Top 150 IG Corporates**
    - More than 12% by market value still focused on balance sheet improvements
    - Only 2.3% likely to engage in bondholder-unfriendly actions this year
- Though gradually shifting, corporate event risk skewed to the positive in 2004



# Autos: More Room to Run in 1H04

- ◆ Higher profits in 2004 due to:
  - Expanding economy
  - Full slate of new model introductions
  - More benign production forecast
- ◆ Focus on automotive operations to offset smaller contribution by finance arms
- ◆ Ratings not a major concern in first half of year
  - S&P not likely to act in 1H, though greater scrutiny on execution in 2H could pressure ratings later on
  - Possible Moody's action likely to result in muted market response
- ◆ Compelling valuations: sector OAS +80 bp cheap to Credit Index (as of 12/31/03)
- **Overweight Ford and GMAC** ... Look for F and GM spreads to converge in concert with convergence of companies' automotive profitability
- ◆ Other things to monitor: European profitability, Incentive usage, Production cuts (GM)
- ◆ Prepare to reverse the trade at some point in 2004



6.8% of  
US Credit Index

# Electric Utilities: Further Stability and Outperformance

5.9% of  
US Credit Index

- ◆ Robust technicals driven by:
    - Decline in new issuance in 2004 (although front-end loaded)
    - Continued strong bid for spreadier names with stable or improving fundamentals
  - ◆ Ratings trend still negative, although look for
    - Pace of downgrades to slow
    - Downgrades/upgrades ratio to improve
  - ◆ Still-attractive valuations: sector OAS +11 bp cheap to the Credit Index ex-autos (as of 12/31/03)
  - ◆ Reduced volatility within IG given FirstEnergy's fall to HY
- **Overweight Electrics**, yet margin for outperformance decreasing quickly
- **Overweight Consumers Energy FMBs, IPALCO, TXU Oncor**
- ◆ Other things to monitor in 2004: Near-term, natural gas price rise. Energy bill passage in early 2004 widely expected to fuel increase in M&A.



# Banks: Valuations Limiting Performance Prospects

- ◆ Strong fundamentals
    - Earnings at record levels
    - Asset quality favorable
    - Capital levels more than support growth
    - Rising interest rates would be positive for fundamentals (e.g. most bank balance sheets are currently asset-sensitive)
  - ◆ Positive ratings momentum
  - ◆ But, current valuations leave little room for outperformance in a bull market: sector OAS +22 bp rich to the Credit Index (as of 12/31/03)
- Underweight Banks
- Given marginal cost, recommend swapping into the best names, e.g. into Wells Fargo, US Bancorp and Wachovia from Bank One, SunTrust and Bank of New York
- ◆ Other things to monitor in 2004: Flattening interest rate curve, M&A activity (we highlight smaller, lower-rated banks as potential candidates)



14.3% of  
US Credit Index

# U.S. Wirelines: Benefiting from the High-Beta Bid in 1Q04

4.1% of  
US Credit Index

- ◆ Strong technicals
    - Currently riding high-beta trade
    - Strong bid should persist given risk appetites and few alternatives
  - ◆ Compelling valuations: sector OAS +34 bp cheap to Credit Index (as of 12/31/03)
  - ◆ Fundamentals okay, but skewed toward weakening
    - With balance sheet repair now largely complete, more likely to direct cash hoards toward growth objectives
    - Backdrop of intensifying competition to become more of an issue
    - Watch for conservative 2004 guidance in upcoming 4Q03 results (tactically cautious ahead of late-Jan earnings)
- **Overweight U.S. Wirelines** ... Trend is your friend over next few months, but look to lighten up later in 1H and potentially move underweight in 2H
- **Overweight Sprint**
- ◆ Other things to monitor in 2004: M&A activity -- potential improvement in competitive environment offsets increased headline risk/volatility



# Latest *OneScore* Output: Picks & Pans

## 7.5 and Above

### Double A

LLY

### Single A

ADM

BA

DOW

### Triple B

F

FON

GM

HAL

PETBRA

VLO

## 2.5 and Below

### Double A

WMT

### Single A

AXP

BAC

MMC

NCC

SLMA

### Triple B

AHC

CZN

GIS

KMP

SAFC

UPC

WM

# Finding “Short” Candidates

## Cuspy IG Credits – 2004/05 Ratings Expectations

Issuer	Ratings	12/03 Index Debt (\$bn)	Most Likely To Fall to HY in			Most Likely to Stay IG
			1H04	2H04	2005	
<b>AEP</b>	<b>Baa3/BBB (stbl/stbl)*</b>	<b>6.31</b>				<b>X</b>
Alliant Energy Resources	Baa3/BBB (stbl/neg)	1.05				X
Altria Group	Baa2/BBB (neg/neg)	5.00				X
Amerada Hess	Baa3/BBB (*-/neg)	3.46	X			
<b>Arrow Electronics</b>	<b>Baa3/BBB- (neg/neg)</b>	<b>1.20</b>	<b>X</b>			
Ashland	Baa2/BBB (neg/neg)	0.55			X	
<b>AT&amp;T Corp</b>	<b>Baa2/BBB (neg/stbl)</b>	<b>9.08</b>				<b>X</b>
<b>AT&amp;T Wireless</b>	<b>Baa2/BBB (neg/stbl)</b>	<b>10.08</b>				<b>X</b>
<b>Capital One Bank</b>	<b>Baa2/BBB- (stbl/neg)</b>	<b>3.95</b>				<b>X</b>
<b>Cigna</b>	<b>Baa3/BBB (stbl/neg)</b>	<b>1.10</b>				<b>X</b>
<b>Citizens Comm</b>	<b>Baa2/BBB (neg/*-)</b>	<b>3.40</b>	<b>X</b>			
CNA Financial	Baa3/BBB- (neg/*-)	0.98			X	
<b>Consumers Energy</b>	<b>Baa3/BBB- (stbl/neg)</b>	<b>2.65</b>				<b>X</b>
<b>DaimlerChrysler</b>	<b>A3/BBB (neg/neg)</b>	<b>22.08</b>				<b>X</b>
<b>Delphi</b>	<b>Baa2/BBB- (stbl/neg)</b>	<b>2.00</b>			<b>X</b>	
Devon Energy	Baa2/BBB (neg/stbl)	6.09				X
<b>Duke Energy / Capital</b>	<b>Baa3/BBB (stbl/neg)</b>	<b>9.35</b>				<b>X</b>
Eastman Chemical	Baa2/BBB (neg/neg)	1.90				X
<b>Eastman Kodak</b>	<b>Baa3/BBB- (neg/neg)</b>	<b>1.45</b>	<b>X</b>			
<b>EDS</b>	<b>Baa3/BBB (neg/neg)</b>	<b>2.40</b>		<b>X</b>		
Enterprise Products	Baa2/BBB- (*-/*-)	1.65	X			
FMCC/Ford	A3,Baa1/BBB- (neg/stbl)	59.54				X
<b>GATX</b>	<b>Baa3/BBB- (neg/NA)</b>	<b>0.80</b>				<b>X</b>

\* Ratings refer to lowest-rated IG issuer in cap structure, eg AEP Hold Co, Duke Cap., NiSource Fin., PEMEX/Proj Fdg Mtr Trust, TXU Oncor unsec.



# Finding “Short” Candidates (cont.)

## Cuspy IG Credits – 2004/05 Ratings Expectations, continued

Issuer	Ratings	12/03 Index Debt (\$bn)	Most Likely To Fall to HY in			Most Likely to Stay IG
			1H04	2H04	2005	
GMAC/General Motors	A3,Baa1/BBB (neg/neg)	51.77				X
<b>Goodrich</b>	<b>Baa3/BBB- (stbl/stbl)</b>	<b>1.50</b>				X
International Paper	Baa2/BBB (stbl/neg)	6.40				X
<b>Liberty Media</b>	<b>Baa3/BBB- (stbl/stbl)</b>	<b>4.82</b>				X
MeadWestvaco	Baa2/BBB (neg/neg)	2.15				X
<b>Motorola</b>	<b>Baa3/BBB (neg/neg)</b>	<b>5.57</b>				X
NiSource	Baa3/BBB (stbl/stbl)*	4.40				X
Noranda	Baa3/BBB- (stbl/neg)	1.15				X
PEMEX	Baa1/BBB- (stbl/stbl)*	13.55				X
Phelps Dodge	Baa3/BBB- (neg/neg)	0.60				X
Progress Energy	Baa2/BBB- (stbl/stbl)	7.60				X
<b>Raytheon</b>	<b>Baa3/BBB- (neg/stbl)</b>	<b>8.26</b>				X
Sprint	Baa3/BBB- (stbl/stbl)	15.77				X
<b>Sun Microsystems</b>	<b>Baa3/BBB (neg/*-)</b>	<b>1.05</b>		X		
<b>Tampa Electric</b>	<b>Baa1/BBB- (neg/neg)</b>	<b>0.65</b>				X
Temple-Inland	Baa3/BBB (neg/neg)	0.80				X
TXU (Oncor, Energy, & Tex Ut Elec)	Baa2/BBB- (stbl/neg)*	4.51				X
Tyson	Baa3/BBB (*-//*-)	2.29	X <sup>1</sup>			X
<b>UnumProvident</b>	<b>Baa3/BBB- (neg/neg)</b>	<b>1.68</b>			X	
Valero	Baa3/BBB (stbl/neg)	3.00				X
Weyerhaeuser	Baa2/BBB (stbl/neg)	9.49				X

1. Dependent on developments in recent mad cow situation.

\* Ratings refer to lowest-rated IG issuer in cap structure, eg AEP Hold Co, Duke Cap., NiSource Fin., PEMEX/Proj Fdg Mtr Trust, TXU Oncor unsec.



# 1H04 Outlook for European IG Credit

- ◆ We expect the credit “sweet spot” to continue in 1Q, though will likely stall thereafter due to market unease with valuations
- ◆ Economic picture is crucial for spread performance
  - A modest rise in rates would be supportive for credit, while a dramatic rise would hurt credit
  - Stronger euro would hurt certain sectors
- ◆ Fundamentals are generally supportive
  - More aggressive growth strategy might be pursued by firms, including more M&A
  - Deleveraging continues...although less evident outside telecom
- ◆ Technicals are especially robust
  - Low gross issuance combined with large redemptions lead to low net supply
  - Pension and insurance fund demand continues
  - Limited amount of alternatives with comparable spread duration in €exist



# European Credit Recommendations

- ◆ We advise a 10% overweight in €corporates and a shorter spread duration
- ◆ For outperformance, we recommend exposures to:
  - High-spread, high-beta, lower-rated names
  - T1 and Yankee floating bank capital
- ◆ Other strategies:
  - Exploit relative value in coupon step-up/step-down bonds
  - Consider default swaptions for yield enhancement



# What Causes the Rally to End?

## Potential Drivers of A Credit Spread Correction

- ◆ Sharp Elevation / Flattening of the Curve
- ◆ Damaging USD Devaluation
- ◆ Alternatives Become Much More Compelling
- ◆ Economic Slowdown
- ◆ Geopolitical Event
- ◆ Emerging Markets Correction
- ◆ Up-tick in Idiosyncratic Event Risk
- ◆ Auto sector ratings turbulence
- ◆ Regulatory Impact on Liquidity

# Lehman's Array of Unique Quantitative Tools Delivered via LehmanLive & POINT

- ◆ Quantitative Credit Toolkit
- ◆ IG & HY ESPRI
- ◆ OneScore
- ◆ Meteor
- ◆ Risk Model / Risk Budgeting

The screenshot displays the LehmanLive website interface. At the top, the header includes the Lehman Brothers logo and navigation links such as Home, Fixed Income, Equities, Investment Banking, Private Client Services, Private Equity, and EmployeeNet. The main content area is titled 'Quantitative Credit Toolkit' and describes it as a composite of various sophisticated models developed by Lehman Brothers. Below this, there are four sub-sections: 'Spread and Sector Relative Value Tools', 'Security Valuation Tools', 'Correlations Tools', and 'Credit Analysis Tools'. Each sub-section provides a brief description of the models and tools available. A sidebar on the left lists various research publications and products, including Fixed Income Research, Publications, Global Economics, Global Strategy, Fixed Income Indices, POINTweb, Fixed Income Toolkit, Webcasts, Products, Interest Rates, Credit, High Grade, Structured Credit, Emerging Markets, CDOs, Short Term, High Yield, Syndicate / New Issues, Esoterics, Quant Toolkit, Mortgages / ABS / CMBS, Municipals, and Global Foreign Exchange. A contact section for Credit Analytics is also visible on the right.

## Toolkit Contents

- ◆ Time Series Plotter
- ◆ ESPRI PowerTool
- ◆ CurveLab
- ◆ Global Issuer Spreads
- ◆ Bond Calculators
- ◆ Correlations
- ◆ Ratings Transitions / Default Probabilities



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