



GLOBAL
Relative Value

Plenty of Risks, but Staying the Portfolio Course with Arrival of February

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RELATIVE VALUE

No allocation adjustments recommended with the arrival of February. The U.S. recession that we did not know that we were in may have ended before we thought. We mark the end of the major central bank easing cycle, contemplate current capital market risks, ponder the continued outperformance of U.S. financial assets, provide our views on coping with heightened geopolitical risks, sketch the January performance of our major indices, and suggest a Rams victory in the Super Bowl.

ECONOMICS

We believe that China will probably succeed in completing the transition to a market economy, albeit not without some temporary setbacks. U.S. macroeconomic data are improving steadily. There is a strong case for the Fed remaining on hold for a long time.

POLITICAL ANALYSIS

The presence of several international policy leaders at the World Economic Forum underscores the difficulty in and the necessity of formulating international commerce rules.

CURRENCIES

Investors may be tempted to look for FX carry opportunities. We recommend looking beyond the past few years' mainstays. Rather, the best value probably lies in a diversified basket of out-of-favor currencies.

INTEREST RATE STRATEGY

Interest rate carry trades, particularly in the 2- to 5-year sector, continue to look good. Even though we don't see volatility reaching its historical lows, it will decline further from current elevated levels. Spreads still have another 10 bp to decline in the belly of the curve. We favor agencies over LIBOR.

CREDIT STRATEGY

A compilation of the safest, liquid US\$ names is highlighted for those seeking shelter. In addition, we compare spread volatilities in dollars and euros and offer selected trade ideas in the European telecom sector. We also discuss recent developments influencing the basis between cash and default spreads in Europe. We lower our weighting in Mexico and Bulgaria to underweight and increase our overweights in Brazil, Ecuador, and Russia.

SECURITIZED STRATEGY

We recommend retaining a core overweight to mortgages. In non-agencies, credit performance shows signs of weakness, but California loans continue to outperform those from other states. In ABS, we summarize the S&P ratings action on EAST and analyze the value in Providian subordinates. In CMBS, we develop a framework to project long-term delinquencies and losses.

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Global Fixed-Income Asset Allocation

GLOBAL AGGREGATE *

February 1, 2002

	Amt. Out. (\$ billion)	# of Issues	OAD (years)	Year-to-Date Total Return (%)						% of Index	Recommended Portfolio (%)	Diff.	% Over (+) or Under (-) Weight
				Local Currency	100% Hedged into				% of Recommended				
					U.S.	Yen	Euro	Sterling					
U.S. Aggregate	6,041	3,123	4.53	0.80	0.80	0.66	0.95	1.01	46.6	47.4	0.8	2	
Eurodollar (ex-U.S. Agg)	240	378	3.54	0.70	0.70	0.56	0.83	0.90	1.8	1.9	0.0	2	
144A (ex-U.S. Agg)	78	153	6.02	1.02	1.02	0.88	1.16	1.22	0.6	0.6	0.0	2	
Canadian Government	153	46	5.84	0.05	0.03	-0.13	0.14	0.21	1.2	1.2	0.0	3	
Pan-Euro Aggregate	4,001	2,435	5.21	0.70	0.56	0.42	0.70	0.76	30.8	32.3	1.4	5	
Asian-Pacific Aggregate	2,411	1,336	5.24	5.24	-0.47	-0.64	-0.37	-0.30	18.6	16.3	-2.3	-12	
Euroyen	49	83	4.61	-0.59	-0.42	-0.59	-0.32	-0.25	0.4	0.3	0.0	-11	
Global Aggregate Index	12,973	7,554	4.88	-	0.47	0.33	0.60	0.67	100.0	100.0			

* Based on \$300 million liquidity criterion. Note: regional aggregate indices have lower liquidity criterion (usually \$150 million) under current rules.

GLOBAL AGGREGATE INDEX* BY CURRENCY OF ISSUER ^a

	Market Value (\$ billion)	Number of Issues	OAD (years)	% of Index	Recommended Portfolio (%)	% Over (+) or Under (-) Weight
Currency:						
U.S. Dollar	6,690	3,654	4.51	48.8	50.5	4
Euro	3,566	1,994	4.91	26.0	26.7	3
Other Europe	147	43	4.08	1.1	1.1	1
Sterling	530	398	7.56	3.9	3.9	2
Yen	2,454	1,266	5.33	17.9	15.7	-12
Other Asia	152	153	3.58	1.1	1.0	-7
Canadian Dollar	173	46	5.84	1.3	1.3	1

^a Based on \$300 million liquidity criterion. Note: regional aggregate indices have lower liquidity criterion (usually \$150 million) under current rules.

ASIAN-PACIFIC AGGREGATE ^a

	Market Val. (yen billion)	Number of Issues	OAD (years)	YTD Return (yen)	% of Index	Recommended Portfolio (%)	Difference	% Over (+)/ Under (-) Weight
Asian-Pacific Aggregate	341,585	1,327	5.21	-0.64	100.0	100.0		
Country of Issuer:								
Japan	317,351	1,116	5.33	-0.68	92.9	97.3	4.4	5
South Korea	10,402	93	2.96	0.26	3.0	0.0	-3.0	NA
Non Asian-Pacific	3,826	61	4.33	-0.49	1.1	0.0	-1.1	NA
Australia	5,521	26	3.83	-0.44	1.6	1.7	0.0	2
Malaysia	90	2	2.31	0.01	0.0	0.0	0.0	-13
Singapore	2,585	17	4.45	0.25	0.8	0.8	0.0	-1
New Zealand	1,164	6	4.12	0.70	0.3	0.3	0.0	-12
Thailand	647	6	5.82	-0.07	0.2	0.0	-0.2	NA

^a Index returns as of January 31, 2002.

U.S. Fixed-Income Asset Allocation

U.S. AGGREGATE CORE PORTFOLIO

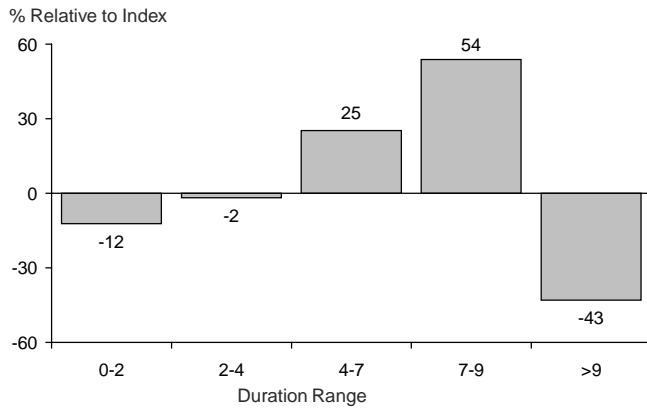
February 1, 2002

SUMMARY RECOMMENDATION	
Option-Adjusted Duration	Spread Duration
98%	119%

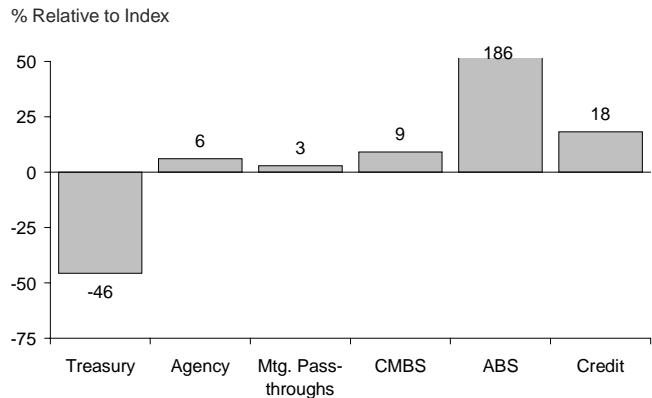
Sector	Percent of Market Value by Duration Range											Contribution to								
	0-2		2-4		4-7		7-9		9+		Total	% Over(+)/ Under(-)		OAD		Spread Duration		% Over(+)/ Under(-)		
	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Weight	Index	Rec	Diff	Index	Rec	Diff	Weight
Treasury	5.37	4.65	4.97	1.05	3.90	4.57	1.09	1.20	6.69	0.50	22.01	11.96	-46	1.28	0.48	-0.80	0.00	0.00	0.00	-
Agency	3.50	2.85	3.72	4.07	2.64	3.58	0.72	2.13	1.32	0.00	11.91	12.62	6	0.51	0.53	0.02	0.50	0.53	0.02	5
Mtg. Pass-throughs	4.61	1.95	24.70	25.16	5.62	8.84	0.00	0.00	0.00	0.00	34.93	35.95	3	1.10	1.25	0.14	1.26	1.36	0.10	8
CMBS	0.05	0.00	0.38	0.44	1.62	1.86	0.06	0.00	0.00	0.00	2.10	2.30	9	0.10	0.12	0.01	0.10	0.12	0.01	10
ABS	0.52	2.33	0.78	1.99	0.34	0.53	0.06	0.00	0.00	0.00	1.70	4.85	186	0.05	0.10	0.05	0.05	0.10	0.05	100
Credit	2.98	3.17	8.15	9.17	9.56	10.25	2.30	3.20	4.35	6.53	27.35	32.32	18	1.48	1.96	0.48	1.47	1.93	0.46	31
Total	17.03	14.94	42.69	41.88	23.68	29.63	4.24	6.52	12.36	7.03	100.00	100.00		4.53	4.43	-0.10	3.39	4.03	0.64	19

% Over (+)/ Under(-) Weight	0-2	2-4	4-7	7-9	>9
	-12	-2	25	54	-43

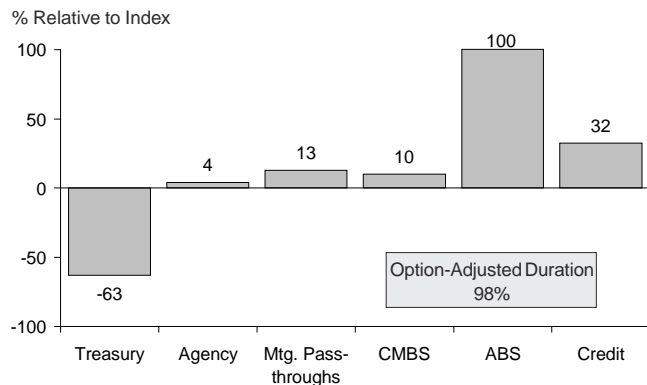
Recommended Portfolio by Duration Range



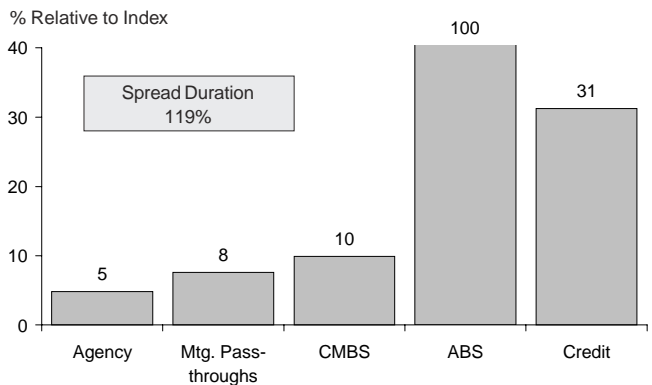
Portfolio Allocation by Asset Class



Contribution to OAD by Asset Class



Contribution to Spread Duration by Asset Class



U.S. Fixed-Income Asset Allocation

U.S. AGGREGATE CORE PORTFOLIO

February 1, 2002

SUMMARY RECOMMENDATION	
Option-Adjusted Duration	Spread Duration
98%	119%

Approx Matur/ Duration	Percent of Market Value																		% Over(+)/ Under(-) Wght (%)
	T-Bills/ 0-1 yr		2 yr/ 1-2 yr		3 yr/ 2-3 yr		4 yr/ 3-4 yr		5-6 yr/ 4-5 yr		6-10 yr/ 5-7 yr		10-20 yr/ 7-10 yr		20-30 yr/ 10 +		Total		
	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	
Treasury	0.04	0.00	5.33	4.65	2.20	0.00	2.77	1.05	1.29	2.38	2.60	2.19	2.58	1.70	5.20	0.00	22.01	11.96	-46
Agency	0.78	0.00	2.72	2.85	2.07	1.74	1.65	2.33	0.66	0.72	1.98	2.85	0.88	2.13	1.17	0.00	11.91	12.62	6
Mtg. Passthrgs	0.22	0.00	4.39	1.95	11.66	9.28	13.04	15.88	5.19	8.84	0.43	0.00	0.00	0.00	0.00	0.00	34.93	35.95	3
CMBS	0.00	0.00	0.05	0.00	0.16	0.44	0.22	0.00	0.48	0.66	1.14	1.19	0.06	0.00	0.00	0.00	2.11	2.30	9
ABS	0.03	0.47	0.49	1.87	0.42	1.99	0.36	0.00	0.18	0.00	0.16	0.53	0.06	0.00	0.00	0.00	1.70	4.85	186
Credit	0.26	0.00	2.73	3.17	3.20	3.96	4.95	5.20	2.80	1.67	6.76	8.58	3.10	4.06	3.55	5.67	27.35	32.32	18
Total	1.33	0.47	15.70	14.47	19.70	17.40	22.99	24.48	10.60	14.27	13.08	15.35	6.68	7.88	9.92	5.67	100.00	100.00	

% Over (+)/ Under(-) Weight	-65	-8	-12	6	35	17	18	-43
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CORPORATE SECTOR RECOMMENDATIONS (spread duration contribution)

	Aaa-Aa			A			Baa			Total			Over(+)/ Under(-) Wght (%)
	Index	Rec.	Diff.	Index	Rec.	Diff.	Index	Rec.	Diff.	Index	Rec.	Diff.	
Spread Duration													
0-3	0.05	0.01	-0.03	0.04	0.10	0.06	0.03	0.06	0.04	0.12	0.18	0.07	57
3-5	0.10	0.08	-0.02	0.11	0.05	-0.06	0.09	0.10	0.01	0.30	0.22	-0.08	-25
5-7	0.09	0.20	0.11	0.19	0.23	0.04	0.17	0.11	-0.06	0.44	0.54	0.10	22
7-10	0.04	0.00	-0.04	0.08	0.23	0.15	0.09	0.18	0.09	0.22	0.42	0.19	87
10+	0.06	0.17	0.11	0.18	0.28	0.10	0.15	0.13	-0.02	0.39	0.58	0.19	48
Total	0.34	0.46	0.12	0.60	0.88	0.29	0.53	0.58	0.05	1.47	1.94	0.47	32
% Over (+)/Under(-) Weight			36			48			10			32	

Sector	Aaa-Aa			A			Baa			Total			Over(+)/ Under(-) Wght (%)
	Index	Rec.	Diff.	Index	Rec.	Diff.	Index	Rec.	Diff.	Index	Rec.	Diff.	
Industrial	0.09	0.32	0.23	0.31	0.57	0.26	0.36	0.37	0.01	0.76	1.26	0.50	66
Financial	0.13	0.12	0.00	0.22	0.15	-0.07	0.04	0.06	0.02	0.38	0.33	-0.05	-13
Utility	0.01	0.00	-0.01	0.04	0.06	0.03	0.09	0.12	0.03	0.13	0.18	0.05	43
Non-Corp.	0.09	0.02	-0.07	0.05	0.09	0.05	0.06	0.04	-0.02	0.20	0.16	-0.04	-20
Total	0.32	0.46	0.15	0.61	0.88	0.28	0.54	0.58	0.04	1.47	1.93	0.47	32
% Over (+)/Under(-) Weight			47			45			7			32	

U.S. Fixed-Income Asset Allocation

MBS SECTOR RECOMMENDATIONS (spread duration contribution)

Program & Price	Index		Recommended		Difference		% Over (+)/Under(-) Weight			
	% Mkt. Val.	% Spread Dur.	% Mkt. Val.	% Spread Dur.	% Mkt. Val.	% Spread Dur.	% Mkt. Val.	% Spread Dur.		
GNMA										
30-year	< 98	0.03	0.00	0.00	0.00	0.00	-0.03	0.00	N/A	N/A
	98 to <102	2.94	0.13	3.13	0.13	0.19	-0.01		6	-5
	102 to <106	3.81	0.13	2.96	0.11	-0.85	-0.02		-22	-17
	106+	0.49	0.02	0.79	0.03	0.30	0.01		N/A	N/A
15-year	< 98	0.00	0.00	0.00	0.00	0.00	0.00		N/A	N/A
	98 to <102	0.09	0.00	0.00	0.00	-0.09	0.00		N/A	N/A
	102 to <106	0.15	0.00	0.00	0.00	-0.15	0.00		N/A	N/A
	106+	0.00	0.00	0.00	0.00	0.00	0.00		N/A	N/A
GNMA Summary		7.51	0.29	6.87	0.26	-0.64	-0.03		-9	-10
Fannie Mae and Freddie Mac										
Conventional 30-year										
	< 98	1.16	0.06	0.00	0.00	-1.16	-0.06		-100	-100
	98 to <102	13.52	0.53	19.03	0.79	5.51	0.26		41	50
	102 to <106	6.27	0.18	3.11	0.09	-3.16	-0.09		-50	-50
	106+	0.47	0.01	2.03	0.06	1.55	0.05		327	376
Conventional 15-year										
	< 98	0.05	0.00	2.57	0.09	2.51	0.09		4,742	3,874
	98 to <102	3.06	0.11	0.00	0.00	-3.06	-0.11		-100	-100
	102 to <106	2.57	0.07	2.34	0.06	-0.23	-0.01		N/A	N/A
	106+	0.02	0.00	0.00	0.00	-0.02	0.00		N/A	N/A
Conventional Summary		27.12	0.96	29.07	1.04	1.95	0.13		7	8
Balloons		0.30	0.01	0.00	0.00	-0.30	-0.01		N/A	N/A
Total Pass Throughs		34.93	1.26	35.95	1.30	1.02	0.10		3	3
CMBS		2.10	0.10	2.30	0.12	0.19	0.01		9	10
Total		37.04	1.36	38.24	1.42	1.21	0.05		3	4

U.S. Fixed-Income Asset Allocation

U.S. DOLLAR CORE PLUS

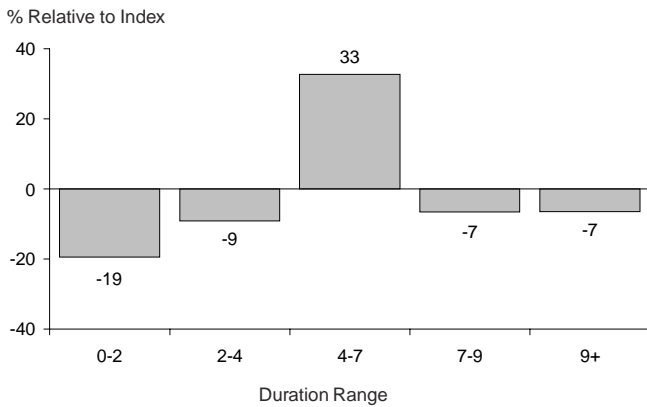
February 1, 2002

SUMMARY RECOMMENDATION	
Option-Adjusted Duration	Spread Duration
98%	119%

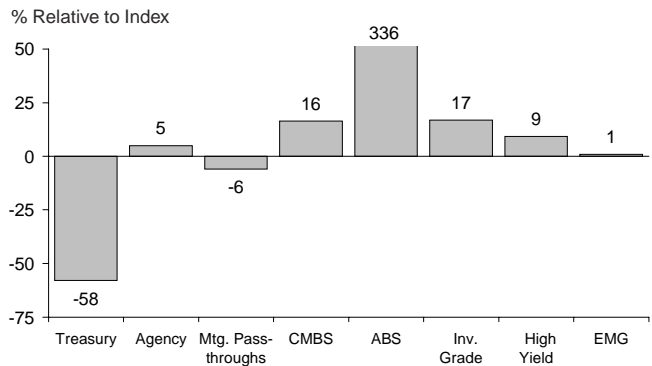
Sector	Percent of Market Value by Duration Range											Contribution to								
	0-2		2-4		4-7		7-9		9+		Total	% Over(+)/ Under(-)	OAD		Spread Duration		% Over(+)/ Under(-)			
	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Diff	Index	Rec	Diff	Weight	
Treasury	4.75	2.71	4.40	3.52	3.45	0.00	0.97	0.54	5.93	1.46	19.50	8.22	-58	1.13	0.32	-0.81	0.00	0.00	0.00	-
Agency	3.11	1.04	3.29	3.83	2.34	3.93	0.64	1.72	1.17	0.56	10.55	11.08	5	0.45	0.47	0.02	0.45	0.47	0.02	5
Mtg. Pass-throughs	4.12	2.51	22.41	17.98	5.08	9.23	0.00	0.00	0.00	0.00	31.61	29.72	-6	0.98	1.11	0.14	1.12	1.20	0.08	8
CMBS	0.04	0.00	0.34	0.50	1.65	1.96	0.09	0.00	0.00	0.00	2.12	2.47	16	0.11	0.11	0.00	0.11	0.12	0.01	9
ABS	0.46	2.93	0.69	3.60	0.30	0.00	0.05	0.00	0.00	0.00	1.50	6.53	336	0.05	0.10	0.05	0.05	0.10	0.05	106
Corporates																				
Inv. Grade	3.88	4.54	8.38	6.76	9.91	13.85	2.44	0.47	4.16	7.98	28.77	33.60	17	1.50	1.95	0.44	1.48	1.93	0.44	30
High Yield	0.27	0.00	1.07	0.64	2.43	3.10	0.15	0.68	0.12	0.00	4.04	4.42	9	0.19	0.22	0.03	0.18	0.21	0.03	16
EMG	0.42	0.00	0.38	0.36	0.66	1.21	0.37	0.00	0.08	0.36	1.91	1.93	1	0.08	0.12	0.04	0.12	0.13	0.01	5
Municipals	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.36	0.00	2.00	2.00	NA	0.00	0.00	0.00	0.00	0.00	0.00	NA
Total	17.05	13.73	40.96	37.20	25.82	34.27	4.71	4.40	11.46	10.71	100.00	100.00		4.49	4.39	-0.10	3.51	4.15	0.64	18

% Over (+) / Under (-) Weight	0-2	2-4	4-7	7-9	9+
	-19	-9	33	-7	-7

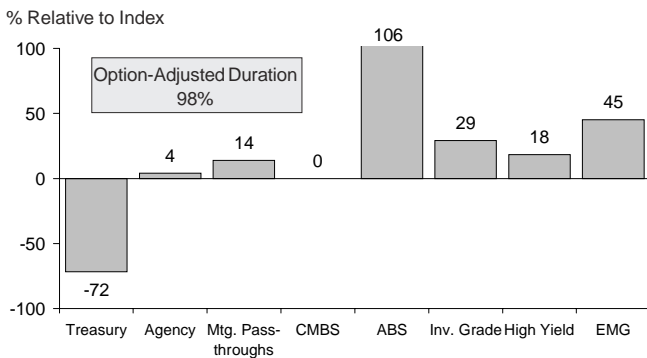
Recommended Portfolio by Duration Range



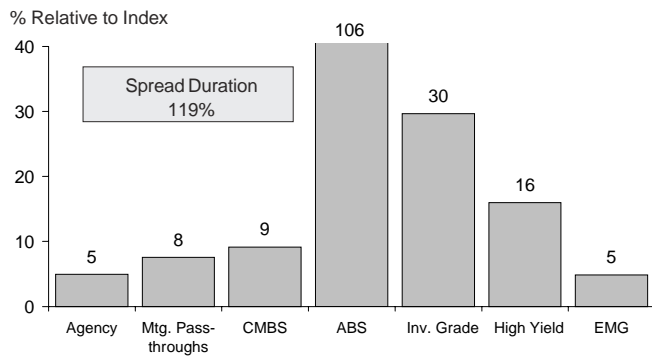
Portfolio Allocation by Asset Class



Contribution to OAD by Asset Class



Contribution to Spread Duration by Asset Class



European Fixed-Income Asset Allocation

EURO-AGGREGATE PORTFOLIO

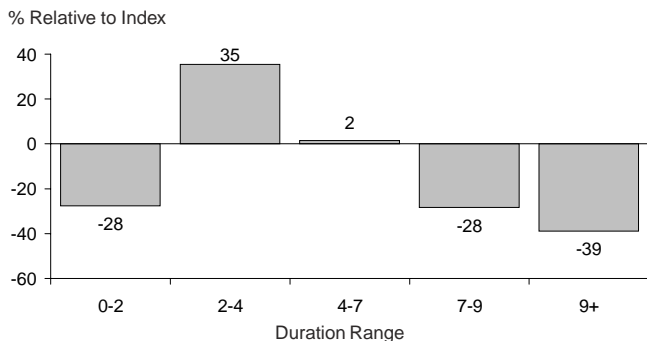
February 1, 2002

SUMMARY RECOMMENDATION	
Option-Adjusted Duration	Spread Duration
99%	102%

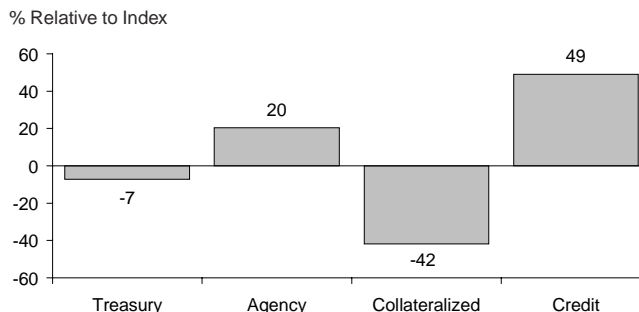
Sector	Percent of Market Value by Duration Range												Contribution to Spread Duration				
	0-2		2-4		4-7		7-9		9+		Total		% Over(+)/ Under(-) Weight	OAD		% Over(+)/ Under(-) Weight	
	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec	Index	Rec		Diff			
Treasury	13.81	11.26	17.36	17.61	20.36	25.52	4.67	0.00	8.12	5.31	64.33	59.69	-7	3.32	3.02	-0.30	-9
Agency	1.09	0.00	1.80	8.26	2.82	0.00	0.83	0.00	0.31	0.00	6.86	8.26	20	0.33	0.24	-0.09	-26
Collateralized	2.26	0.00	3.97	3.48	4.95	1.33	0.76	2.18	0.06	0.00	12.00	6.98	-42	0.51	0.37	-0.14	-27
Credit	2.31	2.82	6.07	10.22	6.96	8.81	1.27	3.22	0.20	0.00	16.81	25.07	49	0.76	1.21	0.45	60
Total	19.47	14.08	29.21	39.56	35.10	35.65	7.53	5.39	8.69	5.31	100.00	100.00	4.92	4.85	-0.07	-1	

% Over(+)/Under(-) Weight -28 35 2 -28 -39

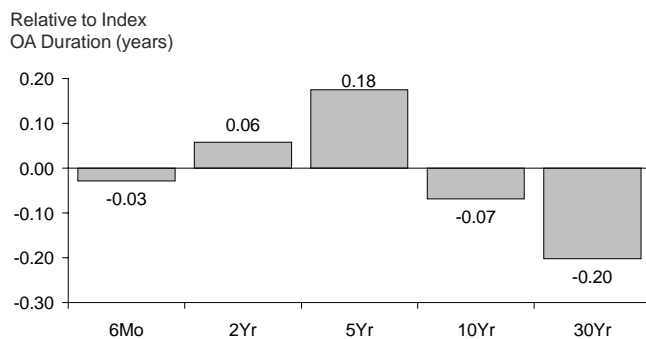
Recommended Portfolio by Duration Range



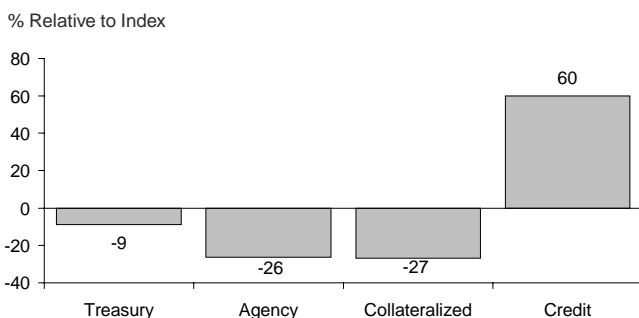
Portfolio Allocation by Asset Class



Portfolio Allocation by Key Rates



Contribution to Spread Duration by Asset Class



Global Fixed-Income Index Return Forecasts

U.S. ASSET CLASSES

February 1, 2002

Asset Class	2002 Total Return (%)		2002 Excess Return (bp)	
	Year-to-Date*	Forecast	Year-to-Date*	Forecast
U.S. Universal Index	0.84	5.70	31	159
U.S. Aggregate	0.81	5.27	28	121
U.S. Treasuries	0.67	4.15	-	-
Agencies	0.60	4.83	10	90
MBS	0.93	5.34	55	132
CMBS	1.13	6.37	56	171
ABS	0.66	4.97	32	112
Credit	0.85	6.65	21	225
High-Yield Corporates	0.70	12.48	17	800
EMG	2.05	-	153	-
Municipals	1.73	-	-	-

Assumptions

	Fed Funds	2-Year	5-Year	10-Year	30-Year	2s-10s (bp)	2s-30s (bp)
U.S. Treasury Curve on 12/31/02	2.25	3.70	4.70	5.25	5.65	155	195

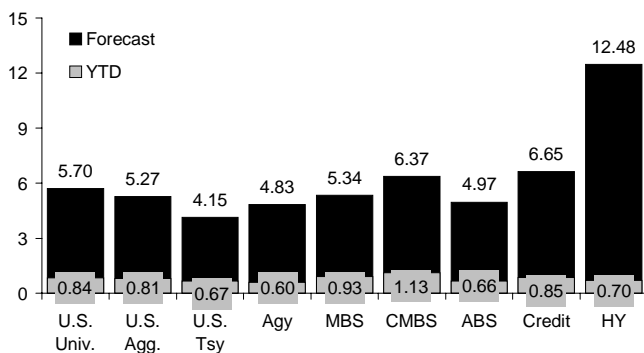
Spread Scenarios

No Change

U.S. Dollar Indices

2002 Nominal Returns and Forecast

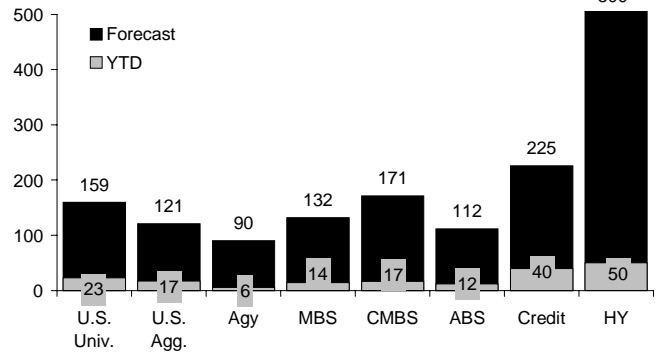
Nominal Return (%)



U.S. Dollar Indices

2002 Excess Returns and Forecast

Excess Return (bp)



* Index Returns as of January 31, 2002.

Global Fixed-Income Index Return Forecasts

EUROPEAN ASSET CLASSES

February 1, 2002

Asset Class	2002 Total Return (%)		2002 Excess Return (bp)	
	Year-to-Date*	Forecast	Year-to-Date*	Forecast
Euro Aggregate**	0.57	2.73	8	34
Treasuries	0.58	2.36	1	7
Agencies	0.48	3.14	11	62
Collateralized	0.29	3.46	-1	18
Credit	0.74	3.25	43	134
Pan European Aggregate***	0.70	2.81	8	34
Treasuries	0.68	2.48	1	7
Agencies	0.77	3.33	21	62
Collateralized	0.31	3.05	0	18
Credit	0.99	3.54	38	134
Pan European High Yield***	0.00	12.99	-44	0
Sterling Aggregate	1.72	3.12	14	27
Swedish Krona Aggregate	0.34	3.92	-2	11
Danish Krone Aggregate	0.71	3.36	0	1
Norwegian Krone Aggregate	0.26	6.33	0	0
Swiss Franc Aggregate	-0.04	4.57	35	87

Assumptions

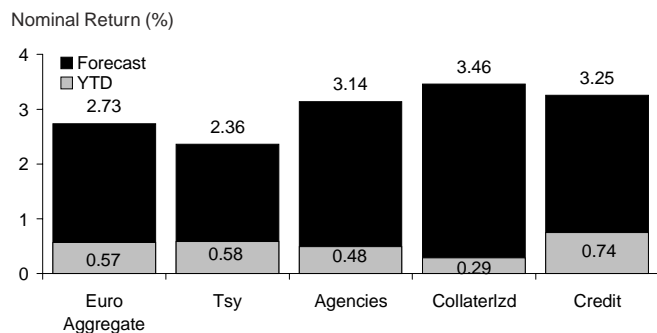
	Short Rate	2-Year	5-Year	10-Year	30-year	2s-10s (bp)
Euro Curve on 12/31/02	4.25	4.80	5.10	5.50	5.80	70
Sterling Curve on 12/31/02	5.25	5.21	5.48	5.25	5.22	4
Swedish Curve on 12/31/02	4.50	4.92	5.48	5.75		83
Danish Curve on 12/31/02	4.55	4.68	5.35	5.70		102
Norwegian Curve on 12/31/02 ^a	6.00	5.79	6.09	6.40		61
Swiss Curve on 12/31/02	2.00	2.60	3.20	3.91		131

Spread Scenarios

No Change

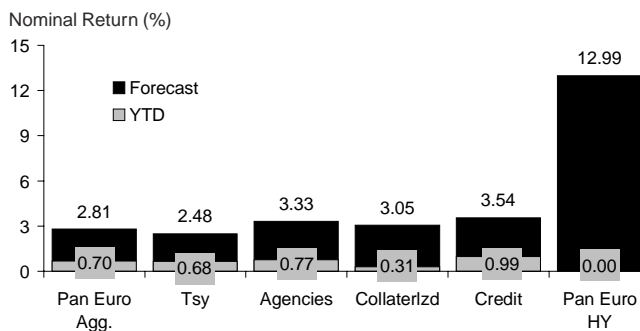
Euro-Aggregate

2002 Nominal Returns and Forecast



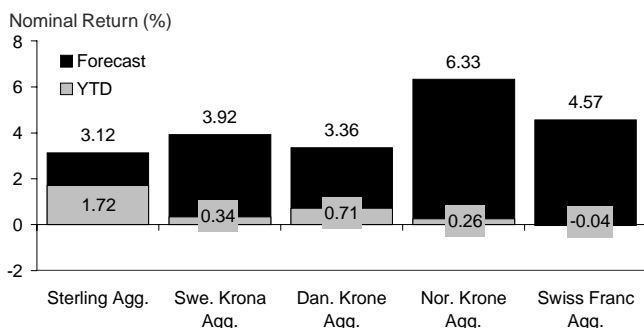
Pan-European

2002 Nominal Returns and Forecast



European Indices (Local Currency)

2002 Nominal Returns and Forecast



* Index Returns as of January 31, 2002.

** Euro-Aggregate Indices reported in euros.

*** Pan-European Indices reported in hedged euros.

^a The Norwegian 5-year bond is a 4-year bond, as no 5-year exists.

Global Fixed-Income Index Return Forecasts

ASIAN-PACIFIC ASSET CLASSES

February 1, 2002

Asset Class	2002 Total Return (%)		2002 Excess Return (bp)	
	Year-to-Date*	Forecast	Year-to-Date*	Forecast
Asian-Pacific Aggregate	-0.64	0.46	1	-3
Treasuries	-0.69	0.45	0	2
Agencies	-0.55	-0.05	5	-51
Collateralized	0.03	0.66	3	48
Credit	-0.39	0.86	4	7

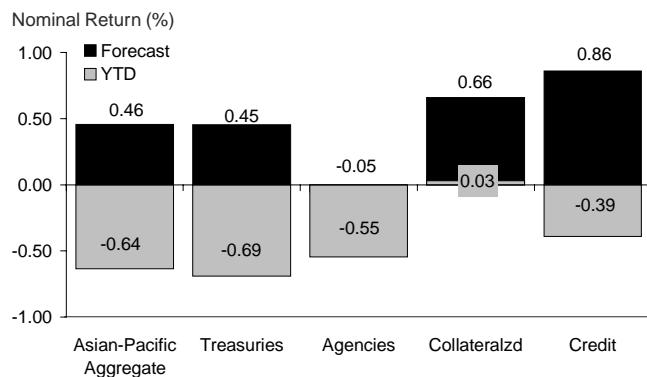
Assumptions

	Overnight Call Rate	2-Year	5-Year	10-Year	20-Year	2s-10s (bp)	2s-20s (bp)
JGB Curve on 12/31/02	0.03	0.10	0.80	1.80	2.30	170	220

Spread Scenarios

No Change

Asian-Pacific Aggregate 2002 Nominal Returns and Forecast



Global Relative Value

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PLENTY OF RISKS, BUT STAYING THE PORTFOLIO COURSE WITH ARRIVAL OF FEBRUARY;
MARKING THE END OF THE MAJOR CENTRAL BANK EASING CYCLE;
PONDER THE CONTINUED OUTPERFORMANCE OF U.S. FINANCIAL ASSETS;
OUR VIEWS ON COPING WITH HEIGHTENED GEOPOLITICAL RISKS;
SKETCH OF JANUARY INDEX PERFORMANCE;
RAMS VICTORY IN THE SUPER BOWL

LEHMAN BOND SHOW WITH ECONOMIST ETHAN HARRIS

On the heels of last Friday's January U.S. employment report, Ethan Harris, our co-chief U.S. economist, joins me on the Lehman Bond Show to discuss the near-term trajectory for the U.S. economy. Typical of cyclical bottomings, this is a period of conflicting economic signals—especially as shown last week. Catch our webcast at <http://www.webcast.lehman.com>.

FED PASSES ON A JANUARY EASE; HIGHLIGHTS THE EFFECTIVE CONCLUSION OF THE “GREAT EASING CYCLE”; WITHOUT ANOTHER DESTABILIZING MACROECONOMIC OR GEOPOLITICAL EVENT, MAJOR CENTRAL BANKS ON HOLD; WHAT A DIFFERENCE A YEAR MAKES

Completing almost a perfect 12-month cycle, the Fed chose to keep rates on hold at its January 30 meeting. Like most central bank watchers, we are struck by the stark contrast in central bank actions between January 2002 and January 2001. Looking back, the 2001 central bank easing cycle was remarkable by historical standards with respect to its swiftness, coordination, and magnitude. And for **major** central banks, it's effectively over without another destabilizing macroeconomic or geopolitical event, in our opinion.

For a handful of stragglers, the “Great Easing Campaign” continues. During the first four weeks of 2002, four monetary authorities lowered their official rates: Chile (50 bp cut), the Czech Republic (-25 bp), Hungary (one 25 bp ease plus another 50 bp), and the Philippines (-25 bp). In total, January 2002's six rate cuts (including 25 bp by the Bank of Canada) ranked only slightly behind January 2001.

But looking ahead to embryonic global economic recovery in 2002, even these stragglers will soon finish their monetary policy efforts to stimulate economic growth. As we suggested last week in *Global Relative Value*, the countdown to the arrival of the next tightening cycle has begun.

NO ASSET ALLOCATION ADJUSTMENTS MOVING INTO EARLY FEBRUARY

As discussed below in our sketch of January returns, the global capital markets generally have been behaving in accordance with our expectations for 2002. Also on the plus side, the U.S. economy surprisingly returned to a positive reading for the fourth quarter (0.2%). And thanks to despondent workers no longer looking, unemployment shrank to 5.6%.

Normally, we'd declare tactical victory and move forward. But even perennial optimists like us also have to acknowledge several unsettling elements overhanging the markets.

The Lehman Brothers Bond Show Webcast

Host Jack Malvey and Lehman Brothers' Co-Chief U.S. Economist Ethan Harris discuss the underlying weakness in the latest economic reports, future monetary policy, and strategy for the week ahead at

<http://live.lehman.com>
and
<http://www.webcast.lehman.com>.

First and foremost, indeed the greatest risk as discussed below, the Bush administration demonstrably underscored last week the probability of high geopolitical risk persistence for the foreseeable future. From the look of the agenda, the “Davos in New York crowd” will spend much of the next several days contemplating the linkages between geopolitical risks and all manner of businesses and markets. Oddly from our perspective and perhaps more a function of “9/11 fatigue” than “Ostrich Syndrome,” the capital markets seemed largely unperturbed for the disconcerting likelihood of high geopolitical risk persistence. In our view, such complacency may eventually prove detrimental to portfolio performance.

Second, on the micro level, some capital market elements became unnerved by the conjectures of “more Enrons to come.” Equities sagged early last week; credit spreads gave up ground. Unfortunately, we do not have firm empirical evidence for the following statement. But based on long historical experience, we suggest an extremely low probability of another Enron in terms of size and surprise materializing in 2002. Sure, there will be the usual incidence of bankruptcies. Some will surprise. Like Kmart, most will be the culmination of long-term deterioration. And in all likelihood, none will supercede Enron.

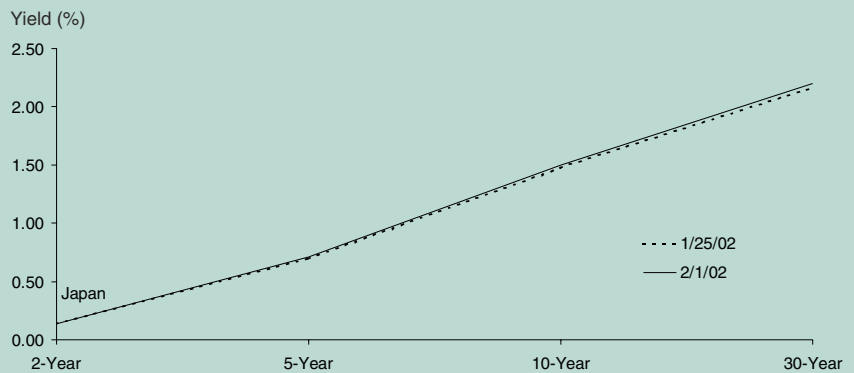
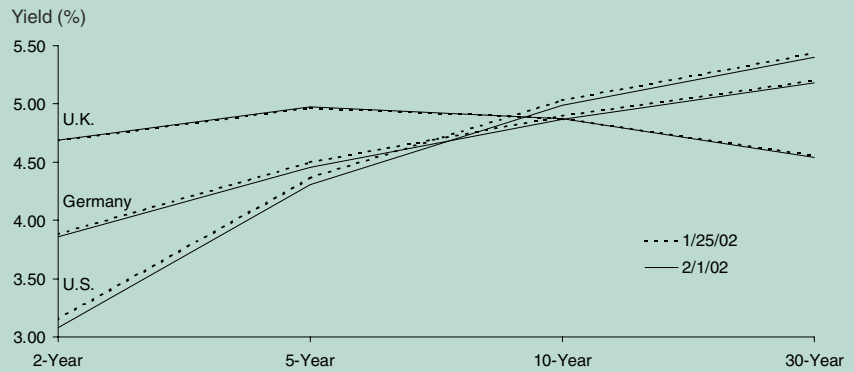
And there will be more write-offs as both accounting firms and issuers strive to produce the cleanest books in this welcome “New Age of Pristine Accounting.” Some write-offs will surprise, like the disclosures last week from two fine U.S. firms, PNC and Anadarko. In the end, the accounting profession and issuers will square away their books to the satisfaction of investors, regulators, and rating agencies. This will be a multi-quarter process. Some firms will encounter pain. But 2-4 quarters out and perhaps in even less time, most capital operators will be in a better mood about accounting. And arguably, these adjustments will be perceived as long-term positive for Corporate America.

Third, doubt has emerged about the velocity of global economic recovery. With Japan on center stage, Asian capital markets did not enjoy a joyous close to January. And even in the U.S., the positive fourth-quarter GDP reading only partially mollified the “cyclical suspicious.” As we suggested last month, we were regrettably confident that prognostications of a “double dip” inevitably would emerge in 2002. In the lull between the conclusion of fourth-quarter earnings releases and looking at another three months before finding that

Weekly Spread Summary			
	Weekly Spread Change (bp)		Weekly Spread Change (bp)
Vol Sectors		Credit Sectors	
U.S. Agencies	-1	U.S. Investment-Grade	7
MBS	2	U.S. High Yield	-6
		Emerging Markets	36
Credit/Vol Sector			
ABS	-1		
CMBS	-2		

Global Bellwether Yield Curves

One-Week Change, January 25, 2002 versus February 1, 2002



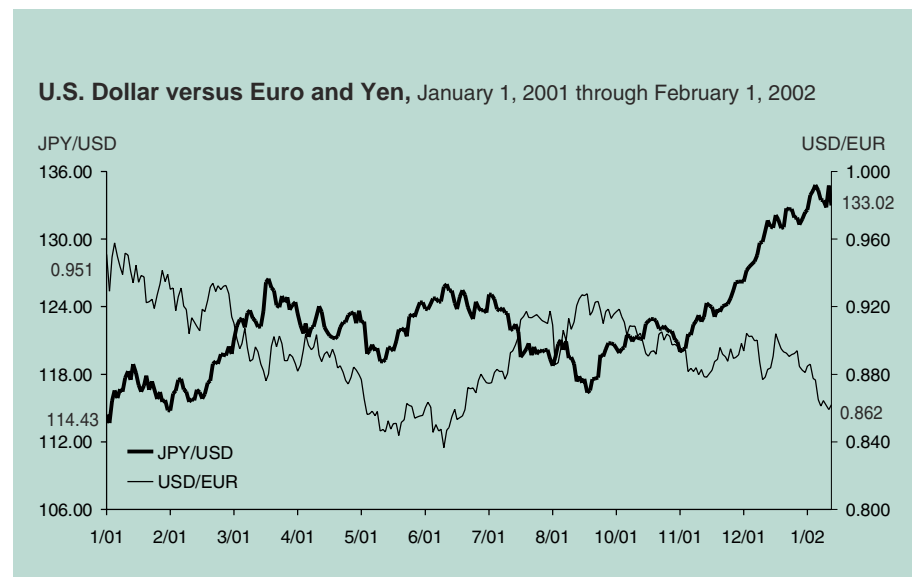
		Yields (%)			
		2-Yr	5-Yr	10-Yr	30-Yr
U.S.	1/25/02	3.15	4.37	5.03	5.43
	2/1/02	<u>3.08</u>	<u>4.31</u>	<u>4.99</u>	<u>5.40</u>
	W-o-w Chg (bp)	-7	-6	-4	-3
Germany	1/25/02	3.88	4.50	4.90	5.20
	2/1/02	<u>3.86</u>	<u>4.46</u>	<u>4.87</u>	<u>5.18</u>
	W-o-w Chg (bp)	-2	-4	-3	-2
U.K.	1/25/02	4.69	4.97	4.88	4.56
	2/1/02	<u>4.69</u>	<u>4.98</u>	<u>4.87</u>	<u>4.54</u>
	W-o-w Chg (bp)	0	1	-1	-2
Japan	1/25/02	0.14	0.70	1.48	2.17
	2/1/02	<u>0.14</u>	<u>0.71</u>	<u>1.50</u>	<u>2.20</u>
	W-o-w Chg (bp)	0	1	2	3

the first-quarter limped along at only 0.5%, we begin to think that this “cyclically suspicious sentiment” begins to gain an upper hand over the near term.

We never suggested an easy ride in 2002. There are risks galore. So, after benefiting from the “first-quarter effect,” what should asset managers do with the arrival of February 2002.

Hopefully not succumbing to tactical inertia, we advocate a portfolio policy of “staying the course.”

- 1) Globally, Asian-Pacific Index returns do not look likely to match their U.S. and European regional counterparts. Stay underweighted on both a hedged and unhedged-currency basis.
- 2) Stay long spread sectors, even with the above acknowledged risks. MBS is unlikely to match January’s potent return, but should still outperform. We can understand some gains trading. But with our minor overallocation (7%), we are standing pat and suggest continued overweighting. We also will retain our credit overallocation. Here, the case can be made for a minor spread wave. But in the admitted absence of clairvoyance, we’d rather not try to time a week-to-week minor spread ripple. In our view and barring a major eruption of geopolitical risk, the global credit markets will still outperform local treasuries over the next two month as the global economy mends.
- 3) Our duration call might use refinement. We’ve been short around the world. This has been a good call in Asia, but less so in the U.S. last week. Here, we still worry about the upside economic risks intruding into the global debt markets. And with major central banks now done, we worry that this reality will gradually have a detrimental effect on yields. Hopefully, we are worry too much. If we are, then we may have to chuck seasonality in the U.S. and cover our U.S. short.



THE PUZZLE OF U.S. FINANCIAL ASSET OUTPERFORMANCE ON A GLOBAL BASIS

Why are U.S. asset markets continuing to outperform? Perhaps because of little choice. The markets perceive less effective non-U.S. economic policy management. But it remains an official puzzle—after all, if the dollar and U.S. assets outperform in both a U.S. recession and a recovery, when will there be a correction? And surely the Enron fiasco would put all U.S. assets under heightened foreign scrutiny.

Officials are talking about it. This week's Federal Reserve Minutes for the Board meeting of December 11 included a mention:

the substantial easing of monetary policy that had been put in place this year had not shown through fully to long-term interest rates, equity prices, bank lending rates, and the foreign exchange value of the dollar.

Similarly, the ECB Monthly Bulletin included a detailed fundamental analysis of why the Euro is so weak in "Economic Fundamentals and the Exchange Value of the Euro."

Virtually all the models surveyed suggested an under valuation of the euro in autumn 2000, thereby supporting the qualitative judgment that exchange rates had moved out of line with the fundamentals.

Late 2000 happens to be where the ECB stood up and finally intervened decisively to stop a currency slide that was understood to be beginning to be seen as a condemnation of the Monetary Union.

Even in Japan, where a weak currency within bounds seems called for, too fast a fall is not. Central Bank Governor Hayami last week outlined one reason why a full free-fall in the yen is undesirable:

If Japan were not able to foster high value-added industries, or if foreign exchange markets believed Japan unable to do so, market forces would work in the direction of yen depreciation . . . Structural reforms are not at all intended to cause adjustments in this pessimistic way.

Lastly, look at the dollar index (Figure 1). It is nowhere near the value expected if we are indeed in a deep credit cycle like 1989-1992. Falling rates saw the dollar deeply discounted then, but it is at peak values now.

Why the Buy?

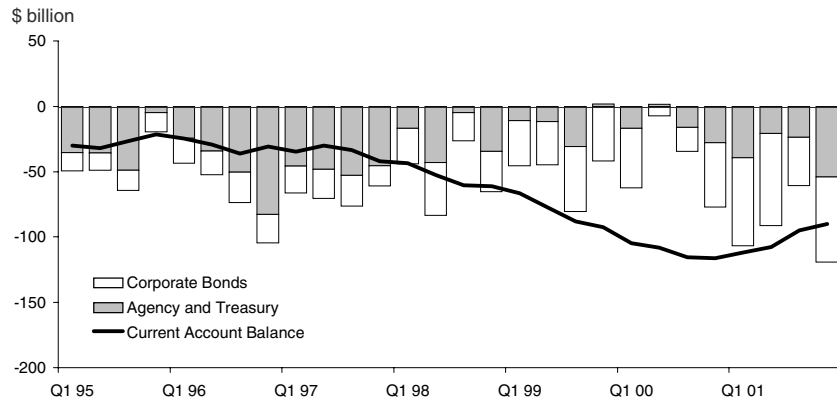
One explanation for the paradoxical strength in the dollar is that foreign investment in U.S. fixed income markets. Total foreign investment in U.S. securities up to the September 11 disruption was climbing. Inflows paused, of course, in September but the news is that foreign flows came back solidly in October and November in Treasury reports. Lehman internal information points to a similar situation into December. Overall bond sales by Americans to foreigners have surged compared to our current account deficit.

Figure 1. Dollar Index and Fed Funds



Sources: Lehman Brothers, Bloomberg, and U.S. Federal Reserve.

Figure 2. U.S. Current Account: Bond Financing



Sources: Lehman Brothers, Datastream, and U.S. Bureau of Economics Analysis.

Not only are foreign flows solid, but some very interesting shifts have developed. Reasonably enough, at a time of spotty liquidity, foreigners are increasingly favoring government and U.S. agency debt. As Drew Matus in our Economics Department, who monitors this data, points out, October and November were the first back to back months in which foreigners bought U.S. Treasury securities. See the shifting pattern of foreign investment, moving toward safety in Treasuries and Agencies and away from corporates and equity.

Going forward, investor concerns will have shifted from basic liquidity and security to accounting and rating instability. And a background of political and strategic risk has not gone away. Risk aversion remains a factor in investor decision.

Sources of Safety

Ordinarily and in earlier cycles, the idea was that credit distress would tend to penalize a currency and all that nation's asset markets. For this reason a credit cycle tended to correspond to a currency cycle. Deteriorating private sector assets led to risk aversion, the currency weakened, and for foreigners, all assets including government claims, looked weak. The smaller the country, the more severe the national penalty in a period of risk aversion.

Where is the U.S. dollar weakness corresponding to the Enron accounting fiasco and the deep questions about U.S. accounting, rating, and business take-over practices? Nowhere to be seen.

Figure 3. Foreign Purchases of U.S. Treasuries

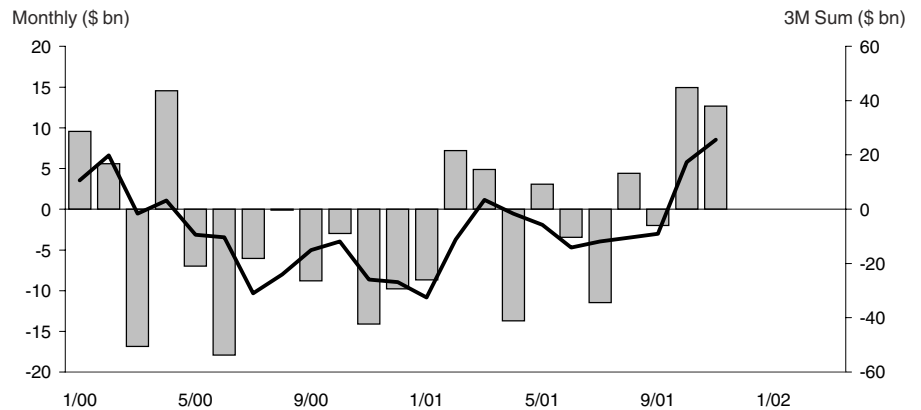
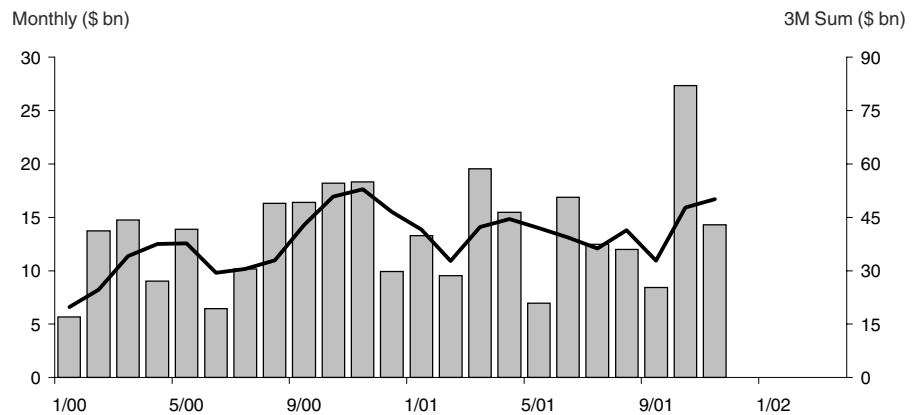


Figure 4. Foreign Purchases of U.S. Agencies

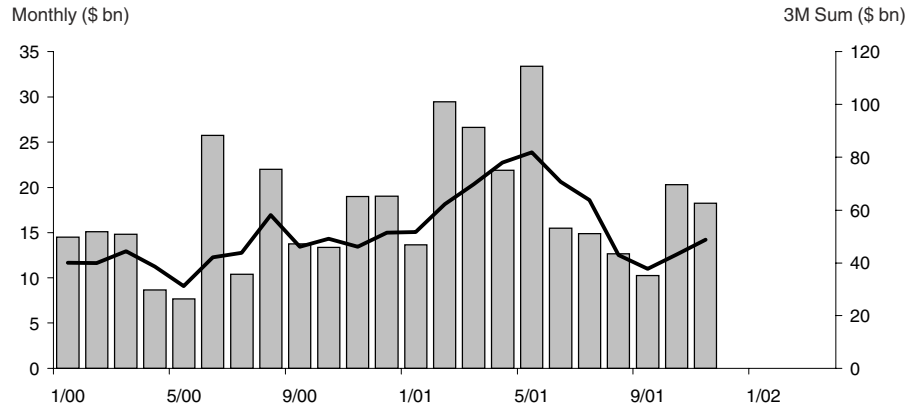


Source: Lehman Brothers Global Economics Group.

One reason is that big businesses around the world are increasingly integrated. Hence, the highly correlated equity sell-offs we have seen in global semiconductor, technology, oil and aircraft cycles. In effect, the national content of business credit risk is muted compared to the past.

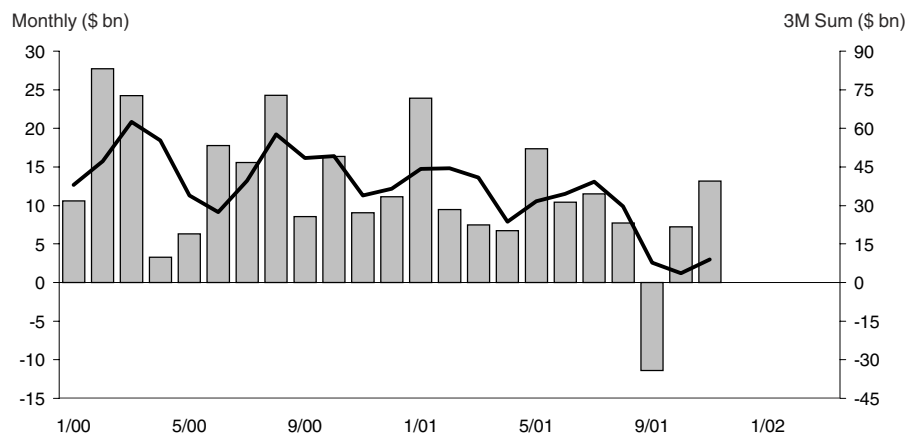
As well, the desired alternative to credit is government paper—it's a natural response to stress. Again, it's a global response of investors here and abroad. Government debt is reliably repaid and the stress implies low inflation and lower rates through time. **What we have however is a situation where the U.S. system is generating more of the safest kinds of debt for global investors.**

Figure 5. Foreign Purchases of U.S. Corporates



Source: Lehman Brothers Global Economics Group.

Figure 6. Foreign Purchases of U.S. Equities



Source: Lehman Brothers Global Economics Group.

Government and Near-Government Supply

First, the U.S. is running an uninhibited expansionary fiscal policy. That picture was only reinforced in the State of the Union speech last week in which President Bush said the objective of fighting terrorism was worthy, urgent, and one form which he would not shirk. Efforts to boost economic activity were justified in practically the same breath. There is nothing like an emergency to promote government debt issuance. The U.S. financial system is producing a healthy dose of the safest class of assets for the global system.

Second, we have been producing solid growth in mortgage agency and mortgage backed securities, which are very near to Treasuries in security. Favorable refinancing conditions have led to an increase in household debt through this low cost and easily available format. And state and local debt has also picked up sharply. All these are close substitutes for official debt because they have very limited downside risk.

Third, the ability and propensity of other governments to issue or indirectly guarantee debts is limited. In Europe, the European Commission is chiding governments about their long run budget “stabilization” efforts. In Japan, the government is determined to cap the level of debt issuance ahead of a deeper credit downgrade that is looming. There are fewer alternatives than usual to U.S. securities.

A smoothly functioning financial system adapts to its customers. In this case, the American financial system is adapting to American and global investors. This may be the key to the dollar puzzle. In 1990, Germany was facing a unification emergency that led to unconstrained government debt issuance. Welding the two parts of the divided nation together was understood to be a once in a generation priority. Unconsciously, Germany stumbled into a surge in provision of government debt that drove up the value of the Deutschmark and broke up the ERM mechanism of the time.

The Carry

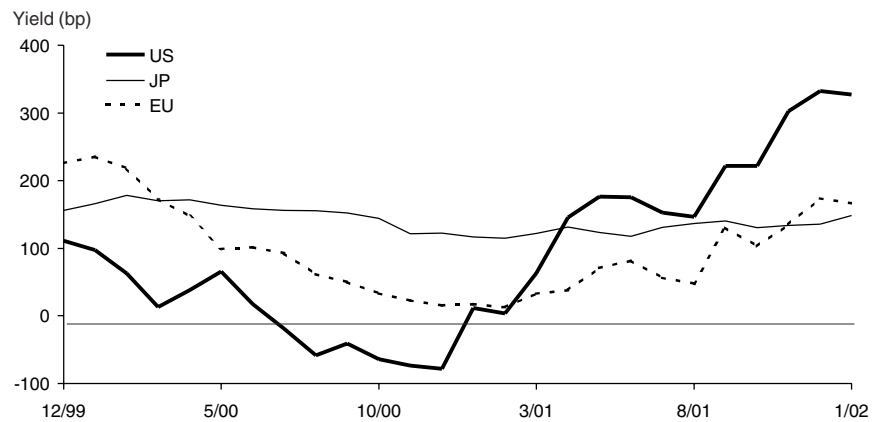
It is not only safety, but also carry that now favors U.S. assets. Just as we recommend currency-hedged foreign securities in a global portfolio, so a large class of foreign investors will be attracted to U.S. government debt when hedged returns are high. In this way, the Federal Reserve’s drastic rate-cut policy favors the dollar. A very steep U.S. curve creates the opportunity to buy a U.S. security funded at short term. Any investor who has a medium term view on global deflation will find the position attractive.

Market Conclusions

It looks like the dollar is profiting from the greater flexibility of the U.S. system—including monetary policy, fiscal policy, and the special institutional stability in our mortgage finance industry.

- The downside on U.S. duration remains a risk because of the tactical, inventory-driven business cycle.
- The same concern is at least as pressing in Europe and Japan where our strategists are short duration at 99% and 99%.

Figure 7. Dollar Carry, 10-Year to 3-Month



Sources: Lehman Brothers and Bloomberg.

- We had been toying with a higher euro exposure in unhedged portfolios to reflect the new currency's potential as an alternative after Enron. A bad idea, and we reverse that..
- The same flexibility that lets the U.S. produce government debt in a period of stress also argues for a narrower swap-bond spreads.

“SUCCESSFULLY COPING WITH PORTFOLIO RISKS DURING PERIODS OF HIGH GEOPOLITICAL UNCERTAINTY”

The early Oughts are more sober times. Our historic amusements at this time of year (mainly for U.S. readers) on the “Super Bowl Effect” (by the way, the Rams will defeat the Patriots in a close game) and the “Groundhog Day Effect” (will be a shadow, mild winter persists for another six weeks for the U.S. capital markets) seem less apropos.

In his State of the Union address last week, President Bush outlined the clear and present dangers posed by the “axis of evil”: Iraq, Iran, and North Korea. And U.S. Defense Secretary Rumsfeld warned of the high likelihood of additional terrorist strikes in the U.S. in 2002.

These words from Washington echo Woodrow Wilson's administration circa 1916 and the Roosevelt Administration from 1939 through late 1941. The American public and global opinion are being lobbied. Washington has expressed its clear intention to address terrorism, states that sponsor terrorism, and political operatives with the means and the will to acquire and to use weapons of mass destruction against the industrialized world.

The future history of the Oughts arcs from the bright, technologically-driven return to the New Paradigm to the dreaded possibility of major upheavals. Fortunately, the odds favor the former. The U.S. and its major industrial partners have every incentive and the capabilities to secure a more prosperous and safer future. But the risks of the latter cannot be dismissed. And unlike the comparative geopolitical tranquility of the 1990s, the Oughts likely will be recalled as a less settled time.

In turn, asset managers will have to devote more time to assaying and preparing for eruptions of geopolitical risk. We were invited to address the Boston Society of Security Analysts on this very topic last week. The gist of our comments follows in outline form. **Our main recommendation: investment policy committees need to formally incorporate an evaluation of geopolitical risk at each of their sessions. Unfortunately, the chances are high that geopolitical risks will occasionally spill over into the capital markets over the next several years in our opinion.**

Definition of Geopolitical Risk for Capital Markets

- Putting the “Political” back in front of “Economy”: It’s “Political Economy” as demonstrated in the textbooks of the 19th century. As long realized, capital-market operators cannot ignore domestic and international political risks. But the calm waters of the early-to-mid 1990s might have breed complacency in some quarters. Like two-dimensional figures in “flatland space,” many capital-market operators have successfully trafficked by considering only endogenous economic and corporate events. This methodology will likely be less successful during the Oughts.
- What is geopolitical risk? The term was coined by Rudolf Kjeflen (1916), a Swedish political scientist, to consider role of geography in international relations.
- The modern capital market connotation of geopolitical risk has broadened to include any international event (“international incident,” war, threat of war, disruption of major trade flow (oil), revolution, terrorist action, coup, assassination) that adversely affects global commerce and capital markets.
- Sharper definition are required. We should differentiate between “sudden geopolitical shocks” like 9/11 and long-term strategic realignments like the end of the Cold War.

The Long View of Geopolitical History

Last summer, former U.S. ambassador Richard Holbrooke divided the 20th century into two halves:

- First half of 20th century—defeat of fascism
- Second half of 20th century—defeat of communism.

In our view,

- First quarter of 21st century—defeat of terrorism.

Hopefully, this timeline will be even shorter.

Incidence of Geopolitical Risk: 1900-January 2001

Geopolitical risks are not new:

- For U.S. capital markets, major event about once every decade: World War I (1914-1918); World War II (1939-1945); Korean War (1950-1953); Vietnam War (1965-1973); Arab Oil Embargo (1973); Iranian Revolution (1979); Gulf War (1990-1991); 9/11/01.

- Minor incidents more frequent: Berlin Blockade (1948); Hungarian Revolution (1956), “Cultural Revolution” in China (1965); Pueblo (1969); Watergate denouement (1974); U.S. hostages in Tehran (1979); Tiananmen Square (1989); potential Russian Coup (1991); World Trade Center Bombing (1993); Kobe Earthquake (example of a natural disaster introducing global capital market wobbles in 1995); Chinese missile testing over Taiwan (1996); India and Pakistan nuclear testing (1998); U.S. reconnaissance plane in China (2001)
- Expect higher frequency in a more-integrated world of 189 U.N. member nations.

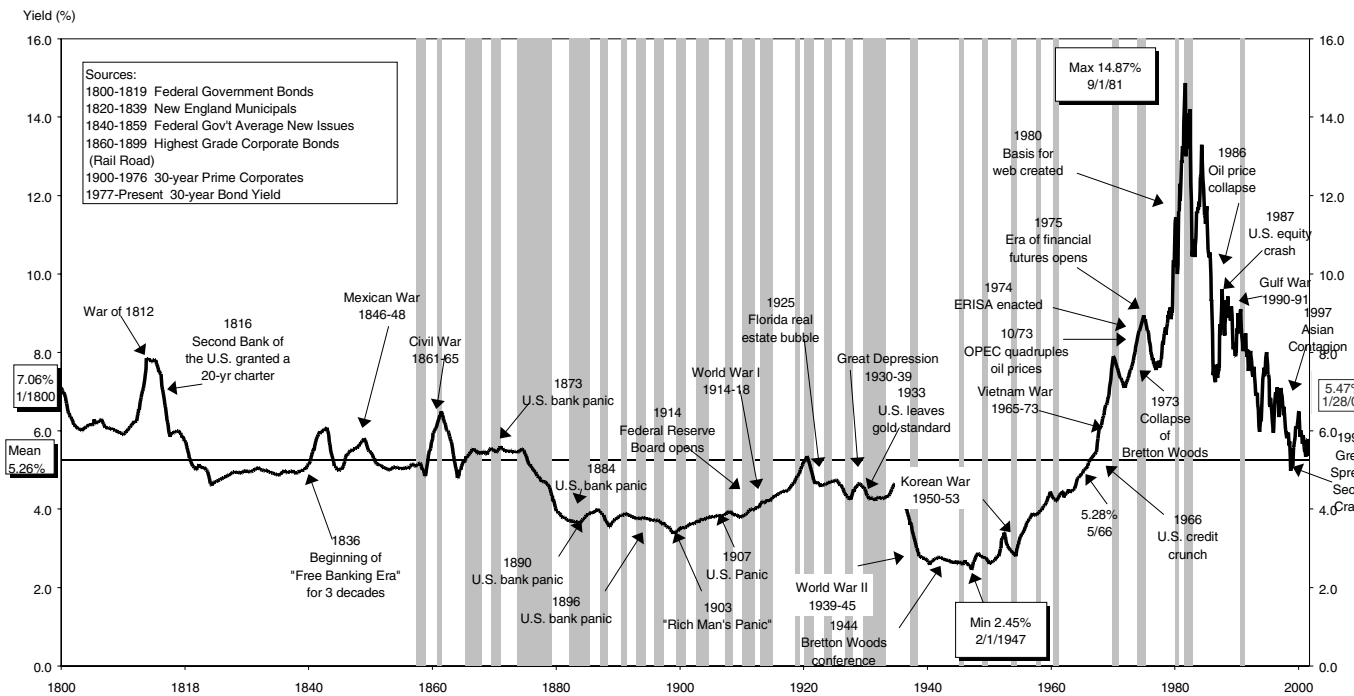
Portfolio Effects of Geopolitical Risk

- Historical lessons provide useful guidance, but beware of “survivorship bias” as Steve Ross has cautioned: equity and debt markets of Russia, Germany, Japan, France, Italy, and China did not survive 20th century without impairment

General Lessons

- CURRENCIES: “flight to dollar, fall of peripherals”
- EQUITIES: “sharp decline; especially for growth, cyclicals, smaller firms”

Figure 8. **A History of Long-term U.S. Interest Rates and Thirty-Two U.S. Business Cycles:**
1800 through January 28, 2002



* Shaded areas denote military conflicts since January 1800.

Figure 9. **History of U.S. Economic Crises and Long U.S. Bond Yields**
1850 through January 28, 2002

U.S. Recession Dates		Long U.S. Bond Yield (%)			Recession Change (bp)	
		1-Yr Before Recession	Average During Recession	1-Yr After Recession	1-Yr Before	1-Yr After
Beginning	End					
<i>19th Century</i>						
Jun-1857	Dec-1857	5.10	5.05	5.75	-5	70
Oct-1860	Jun-1861	5.65	6.34	6.00	69	-34
April-1865	Dec-1867	4.85	5.43	5.44	58	1
Jun-1869	Dec-1870	5.45	5.51	5.48	6	-3
Oct-1873	Mar-1879	5.50	5.01	3.94	-49	-107
Mar-1882	May-1885	3.79	3.73	3.95	-6	22
Mar-1887	April-1888	3.93	3.79	3.70	-14	-9
July-1890	May-1881	3.75	3.86	3.70	11	-16
Jan-1893	Jun-1894	3.82	3.77	3.73	-5	-4
Dec-1895	Jun-1897	3.75	3.68	3.48	-7	-20
Jun-1899	Dec-1900	<u>3.48</u>	<u>3.50</u>	<u>3.64</u>	2	14
Period Average		4.46	4.52	4.44	6	-8
<i>20th Century</i>						
Sep-1902	Jun-1904	3.62	3.73	3.82	11	9
May-1907	Jun-1908	3.82	3.91	3.82	9	-9
Jan-1910	Jan-1912	3.84	3.92	4.15	8	23
Jan-1913	Dec-1914	4.00	4.21	4.39	21	18
Aug-1918	Mar-1919	4.50	4.82	5.25	32	43
Jan-1920	Jul-1921	4.85	5.14	4.65	29	-49
May-1923	Jul-1924	4.66	4.67	4.70	1	3
Oct-1926	Nov-1927	4.64	4.31	4.65	-33	34
Aug-1929	Mar-1933	4.60	4.32	4.50	-28	18
May-1937	Jun-1938	4.10	3.23	2.75	-87	-48
Feb-1945	Oct-1945	2.65	2.62	2.55	-3	-7
Nov-1948	Oct-1949	2.80	2.74	2.69	-6	-5
Jul-1953	May-1954	3.30	2.87	3.40	-43	53
Aug-1957	Apr-1958	3.80	3.91	4.20	11	29
Apr-1960	Feb-1961	4.20	4.25	4.35	5	10
Dec-1969	Nov-1970	6.67	7.72	7.15	105	-57
Nov-1973	Mar-1975	7.55	8.68	7.95	113	-73
Jan-1980	Jul-1980	9.06	10.75	14.57	169	382
Jul-1981	Nov-1982	11.00	13.09	11.84	209	-125
Jul-1990	Mar-1991	<u>8.19</u>	<u>8.49</u>	<u>8.04</u>	<u>30</u>	<u>-45</u>
<i>21st Century</i>						
Mar-2001		<u>5.71</u>	<u>5.47</u>	-	<u>-24</u>	-
Period Average		5.12	5.37	5.47	25	10
Overall Average: 1850-2002		4.89	5.08	5.10	19	2

* Using NBER March 2001 Recession Date.

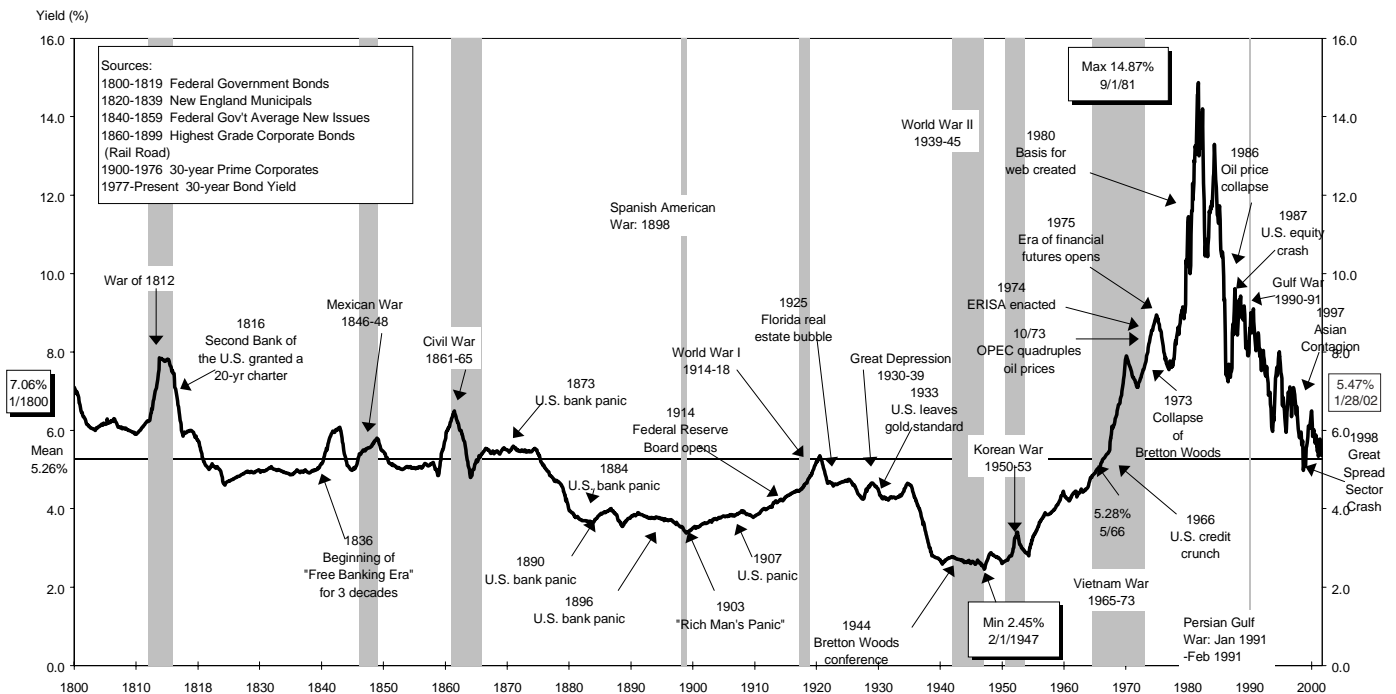
- BONDS: “major front end rally (especially 2-year) on premise of central bank relief; long-end prices fall; hence, curve steepeners”; international investor bias for local markets; general spread expansion, more for lower quality credits than high-quality credits.

Focusing on bonds, we have included several exhibits to illustrate the effects of business cycles and major and minor geopolitical shocks on the debt markets over the past two centuries. In our view, investors should become very familiar with this data. Admittedly, the data is somewhat ambivalent. And we acknowledge that the lessons of the War of 1812 probably do not have much import for the global capital markets of the early 21st century. We also concede a U.S. data bias, partially because continuous non-U.S. capital market data is less readily available for non-U.S. capital markets (see the comment above on “survivorship bias”) other than for the U.K. Still, with the aid of our non-U.S. strategy colleagues, we hope to assemble similar data for the Japanese and European capital markets in the near future.

We can tease two broad conclusions from the data:

- For minor events, long interest rates tend to rise at the time of the incident (long-end risk aversion) and then decline over the course of the next several months as the aftershocks dissipate.

Figure 10. A History of Long U.S. Interest Rates and U.S. and World Military Conflicts: 1800 through January 28, 2002



* Shaded areas denote military conflicts since January 1800.

- For major events, long interest rates tend to rise at the time of the incident and to rise further still over ensuing months. This may be a reflection of the government's need to boost military spending, thereby encouraging deficit financing, higher government borrowings, and an upward inflationary bias. Unfortunately for the U.S. bond market, the Bush administration has portrayed 9/11 as more of a strategic event and already has requested an augmented defense budget. Hopefully, other influences (specifically, the lowest deflator in 50 years) will keep a lid on U.S. inflation over the next several years.

Evaluating Geopolitical Risks

- Especially with portfolio globalization, asset managers must formally incorporate geopolitical risk into the investment decision-making process.

How?

- Hire a full-time political analyst or subscribe to political risk consulting service
- Develop contacts with State Department and CIA
- Read publications such as *Foreign Affairs*
- Visit major regions at least annually
- Never invest in a country without a prior visit by some member of the investment staff

Figure 11. **History of U.S. Military Conflicts and Long U.S. Bond Yields**
1800 through January 28, 2002

U.S. Military Conflict	Beginning	End	Long U.S. Bond Yield (%)			Military Conflict Chg (bp)	
			1-Yr Before Conflict	Avg During Conflict	1-Yr After Conflict	1-Yr Before	1-Yr After
<i>19th Century</i>							
War of 1812	Jun-1812	Aug-1815	6.16	8.15	7.45	199	-70
Mexican-American War	May-1842	Feb-1845	5.54	5.52	5.77	-2	25
Civil War	April-1861	April-1865	6.00	5.58	5.48	-42	-10
Spanish-American War	April-1889	Dec-1898	<u>3.60</u>	<u>3.45</u>	<u>3.50</u>	<u>-15</u>	<u>5</u>
Period Average			5.33	5.68	5.55	35	-13
<i>20th Century</i>							
World War I	Mar-1917	Nov-1918	4.41	4.61	5.15	20	54
World War II	Dec-1941	Aug-1945	2.70	2.66	2.56	-4	-10
Korean Conflict	Jun-1950	Jul-1953	2.74	2.98	3.00	24	2
Vietnam	Aug-1964	Jan-1973	4.50	6.43	8.45	193	202
Persian Gulf War	Jan-1991	Feb-1991	8.61	8.57	7.97	-4	-60
<i>21st Century</i>							
September 11, 2001	Sep-2001		<u>5.88</u>	<u>5.26*</u>	<u>5.47**</u>	<u>-62</u>	<u>21</u>
Period Average			4.81	5.09	5.43	28	34
Overall Wartime Average			5.01	5.32	5.48	31	16

* 9/12 through 12/31/01.

** January 28, 2002.

- Like military planners, conduct scenario analyses drills. For example, what would you do if North Korea invaded South Korea or India/Pakistan have a nuclear exchange?

What Are the Major Geopolitical Risks: 2002-2020?

Dispute Framework: Old Problems, New Old Problems, New Problems

- Capitalism or “socialist recidivism”
- Religious tolerance: “clash of civilizations?”
- Lack of compromise
- Political and economic convergence to regional aggregates (think eurozone) or nationalist-fueled unraveling into smaller units (think Balkans)
- Shift in the global balance of power
- Distributionist policies: technology, information, healthcare, wealth
- Role of terrorism as a tool to engender to geopolitical change
- Accountability for long-term environmental issues
- Proliferation and potential use of weapons of mass destruction

Regional Risks and Questions

East Asia: The Rising Influence of China

(see the massive report put out by Lehman’s Global Economics team last week on China)

- Role of Japan
- Taiwan assimilation by China
- Korean unification
- Indonesian unbundling
- Singapore’s role

Central Asia: India/Pakistan Tensions: Peaceful Denouement?

- Economic liberalization

Middle East: A Resolution of the Palestinian Question

- Iraq: Longevity of current regime?
- Iran: Moderation of theocracy and partial return to the West?
- Future of Saudi monarchy

Europe: Expansion of EU

- Economic integration offset political separation
- Russia
- Separatist agitators: Basques, Ireland, Balkans

Latin America: Democracy, Populism, or Authoritarianism

- Final lessons from Argentine devaluation/default?: Failed experiment in neoliberal modern capitalism or bad local and IMF policy-making?
- Venezuela: “New Old” political model
- Brazil: Stay the course?
- Mexico: Extent of reform?

Figure 12. Long U.S. Bond Yields Before and After Military Conflicts: 1912 through January 28, 2002

Military Conflict	Date	Long Bond Yield	Long Treasury Yields Percent X Months Before/After Military Conflict												Change (%) in Treasury Yields X Months Before/After Military Conflict											
			-24	-12	-4	-6	-2	-1	1	2	4	6	12	24	-24	-12	-4	-6	-2	-1	1	2	4	6	12	24
World War I																										
Assassination in Sarajevo	6/1914	4.22	4.05	4.20	4.23	4.20	4.24	4.23	4.20	4.22	4.25	4.30	4.34	4.43	4.20	0.48	-0.24	0.48	-0.47	-0.24	-0.47	0.00	0.71	1.90	2.84	4.98
Austria Declares War on Serbia	7/1914	4.20	4.04	4.15	4.21	4.22	4.23	4.22	4.22	4.25	4.28	4.30	4.35	4.44	3.96	1.20	-0.24	-0.47	-0.71	-0.47	0.48	1.19	1.90	2.38	3.57	5.71
U.S. Declares War on Germany	4/1917	4.47	4.34	4.42	4.46	4.46	4.46	4.45	4.48	4.48	4.50	4.55	4.65	4.90	3.00	1.13	0.22	0.22	0.22	0.45	0.22	0.22	0.67	1.79	4.03	9.62
Austria, Hungary, & Germany Surrender	11/1918	4.80	4.47	4.55	4.70	4.65	4.76	4.79	4.85	4.85	4.90	4.95	5.15	5.20	7.38	5.49	2.13	3.23	0.84	0.21	1.04	1.04	2.08	3.13	7.29	8.33
World War II																										
Germany Invades Poland	9/1939	2.73	3.35	2.80	2.75	2.76	2.74	2.74	2.72	2.70	2.68	2.64	2.65	2.76	-18.51	-2.50	-0.73	-1.09	-0.36	-0.36	-0.37	-1.10	-1.83	-3.30	-2.93	1.10
Germany Invades France	5/1940	2.59	3.00	2.75	2.68	2.70	2.64	2.60	2.62	2.64	2.65	2.70	2.73	2.74	-13.67	-5.82	-3.36	-4.07	-1.89	-0.38	1.16	1.93	2.32	4.25	5.41	5.79
France Surrenders	6/1940	2.62	2.90	2.75	2.65	2.70	2.60	2.59	2.64	2.66	2.69	2.70	2.74	2.74	-9.66	-4.73	-1.13	-2.96	0.77	1.16	0.76	1.53	2.67	3.05	4.58	4.58
Pearl Harbor	12/1941	2.77	2.70	2.70	2.75	2.74	2.77	2.78	2.76	2.77	2.75	2.74	2.71	2.64	2.59	2.59	0.73	1.09	0.00	-0.36	-0.36	0.00	-0.72	-1.08	-2.17	-4.69
Germany Surrenders	5/1945	2.64	2.70	2.66	2.64	2.61	2.66	2.65	2.62	2.60	2.58	2.63	2.60	2.60	-2.22	-0.75	0.00	1.15	-0.75	-0.38	-0.76	-1.52	-2.27	-0.38	-1.52	-1.52
Hiroshima/Nagasaki and Japanese Surrender	8/1945	2.59	2.68	2.68	2.65	2.65	2.62	2.60	2.58	2.61	2.65	2.66	2.56	2.70	-3.36	-3.36	-2.26	-2.26	-1.15	-0.38	-0.39	0.77	2.32	2.70	-1.16	4.25
Korea																										
North Korea Invades	6/1950	2.66	2.82	2.74	2.62	2.60	2.65	2.65	2.67	2.68	2.69	2.72	2.80	3.40	-5.67	-2.92	1.53	2.31	0.38	0.38	0.38	0.75	1.13	2.26	5.26	27.82
Cease Fire Signed	7/1953	2.94	2.80	3.30	3.00	3.05	2.95	2.95	2.90	2.90	2.88	2.85	3.00	3.45	5.00	-10.91	-2.00	-3.61	-0.34	-0.34	-1.36	-1.36	-2.04	-3.06	2.04	17.35
Vietnam																										
Gulf of Tonkin	8/1964	4.85	4.45	4.50	4.80	4.70	4.80	4.85	4.86	4.88	4.90	4.95	5.04	5.32	8.99	7.78	1.04	3.19	1.04	0.00	0.21	0.62	1.03	2.06	3.92	9.69
U.S. Marines Sent	3/1965	4.98	4.46	4.76	4.89	4.86	4.91	4.95	5.00	5.00	5.04	5.05	5.25	5.44	11.66	4.62	1.84	2.47	1.43	0.61	0.40	0.40	1.20	1.41	5.42	9.24
North Vietnam Overtakes Saigon	4/1975	8.75	7.80	8.55	8.95	8.85	8.80	8.85	8.70	8.60	8.55	8.40	7.90	7.76	12.18	2.34	-2.23	-1.13	-0.57	-1.13	-0.57	-1.71	-2.29	-4.00	-9.71	-1.31
Persian Gulf War																										
Iraq Invades Kuwait	8/1990	9.10	9.08	8.26	8.63	8.53	8.54	9.00	8.77	8.44	8.22	8.28	7.88	7.38	0.22	10.17	5.45	6.68	6.56	1.11	-3.63	-7.25	-9.67	-9.01	-13.41	-8.90
U.N. Authorizes Force	11/1990	8.31	9.00	7.98	9.00	8.49	8.77	8.44	8.22	8.03	8.25	8.49	7.52	7.40	-7.67	4.14	-7.67	-2.12	-5.25	-1.54	-1.08	-3.37	-0.72	2.17	-9.51	-0.95
Desert Storm Begins	1/1991	8.03	9.13	8.61	8.77	9.00	8.31	8.22	8.28	8.25	8.49	8.08	7.88	6.90	-12.05	-6.74	-8.44	-10.78	-3.37	-2.31	3.11	2.74	5.73	0.62	-1.87	-4.07
Ground Assault Begins	2/1991	8.28	9.17	8.53	8.44	9.10	8.22	8.03	8.25	8.26	8.43	7.88	7.97	6.93	-9.71	-2.93	-1.90	-9.01	0.73	3.11	-0.36	-0.24	1.81	-4.83	-3.74	-6.30
Kuwait Liberated	2/1991	8.28	9.17	8.53	8.44	9.10	8.22	8.03	8.25	8.26	8.43	7.88	7.97	6.93	-9.71	-2.93	-1.90	-9.01	0.73	3.11	-0.36	-0.24	1.81	-4.83	-3.74	-6.30
War on Terrorism																										
Afghanistan-U.S. Bombing Begins	10/2001	4.88	6.16	5.79	5.74	5.77	5.36	5.42	5.27	5.48	-	-	-	-20.68	-15.65	-14.94	-15.40	-8.97	-9.88	7.89	12.17	-	-	-	-	-
Mean														-2.56 -0.92 -1.62 -1.96 -0.53 -0.36 0.28 0.31 0.29 -0.14 -0.27 0.72												
Median														-2.22 -0.75 -0.73 -1.09 -0.34 -0.34 -0.36 0.22 1.08 1.60 0.44 4.41												

Long U.S. Yields: 1900-1976 30-year Prime Corporates; 1977-Present 30-year Bond.
Source: Yield Lehman Brothers Fixed-Income Research

Figure 13. Long U.S. Bond Yields After Crisis Periods: 1940 through January 28, 2002

Crisis Events	Reaction Dates	Long Bond Yield	Long Treasury Yields X Mos				Chg (bp) in Yields X Mos				% Chg in Yields X Mos			
			After Reaction				After Reaction				After Reaction			
			1	2	3	4	1	2	3	4	1	2	3	4
Fall of France	May-1940	2.59	2.62	2.64	2.66	2.65	3	5	7	6	1.16	1.93	2.70	2.32
Pearl Harbor	Dec-1941	2.77	2.76	2.77	2.75	2.75	-1	0	-2	-2	-0.36	0.00	-0.72	-0.72
Truman Upset Victory	Nov-1948	2.78	2.77	2.78	2.76	2.77	-1	0	-2	-1	-0.36	0.00	-0.72	-0.36
Korean War	Jul-1950	2.67	2.68	2.68	2.69	2.69	1	1	2	2	0.37	0.37	0.75	0.75
Eisenhower Heart Attack	Sep-1955	3.50	3.55	3.55	3.60	3.65	5	5	10	15	1.43	1.43	2.86	4.29
Sputnik	Oct-1957	3.88	3.90	3.90	3.92	3.93	2	2	4	5	0.52	0.52	1.03	1.29
Cuban Missile Crisis	Oct-1962	4.50	4.45	4.43	4.42	4.45	-5	-7	-8	-5	-1.11	-1.56	-1.78	-1.11
JFK Assassination	Nov-1963	4.55	4.60	4.65	4.70	4.76	5	10	15	21	1.10	2.20	3.30	4.62
U.S. Bombs Cambodia	Apr-1970	7.80	7.75	7.70	7.66	7.62	-5	-10	-14	-18	-0.64	-1.28	-1.79	-2.31
Kent State Shootings	May-1970	7.75	7.70	7.66	7.62	7.60	-5	-9	-13	-15	-0.65	-1.16	-1.68	-1.94
Arab Oil Embargo	Oct-1973	8.25	8.30	8.40	8.45	8.50	5	15	20	25	0.61	1.82	2.42	3.03
Nixon Resigns	Aug-1974	8.75	8.80	8.85	8.90	8.95	5	10	15	20	0.57	1.14	1.71	2.29
USSR in Afghanistan	Dec-1979	10.90	11.30	11.45	11.05	10.25	40	55	15	-65	3.67	5.05	1.38	-5.96
Hunt Silver Crisis	Feb-1980	11.45	11.05	10.25	10.00	10.20	-40	-120	-145	-125	-3.49	-10.48	-12.66	-10.92
Falkland Islands War	Apr-1982	13.30	14.20	13.45	12.30	11.86	90	15	-100	-144	6.77	1.13	-7.52	-10.83
U.S. Invades Grenada	Oct-1983	11.65	11.84	11.71	12.09	12.47	19	6	44	82	1.63	0.52	3.78	7.04
U.S. Bombs Libya	Apr-1986	7.57	7.36	7.32	7.24	7.69	-21	-25	-33	12	-2.77	-3.30	-4.36	1.59
Financial Panic of 1987	Oct-1987	9.03	8.98	8.56	8.43	8.74	-5	-47	-60	-29	-0.55	-5.20	-6.64	-3.21
Invasion of Panama	Dec-1989	8.40	8.61	8.53	9.00	8.63	21	13	60	23	2.50	1.55	7.14	2.74
Gulf War Ultimatum	Dec-1990	8.22	8.03	8.28	8.25	8.26	-19	6	3	4	-2.31	0.73	0.36	0.49
Gorbachev Coup	Aug-1991	7.88	8.07	7.96	7.52	7.74	19	8	-36	-14	2.41	1.02	-4.57	-1.78
ERM U.K. Currency Crisis	Sep-1992	7.63	7.59	7.40	7.21	6.90	-4	-23	-42	-73	-0.52	-3.01	-5.50	-9.57
WTC Bombing	Feb-1993	6.93	6.93	6.97	6.67	6.56	0	4	-26	-37	0.00	0.58	-3.75	-5.34
Russia, Mexico, Orange County	Oct-1994	8.01	7.88	7.70	7.44	7.43	-13	-31	-57	-58	-1.62	-3.87	-7.12	-7.24
Oklahoma City Bombing	Apr-1995	6.65	6.62	6.84	6.65	6.49	-3	19	0	-16	-0.45	2.86	0.00	-2.41
Asian Stock Market Crisis	Oct-1997	6.15	6.04	5.92	5.81	5.92	-11	-23	-34	-23	-1.79	-3.74	-5.53	-3.74
U.S. Embassy Bombings/ Russia/LTCM	Aug-1998	5.30	4.98	5.15	5.08	5.10	-32	-15	-22	-20	-6.04	-2.79	-4.23	-3.83
WTC Attack	Sep-2001	5.42	4.88	5.27	5.48	5.47	-54	-15	6	5	-9.88	-2.77	1.09	0.92
Mean							0	-5	-14	-15	-0.35	-0.58	-1.43	-1.43
Median							-1	2	-2	-3	-0.36	0.44	-0.72	-0.92

Long U.S. Yields: 1900-1976 30-year Prime Corporates; 1977-Present 30-year Bond.
Source: Yield Lehman Brothers Fixed-Income Research

Africa: Mainstreaming the Lagging Continent

- Will the wealth, health, technology, education divide, narrow or widen?
- Addressing “state failures”

Global Debt Portfolio Responses: No Single Formula

- At first, implement “risk aversion trades”
- Recognize that the ensuing reality usually won’t be as bad as some of the initial conjectures. For example look back to 9/11, the global economy has not collapsed into a depression.
- Cover long futures/options positions in the 10-year maturity sector and beyond; hedge spread risks if possible
- Buy short-duration Treasury paper (2-year neighborhood)
- Buy high-quality (Aa/AA above) credit paper on spread expansion; U.S. agencies especially attractive
- Stay with local currency debt
- Depending on the geopolitical event, investigate the following trades after 2-4 weeks
- Extend duration: buy the long end of yield curves
- Buy downtrodden peripheral currencies
- Add lower-quality spread product

Recommendations

- Begin each investment policy committee with an overview of geopolitical risk
- Develop a “threat radar system” with rankings
- Using capital market history as a starting point, develop contingency plans and rehearse
- Senior asset managers should broaden their inputs:
- Even pure U.S. asset managers would benefit from yearly visits to Asia and Europe
- Extend international political readings
- Join/attend sessions by international political/economic experts

GLOBAL CAPITAL MARKET PERFORMANCE IN JANUARY: GENERALLY CONSISTENT WITH OUR FORECASTS FOR 2002

On last Friday, we had the final results of all of our indices for just a few hours prior to publication deadline for this week’s *Global Relative Value*. As sketched below and more amply reviewed in this week’s *Global Family of Index Report* for January, we saw the following main themes in January returns:

- In contrast to our forecast of appreciation for 2002, the euro edged higher on its easy transition from a virtual to a physical currency and then wilted as the U.S. dollar rallied on the premise of U.S. economic recovery. The yen opened 2002 weaker-than-expected on renewed worries about Japan’s near-term economic destiny.
- The “January effect” did not aid the global equity markets. 2002 picked up where 2000/2001 left off. Once again, bond returns topped equity returns.
- U.S. and European bond returns opened the 2002 performance campaign in the plus column, shining a bit more than our annualized return expectations would suggest. But higher JGB yields dragged our Asian-Pacific Index into negative territory.

- Except for European high-yield, all spread sectors opened 2002 with positive excess returns.
- MBS, our “Comeback Asset Class of 2002” for investment-grade credits topped our expectations with a very strong start.
- Although the post-Enron blues inspired last January volatility for several key industrials, the global investment-grade credit markets began 2002 with positive total returns.
- Surprisingly, Argentina’s devaluation/default hardly dented overall EMG performance. In fact, EMG produced the best relative return of any sector. Unfortunately, our choice for the best asset class performer of 2002, U.S. and European high yield, could not escape equity market weakness and another rash of bankruptcies.

A month does not make a year. The 2002 performance campaigns still in diapers. So far, we haven’t seen anything in the global capital markets or the January 2002 returns to amend our prophecies for the full 12 months. Hopefully, our full-year prognostications will prove generally correct.

Global Yield Curves: Direction of Global Government Yields Signaled World Economies Are on the Mend, but Equity Markets Painted a Different Picture

U.S.: The Fed Held Rates Steady, Bringing the Year-Long Easing Campaign to an End; Signs of Economic Recovery Emerge; U.S. Curve Flattened in January

- With the prospect of further interest rate cuts effaced and signs of recovery starting to appear, the front-end of the U.S. yield curve bore the brunt. Two-year yields closed January at 3.15%, 10 bp higher than at the end of December (3.05%). From its low of 2.74% on January 11, the 2-year note gained 31 bp. The yield on the 5-year U.S. Treasury rose 3 bp to 4.37% from 4.34% on 12/31/01. Ten and 30-year Treasury yields fell 1 bp and 5 bp, respectively, to 5.03% and 5.43%. The slope of the 2s-30s curve dropped 14 bp to 228 bp from 243 bp on 12/31/01

Germany: Accelerating Inflation in Germany Undermined the Case for Further ECB Rate Cuts, Sending the Yield on the 2-Year Schatz Up 22 bp, to 3.88%

- Germany consumer price inflation rose to 2.1% in January from 1.7% in December, exceeding the ECB’s 2.0% inflation target. Shorter-dated German governments were hard hit with the yield on the 2-year schatz up 22 bp to 3.88% and the 5-year note up 9 bp to 4.50%. Yields on the 10- and 30-year descended 9 bp (to 4.90%) and 21 bp (to 5.20%). The yield differential between 2 and 30-year bunds narrowed 43 bp to 132 bp from 175 bp on 12/31/01, the lowest since July 2001 (129 bp).

U.K.: Gilt Curve Rallyed In January, Despite Unexpected Jump in Consumer Confidence

- In contrast to its global counterparts, the U.K. gilt curve ended January on a stronger footing. Two-year Gilt yields came in 7 bp to 4.69%, 5s dropped 15 bp to 4.97%, 10s declined 17 bp to 4.88%, and 30-year bond yields were 14 bp lower to 4.56%. In the face of increased consumer confidence (currently running at a 3-year high) and signs of economic revival, U.K. gilts benefited from equity market jitters. The slope of the

Gilt curve became more inverted, as the 2s-30s yield differential moved from -6 bp on 12/31/01 to -13 bp at the end of January.

Japan: JGB Curve Sold Off in Response to Possible Ratings Downgrade by S&P; Removal of Foreign Minister Tanaka also Weighed Negatively on Japanese Government Bonds

- Two-year JGB yields edged up 2 bp to 0.14%, 5s shot up 16 bp to 0.70%, 10s lofted 11 bp to 1.48%, and 20-year JGBs ascended 14 bp to 2.17%. JGBs haven't visited this yield range in nine months. The Japanese curve steepened as the 2s-30s slope moved up to 203 bp from 191 bp on 12/31/01.

Currencies:

Introduction of Euro Notes and Coins Passed without an Early Euro Rally, Few Signs of U.S. Dollar Weakness in Early 2002

- The awaited introduction of euro notes/coins came and passed without a euro rally. Instead, the euro steadily declined during the first 4 weeks of 2002, weakening 3.43% to 0.861 USD/EUR on January 31.
- The yen also lost value to the U.S. dollar. Our currency strategy team suggests further yen weakness through March 2002 (the end of the Japanese fiscal year), citing the pace

Figure 14. Returns by Lehman Brothers Index
January 1-31, 2002, Excess in bp, Nominal in %

	January 1-31, 2002	
	Excess	Nominal
Global Treasury (ex-U.S.)*	-309	0.10
Global Reals*	-	0.37
Multiverse*	-	0.49
Global Aggregate*	-	0.47
Asian-Pacific Aggregate**	1	-0.64
Pan-European Aggregate***	8	0.70
Euro-Aggregate***	8	0.57
U.S. Universal	31	0.84
U.S. Aggregate	28	0.81
U.S. Treasury	-	0.67
U.S. Agency	10	0.60
U.S. MBS	55	0.93
U.S. CMBS (ERISA-Eligible)	56	1.13
U.S. ABS	32	0.66
U.S. Credit	21	0.85
144A	28	1.01
Eurodollar	15	0.65
Global High Yield*	-	1.12
Pan-European High Yield***	-44	0.00
U.S. High Yield	17	0.70
U.S. CMBS High Yield	37	1.13
Emerging Markets	153	2.05
U.S. Municipals	-	1.73

* Returns reported in U.S. dollars and on a currency-hedged basis.

** Returns reported in Japanese yen.

*** Returns reported in euros. Excess returns are calculated over comparable-duration local government curves. Pan-European Aggregate and Pan-European High-Yield returns reported on a currency-hedged basis.

of monetary expansion as a potential downside for JPY. The yen weakened versus the U.S. dollar (down 2.07% at 133.775 JPY/USD), though gaining 1.31% versus the euro (115.167 JPY/EUR).

- Following the logistical success of the euro's hard currency introduction, the potential extension of the EMU to the U.K. and Sweden further excited notions of convergence. Though public appetite for the single currency engenders much political discussion, the manifestation of any such convergence (i.e., a likely revaluation of the krona prior to EMG ascension) remains well in the offing. During January 2002, sterling traded off vis-à-vis the dollar (1.413 USD/GBP, -2.98%) and yen (189.064 JPY/GBP, -0.88%), while marginally better against the euro (1.642 EUR/GBP, 0.43%).
- The EMG currencies provided the only evidence of dollar weakness. As one of the few currencies to strengthen against the dollar in 2001, the Mexican peso gave up 0.11% in January 2002, closing at 9.158 MXN/USD. The Thai baht appreciated 0.42% (44.045 THB/USD).

**PREVIEW OF JANUARY GLOBAL FAMILY OF INDEX PERFORMANCE:
 "FIRST QUARTER EFFECT" EVIDENT;
 ALL SPREAD SECTORS PRODUCED POSITIVE EXCESS RETURNS,
 EXCEPT PAN-EUROPEAN HIGH YIELD (-44 BP);
 LEANER, BUT POSITIVE, NOMINAL RETURNS; U.S. AGGREGATE (0.81%)
 OUTDISTANCED PAN-EUROPE (0.70%) AND ASIAN-PACIFIC (-0.64%);
 EMG GENERATED 153 BP EXCESS RETURN**

Macro Indices

Multiverse:

**World Bond Markets Completed First Month of 2002 up 0.49% on a U.S. Dollar-Hedged Basis;
 Skittish Global Equity Markets Weighed Down MSCI Index (-3.0%) in January**

- Our Multiverse Index continued its advantage over global equities in 2002, gaining 0.49% (U.S. dollar-hedged), while the Morgan Stanley Capital International Index (MSCI) fell 3.0%. A glance back to January 2001 found equities ahead with 1.9% and our Multiverse Index trailing with 1.6%.

Global Aggregate:

**Up 0.47% on U.S. Dollar-Hedged Basis; U.S. Aggregate (0.80%) Led Pan-European (0.56%)
 and Asian-Pacific Aggregate (-0.47%) Indices in January (U.S. Dollar-Hedged Terms);
 Securitized (0.82%) Assets Performed Better than
 Credit (0.67%) and Government (0.26%) Sectors**

- After two months of negative returns, our Global Aggregate Index managed 0.47% in January (U.S. dollar-hedged).
- Of the three regional aggregates, the U.S. Aggregate checked in the highest return with 0.80%, followed by the Pan-European Aggregate (0.56%), and Asian-Pacific Aggregate (-0.47%).
- Lower volatility in the mortgage market helped securitized assets (0.82%) best both credit (0.67%) and government (0.26%) sectors.

Global Treasuries:

Lowest Returning Local Currency Bond Market in 2001, Gilts Soared to Top of Global Treasury Index with 1.55% (Local Currency) Total Return; Japan and Australia Offered Only Negative Total Returns

- In an early manifestation of last year's losers morphing into this year's winners, two of 2001's lowest performing government bond markets soared to top position in January 2002: U.K. returned 1.55% on a local currency basis (1.33% U.S. dollar hedged) and New Zealand provided 1.08% (0.84%). Unfortunately, mean reversion does not work perfectly. The other two laggards from last year (i.e., Japan and Australia) were still at the bottom. The reality of lower interest rates, Australian government bonds reported a -0.06% local currency total return (-0.25% when hedged into U.S. dollars); JGBs returned -0.74% in yen (-0.57% hedge in U.S. dollars).
- U.S. Treasuries returned 0.67%, slightly higher than the eurozone average, 0.59% (dollar hedged).
- Euro-peripherals underperformed Treasuries in both local currency terms and when hedged into dollars: Sweden (0.46% local currency, 0.29% hedged) and Norway (0.26%, -0.13%). Denmark eked out 0.71% in local currency, lagging Treasuries on a dollar-hedged basis (0.56%).

U.S. Universal: Off to a Healthy Start in 2002; 0.84% Nominal and 31 bp Excess Return; All Constituents Posted Positive Performance; Emerging-Market Bonds (2.45% and 197 bp) Generated Strongest Returns; Bankruptcies Dashed U.S. High-Yield

- Our U.S. Universal Index recorded a nominal return of 0.84% in January and added 31 bp of excess return.

Figure 15. Global Treasury Index: Total Returns through January 1-31, 2002

	<u>Local Currency</u>	<u>U.S. Dollar-Hedged</u>
United Kingdom	1.55	1.33
New Zealand	1.08	0.84
Belgium	0.76	0.62
Netherlands	0.75	0.62
Denmark	0.71	0.56
Ireland	0.70	0.57
U.S. Treasury	0.67	0.67
Greece	0.63	0.50
Germany	0.59	0.46
Eurozone	0.59	0.46
Italy	0.56	0.43
Spain	0.56	0.43
France	0.54	0.41
Austria	0.50	0.37
Finland	0.46	0.33
Sweden	0.46	0.29
Portugal	0.38	0.25
Norway	0.26	-0.13
Canada	0.05	0.03
Australia	-0.06	-0.25
Japan	-0.74	-0.57

- Emerging-markets (ex-Agg) returned 2.45% and 197 bp in January as Russian debt continued to outperform. High-Yield and Non-ERISA CMBS (1.27% and 56 bp), 144A (ex-Agg) (1.02% and 32 bp), U.S. Aggregate (0.81% and 28 bp), U.S. High Yield (0.70% and 17 bp), and Eurodollar (ex-Agg) (0.70 and 33 bp) followed.

Global High Yield: Up 1.12% (U.S. Dollar-Hedged);

U.S. Dollar EMG (2.50%) Outperformed Euro EMG (-0.55%);

U.S. High-Yield Corporate Returns (0.70%) Dampened by Global Crossing and Kmart Bankruptcies

- In contrast to the robust returns of January 2001 (6.74%), our Global High-Yield Index earned 1.12% (U.S. dollar-hedged) in January 2002.
- Rumblings in the equity markets dampened returns in the high-yield corporate bond arena. U.S. dollar EMG had the highest returns in January with 2.50% total return and 202 bp in excess return. CMBS high yield brought in 1.13% and 37 bp. Bankruptcy filings by Global Crossing and Kmart reduced the return of U.S. high-yield to 0.70% and 17 bp. Despite posting its fifth straight month of negative return, euro-denominated EMG showed improvement in January (-0.55%) over December 2001's dreadful -17.05%.

U.S. Aggregate: 0.81% Total Return and 28 bp Excess Return;

All Spread Sectors Outperformed; Conclusion of Fed Easing Cycle Boosted Mortgages (0.93%, 55 bp) and Constrained Performance of U.S. Treasuries (0.67%);

Apprehension over Corporate Accounting Practices Lingered over the Credit Market;

Although Industrials (-2 bp Of Excess Return) Trailed, Other Sectors Fared Better,

Driving Overall Credit Performance to 21 bp

- One month into 2002 found the U.S. Aggregate earning 0.81% in total return and 28 bp relative to U.S. Treasuries.
- As the Fed's easing campaign came to a close and signs emerged signaling recovery, our U.S. Treasury Index posted a 0.67% return.
- U.S. agencies earned 0.60% and 10 bp of excess return. Bullets (0.61% and 7 bp) outpaced callables (0.57% and 29 bp) on a nominal basis.
- Asset-backed securities generated 0.66% and 32 bp. Utilities (1.03% and 54 bp) and credit cards (0.75% and 44 bp) were the top performers, while manufactured housing (0.27% and -28 bp) trailed.
- Our Investment-Grade CMBS Index placed first in the U.S. Aggregate, with 1.03% total return and 56 bp of excess return.

Figure 16. **Macro Index Returns**, January 1-31, 2001, %
100% Hedged into

	U.S.	Yen	Euro	Sterling
Multiverse	0.49	0.35	0.63	0.69
Global Aggregate	0.47	0.33	0.60	0.67
Global Credit	0.73	0.59	0.87	0.93
U.S. Universal	0.84	0.70	0.98	1.04
Global High Yield	1.12	0.97	1.25	1.32

- Mortgage securities were closely behind with 0.93% and 55 bp. GNMA (1.00% and 61 bp) bonds bested FNMA (0.91% and 54 bp) and FHLMC (0.89% and 52 bp).
- In contrast to 2.74% in January 2001, our U.S. Investment-Grade Credit Index earned a 0.85% total return and 21 bp excess return. Utilities ended their 4-month losing streak and delivered 1.38% and 72 bp. Financial institutions (0.91% and 39 bp) were aided by strength in the Insurance (1.51%) and REIT (1.43%) sub-sectors. Non-corporates (0.83% and 29 bp) and industrials (0.71% -2 bp) followed.

Pan-European Indices: Though Slightly Less than U.S. Aggregate (0.81%),

Pan-European Aggregate Generated 0.70% Nominal Return;

Pan-European Credit Earned 0.99%, with a 38 bp Excess Return;

Securitized Sectors Offered 0.31% Nominal Return, Flat to Governments;

Pan-European High Yield Lagged Governments by 44 bp

- Our Pan-European Index staged a January rebound, returning 0.68% due to a rally in the intermediate (1.01%) and long end (2.11%). The euro curve flattened as the 2-year fell 22 bp to 3.88% and the 5-year ceded 9 bp (4.51%), producing a 0.57% total return for euro governments. The Gilt curve descended during January, with the 2-year falling 7 bp to 4.69% and 10-year falling 18 bp to 4.88%; Gilts provided a 1.65% local currency return.
- In evidence of a “First Quarter Effect,” Pan-European credit generated a 38 bp outperformance versus local curves. In absolute terms, credit superiority (0.99% nominal return) was less apparent.
- Pan-European high yield (flat nominal returns, -44 bp of excess return) underperformed investment-grade credit.

Asian-Pacific Indices: Sole Negative Nominal Returns among

Major Regional Indices in January, -0.64% Yen-Hedged Total Return

- With a second month of JGB weakness, our Asian-Pacific Aggregate Index’s 86.3% government weighting implied underperformance versus other regional aggregates indices. Overall, this index returned a yen-hedged -0.64%, cushioned by a marginally better credit sector (-0.39%).

EMG: So Much for the “Contagion Effects” of Argentine Default/Devaluation;

All Major EMG Countries (including Argentina) Rallied in January;

U.S. Dollar EMG Index Provided 2.05% Return and 153 bp Excess Return

- Despite turbulence in U.S. credit markets, emerging market debt performed well, returning 2.05% in January—153 bp in excess of U.S. Treasuries. Though not as heady as January 2001’s dashing 4.58%, the search for higher yields translated into an early boost for EMG, with nearly all sovereigns recording positive absolute and relative returns (Venezuela, -3.05%, being an exception due to lower oil prices).
- Collectively, Latin American EMG (including Argentina) generated 1.00% (47 bp). Ecuador (6.56%) and recently upgraded Peru (4.93%) outpaced Mexico (1.35%) and Brazil (1.22%).
- Turkey (3.66%) and Russia (6.02%) also enjoyed positive returns.

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JGB MARKET NOW FACING HEADWINDS

The Importance of the JGB Rating

Ten years ago, it would have been unimaginable that the credit rating assigned to JGBs would plunge from triple A down to the point at which it is on the verge of a single-A rating. The problem of bad loans held at banks first became a major issue about seven years ago, and when I was asked back then by one foreign investor about my opinion of the rating given JGBs, I remember being surprised at what I honestly felt was an irrelevant question.

Today, however, JGBs are a cause for concern worldwide and considered a risk factor by global financial markets. The risk is that a plunge in JGB prices would trigger chaos in financial markets worldwide. It is not inconceivable that some event could spark a collapse in market supply-demand and cause the equilibrium price to either skyrocket or plummet. If this were to happen, although there is a relatively low probability that an insidious increase in the supply of JGBs would suddenly throw supply-demand out of balance, one potential scenario that must be acknowledged is the possibility that one day there might suddenly be no willing buyers of JGBs, and this would send JGB prices spiraling downward.

The debt ratings given to JGBs by the rating agencies are becoming increasingly important to the task of avoiding the risk of such a collapse in JGBs. Although Japan's domestic credit rating institutions now rate JGBs triple A, overseas rating agencies have all cut their ratings of JGBs by two or three notches. The overseas agencies also all share a negative outlook, and it would not be a surprise if they were to further downgrade JGBs at some point. A downgrade to the single-A category has entered the realm of possibility, provided nothing occurs to arrest this downward slide in ratings.

Can There Be a Default on JGBs?

The drop in JGB ratings signifies a decrease in ability to pay off debt and suggests an increased risk of default in the future. Japan does not hold any external debt; all of its debt is domestic and denominated in yen. In the classic case of accumulated debt in a developing country, ballooning foreign debt depreciates that country's currency, thus making payment impossible, and international agencies ultimately intervene to forge an agreement on either rescheduling or forgiving debt payments. There are countless examples of this, including the Latin American debt crisis of the 1980s, the debt problem set off by the crisis in Russia, and the current debt crisis in Argentina. Most of these cases were cleaned up through a combination of debt rescheduling and defaults, but the problem confronting Japan is of a somewhat different nature.

Japan's own laws contain no reference to a default on JGBs (maybe for obvious reasons), so it is unclear exactly what would be grounds for declaring a default and how the default would be handled. In other words, the credit event that is equivalent to a default remains undefined, and it is unclear exactly what constitutes a default. Common sense would indicate that this could be when a government bond that normally pays interest twice a year misses a payment. The redemption of JGBs is guaranteed, but there are rules in place, e.g.,

10-year JGBs are to be redeemed in 60 years, with the caveat that it must be possible to issue refinancing bonds. Nevertheless, managing funds in the government's Bond Sinking Fund is no easy matter, and the fund balance at the end of the fiscal year is less than the amount of JGBs scheduled for cash redemption the following year. Accordingly, funds are procured through the issuance of refinancing bonds, and from that amount, the Bond Sinking Fund borrows money to redeem JGBs for cash and to pay back loans.

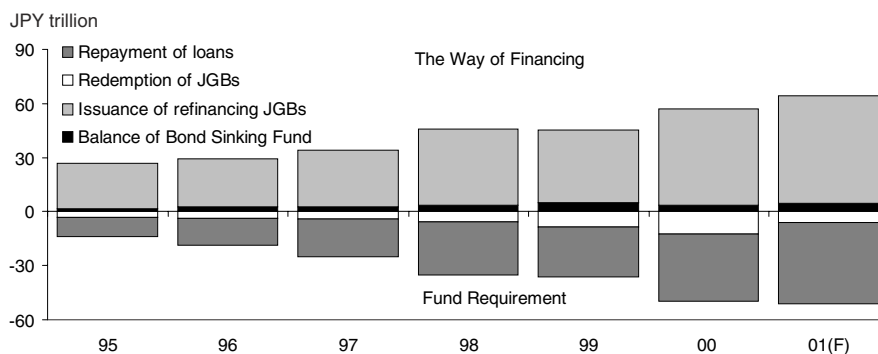
The recent flow of funds in the Bond Sinking Fund has seen the fund balance move within the range of JPY3 and JPY5 trillion, with cash redemptions covered by funds procured through the issuance of refinancing bonds. Originally, transfers into the fund were required to be at a fixed rate, but funding difficulties have caused transfers to be halted, with the funds diverted to other purposes. Consequently, all redemptions are predicated on the continuous issuance of refinancing bonds, and in one sense, the redemption of JGBs is built upon a fragile balance.

Does Japan Have the Ability to Serve Its Debt?

In Japan's case, government debt is not external but rather domestic, so the government's ability to pay debts needs to be looked at in relation to domestic savings. In other words, claims on government debt are held by private sector corporations and households; this debt has accumulated within Japan as one form of savings. To a certain extent, the government can control debt that resides domestically and is denominated in its own currency. Domestic debt differs greatly from external debt, which requires foreign currency reserves and the acquisition of foreign currency.

Nevertheless, Japan's declining economic power and shrinking tax revenue have led to bloated government deficits, and if this economic status quo continues, the fiscal deficit will rage out of control. There is a risk that, ultimately, obstacles will appear to prevent the government from raising funds (in other words, issuing JGBs), making it impossible for it

Figure 1. Financing Conditions of Government's Bond Sinking Fund



Source: The Ministry of Finance, *The Budget Statement*.

to either redeem JGBs or pay interest due—in other words, default becomes inevitable. It is because this risk cannot be completely ruled out that Japan is currently in a predicament, while this uncertainty over the government's ability to procure funds explains the potential for a collapse in the JGB market.

In reality, there are no market participants that consider a collapse in JGBs the most likely scenario. It simply must be considered as one potential risk, although trying to assign a level of probability for this occurring is likely to be problematic. Currently, we believe the probability of a financial crisis and collapse in the JGB market to be about 20%.

Problems with the Fiscal Deficit

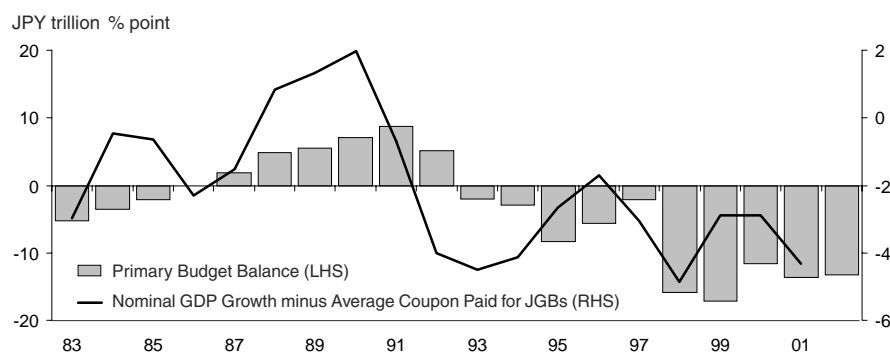
Normally, the economic problems presented by government deficits are due to the consequent constraints on, and lack of freedom in setting, fiscal policies. Moreover, the expansion of fiscal deficits tends to negate efforts to raise capital by the private sector in what is known as “crowding out.” Under normal conditions, government bonds have a higher credit rating than private sector corporate debt, so investments tend to flow toward the safety of government bonds issued in large quantities. This drives up the yields demanded of corporate bonds issued by private sector companies, thereby raising their cost of capital. Either that, or private sector corporations become unable to procure funding. In the current situation, there is no evidence of crowding out, given the lack of demand for capital among private sector corporations.

The problem comes when private demand for capital begins rising and JGB issuance collides with corporate bond issuance in the marketplace, at which point the question is whether the corporate bond spread will increase substantially. Currently, more than JPY 100 trillion in JGBs is being absorbed by the market, while the amount of corporate bonds issued is only about JPY 10 trillion; this is a remarkably large difference in scale. As a consequence, there is consistently an excess of JGB issuance and too little corporate bond issuance. Under such conditions, it is difficult to verify whether crowding out is actually occurring.

Furthermore, it is important to discern whether the fiscal deficit continues to grow and proliferate or whether it is brought under control within a given framework. Normally, when the primary balance is at equilibrium (general expenditures are covered by tax revenue, i.e., the fiscal burden on the people [tax revenues] and the beneficiary [general expenditures] are equal), then the amount of debt outstanding will decline as long as interest rates are lower than the nominal economic growth rate.

Right now, neither of the above conditions is being met. The primary balance was at a JPY 13.7 trillion deficit after the second supplementary budget in FY2001 and is estimated to be in deficit by JPY 13.3 trillion based on the initial FY2002 budget. This is far from equilibrium. In addition, when comparing the nominal GDP growth rate with the weighted average coupon rate on outstanding JGBs, which is a criteria for debt convergence, given that the nominal GDP growth is actually negative, no matter how low JGB coupon rates paid are reduced, the conditions for debt convergence can never be met.

Figure 2. Primary Budget Balance and Its Conditions for Convergence



Sources: The Ministry of Finance, *The Budget Statement*, and Lehman Brothers.

Accordingly, there is currently no prospect for the fiscal deficit to be brought under control, and conditions in the economy and financial markets suggest the possibility that the fiscal deficit will balloon.

In order to reduce government deficits, the Koizumi administration is expected to hold JGB issuance below JPY30 trillion over the short term while cutting spending, at the same time setting as a medium- to long-term policy objective the restoration of equilibrium in the primary balance. The JPY30 trillion cap on JGB issuance is a policy goal through FY2002, but the government is also expected to set a goal of reduced spending from FY2003. In any case, elimination of the deficit in the primary balance is a long-term objective of at least more than five years' duration.

JGBs Viewed from the Default Swap Rate

It is possible to estimate the degree of risk perceived by international investors regarding the default of JGBs by looking at the default swap rate, which corresponds to the insurance premium on JGBs in a default swap.

The 10-year default swap on the Japanese government's debt during the financial crisis at the end of 1998, when the Japan premium was high, rose from 10 bp (bid side, same as below numbers) to about 25-30 bp. The rate subsequently began moving down over 1999 and 2000, settling in at about 10 bp for most of that period. It subsequently rose to 20 bp in early 2001 and up to 25 bp by autumn. The default swap rate thus continued to rise in conjunction with the decline in the Japanese economy. When Moody's and S&P downgraded JGBs while issuing negative outlook in December 2001, the rate rose further, up to about 35 bp. This trend has continued into 2002, with the default swap rate having risen to 46 bp by February 1, rising in lockstep with JGB yields as JGBs were sold off.

The rise in the default swap rate on Japanese government debt until now has reflected the basic theme of structural problems in Japan's economy, in particular the difficulty in

solving the problem of fiscal deficits in a deflationary environment, and the default swap rate does not appear likely to decline in the near term. Overseas investors that use the default swap have been particularly disappointed by Japan's slowness in tackling its structural problems. However, the present level of default swap on Japan has already risen to the equivalent of that of single-A rated sovereign issues; the default swap rate will be stabilized around this level for a while before it moves further upward.

Who Is Supporting the Market by Purchasing JGBs?

Based on bond buying and selling trends by type of investors in 2001, domestic banks were the largest net purchasers at JPY21.6 trillion (excluding TBs and FBs), while within an environment of weak share prices and excess liquidity, a number of financial institutions emerged as buyers of bonds as a way to invest their excess capital. The biggest net buyers, however, were not the major city banks but rather the trust banks, regional banks, and credit unions. The major city banks were preoccupied with mergers and with writing off nonperforming loans, and they actually became net sellers of bonds to the tune of approximately JPY600 billion. Accordingly, among the banks, it was the small to midsize regional financial institutions that were aggressively investing in bonds. The level of net buying by all banks nationwide grew to nearly twice the level of 2000. Furthermore, the life insurers and the agricultural-linked financial institutions clearly turned to bonds during this time, when finding investment vehicles became difficult. Meanwhile, foreign investors went from being major net buyers by JPY10 trillion in 2000 to being net buyers by only slightly more than JPY2 trillion in 2001, clearly choosing not to participate wholeheartedly in the yen bond market.

Although the statistics show a breakdown of the amount of net buying of bonds by each type of private investor, when the BOJ is added into the equation, it quickly becomes clear that the central bank is the dominant net buyer of JGBs. In 2001, the BOJ increased its monthly

Figure 3. Default Swap on Japanese Government's Debts

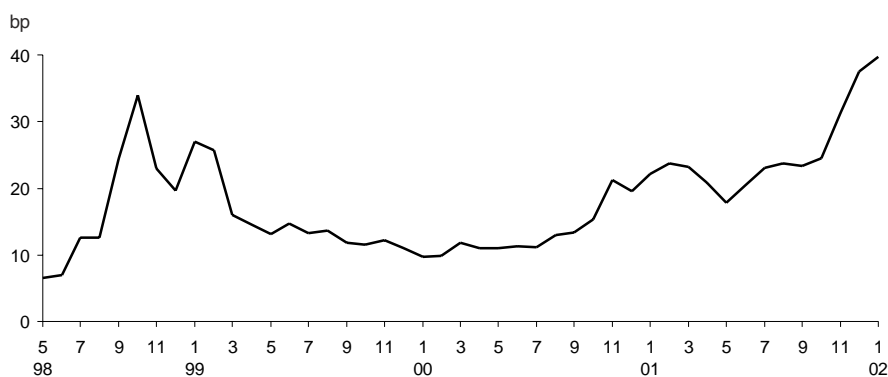
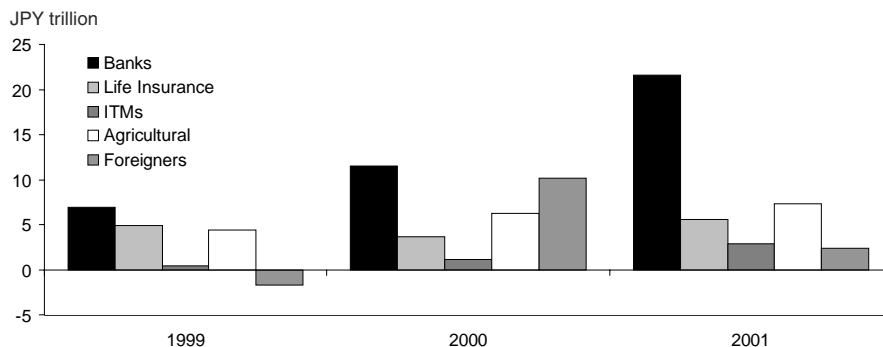


Figure 4. **Transaction for Yen Bonds by Type of Investor (Excluding TBs and FBs, Net Purchase)**



Source: Japan Securities Dealers Association.

outright buying operations from JPY600 billion in March to JPY800 billion in December; so for the year, the BOJ should have been a net buyer of JGBs by JPY7 trillion. Based not only on sheer volume but also on its continuous, periodic, fixed-amount purchases irrespective of trends in the JGB market, the BOJ's role in supporting the market has become huge.

Distribution of JGB Holdings

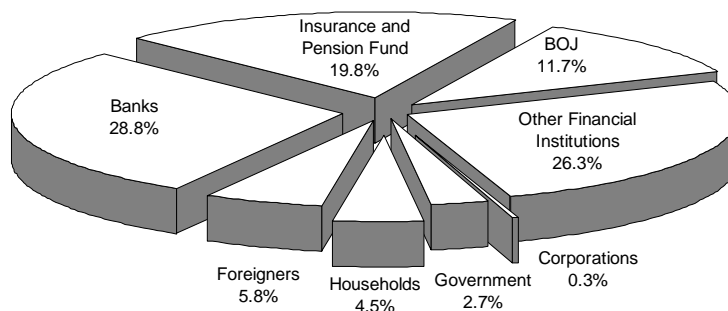
There was a dramatic change in the distribution of JGB ownership in the 6-month period from the end of March until the end of September 2001. While banks and other deposit holding institutions, households, and foreign investors were reducing their share of JGB ownership, the BOJ and the government was increasing its share, signifying a shift of JGBs from the private sector to the public sector. Thus, the BOJ and government are buying JGBs from the private sector to increase their holdings within a context of expanding fiscal deficits and increased JGB issuance. The government is covering the fiscal deficit by issuing JGBs, and even when the private sector initially purchases these bonds, the BOJ subsequently buys them back. So in one sense, what is effectively happening is that the government deficit is being monetized.

This trend, first evident in the first half of FY2001, has remained in place going into the second half, as JGB ownership stays tilted in favor of the BOJ and the general government. At its Monetary Policy Board meeting on December 19 of last year, the BOJ further propelled this concentration of ownership in government hands by raising its monthly outright buying of medium- to long-term JGBs from JPY600 billion to JPY800 billion.

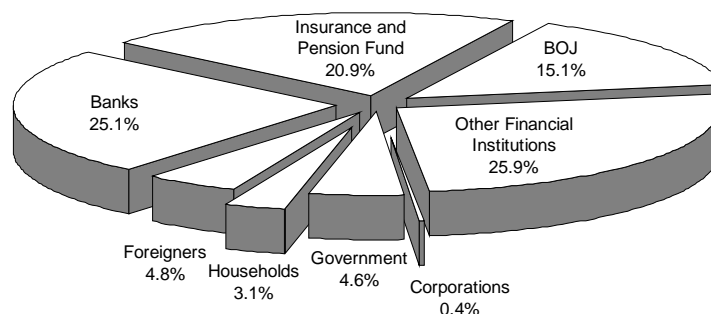
Furthermore, the JGB holdings of the Fiscal Loan Fund, which was born out of systemic reform of the Trust Fund Bureau, have been on a gradual declining trend, but growth in the BOJ's holdings has meant that the total holdings among the two are also on an increasing trend. The Fiscal Loan Fund, a special governmental account, ceased all transfers from

Figure 5. Percentage Share of JGB Holdings by Type of Investor

March 2001



September 2001



Source: The Bank of Japan.

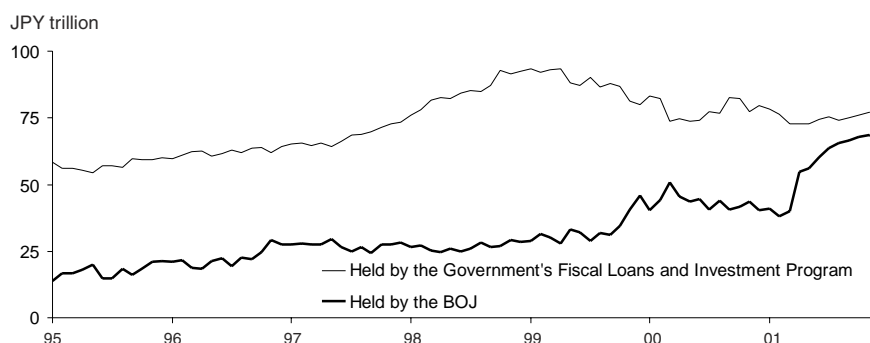
postal savings and postal life insurance and, as an interim measure, began procurement through the issuance of FILP bonds from FY2001 for a period of seven years. The fund will cease to exist after that, however, so the reduction in JGB holdings of the fiscal loan fund should continue.

Will the Taming of Deflation Cause a Collapse in JGBs?

As the above analysis also makes clear, Japan's system for managing government debt is built upon a delicate balance, and if something were to occur that rendered the refinancing of JGBs impossible, it would create the risk of an imminent collapse in the system. In actuality, however, there are numerous tools for avoiding a default, and there is virtually no chance that the Japanese government would default on its debt.

The problem, however, is that steps taken to avoid default will trigger another event, and these events could have drastic consequences for the bond market depending on circumstances. Generally speaking, this means the monetization of fiscal deficits, whereby opening the door for the BOJ to underwrite JGBs enables the government to procure funds.

Figure 6. Public Sector's Holding of JGBs



Source: The Bank of Japan.

In one sense, this is the same as printing money to underwrite JGBs, a move that would ultimately damage the credibility of the currency and lead to a wicked form of inflation. In such a situation, of course, the holders of JGBs would suffer losses from declining JGB prices, the JGB market would collapse, and long-term interest rates would skyrocket.

Even if the BOJ does not directly underwrite JGBs, it is purchasing them on the secondary market, in some cases immediately after their issuance. Currently, the BOJ is making outright purchases from the market of JPY800 billion in medium- to long-term JGBs every month, but it already owns over 15% of outstanding bonds and is forced to increase this further. The question is at what point the market will come to the conclusion that this is the same as the direct underwriting of JGBs by the BOJ.

The government has begun groping for policies to put an end to the prolonged economic downturn and deflation, and there is a possibility that it could pursue radical policy measures in the near future. Although it set off on the road to inflation through drastic devaluation of the yen, the U.S. and countries in Asia quickly cried foul, so Japan is now being forced to find another solution. The only options remaining must necessarily include options it is prohibited from pursuing, while there is a sense that inflationary policies will lead to more radical measures. The problem lies in how well the government will be able to contain a sharp upward movement in long-term interest rates, an issue with which the government and the MOF is preoccupied. If it appears that the JGB auction cannot attract enough buyers, market participants will suddenly begin to feel the risk in holding JGBs, and this will likely lead to a collapse in the JGB market and a dramatic increase in long-term interest rates.

The biggest risk to the JGB market is not the potential of default but rather that the government will decide seriously to pursue policies to eliminate deflation and spark inflation. Judging by the most recent economic data, it appears that spiraling deflation and economic deterioration have become bad enough to compel the government to take such

drastic steps. Although there has been no change recently in the Koizumi administration's broader agenda placing priority on structural reform, the probability has increased considerably that, depending on circumstances, the government will make actual policy decisions that put a priority on conquering deflation. In any case, this is a major negative factor weighing on the JGB market, and even if policies to suppress the rise in long-term interest rates were to be enacted simultaneously, the market is likely to harbor inflationary expectations and, thus, demand a large risk premium on JGBs.

Technical Strategy

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JUNE EURODOLLAR—DOUBLE TOP STILL IN PLAY

We highlighted a potential double top pattern for June Eurodollars a few weeks ago and revisit this chart given this week's breakdown under June trendline support, 97.735. The momentum and volume patterns remain weak (not making new highs with price in mid-January), favoring a larger decline. Sell rallies back into the low end of the trendline. Also remember that the COT data show trend money still massively net long, +956,964 contracts as of January 22. The risk of a larger liquidation event remains high.

Initial targets remain at the low end of the November range, 97.115-96.900. Expect new buying here. However, if this pattern is correct, then the 96.900 level should fall for a test of the 200-day simple moving average, 96.430.

Figure 1. Daily June Eurodollar with 40- and 200-Day SMAs, MACD, and Volume



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THE CHINA SYNDROME

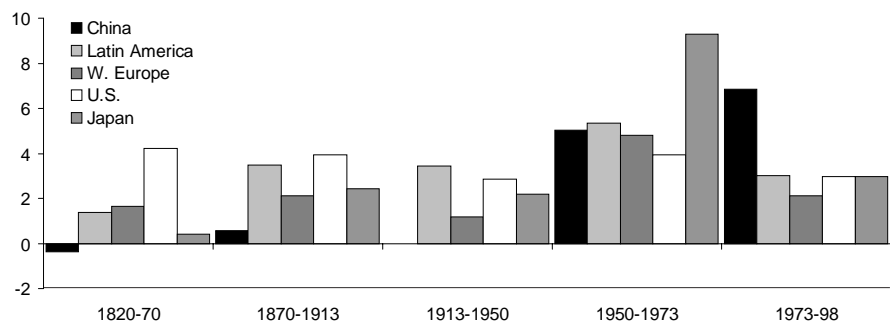
The 1979 film *The China Syndrome* revolved around the unlikely scenario of a nuclear reactor's meltdown burning a hole through the earth's core to China. At that time, it probably seemed almost as unlikely that, only 22 years later, China would be the world's sixth largest economy (surpassing Italy last year) and the third largest beneficiary from inward FDI (behind the U.S. and U.K.). Yet this is the reality. In 2001, China was one of the world's fastest-growing economies, expanding by 7.3%; and data just released by the UN Conference on Trade and Development reveal that China's FDI inflows increased by nearly 15%, to \$46.8 billion, whereas for the rest of Asia's total inflows fell from \$144 billion to \$125 billion. To an extent, this reflects China's recent accession to the WTO. But WTO membership is itself a reflection of China's growing weight in the global economy, which is the real force pulling in investment (Figure 1).

Strong FDI allows Chinese enterprises to tap into the latest technologies and to benefit from commercial expertise and knowledge of foreign markets. And the need to continue to attract large amounts of FDI is, in turn, driving non-economic change in China—notably in the regulatory regime and legal base and in the fight against corruption—to enhance still further China's obvious attractions for inward investors.

We judge that China's leaders—current and incoming “Fourth Generation”—are fully seized of this, and we are also encouraged by the fact that each generation of leaders has become progressively more pro-reform. In our projections, China's FDI inflows will surge to \$65 billion in 2003, lifting the country's foreign exchange reserves to around \$300 billion; unless there is a massive yen depreciation, this will pressure the renminbi to appreciate (Figure 2).

However, strong FDI is no panacea for China. The more China opens up, the greater the foreign competition. This, in turn, increases the urgency of state enterprise and financial reform.

Figure 1. **Long-Run GDP in China and the Rest of the World**
Average Annual Growth Rates

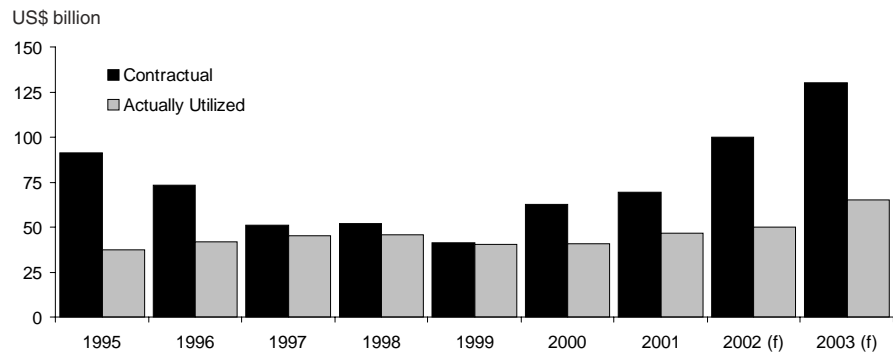


And all that while managing urbanization, developing a national welfare system and capital markets, and overcoming income inequalities, including inter-regionally.

Despite these challenges, we conclude—in a major study launched last week—that China “will probably succeed in completing the transition . . . to a market economy, albeit not without some temporary setbacks.”¹ China’s economy should grow by around 7% pa over the next few years; and over the next 20 years, the economy has the potential to sustain an average growth rate of around 6% pa. The full story behind that conclusion—and what it means for investors and the other Asian economies—is the subject of our study.

¹ *China: Gigantic Possibilities, Present Realities*, by Alastair Newton and Robert Subbaraman, Lehman Brothers, January 21, 2002.

Figure 2. FDI Inflows in China



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DÉJÀ W

As advertised, the Fed decided to leave rates unchanged, but retained its easing bias. Although the stock market has been a bit shaky recently, the macroeconomic data are improving steadily. Looking ahead, there is a strong case for the Fed remaining on hold for a long time. Indeed, the closer we look at the history of the Fed, the more convinced we are that it will not start to tighten until very late in the year. Thus, despite the near-term data improvement, we have decided to lower our funds rate forecast for year-end from 2.50% to 2.25%. There is also a risk that the recovery will be so weak that the Fed will feel compelled to follow through on its bias and ease again.

Good Data Point (GDP)

4Q GDP was stronger than expected, rising 0.2%, compared with our forecast of -0.5% and consensus expectations of -1.1%. Although this is good news, it is tempered by the very sharp slowdown in nominal GDP growth. As Figure 1 shows, nominal GDP actually fell slightly in the quarter, its first decline since 1982. Part of this weakness was due to some accounting quirks related to the terrorist attack, but part of the weakness was more fundamental. Companies were able to boost final sales by 2.5% in real terms, but only by practically giving away the stuff. The cut-throat competition was evident in motor vehicles, general merchandise stores and capital goods producers.

Nonetheless, the improved tone of the economy is evident, and the aggressive inventory cuts of the past year have created room for at least some increase in production. With this in mind, we have raised our 1Q GDP forecast from flat to up 1%, and we have trimmed a tenth off our unemployment rate forecast. Our GDP forecast is easy to remember: GDP grows 1%, 2%, 3%, and 4%, respectively, in each quarter of the year.

The Outlook at a Glance

	2001		2002				2001	2002	2003
	3Q	4Q	1Q	2Q	3Q	4Q			
Real GDP	-1.3	0.2	0.5	2.0	3.0	4.0	1.1	1.0	3.5
Domestic final sales	-0.2	3.3	-1.8	1.1	2.2	3.6	2.5	1.0	3.4
Inventories	-0.8	-2.2	2.6	1.4	1.1	1.1	-1.2	0.5	0.6
Net trade	-0.3	-0.9	-0.2	-0.5	-0.3	-0.6	-0.2	-0.5	-0.5
Unemployment rate	4.8	5.6	6.1	6.3	6.2	6.1	4.8	6.2	6.0
Consumer prices	2.7	1.8	1.3	1.0	1.3	1.8	2.8	1.4	2.1
Core CPI	2.7	2.7	2.5	2.3	2.1	1.8	2.7	2.2	1.9
Fed funds	3.50	2.15	1.75	1.75	1.75	2.25	2.15	2.25	4.25
TSY 2-year note	3.64	2.84	3.10	3.20	3.40	3.70	2.84	3.70	4.50
TSY 5-year note	4.48	4.02	4.35	4.50	4.60	4.70	4.02	4.70	5.10
TSY 10-year note	4.98	4.73	5.05	5.15	5.20	5.25	4.73	5.25	5.40
TSY 30-year bond	5.52	5.30	5.45	5.55	5.60	5.65	5.30	5.65	5.80

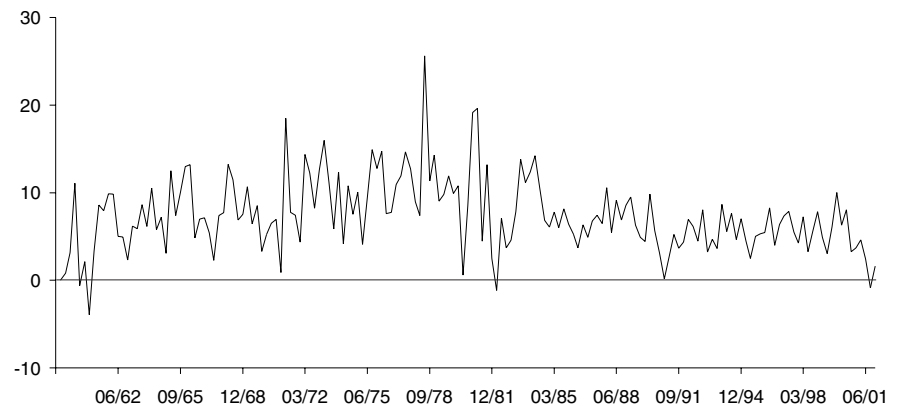
Notes: Real GDP and its contributions are seasonally adjusted annual rates. Unemployment is measured as a percentage of the labour force. Inflation and employment costs are year-on-year percentage changes. Interest rate forecasts are end-of-period. Table last revised February 1. All forecasts are modal forecasts (i.e., the single most likely outcome).

Déjà W

Although the Fed is likely to stay on hold for some time, it is worth looking at scenarios in which the Fed would change rates. Chairman Greenspan has argued that there could be a "double dip" or "W-shaped recovery" scenario. The recent improvement in the data could be an attempt by firms to stop the decline in inventories. However, this inventory-led recovery could be short-lived unless sales revive.

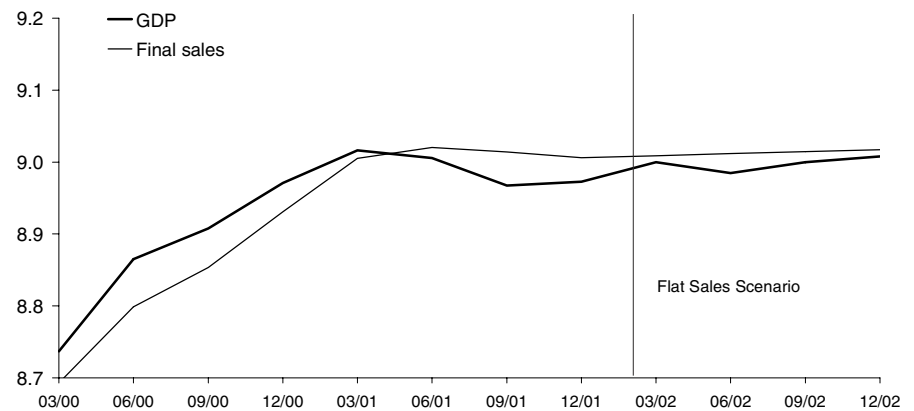
Figures 2 and 3 illustrate this scenario. Recall the basic GDP identity: GDP is equal to final sales plus inventory investment. As Figure 2 shows, in the past year, firms have pushed GDP below final sales, causing an increasingly rapid pace of decline in inventories.

Figure 1. **Nominal GDP, % quarter-over-quarter, saar**



Note: Data adjusted for insurance distortion.

Figure 2. **Real GDP and Final Sales, \$ trillion**

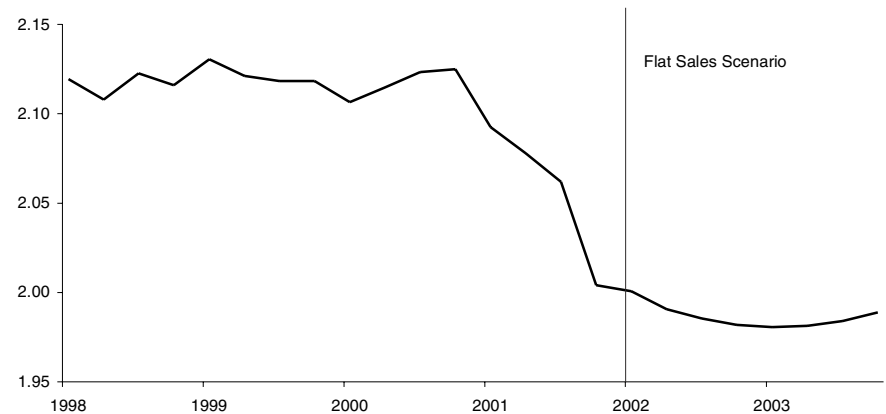


Note: This scenario does not represent our current forecast, but rather an illustration how a "double dip" could arise.

However, once production is brought back into line with sales, the revival could abort as firms begin questioning whether they really want to increase their inventory. In other words, a recovery led by inventories alone could lose steam after a quarter or two.

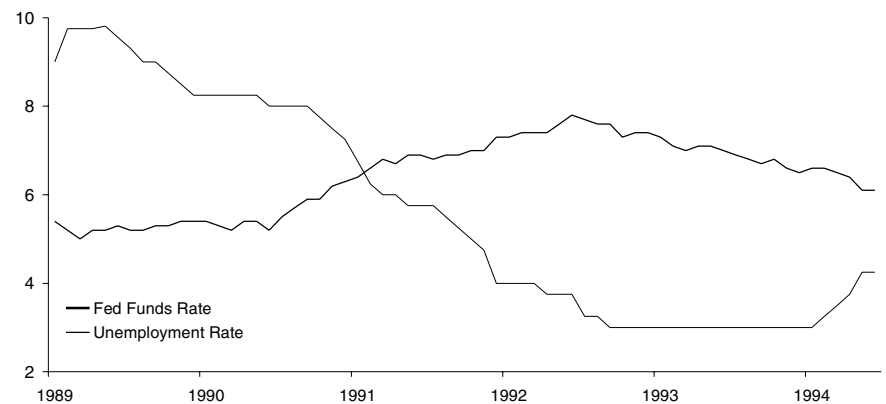
The 1991 experience gives a good guide to Fed policy under a weak recovery scenario. In the first four quarters of the recovery, GDP grew just 2.3%. As Figure 4 suggests, firms were able to meet their production needs without increasing employment, and there was a continued rise in the unemployment rate. The Fed continued to ease, cutting the funds rate from 6% at the end of the recession to a low of 3% in September 1992. Today, with the funds rate starting at a much lower level, such dramatic cuts are unlikely, but clearly a repeat of the "jobless recovery" will mean many more rate cuts from the Fed.

Figure 3. Inventory / Sales Ratio



Note: This scenario does not represent our current forecast, but rather an illustration of a "double dip" scenario.

Figure 4. The Fed and the Unemployment Rate, %



The "Greenspan Put"

Another scenario that would prompt further Fed easing is a major meltdown in financial markets. At the extreme, some analysts argue that the stock market is so important to a recovery in the economy that the Fed will do whatever it takes to prevent a major decline in the markets. In other words, the Fed is creating a one-way bet for stock investors.

This theory has some merit, but it exaggerates the role of the stock market in Fed thinking. In the 1990s, the surge in the ratio of stock market wealth to income and the widening ownership of stocks made the "wealth effect" a more important driver of economic activity. Nonetheless, the wealth effect is only one of a number of important drivers of economic activity, including interest rates, fiscal policy, the dollar exchange rate, energy costs, and that great wild card "confidence." The stock market is an important part of the Fed's information set, but unless there is a financial crisis, the Fed does not target the stock market.

Since the stock market and the economic outlook tend to move up and down together, it is easy to form the impression that the Fed is targeting stocks. But there is a simple test for the "Greenspan put": what does the Fed do when the markets and the economy diverge? Last week provided a good test case: an array of economic indicators all pointed to an end to the recession, but the stock market was suffering, with the Dow down 6.3% from its peak at the start of the month. What was the Fed's response? It pointed to the signs of economic recovery, and, for the first time in more than a year, it chose to leave rates unchanged.

LIGHT DATA WEEK AHEAD

After the raft of data and the Fed policy decision last week, this week's meager offering of second-tier indicators will be a welcome reprieve. We look for surprisingly resilient January auto sales figures to set the tone for the rest of the week as market participants digest last week's data flow.

Domestic Vehicle Sales (Monday)

Although we look for a modest pull-back this month, domestic vehicle sales are likely to remain surprisingly resilient for the tenth month of a recession, particularly since some of last autumn's aggressive incentives programs have been curtailed or terminated. Domestic sales are projected to pull back to 12.3 million units in January, from 13.1 million in December. With an estimated 3.3 million in imports, we expect total vehicle sales to come close to 16.0 million units, a very impressive sales pace, even for non-recession years.

January sales will likely be biased lower by a sharp reduction in fleet purchases. However, household demand for new cars and trucks was supported by still very large cash-back rebates exceeding \$2,000 per vehicle. With real income still growing, new vehicle affordability remains very attractive. Although we expect the unemployment rate to continue to drift higher, damping sales, the return of some of the consumer sector's former optimism should prevent vehicle sales from slipping much below 15.0 million units in 1Q. Ultimately, we expect sales will average 15.5 million units this year, another solid one for the industry.

Non-manufacturing Purchasing Managers' Index (Tuesday)

We look for the non-manufacturing NAPM to slip almost a point in January to 53.5, following last month's surprising jump. During its short life, the series has shown a consistent pattern of reversal following sharp upward movements. Despite the series' limited usefulness and extremely low correlation with broader measures of economic activity, the data can move the market, as Figure 6 suggests. Rather than measuring actual business activity, we suspect the data actually measure business confidence, which, like consumer confidence, seems to be improving as optimism about the future grows.

Treasury Five-Year Note Auction (Tuesday)

The first leg of the Treasury's quarterly refunding kicks off on Tuesday, with the sale of \$16 billion worth of reopened five-year notes.

Figure 5. **Total Vehicle Sales, m, saar**

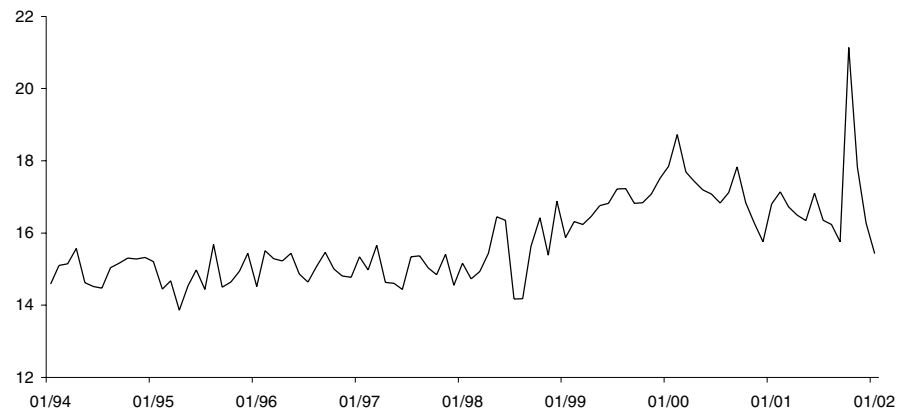


Figure 6. **Market Reaction to Non-manufacturing PMI, at day's end**

	5-Jun	5-July	3-Aug	6-Sept	3-Oct	5-Nov	5-Dec	4-Jan
Chng TSY2 (bp)	-7	0	2	-14	0	-2	26	0
Chng TSY10 (bp)	-6	3	3	-11	-3	-6	22	2
Chng S&P500 (%)	1.3	-1.2	-0.5	-2.2	2.0	1.4	2.2	0.6

Factory Orders (Tuesday)

Given the rebound in durable goods orders that was reported last week, we look for factory orders to rise 0.8% in December. Like that report, we reckon this month's strength in factory orders was fairly evenly balanced among the various components, such as machinery, electronics, and even aircraft parts. Indeed, even non-durable goods orders probably increased, although falling commodity prices probably limited much of the gain in December. Still, the core non-defense non-aircraft capital goods series probably rose an additional 0.5% in December, marking the third increase in a row. Other, more anecdotal data, such as the purchasing managers' reports, confirm this rebound in new orders and support the conjecture that business investment spending might finally be stabilizing after over a year of sharp retrenchment.

Non-farm Productivity (Wednesday)

Non-farm productivity is expected to rise 3.0% in 4Q, following a 1.5% increase in 3Q. If our forecast is correct, productivity will have grown an average of 2.3%/quarter over the three quarters of recession, a strong sign that the underlying trend has improved. With compensation costs expected to slow to 3% in the period, we reckon unit labor costs will be unchanged in 4Q, or up 2.5% y-o-y. We judge the slackening in labor cost pressures will help to suppress price inflation this year, while at the same time helping to improve corporate profit margins.

The performance of non-farm productivity growth in the current recession has truly been remarkable. In most post-war recessions, productivity growth slows sharply and frequently turns negative, as the reduction in output typically occurs faster than the reduction in employment and hours. By contrast, in the current downswing, employers have shown little inclination to hoard labor despite their recent memory of super-tight labor markets in the late 1990s. We suspect that increased labor flexibility and a greater reliance on temporary workers relative to past business cycles have helped to make hours worked more responsive to movements in output.

Figure 7. **Non-defense Cap Goods Orders Ex-aircraft, % month-over-month**

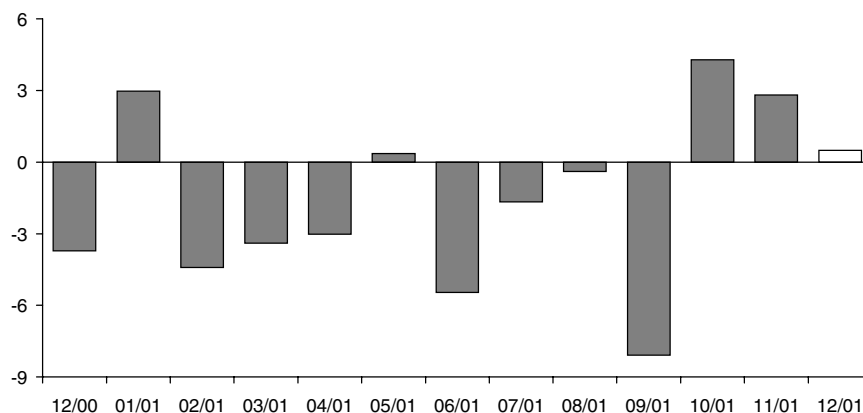


Figure 8. **Non-farm Productivity, % quarter-over-quarter**

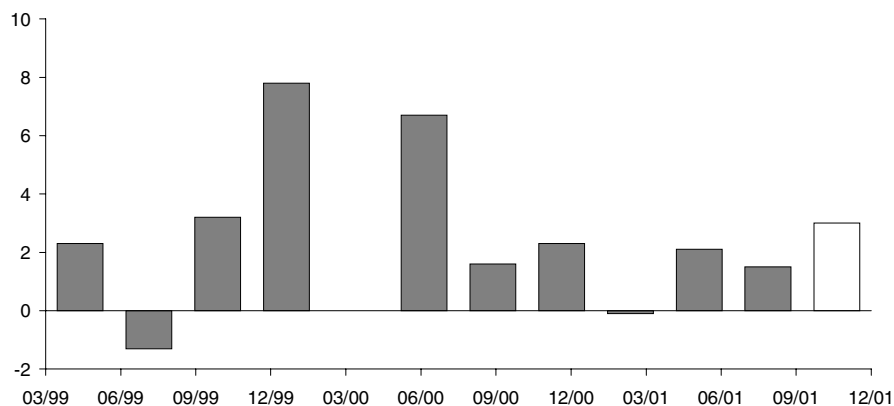
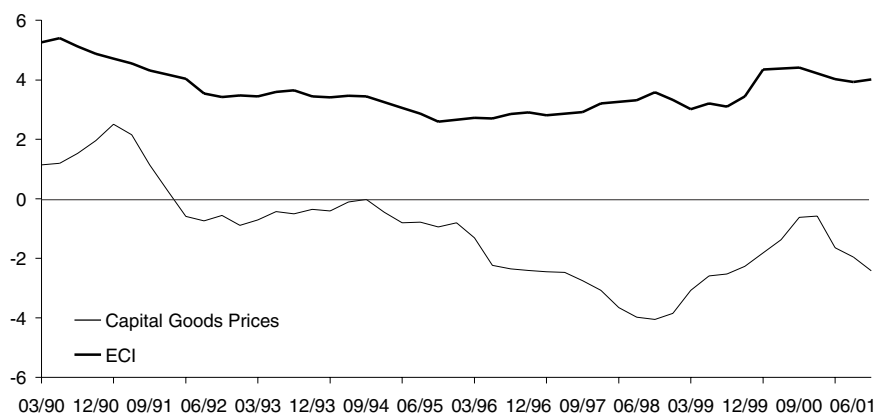


Figure 9. **Capital Prices versus Wages, % year-over-year**



However, only a modest acceleration in productivity growth is likely. Increased security measures and the curtailment of just-in-time and "kanban" inventory management systems suggest that it may be harder to eke out additional gains in output per hour. Moreover, the overhang in the capital stock suggests that older, existing capital will be re-deployed before any new investment is made. Since the older capital has less embedded technology and is less cutting-edge than the newer equipment, the boost to productivity will be smaller. Still, we suspect they will have plenty of reason to do so. The rapid pace of technical innovation quickly renders a significant proportion of high tech capital equipment obsolete. Moreover, relative prices of capital goods versus wages make additional investment very attractive. As a result, we remain optimistic about the long-run potential for productivity growth to match its rapid advances of the 1950s and 1960s and restrain price inflation.

TSY 10-Year Note Auction (Wednesday)

The Treasury will auction \$13 billion in new 10-year notes this week.

Consumer Credit (Thursday)

Fueled by rapid car sales, consumer installment credit growth has accelerated since last autumn. We look for the sum of credit card, personal and auto loans to rise \$11 billion in December, after a nearly \$20 billion increase in November. Growing optimism about the economic outlook and falling interest rates has probably encouraged many households to increase their debt levels. This recent surge in borrowing is a bit troubling. Consumer balance sheets were stressed even before the recession began, and now, with installment debt levels rising, we judge the situation has become a bit riskier. Not only have household assets shrunk since 2000 (to the tune of over \$4 trillion), but the unemployment rate will likely drift up to almost 6.5%. As a result, we expect monthly debt service burdens, which are already hovering near record levels, to creep above 14% in the next year. Indeed, this is one reason we look for an atypically soft rebound in consumer spending in 2002 compared with previous recessions.

Initial Jobless Claims (Thursday)

Initial jobless claims are expected to slip 5,000, to 385,000, in the first week of February. Given the volatility of this number recently, we are uncertain of what to make of last week's 30,000 increase.

Figure 10. **Consumer Credit**, change, \$ billion

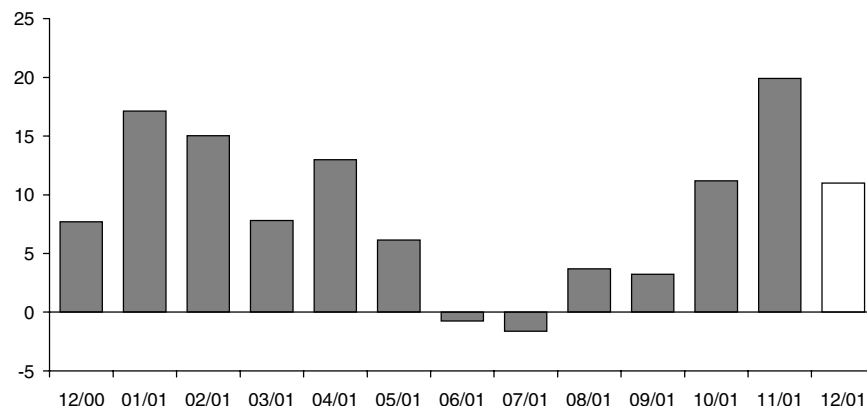
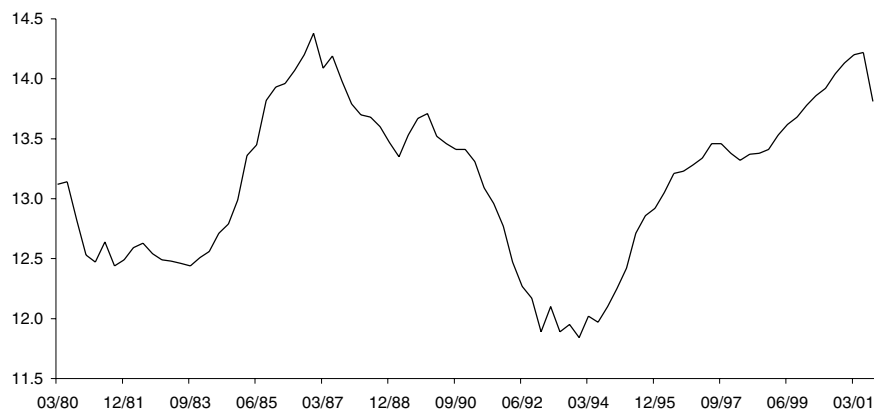


Figure 11. **Debt Service Burden**, % monthly disposable income

Wholesale Inventories (Friday)

Wholesale inventories probably fell 0.7% in December, their seventh consecutive monthly retrenchment. Firms had been shedding inventories rapidly over 2001, and as with factories and retailers, wholesalers continued to draw down their stocks as the year came to a close. We expect this depletion to set up the need for companies to rebuild their inventories in 2002, adding 3.0 percentage points of GDP growth in 1Q.

U.S. Political Analysis

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THE WORLD IS IN FACT A STAGE

World Economic Forum (WEF) participants will be readying to depart New York as you read this report. As of Friday afternoon, all organized protests to the meeting were civil; most protestors we saw on television were making rational, if sometimes underinformed, cases for their causes. Thus far, the latest meeting of global leaders has not been marred by the mayhem witnessed last year in Italy and two years ago in Seattle. We attribute the difference more to New York City crowd control than any easing of tensions between the powerful and those less so.

Economics is the root of most policy disputes, be they international or domestic. It is human nature for peoples of means to seek perpetuation of their position. The flip side is equally robust, in that populations suffering in conditions borne of underdeveloped economies seek to remedy what they view as injustice. **Global integration and attempts by some to dominate trade flows is older than many nations now participating in world commerce.** The Boston Tea Party was effectively a spark in the fight by the United States to cast aside Britain's trade restraints. Gladly, the two countries fight out their differences on less dramatic stages. However, the presence of several international policy leaders at the Forum underscores layers of difficulty in, as well as the continuing necessity of, formulating international commerce rules.

Economics and violence are two reasons that the subject of foreign affairs has taken such a prominent place in Bush administration policy planning. During his State of the Union address, the president did a thorough job of reminding Americans that the war against terrorists of global reach is in its early stages and that the other side remains steeled for a fight. These terrorists, whether rogue or nation states, justify their cowardice in part on economic grounds. But as global trade increases both in volume and value, most countries rely on negotiations to alter the playing field.

Secretary of State Colin Powell is leading a WEF session on stabilizing the world. As ambitious as this sounds, this subject attracts market attention.

We recall the days immediately after the September 11 attacks when Jeffery Applegate, Lehman Brothers' chief U.S. strategist, said that a safer world would be a price investors would be willing to pay for a prolonged counterterrorism campaign. In his first official State of the Union address, President Bush challenged Senate Democrats to complete debate on and approve his request for Trade Promotion Authority as a means by which the United States can further the goal of safer, more transparent, freer trade.

Better Rules, Better Results

Consistent enforcement of competition rules is essential to effective international trade. On January 25, William Kolasky, Department of Justice Antitrust Division deputy assistant attorney general, outlined the administration's views on U.S. and E.U. competition policy. A recurrent theme was that rules in and of themselves are hollow without stringent, even-handed enforcement. He used the GE/Honeywell decision as a proxy for how the European Union and the United States differ in current merger review policies and to point to

consistent efforts to standardize such reviews. His speech to the Council for the United States and Italy was particularly noteworthy, given that the two unions represent about half of global trade and are the two largest economies.

Kolasky highlighted a meaningful takeaway for investors, particularly those of us severely disappointed by the flawed E.U. markets survey process that led to a bad decision. Last July, Mario Monti, the E.U. commissioner responsible for merger reviews, proclaimed that the commission “is not against mergers that create more efficient firms. Such mergers tend to benefit consumers, even if competitors suffer from increased competition.” These words are welcome, as many of us believe that the GE deal was denied primarily because some Europeans feared the realities of competition that a combined GE/Honeywell would introduce into Atlantic markets.

The department views five crucial, differing conclusions as having led to the United States approving the deal and the European Union denying it. Kolasky suggested that the two sides are closing the gap in the analytical processes to create a more predictable transatlantic merger review system.

- The European Union viewed GE’s 45% share of the global market for aircraft engine manufacturing as dominant; the United States did not.
- U.S. regulators believed that sophisticated buyers in the avionics space would be a bulwark against a combined avionics/aircraft engines company “owning” the market. EU staff and commissioners disagreed.
- GE’s vertical integration into aircraft leasing was viewed by the European Union but not by the United States as a potentially competition-killing force, even though the company would have had less than 10% global share.
- EU staff warned that GE’s balance sheet would enable the Honeywell unit to spend more on R&D than European competitors could realistically afford, thereby creating another competitive advantage through eventual price reductions. The United States had no such worry.
- Finally, the European Union worried that resultant efficiencies would force rivals to exit the market. The United States found no basis in law or experience to support this hypothetical.

All in all, Kolasky’s speech is helpful in understanding the hurdles faced in standardizing transatlantic merger reviews. But it was also optimistic in that it suggests governments on both sides of the ocean understand the importance of getting it right as a way of spurring global trade to the benefit of consumers, customers, and, yes, even investors.

One last comment on the state of global economic integration. On February 6, U.S. Treasury Undersecretary for International Affairs John Taylor will testify before the House Subcommittee on International Monetary Policy and Trade regarding the mess in Argentina. We anticipate detailed insight into the administration’s thinking on a wide range of subjects important to foreign exchange investors and emerging markets.

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TIME TO STRETCH FOR YIELD?

In an environment in which G10 central banks will probably err on the side of laxity, asset market returns may be lukewarm, and the EMG world is set to emerge from a series of currency crises, investors may be tempted to look for FX carry opportunities—at least once any Enron-related volatility has passed. We recommend looking beyond the past few years' mainstays, such as MXN and PLN. Rather, the best value probably lies in a diversified basket of out-of-favor currencies, such as BRL, CLP, TRL, RUB, ZAR, IDR, and PHP, funded in USD and CHF.

The Right Macro Backdrop for Carry Trades in 2002

For the past few years, the performance of FX carry trades, especially in the emerging market world, has been patchy to say the least. True, the MXN and PLN have consistently topped the fx league tables, but mainly because of sound convergence stories that have, on balance, outperformed investor expectations—especially in Mexico. Even in the G10, carry has done little to explain currency moves. Indeed, the low-yielding USD and CHF were the G10's top performers over the past two years.

But the 2002 macro-picture is lining up to look rather different from that in 2000-2001, and although not universally sympathetic to their cause, the most likely fx market winners over the course of the next 12 months could well be many of the carry trades that have latterly been out of favor. Consider the case:

- **Central banks still generous with liquidity.** Wednesday's FOMC decision to stand pat means that one of the more aggressive G10 easing cycles in history ended in December. But given the residual downside risks to the U.S. economy, there is no indication that a major tightening cycle is imminent. Indeed, our monetary policy forecast suggests that nominal G10 policy rates should remain well below their medium-run trend for some time to come. And remember, it was the steady rate period between mid-1995 and mid-1997 that marked one of the more profitable runs for fx carry trades in recent history.
- **Asset market volatility is set to fall.** Carry trades typically underperform during periods of high asset market volatility, partly because risk aversion picks up, but also because investors focus their efforts on capital gains rather than yield. 2001 was no exception—realized bond market volatility was at a multi-year high, and equity volatility remained at lofty levels.

This year, asset market volatility is set to fall—a tepid growth recovery, cautious central banks, and stable oil prices all point to fewer capital gains opportunities. Indeed, our Global Relative Value team predicts that total returns on global bonds will be 3%-4% in 2002. And our Global Equity Team is looking for low double-digit gains—better than the past two years, but not exceptional at the turn of a global business cycle. Investors will need to stretch for yield if they hope to improve total returns in 2002.

- **Stable growth and rising commodity prices (ex-oil).** Meanwhile, the mix of gradually improving global growth and firming commodity prices should give a boost

to growth-sensitive carry trades. True, one exception to the rising commodity price scenario is likely to be oil, given more than adequate supply, Lehman Brothers expects Brent crude to average just \$17 per barrel this year, down from \$24-\$25 in 2001. But in truth, oil-linked currencies have been among the most consistent outperformers in recent years, and none, outside of the high-yielding RUB, appear to offer much value at the moment.

- **No obvious EMG crisis on the horizon.** Finally, with the Argentine peso crisis flagged well in advance and now, we hope, largely behind us (even if the effects on BRL and CLP have yet to disappear fully), there is no obvious EMG hot spot on the horizon. True, the plunge in oil prices and rising political tensions suggest that the VEB bears watching. And a free-fall in the JPY could eventually lead to a round of competitive devaluations (including China) in Asia. But all in all, the EMG radar screen looks clearer in 2002 than it has for some time.

What is more, if there are exaggerated positions in these currencies, they tend to be in eastern Europe and the MXN, where net speculative bets are still near all-time highs. Here, some correction maybe needed (the “Enron factor” could provide it) before buying opportunities become clear. Elsewhere, last year’s relative underperformance has left the typical exposure light, suggesting that carry trades could develop considerable momentum.

Where’s The Value In FX Carry Trades?

In the end, assuming that our global macro view is broadly correct and the recent concerns over U.S. earnings quality are contained, 2002 is lining up to be a better year for fx carry trades, especially in the EMG world. But where is the best value? We attempted a simple rule that combines current 3-month interest rates (the carry) with a measure of fx value (current real-effective exchange rate relative to its 5-year trend) to derive a carry trade valuation ranking. And while the approach is not hugely scientific, it does offer some interesting insights on risk/reward trade-offs in fx carry trades:

- **MXN and PLN won’t top the league tables in 2002.** Although the structural convergence trends in Mexico and Central Europe are for real, two years of outperformance have significantly eroded the risk/reward of these trades. We look for MXN and PLN to underperform an otherwise favorable market for carry trades.
- **Diversify in post-crisis undervaluation currencies.** For the best value, investors will need to move away from the strong, but expensive, structural stories and into the cyclical, post-crisis misalignments such as TRL, ZAR, and RUB in Europe, BRL and CLP in Latin America, and IDR and, perhaps, PHP in Asia. Indeed, a diversified, dynamically managed basket of these out-of-favor currencies is probably the best way to earn high risk-adjusted returns in a positive FX carry environment.
- **Funding vehicles: CHF and USD (not the JPY).** Given their low interest rates and expensive fx valuations relative to trend, the USD and CHF are the most attractive funding vehicles in this positive carry environment. Indeed, after falling 18% since Autumn 2000, the JPY looks a bit too cheap to use as a funding currency at the moment.

- **Steer clear of ARS and VEB for now.** Although ARS and VEB score highly in the value grid, we would steer clear of both for the time being. The ARS crisis is not yet over, and the future of the currency regime is still uncertain. In VEB, the current carry is probably appropriate, given that the political risks and the plunge in oil prices will put pressure on an already overvalued currency.

U.S. Interest Rate Strategy

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OVERVIEW

Jeffrey D. Biby
Doug Johnston

At the risk of sounding like a broken record, the carry trades that we've been promoting since the start of the year continue to look attractive to us. On the yield curve, the reason is fairly straightforward. We pretty much have the same amount of Fed tightening priced into the forward curve as we had last week, and the week before. The market is stubborn in pricing these expectations, which usually gives us cause for concern. Our worry being that our information set may not be as robust as the market's. If the trade doesn't work in the near term, odds are you've got something wrong.

In this case, however, we are going to have to be proved wrong—absolutely. With the market bent on pricing the current (and future) economic climate as the shallowest recession on record, the quickest recovery, and the most aggressive Fed reaction to such, we are compelled to go the other way.¹ Even if one is an economic optimist, it is difficult to justify the forwards. Our economics team has the prognosis that this is going to be one of history's slower recoveries, and yet the market is anticipating the Fed to be more aggressive than history. There is a disconnect here, and one of us is irrational. We hope it is not us.

So we'll stick with our yield curve carry trades, which are effectively long interest rate risk in the 2- to 5-year sector of the curve. Selling out-of-the-money puts is an effective way to implement this strategy, as you get the exposure to the appropriate forwards and the benefit of selling volatility at inflated levels. The green and blue Eurodollar contracts look cheap to us, and while we are not looking for a major push down in yields, we do think that the hunt for carry should ultimately lead yields, led by the 5-year, lower. Even if the curve remains the same, the carry built into these trades is significant, leading to significant sell-off protection. Not to mention the benefit of being long geopolitical risk at seemingly cheap levels; the market appears to think the "campaign" is completely over, although the administration is out to rid the world of the "Axis of Evil."

In this environment, one might question the view of being short volatility, particularly in light of the decline we've seen in implieds over the past month. LBOX, which is Lehman's volatility index, has declined by about 10 bp per annum (to 121 bp/annum) since the start of the year. It was extremely elevated at the end of the last year due to a confluence of dealer hedging, a change in market perception of the Fed, and demand for volatility to hedge new mortgage product. With a new risk-year in motion, the market more balanced on the Fed, and alternative volatility sources catching up with demand, we feel that implied can decline another 10 bp. Even at 110 bp per annum, volatility would still be on the high side, as the LBOX average since 1996 is 102 bp. We are willing to concede that volatility is, on average, higher; it is just that we overshot last year.

¹ See *Interest Rate Strategy Weekly*, 1/25/02 and 1/18/02, for more details

The premium between implied and realized volatility is also likely to remain high, to the benefit of believers in the range trade, as the market will not soon forget the idiosyncratic risks in the marketplace. In addition, the mortgage market has evolved into a coupon-compressed asset class, increasing the risk of large prepayments per unit time. All total, it is hard to see volatility breaking toward the lows of the late 1990s. That said, we feel that there is enough cushion to warrant exposure to asset classes such as MBS and callable agencies, as well as structured options trade; we prefer selling somewhat further out of the money calls versus puts. We are in the range-trade camp (and have been since November), although the center of the range is closer to 5.25% on 10-year swaps (versus 5.68 today), in our view. The break-even rates are still compelling, so selling options and looking for mean-reversion is an attractive trade.

In spread land, the only cause for concern is the possibility of dealer hedging corporate product if investors decide to lighten up a bit, given the nice run that asset class has had since the fall. This makes us favor agencies relative to swaps, even though agencies have performed well recently, as the hedging occurs primarily across the swap spectrum. Spreads to Treasuries, for both asset classes, warrant continued exposure, particularly in the 5-year sector, where off-the-run Treasuries (e.g., 8/07s) still trade in the low 50s, curve adjusted. We think that under the weight of increased Treasury issuance, those spreads can come in another 10 bp over the next few months.

TREASURIES

Doug Johnston
Priya Misra
Vaidyanathan Venkateswaran

After the Refunding

There were no major surprises in the refunding announcement on Wednesday. We got a slightly smaller (\$1 billion) than expected 10-year note and a little larger than expected 5-year reopening. As we reflected in last week's write up, the Treasury dismissed plans of monthly 5-year note auctions, but longer-term, it is weighing quarterly 5- and 10-year notes without reopenings. But what caught our interest was an announcement tucked away at the very end of the announcement—the cessation of 30-year Treasury constant-maturity yield publication.

The Treasury will no longer supply the Federal Reserve Board with an estimate of the 30-year constant maturity yield for publication in the *H-15 Selected Interest Rates Release*. Beginning on February 18, it will submit a long-term yield based on a basket of long-dated securities. This basket will consist of all Treasury securities with remaining terms to maturities of 25 years and over. The Treasury will also provide an extrapolation factor to the Federal Reserve Board to allow interested parties to obtain a proxy estimate of a 30-year yield. In effect, the 30-year CMT yield will become an off-the-run yield, which, according to our curve, is about 15 bp higher than the 2/31's yield (the bond is rich).

The impact of this announcement will be felt by market participants who were benchmarking against the 30-year CMT rate. We isolated pension funds as one significant participant.

Pension funds are among the key institutional investors in the U.S. capital market. According to a survey by William Mercer, 41% of defined-benefit-plan sponsors have hired an investment manager in the past year, and as many again intend to hire over the next few years. At the end of 3Q01, pension funds (defined benefit and defined contribution) had an asset size of \$6.3 trillion. In a survey done by Wyatt, out of the Fortune 100 companies, 90% have defined-benefit plans. Of the top 200 funds in 2000, with a total asset size of \$4.2 trillion, defined benefit plans (DBP) represented a whopping \$3.3 trillion.

DBPs obligate the provider to make clearly defined, binding commitments on the amount of future pension payments to the employee and to make appropriate provision for the discharge of these commitments. By statute, DBPs have to use the H-15 rate to determine:

- The contribution requirement for the proper funding of DBP: the IRC 412 and ERISA 302 mandate the use of a 4-year weighted-average 30-year CMT rate to determine a plan's current liability for purposes of funding, thus influencing the threshold and minimum contributions.
- Lump sum distribution to participants.
- PBGC premiums (insurance is mandatory for DBPs) for plans that are adequately funded.

A recent concern² among pension funds has been the low bond yield, which led to inflating fund liabilities, the lump sum distribution, and increased PBGC premiums. With the recent underperformance in the stock market, pension funds' coffers have lost some cushion.

A large portion of the assets of pension funds are in corporate equities, and since their liabilities are valued using the bond yield, they are effectively short 30-year Treasuries. Thus, one might expect some of them to hold the bond to mitigate their exposure to the bond yield. But now, after this announcement, they will no longer have to necessarily hold *the* bond. They effectively look better funded starting February 18 and can spread their hedge in the bond curve.

We think this takes away a legitimate reason for the bond to trade rich (outside a possible repo squeeze, which we deem unlikely). To summarize, this announcement immediately reduces the risk of a bond squeeze from DBPPs. We think this should reduce the bond premium or, at a minimum, distribute the bond premium to securities in the +25-year sector in graduated fashion. As it is, we believe³ that the 25- to 30-year sector will experience a dramatic decline in supply (~100 billion by 2004) and, so, should trade rich to fair value. Add the fact that this premium should be evenly spread in that sector, and you see that there is potential for a profitable trade.

² *The Impact of Inordinately Low 30-year Treasury Rates on Defined Benefit Plans*, James Turpin & Ron Genhardtshauer, American Academy of Actuaries, July 11, 2001

³ See Outlook 2002, *Interest Rate Strategies*.

Figure 1 shows the 30-year fitted spread over time, the sharp spike occurring when the Treasury canceled the bond during its November refunding. The spread has been grinding in over the past month, but we feel that there is room for it to come in much more and for spreads to widen in the 2/29s, 8/29s, and 5/30s. We thus feel that being short bonds versus the tip of the bond curve (28/29s) looks attractive. Figure 2 shows the off-the-run spread in the tip of the curve; we can see that there is too much of a premium built into the bond relative to just-off-the-runs, and this difference will contract over time.

Here Comes the New 10-Year

The 10-year w.i. (maturing on 2/15/12) looks a trifle (2 bp) expensive to us (on its settlement date). The market is pricing in too much of a premium in the new 10-year issue. Even though w.i. looks 2 bp rich, we feel that it's a little early in the cycle to roll our short position from the 8/11s into the current. We talked earlier about the inversion of the 10-year tip of the curve, and even though some correction has taken place, there is more to come, as seen in Figure 3.

Figure 1. **Fitted Spread Curve: 2/31s, bp**

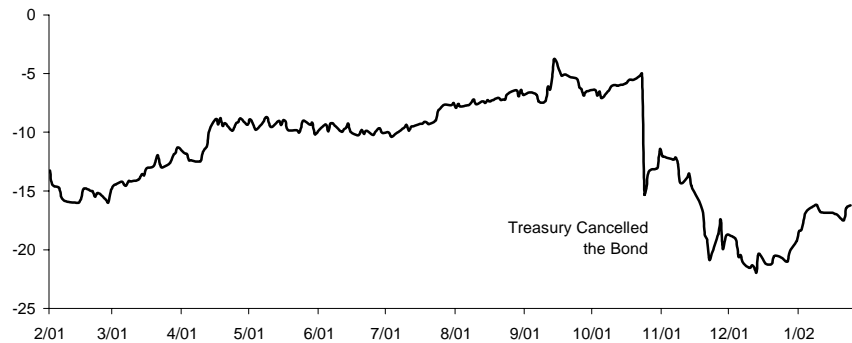
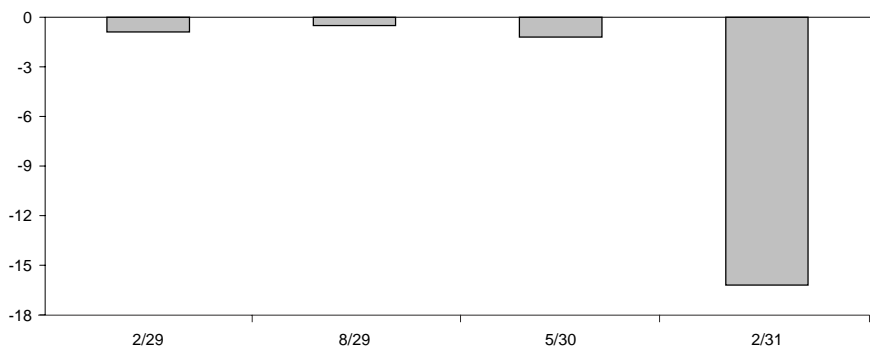


Figure 2. **Off-the-Run Fitted Spreads in the 29s-31s, bp**



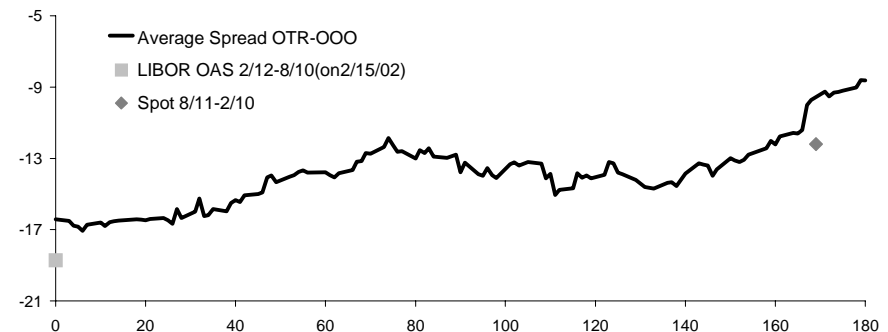
Treasury Futures: Impact of Quarterly 5s

Last week, the Treasury announced that it was considering a return to regular quarterly issuance of 5-year and 10-year notes, without any pre-announced re-openings. We look at implications of this move on the 5-year contract, starting with the Sep 02 contract. Without quarterly issuance, the basket of FVU2, FVZ2, and FVH3 contracts is shown in Figure 4.

Under CBOT rules, any notes with an original maturity of at least 5 years and 3 months and a remaining maturity of at least 4 years and 3 months on the first day of the delivery month is eligible for delivery. Therefore, assuming the first quarterly 5-year note is the May issue, the deliverable basket of the three contracts will also include the 8/07s (U2, Z2, and H3) and the 2/08s (H3), in addition to the 11/07s (Z2 and H3). The new baskets, assuming quarterly issuance starting in May, are shown in Figure 5.

The next step is to get a sense of the liquidity premium of the on-the-run note. To estimate the premium, we look at seasoning patterns in fitted spreads of 5-year notes over both the quarterly issuance cycle (from 8/03s to 8/04s) and the semi-annual one (11/04s to 11/06s). Figure 6 shows the average fitted spread for quarterly and semi-annual 5-year notes as a function of their seasoning, i.e., days since issuance. On average, the quarterly notes have traded richer to the curve than their semi-annual counterparts early on, but they lose specialness much faster as well. Also shown in the graph is the average for all the issues.

Figure 3. **LIBOR Spread Differential between the On-the-Run and the Triple-Old 10-Year**



*The average is computed over the cross-section of the past nine 10-year cycles.

Figure 4. **Deliverable Basket with Semi-Annual Issuance**

FVU2	FVZ2	FVH3
3.5 11/15/06	4.75 5/15/07*	4.75 5/15/07*
4.75 5/15/07*	5 11/15/07*	5 11/15/07*

*Notes not yet issued

We use this “OAS” seasoning curve and today’s fitted curve (and the forward curve) to arrive at forward yields of the hypothetical new notes.

We price each contract about three months from its last delivery date (the Sep contract at the end of June, the Dec contract at the end of September, and so on) for today’s forward yields, as well as parallel curve shifts. In other words, the base-case curve for each contract is the forward fitted yields of the notes on the pricing date, adjusted for specialness in accordance with the seasoning curve. We then subject the curve to parallel shifts and re-price the contract.

The results for the Sep contract are summarized in Figure 7. As the table shows, the effect of new issues in the basket is minimal at current levels. The forward fitted curve on 6/28 between 5/07 and 8/07 is worth about 5 basis points, which is roughly equal to the difference in their presumed fitted spreads. In other words, the two issues are roughly flat in yield terms, which favors the shorter-duration 5/07s. However, as rates back up and inch closer to 6% levels, the option value increases in both cases, but the incremental effect of the quarterly issuances can be as much as 2 ticks in price terms, for a 100 bp backup. This backup in rates is over and above what is priced into the curve at present.

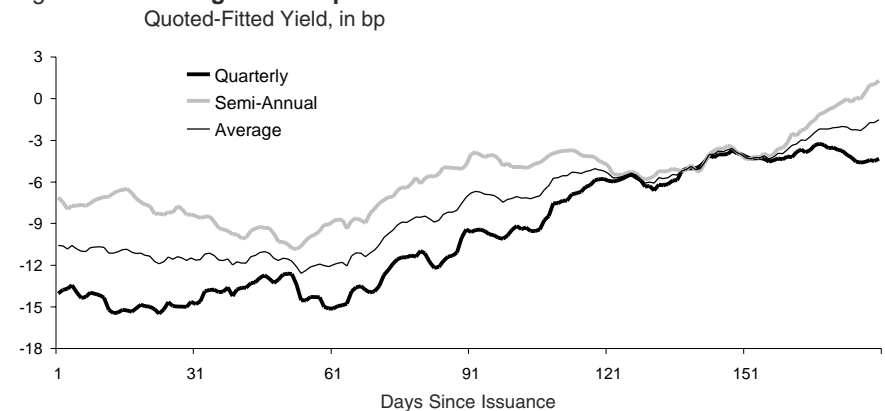
We repeat the analysis for the Dec contract, pricing it at the end of September. Figure 8 compares the model price and option value for semi-annual and quarterly issuance.

Figure 5. **Deliverable Basket with Quarterly Issuance**

FVU2	FVZ2	FVH3
3.5 11/15/06	4.75 5/15/07*	4.75 5/15/07*
4.75 5/15/07*	4.75 8/15/07*	4.75 8/15/07*
4.75 8/15/07*	5 11/15/07*	5 11/15/07*
		5.25 5/15/07*

*Notes not yet issued

Figure 6. **Average Fitted Spreads of 5-Year Notes**



As with the September contract, the 8/07 does not affect the price significantly so long as rates stay low. The price change is roughly a tick for a very large move in rates. The lower effect on the December contract reflects the extent of flattening priced into the curve. For example, on 9/28, the fitted forward curve implies that 5/07-8/07, adjusted for specialness, is give 1 bp.

The effect of quarterly issuance on the March 03 contract is similar to that on the December contract—half a tick for a large move in rates (Figure 9). If we go to quarterly 5s in May, this contract will have all the new issues in the deliverable basket.

In summary, we see limited impact on the Sep, Dec, and March 03 contracts, given the current level and slope of the spot and forward curves. If the curve steepens considerably or if the quarterly notes trade significantly less rich than what has been historically observed, we could see more option value, even in low-rate environments.

Figure 7. **Price and Option Value of FVU2**

	Semi-Annual		Quarterly	
	Price	Option Value	Price	Option Value
-50	106.5608	0.000	106.5608	0.000
-25	105.4874	0.003	105.4870	0.003
0	104.4194	0.014	104.4166	0.017
25	103.3550	0.032	103.3523	0.035
50	102.3004	0.054	102.2875	0.067
100	100.1840	0.074	100.1271	0.127

Figure 8. **Price and Option Value of FVZ2**

	Semi-Annual		Quarterly	
	Price	Option Value	Price	Option Value
-50	105.8080	0.000	105.8080	0.000
-25	104.7120	0.000	104.7121	0.000
0	103.6280	0.001	103.6280	0.001
25	102.5570	0.002	102.5550	0.003
50	101.4960	0.005	101.4930	0.009
100	99.4061	0.220	99.3878	0.225

Figure 9. **Price and Option Value of FVH3**

	Semi-Annual		Quarterly	
	Price	Option Value	Price	Option Value
-50	105.0050	0.001	104.9990	0.007
-25	103.9680	0.006	103.9560	0.018
0	102.9350	0.018	102.9170	0.036
25	101.9040	0.040	101.8800	0.035
50	100.8710	0.077	100.8430	0.024
100	98.7956	0.250	98.7723	0.247

AGENCIES

Mukul Chadda
Judy Goldfarb

Overview

Agency spreads were fairly unchanged to both Treasuries and swaps over the week, as the market has begun to adjust to a Fed on hold. The only notable changes over the week were a widening of 2-year bullets by 4 bp to Treasuries and a similar tightening by 4 bp of 30-year bullet to the swaps curve. As economic data point to the beginning of firmness in the economy, investors are better off betting on the chance of a double-dip recession by extending spread duration out to the 5- and 10-year points.

Mortgages outperformed agencies over the week; current-coupon mortgages now trade 4 bp cheap to agency bullets on an OAS basis. While this basis may widen, a drop in volatility should help mortgages outperform agencies if this volatility risk is unhedged. Figure 10 compares the cheapness of mortgage coupons to agency bullets with their historical levels.

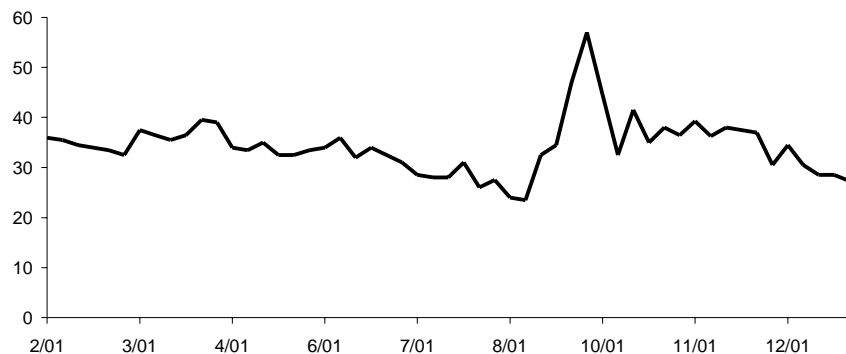
Agencies Look Cheap to ABS

Since the widening of credit spreads last fall—which dragged ABS spreads out with them—the asset-backed sector has performed extremely well versus agencies. Figure 11

Figure 10. **OAS of Mortgages to Agency Bullets, bp**

Coupon	6.0	6.5	7.0	7.5	8.0
Current	1	8	14	18	10
60-Day Average	7	13	14	21	23
120-Day Average	11	17	17	25	28

Figure 11. **Spread of 5-Year AAA Credit Cards over Agency Bullets, bp**



illustrates this by plotting the spread of AAA 5-year credit cards to 5-year agency bullets. Although the ABS sector has been trending tighter to agencies for some time now and the recent tightening could be viewed as a reversal of the post-September 11 cheapening, the current credit environment favors agencies over asset-backed.

In a weak economy, credit tiering should increase across asset classes, and the recent tightening of ABS to agencies indicates that such an event has not yet been priced into the market. As consumer credit deteriorates over the coming months, the ABS sector is more likely to be vulnerable to spread widening, while agencies tend to be more insulated from credit events. We favor moving exposure from the ABS sector to agency bullets.

Callables: The Carry Trade

The current steepness of the curve has been extremely positive for callable issuance. A steep forward curve and a high level of implied volatility offer investors high carry for exposure to the callable sector. The forward curve, off which callables are priced, implies a rather speedy economic recovery. Were this not to materialize, newly issued callables would be in the money and would be sure to be called on their lockout dates. This, in turn, has prompted investors to buy callables and finance them to the lock-out dates, thereby earning an extremely attractive carry.

In betting against the forward curve, investors have a range of callable instruments that they can invest in. Figure 12 lists some of these with the carry advantage they offer. The carry is calculated a financing until lockout at swap rates and assuming that the bond is called at that date. As can be seen from the figure, the longer maturities and shorter lockouts offer the best carry advantage.

A simple glance at this table ignores the risks in each structure. A sharp backup in rates obviously hurts the trade. Were the bond to then extend beyond the lockout date, investors would be faced with the unpleasant choice of financing it to maturity at higher rates—and possibly negative carry—or selling the bond at a loss. To compare the stability of the positive carry across structures, we examine the “cushion” each structure has, while still making the investment attractive. In determining this “cushion,” we assume that a minimum carry advantage of 150 bp is required to leave the trade attractive. We then

Figure 12. **Carry on Various Callable Structures if Financed to Lockout, bp**

Maturity	Lockout		
	6-Month	1-Year	2-Year
3-Years	224	166	
4-Years	280	221	
5-Years	323	272	151
7-Years	381	320	220
10-Years	431	370	252
15-Years	470	408	265

Figure 13. **Break-Even Rate Backups (in bp) for a Return of 150 bp**

Maturity	Lockout		
	6-Month	1-Year	2-Year
3-Years	45	67	
4-Years	43	70	
5-Years	42	67	50
7-Years	42	65	75
10-Years	39	58	65
15-Years	34	51	55

calculate the extent to which rates may back up by the lock-out date without lowering the carry advantage to below 150 bp. The results are compiled in Figure 13.

The choice of structures to pick might appear a little different now. For example, the 4NC1 is one of the more stable structures that offers attractive carry. Using these two tables as a framework, investors can pick the structure that best suits their risk/return requirements.

While these break-even backups may not seem to be much of a cushion, it is important to bear in mind that these are merely the extent to which rates may back up while still leaving more than 150 bp of annualized return on the trade. Back-ups in rates that result in the trade’s breaking even—not losing money—offer even more cushion. As an indication, the 5NC1 structure, which makes 150 bp of annualized return if rates back up 67 bp, remains above water even if rates back up 110 bp in one year. Likewise, the break-even in rates for the 5NC-6months to avoid losing money is a backup of 70 bp in six months.

In addition, our view that the front end is likely to stay low for a while is likely to rally the 5-year sector, as carry trades continue to be popular. Such a rally flattener in the front end will result in greater callability of these structures and increase the expected return on such trades.

DERIVATIVES

Jeffrey D. Biby
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Fed on Hold

The Fed left the Fed funds rate unchanged at 1.75% and kept the bias to ease intact. The Fed noted that the outlook for the overall economy appears “more promising,” but, in keeping its easing bias in place, noted that there is still potential weakness in “business capital and consumer spending.” Our economics group feels that if we continue to receive favorable data, the Fed should remove the bias at the May 7 FOMC meeting (Figure 14).

By that time, it would have much more information on the overall health of the economy, including four more months worth of employment data. We now look for the Fed to remain on hold until the third quarter. We expect the first rate hike of the year in August, with the terminal Fed funds target rate for 2002 at 2.25%, just 50 basis points above the current funds rate.

A Period of Subdued Realized Volatility Ahead

The consequences of a Fed-on-hold scenario are twofold. The long period of inactivity in Fed funds is bound to be a dampener for realized volatility. Interest rates continue to sell off, but not in a hurry. The current trend in realized volatility is a pointer (Figure 15). The 1-month realized volatility has decreased to 109 bp from nearly 200 bp in the middle of December. The decline is bound to weigh on short-dated implied volatility, and 3M10Y swaption volatility has decreased from over 170 bp to 133 bp.

Figure 14. **Expectations of Fed Funds Rate**

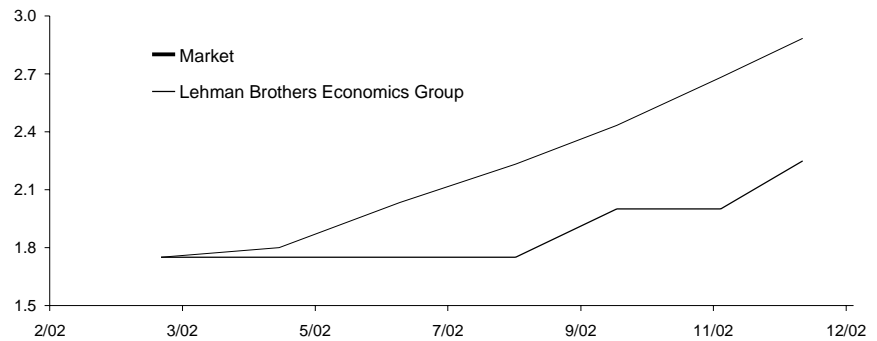
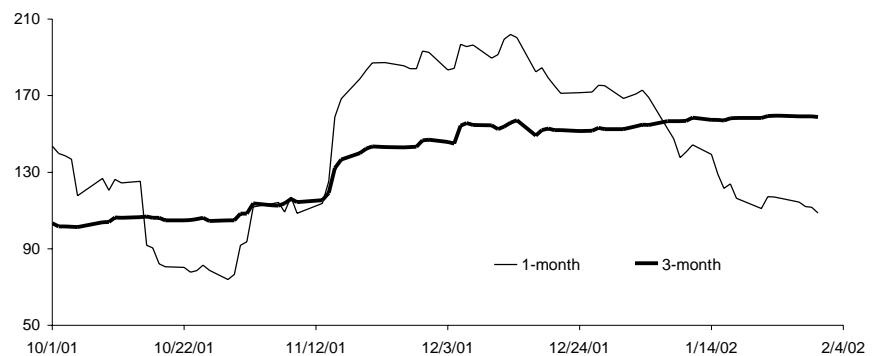


Figure 15. **Realized Volatility in 10-Year Swap Rate**



The current decline in implied volatility started last week, with a considerable chunk of volatility being sold to the dealer community. After the initial 10-15 bp steep decrease, there has been considerable resistance to a further decline. Decreases have been followed by up-ticks, as demand emerges at every new low. Absent any further substantial supply, this is likely to be the trend in volatility. We expect implied volatility to grind lower over the next several days.

Conditional Steepeners Look Attractive

The second consequence of a Fed-on-hold scenario is the steepening bias in the yield curve. The forwards are pricing in considerable flattening, and with the tightening cycle likely to be slower than the market's expectation, the curve is likely to steepen on a forward basis. The options market presents some good opportunities to put on low-risk steepeners.

Recently, there has been considerable supply of 30NC5Y volatility from swapping of corporate callables. Together with the buying in 10-year tails from mortgage accounts, this has caused the volatility spread between 5Y10Y and 5Y20Y volatility to increase to near its all-time highs (Figure 16). The spread between the forwards is also at a historically wide level, with the 5Y10Y forward nearly 10 basis points higher than the 5Y20Y forward (Figure 17). Accordingly, we like buying 5Y20Y payers versus selling 5Y10Y payers.

Structuring the trade to be PV01 neutral, you can take in nearly \$1.6 million for every \$100 million notional on a 5Y20Y payer (Figure 18). The current level of implied volatility provides a buffer of 31 bp flattening in the forwards before the trade starts to lose money. The difference in realized volatility between 5Y10Y and 5Y20Y for the last 180 days is only 11.5 bp annualized, well below the 20 implied by current implied volatilities.

As the dislocation caused by the recent supply-demand dynamics dissipates, the volatility spread will decline. The Fed is likely to remain on the sidelines, and the market will take out some of the excess tightening priced in, leading to a curve steepening. Both of these effects will benefit the trade.

Figure 16. The Spread Between 5Y10Y bp Vol and 5Y20Y bp Vol



Figure 17. The Slope Between 5Y10Y Forward and 5Y20Y Forward Rates

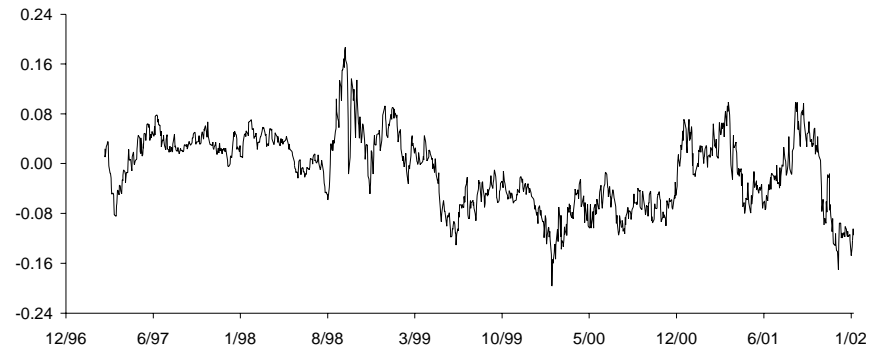


Figure 18. Buying 5Y20Y Payer versus Selling 5Y10Y Payer

	Notional (\$mn)	Strike	\$ PV01	\$ Vega	\$ Premium (\$mn)
5Y10Y	154	6.802	53,645	548,015	8.624
5Y20Y	100	6.709	53,645	515,900 (32,115)	7.030 1.594

European Interest Rate Strategy

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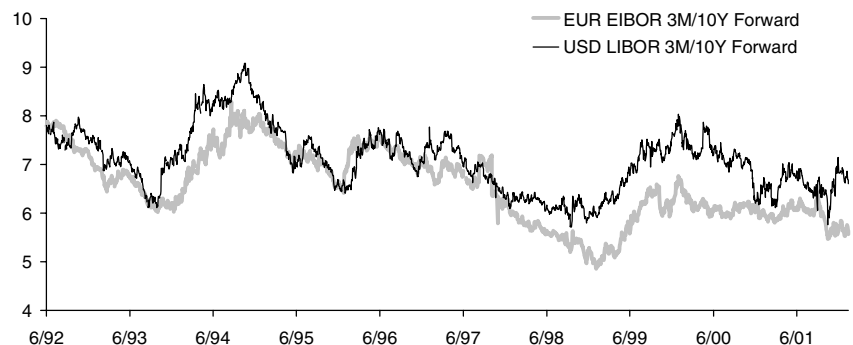
INTRODUCTION

Euribor contracts remain close to their lows of the past fortnight, and with reason—last week's poor inflation figures, as well as increases in orders and purchasing manager sentiment. Services inflation remains high—the lagged effects of wage growth are one reason. The market and press may say that higher January inflation is due to the euro changeover. But this will not have any lasting influence and just hides how worrying the underlying data are. With oil at \$19, overall inflation will fall. But the core rate of inflation—excluding food and energy—looks like it will stay above overall inflation and even the ECB reference rate of 2%. This is all the more dangerous if wage settlements are high, as several European countries hold elections this year.

We agree with our economists that these stronger data should end up seriously worrying the ECB this summer. We think that the ECB could still hike rates even if German GDP growth is still negative (as the Bundesbank suggested last week). This is just what the ECB did in 1999—it hiked rates after a German negative GDP growth figure in 2Q99. Euribors are pricing in over a 30 bp rate hike by September (after discounting the basis). If investors believe that higher inflation and higher confidence could upset European bonds, then they should sell European bonds, especially in the short end. But 10-year Bunds are more influenced by Treasuries for the time being, preventing the curve from steepening. At the moment, European bonds are getting support from U.S. Treasuries and from indices. Because of the end of month, there was a big jump in our bond indices, stoking demand for bonds (the Lehman Euro-Agg Index was up 2% between January and February because of the high level of redemptions).

10-year bonds are in a better position, Treasuries more so than Bunds (Figure 1). This reflects long-term bond risks, mainly inflation. Note that the rate is a full 1% higher in the U.S. than in Europe, a reflection of the steeper U.S. curve. Only we do not see this in spot 10-year levels, as the U.S. curve is so steep. This tells us two things: 1) U.S. long bonds are technically safer short term, and 2) a rise in short-term rate expectations will end up feeding through to the long end, even in the U.S.

Figure 1. **10-Year in Three Months
Much Less Comfortable Level in Europe than U.S.**



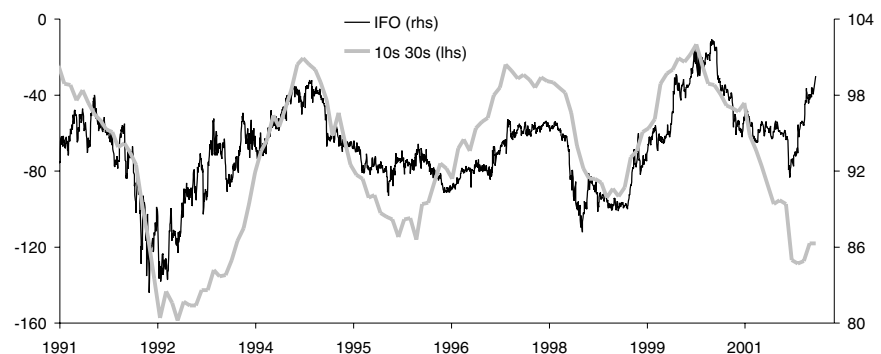
The future is now, not next year. Now we could cite the likelihood of severe credit risks, Japanese-led deflation, and bubbles left, right, and center. These worries are all quite valid, and bubbles always end up exploding at some stage. The problem is that many of these excesses have been around for a long time. We could even point to the similar warnings that were made in 1999 and which were validated afterward. It remains easy to play on fears of impending gloom and doom. But central banks do not base rates on long-term risks, but rather on how the economy is and will be doing this year.

EURO ZONE MARKETS

30-year bonds—more outperformance with strengthening economy. We think that the underlying macro conditions play a significant role in the determination of the 30-year. The flattening these past few weeks goes hand in hand with the cheapening of Euribors and the richening of the 2-5-10 fly (i.e., 5-year underperforming). Market anticipations of a recovery are clearly growing. See Figure 2—the 10s-30s spread is well correlated with the economic cycle (despite this being only one factor among several of importance for the 30-year). **If expectations of growth continue to rise, then the 30-year will do well.** But the graph also shows that the 30-year appears to have gotten ahead of itself. However, if IFO picks up as steeply as it did in 1999, it could still gain a good deal of ground on the 30-year (an IFO of 95 by year-end would go a long way toward normalizing the graph). In this context, supply is a factor in long-term valuations (supply is also relatively constant from year to year).

The 30-year will be the only fixed-rate bond auctioned next week in France: up to 3.9 billion and possibly more (after non-competitive bids). This large amount is a first for the AFT. As we said in our issuance outlook last December, France will continue issuing good quantities of 15- and 30-year. This is predicated on the belief that there is growing structural demand for the 30-year in Europe. It is a long-term objective for France to stand out more in terms of long-bond issuance. The AFT will not try to switch 30-year into 10-year issuance. It will not follow Germany in issuing relatively

Figure 2. Recovery in IFO Last Week Prompts Further 10s-30s Flattening



large quantities of 10-year. It hopes to distinguish the French curve by having larger long-bond outstandings. Our objective of 7 billion issuance in OAT 30-year and a similar amount on the 15-year already looks small.

DERIVATIVES

- **Buy EUR100,000,000 nominal of EUR 3M10Y ATM straddle (ATM vol of 13%) at 2.12%.**
- **Sell EUR495,260,000 nominal of EUR 3M2Y ATM straddle (ATM vol of 20.1%) at 0.65%.**

Modeling volatility is a risky proposition. Risk is even more pronounced when one is modeling it! This notwithstanding, we have decided to take a stab at the subject. However, we will limit our ambitions to short-dated volatility (i.e., short option maturities and swap tenors up to ten years). The objective is to figure out the various market factors that shape the behavior of short-dated vol and then construct trading strategies based on that knowledge.

Slope and Volatility

The slope of the yield curve is one of the leading indicators of how risky the world is. A steeper slope is a reflection of higher growth and inflation expectations, and both of these propositions increase the risk one assumes upon investing in the yield curve. It seems natural to assume that volatility would, as such, be shaped to a certain extent by slopes, increasing as slopes become steeper. In this sense, we would expect the effect of the 2s-10s slope to appear in, say, the 3-month option on the 10-year rate (3M10Y) vol via the dependence of this vol on the 10-year sector. On the other hand, a 3M10Y swaption is obviously subject to short rate expectations, as it is these that shape up much of the option's value at expiry. Hence, we would expect volatility to be a function of the money market slope; for instance, the difference between the 3M1Y and the 3M1M rates. If the money market slope decreases, the rest of the curve usually steepens, and, hence, we would expect volatility to increase.

To put these intuitive arguments to the test, we ran regressions of yield volatilities with option maturities of 3 months, 6 months, and 1 year and swap tenors of 2, 3, 4, 5, and 10 years against the money market slope (as defined above) and the 2s-10s slope. The results have been encouraging and significant, showing high correlation between volatility and its explanatory variables, as well as nicely mean-reverting regression residuals. In Figure 5, we show a summary of the statistical results for the 3M10Y swaption vol. Full details of this model are forthcoming.

These residuals are quite mean reverting, and an average trade would be expected to make returns over about ten business days.

Relative Value Trading with Residuals

How can we use the preceding results to make money? One of the simplest suggestions would be to trade the residual on a relative value basis: when the residual indicates that volatility is cheap, buy it; when it's dear, sell it! This, however, requires a great deal of

confidence in the absolute significance of this residual as an effective rich/cheap signal and presumes that no great moves (or changes of regime) occur in the market. Another, more plausible, suggestion that is more true to the relative value spirit would be to trade one volatility against another, i.e., buy a 3M10Y because our signal indicates it's cheap and sell a 6M5Y because the signal indicates it's expensive (this is just an example). This kind of trading is relatively immune to major market moves.

Figure 3. 3M2Y Residuals

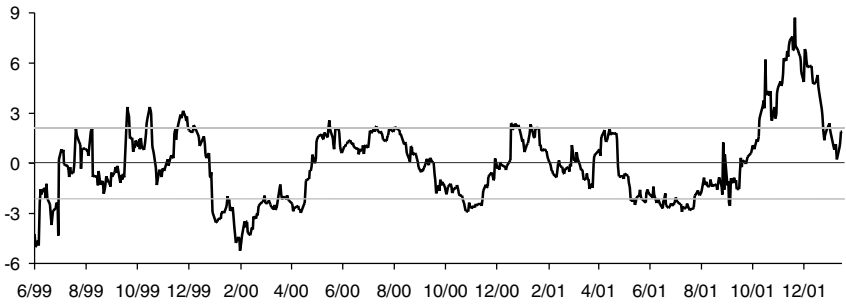


Figure 4. 3M10Y Residuals

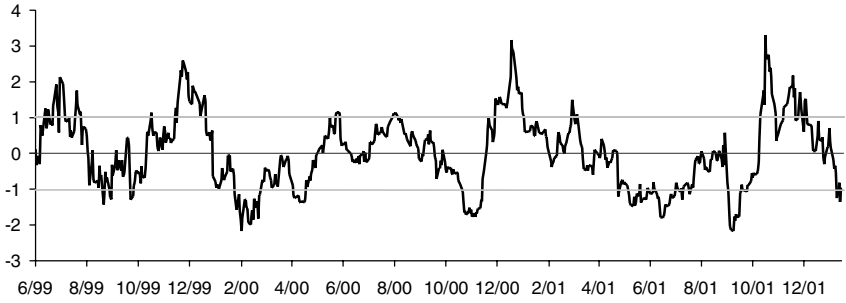


Figure 5. Statistical Summary of 3M10Y Regression

Regression Statistics	
R Square	0.771859359
Coefficients	
Intercept	7.563792566
Money Market Slope	0.018577104
2s-10s Slope	0.047132131

We have used this model to spot some relative value opportunities, and, as we proposed in the beginning of this piece, we believe accounts should buy EUR 3M10Y ATM straddles versus EUR 3M2Y ATM straddles. The reason we prefer using straddles instead of simple payers or receivers is that straddles have much lower deltas and gammas and, as such, are the perfect vehicle for a short-term pure volatility trade.

The trade is vega neutral, and the theta decay and the gamma position are small. Thus, we are really trading pure vol. The trade horizon is two weeks, and the expected P&L can be calculated from the expected change in vol differential between the 3M2Y and the 3M10Y. This expected change is $0.98 - (-1.92) = 2.9\%$. Multiplying this change by the 3M10Y straddle vega gives the expected P&L of EUR458,800.

STERLING MARKETS

Longer-term yields drifted lower over the past month as rate expectations stabilized and risk premium levels dropped. 10-year swap yields are 10 bp lower and have outperformed the euro and U.S. markets by 14 and 16 bp, respectively. The outperformance against the U.S. is particularly hard to explain. The tone of the Fed suggests that rates will be lower for longer. In contrast, the MPC could start raising rates as soon as May. Typically, in the three rate hike cycles since 1994, the Bank of England has started to raise rates an average of 4.5 months after the last cut. Fundamentally, the U.K. is the strongest of the G7 economies and has the smallest output gap. This means the risk of an upturn in inflation is not insignificant. At present, the short-sterling strip is pricing 3-month rates to rise by 125 bp by December. In our view, that is not too far off the mark, but the short-sterling strip has a notorious reputation for overshooting. Add to this that February is well known to be one of the worst calendar months for bonds. Higher yields and more curve flattening is in store over the coming weeks. We look for the benchmark 10-year, UKT 5.0% March 2012, to trade above the December 5.03 high and for the UKT 2-10 Gilt curve to flatten toward 5 bp from the current 16 bp.

The main movement on the strip has been a 25 bp flattening of the Mar03-Mar04 calendar spread. The effect has been to lower the magnitude of the expected rate hike cycle. Base rates are expected to rise by 150 bp over the next 15 months, with the terminal rate near 5.50 (Figure 5). Given GDP trend growth of 2.5% and the inflation target, also 2.5%, some might argue that neutral rates are closer to 5%. However, this ignores the impact of the housing market and the accompanying demand for adjustable-rate mortgages. This means the simple estimation of neutral rates based on growth and inflation targets is too low, and an additional risk premium is justified.

From a relative value standpoint, the flatness of the FRA strip past the middle of 2003 sets up an opportunity to pay the 3-year swap two years forward against receiving the 1Y1Y and the 5Y5Y. To establish this, we explain the level of the 3-year swap two years forward using the level of the 1Y1Y and the 5Y5Y. Using data since January 2000, the R-squared of the regression is 97%. The difference between the actual 3-year swap two years forward and the model price is 15 bp (Figure 7). To profit from this anomaly, construct a weighted forward butterfly according to the coefficients of the regression:

Pay GBP 3-year swap 2 years forward @ 5.58 100k/bp
Rec GBP 1-year swap 1 years forward @ 5.78 28k/bp
Rec GBP 5-year swap 5 years forward @ 5.23 88k/bp

The trade has 43 bp of positive carry, mostly thanks to the 1Y1Y position. GBP 1-year swap rates are 120 bp less than the 1-year forward level. Real money investors can take advantage of this mispricing by switching out of 5s into 2s and 10s on a cash-for-cash basis.

Turning our attention to the long end for a moment, we expect the flattening of the 10s-30s spread to continue. Currently, this spread is -33 bp inverted, threatening the -37 bp extreme of August 2001 (Figure 8). This is occurring despite real money accounts shortening cash for cash. Our model, which uses the level of 2-year rates and swaption vol to explain the 10s-30s slope, shows the curve 5 bp too flat. But as far as we are concerned, this is not nearly enough of an anomaly to recommend a steepener. And if the front end comes under further pressure over the next month, then the 10s-30s will invert further.

Figure 6. Path of 3-Month Rates Implied by Short-Sterling Strip

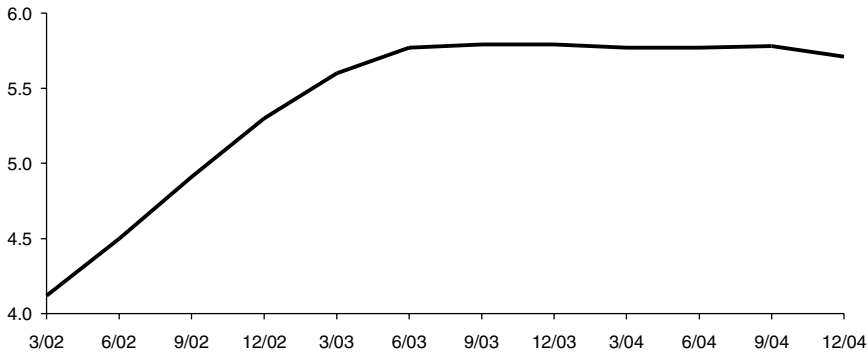
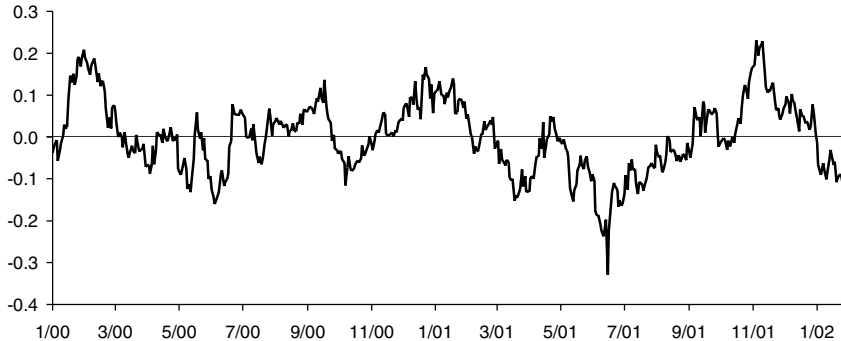
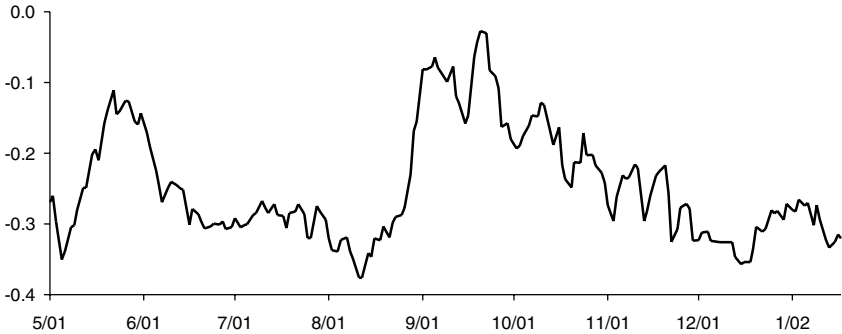


Figure 7. Actual - Model Price for GBP 3-Year Swap 2 Years Forward



It is unlikely that cash-for-cash shortening would be substantial enough to stop this trend. In addition, the long forward swap spread differences from the euro area, such as the 15Y15Y, is at 126 bp, near the bottom of the recent range. Any exiting of these positions would add to the flattening pressure at the long end of the curve. Position for further flattening of the 10s-30s spread and look for a test of the -40 level in the coming weeks.

Figure 8. 10s-30s Gilt Spread to Invert Further



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MIXED SIGNALS FOR THE MARKETPLACE

The U.S. high-grade market closed the week 4-5 bp wider last week as increased market uncertainty overshadowed a flurry of positive economic news and constructive technicals resulting from the Treasury roll. Telecom led the market wider, gapping out roughly 9 bp as largely unsubstantiated concerns of a downgrade drove WCOM bonds out 70 bp and 50 bp in 10- and 30-years, respectively. (*Analyst Scott Shiffman limits near-term risk in WCOM to missed earnings/lower guidance, which would cause Moody's to place the A3 rating on review for downgrade*). Finance companies and banks also gave up the prior week's gains, widening 10 bp and 7 bp, respectively.

Investors took a cautious step back from the market as instability increased throughout the week. Concerns over accounting procedures (Williams, Anadarko, PNC) and cautious 1H02 outlooks contributed to the tenuous market tone. Adding insult to injury, the rating agencies will continue to monitor closely and quickly react to market/credit changes. While we think this uncertainty will have a greater impact on the equity market than on the fixed income market, especially in the long term, we recognize that the unsettling landscape has left some credit investors looking for short-term *safe havens*. This may limit the appetite for risk and, thus, the potential for general credit spread compression over the near term.

As a side note, it is important to realize that other outstanding, potentially unavoidable risks remain in the marketplace. President Bush's State of the Union address was not particularly comforting with respect to future terrorist attacks. The president's few words on more strict accounting regulation and employee retirement safeguards only beg the currently unanswered question: how far can and will government go to enhance transparency and disclosure? It will take several months before we know for sure.

LEAST VULNERABLE IN A CHOPPY MARKET

The markets have responded vigorously to the fear of the unknown over the past several weeks. General themes, such as accounting abuses, contingent liabilities (asbestos), the rating agencies, terrorism, and international issues have been compounded by company-specific (PNC, Williams, Anadarko, Tyco) concerns to perpetuate market uncertainty. Investors remain confounded, searching for the keys to avoid further rude awakenings.

Since this fear of the unknown is likely to weigh on valuations until 10-Ks, proxies, and auditor reports are filed in March, we believe many investors will employ a more defensive strategy (more so than usual for this time of the year) to afford themselves incremental stability over the next 6-8 weeks. Against this backdrop, we collaborated with our high grade research team to determine the *least vulnerable* credits that are among the top 200 issuers in the Credit Index. While managers will have to pay up for many of these names, **we expect this group to offer above-average liquidity and minimum spread volatility in the event that this uncertain market remains or becomes more challenging over the next few weeks.**

Our *defensive* portfolio consists of 87 companies with a combined market value of \$653 billion, or nearly 35% of the Credit Index. However, it is important to note that

managers must delve beyond the Top 50 Credit Index borrowers to secure opportunities in the safer names, given that nearly 75% of the portfolio lies in the 50-200 ranks of the Credit Index. In addition, while we continue to suggest that investors monitor security selection at the micro level, it is helpful to note that a significant portion of this debt is concentrated in several sectors. For example, banks, comprising predominately regional companies, account for 21% of the portfolio, while the noncorporate sector leaves its mark through supranationals (12%), sovereigns (6%), foreign local governments (6%), and foreign local agencies (4%). Nevertheless, not all of these credits are rated in the Aa+ bucket. About \$131 billion, or approximately 20%, of our portfolio was issued by BBB rated companies. Most of these opportunities are confined to the lower-rated electric, rail, REIT, and supermarket sectors, an important indication that **this is not a traditional flight-to-quality trade but, instead, an exercise of bottoms up fundamental research regardless of sector, rating, or price.**

Away from the higher-quality noncorporate and bank sectors, we believe some of the yieldier ways to pick up defensive names exist among BBB rated issuers. Rails, for instance, are considered “early cyclicals” and are well positioned to benefit from any cyclical up-tick. Analyst Dan Ward expects more consistent operating performance in 2002 from the major rails, all five of which appear in our portfolio. However, not all sectors can benefit from positive macro issues. Supermarkets, for example, need to be examined on a case-by-case basis. The names we have included on this list carry positive outlooks at the agencies, a rare but important basis given credit agency scrutiny. Lastly, in the utility sector, we list all levels of the company, including utility operating companies—which are traditionally viewed as safe havens—and their holding companies (e.g., D, TXU). In some cases, we also include non-regulated subsidiaries of a strong holding company (e.g., Exelon Generating).

Since our defensive portfolio does not factor in spread/price as much as it does individual fundamentals and degree of headline risk, we recognize that our current tactical weightings may not be consistent with the portfolio below. Having said that, we are revisiting our current recommended allocations in light of current market conditions and will be publishing our new weightings in the upcoming credit monthly piece.

CREDIT VOLATILITY

Last year’s +254 bp of excess return for the Credit Index was the best annual relative performance since we began this computation in 1989. However, 2001 may also be remembered as the year of the scud—the biggest scud and the most scuds. An unprecedented number of borrowers fell out the Credit Index due to ratings downgrades last year. As shown in Figure 2, \$63.6 billion dropped below the Credit Index threshold of Baa3, representing 4.5% of the beginning-year Credit Index par value. Given the volatile price action for a slew of names over the past few weeks, combined with more proactive rating agencies, the risk of more issuers sliding out of the high-grade universe is still significant. So far this year, the gaming sector (MGG and PPE) represents the majority of paper that has exited the Credit Index.

Figure 1. Defensive Portfolio: Names within Top 200 Issuers in the Credit Index

Issuer	Credit Index Rank	Ratings		Market Value Jan 28, 2002	Class
		Moody's	S&P		
CITIGROUP	2	AA1	AA-	48,028,304	BANKING
IBRD	4	AAA	AAA	32,104,586	SUPRANATIONALS
BANK OF AMERICA CORP	6	AA2	A+	27,124,748	BANKING
GECC	7	AAA	AAA	26,573,040	NON_CAPTIVE_DIVERSIFIED
VERIZON	11	A1	A+	23,913,592	WIRELINES
IADB	12	AAA	AAA	23,907,684	SUPRANATIONALS
ITALY	15	AA3	AA	19,403,508	SOVEREIGNS
WELLS FARGO	17	AA2	A+	18,702,138	BANKING
WACHOVIA	18	A1	A	17,643,696	BANKING
WAL-MORT STORES	25	AA2	AA	14,342,655	RETAILERS
SBC COMMUNICATIONS	27	AA3	AA-	12,906,993	WIRELINES
EUROPEAN INVESTMENT BANK	29	AAA	AAA	12,356,820	SUPRANATIONALS
ASIAN DEVELOPMENT BANK	32	AAA	AAA	10,939,632	SUPRANATIONALS
BELLSOUTH	33	AA3	A+	10,757,880	WIRELINES
KFW	35	AAA	AAA	10,383,815	FOREIGN_AGENCIES
QUEBEC	38	A1	A+	9,827,426	FOREIGN_LOCAL_GOVERNMENTS
CANADA	39	AA1	AA+	9,709,304	SOVEREIGNS
HYDRO-QUEBEC	43	A1	A+	8,917,220	FOREIGN_LOCAL_GOVERNMENTS
DOMINION RESOURCES & VEPCO	44	BAA1	BBB+	5,739,666	ELECTRIC
AIG	48	AAA	AAA	8,164,744	LIFE
LOCKHEED MARTIN	49	BAA2	BBB-	8,063,099	AEROSPACE/DEFENSE
EOP OPERATING LP	50	BAA2	BBB+	7,866,595	REITS
CONOCO	51	BAA1	BBB+	7,852,839	INTEGRATED
WASHINGTON MUTUAL	52	A3	BBB+	7,814,425	BANKING
COUNTRYWIDE	53	A3	A	7,658,799	NON_CAPTIVE_CONSUMER
INTL BUSINESS MACHINES	54	A1	A+	7,657,353	TECHNOLOGY
PHILIP MORRIS (NABISCO)	55	A2	A	7,588,249	TOBACCO
VODAFONE	57	A2	A	7,390,083	WIRELESS
PHILLIPS PETROLEUM	60	A3	BBB+	7,330,720	INTEGRATED
COMCAST CABLE COMMUNICATION	63	BAA2	BBB	7,239,887	MEDIA_CABLE
TARGET	64	A2	A+	7,190,583	RETAILERS
KROGER	67	BAA3	BBB-	6,839,666	SUPERMARKETS
FIRST ENERGY & UTILITY SUBS	68	BAA2	BBB-	6,581,032	ELECTRIC
NORFOLK SOUTHERN CORP	71	BAA1	BBB	6,223,360	RAILROADS
ONTARIO	72	AA3	AA	6,215,703	FOREIGN_LOCAL_GOVERNMENTS
UNILEVER	73	BAA1	BBB+	6,213,467	FOOD
BRISTOL-MYERS SQUIBB	74	AAA	AAA	6,173,158	PHARMACEUTICALS
PROGRESS ENERGY & UTILITY SUBS	75	BAA1	BBB	6,147,377	ELECTRIC
BURLINGTON NORTH SANTA FE	77	BAA2	BBB+	5,888,509	RAILROADS
UNION PACIFIC CORP	78	BAA3	BBB-	5,769,025	RAILROADS
PROCTER & GAMBLE	82	AA3	AA-	5,362,356	CONSUMER_PRODUCTS
ALCOA INC	83	A1	A+	5,194,460	METALS_AND_MINING
CHEVRON CORP	84	AA2	AA	5,155,286	INTEGRATED
KELLOGG CO	86	BAA2	BBB	5,066,192	FOOD
SAFEWAY STORES INC	89	BAA2	BBB	4,846,096	SUPERMARKETS
KOREA	92	BAA2	BBB+	4,647,265	SOVEREIGNS
WEYERHAEUSER	98	A3	A-	4,490,095	PAPER
TXU CORP AND TX UTILITIES ELECTRIC	99	BAA3	BBB	2,471,040	ELECTRIC
DIAGEO PLC	100	A1	A+	4,449,955	BEVERAGE
MELLON BANK	102	A1	A+	4,407,602	BANKING
EXELON, EXELON GENERATING & UTILITY SUBS	103	BAA2	BBB+	4,401,496	ELECTRIC
KDB	106	BAA2	BBB+	4,343,468	FOREIGN_AGENCIES
CSX CORP	107	BAA2	BBB	4,314,728	RAILROADS
UNITED TECHNOLOGIES	109	A2	A+	4,280,573	CONGLOMERATES
ANHEUSER-BUSCH CO.,INC.	111	A1	A+	4,199,800	BEVERAGE

Figure 1. **Defensive Portfolio: Names within Top 200 Issuers in the Credit Index** *continued*

Issuer	Credit Index Rank	Ratings		Market Value Jan 28, 2002	Class
		Moody's	S&P		
BP AMOCO	112	AA1	AA+	4,176,645	INTEGRATED
DUPONT	113	AA3	AA-	4,153,418	CHEMICALS
KRAFT FOODS	115	A2	A-	3,987,755	FOOD
MANITOBA	117	AA3	AA-	3,980,920	FOREIGN_LOCAL_GVERNMENTS
NIAGARA MOHAWK POWER	121	BAA2	A+	3,898,684	ELECTRIC
DTA (Deutsche Ausgleichsbank)	125	A3	AAA	3,779,521	FOREIGN_AGENCIES
SIMON DEBARTOLO GROUP LP	126	BAA2	BBB+	3,733,729	REITS
SUNTRUST	128	A+	A+	3,679,242	BANKING
NATL CITY	142	A2	A	3,335,828	BANKING
MAY DEPARTMENT STORES	144	A1	A+	3,281,102	RETAILERS
FLORIDA P&L AND FPL GROUP CAPITAL	146	AA3	A	3,207,127	ELECTRIC
FINLAND	149	AAA	AA+	3,043,027	SOVEREIGNS
DETROIT EDISON & DTE	155	A3	A-	2,670,471	ELECTRIC
OKB	157	AAA	AAA	2,800,319	FOREIGN_AGENCIES
KEPCO	161	BAA3	BBB	2,731,780	FOREIGN_AGENCIES
MERCK & CO.	162	AAA	AAA	2,723,805	PHARMACEUTICALS
SASKATCHEWAN	165	A1	A+	2,640,030	FOREIGN_LOCAL_GVERNMENTS
FEDEX	166	BAA2	BBB	2,630,747	TRANSPORTATION_SERVICES
ABBEY NATIONAL	170	AA3	AA-	2,539,175	BANKING
NOVA SCOTIA	171	A3	A-	2,536,653	FOREIGN_LOCAL_GVERNMENTS
INSTIT DE CREDITO OFICIAL	172	AAA	BB+	2,531,029	FOREIGN_AGENCIES
VERIZON WIRELESS INC	177	A2	A+	2,496,043	WIRELESS
SOUTHERN COMPANY & UTILITY SUBS	179	A3	A-	2,469,099	ELECTRIC
ROYAL BANK OF SCOTLAND	183	AA3	A	2,399,363	BANKING
CONSOLIDATED EDISON	184	A1	A+	2,384,240	ELECTRIC
BRITISH COLUMBIA	185	AA2	AA-	2,377,225	FOREIGN_LOCAL_GVERNMENTS
CANADIAN NATIONAL RWY	186	BAA2	BBB+	2,363,567	RAILROADS
MASCO CORP	188	BAA1	BBB+	2,324,790	BUILDING_MATERIALS
KINDER MORGAN	190	BAA1	A-	2,305,287	PIPELINES
SWEDEN	193	AA1	AA+	2,286,862	SOVEREIGNS
PHARMACIA CORP	196	A1	AA-	2,250,105	PHARMACEUTICALS
TOYOTA MOTOR CREDIT	200	AA1	AAA	2,168,402	CAPTIVE

* Ratings reflect those of parent company or first name listed.

**Please note that several names had to be omitted for compliance or other reasons.

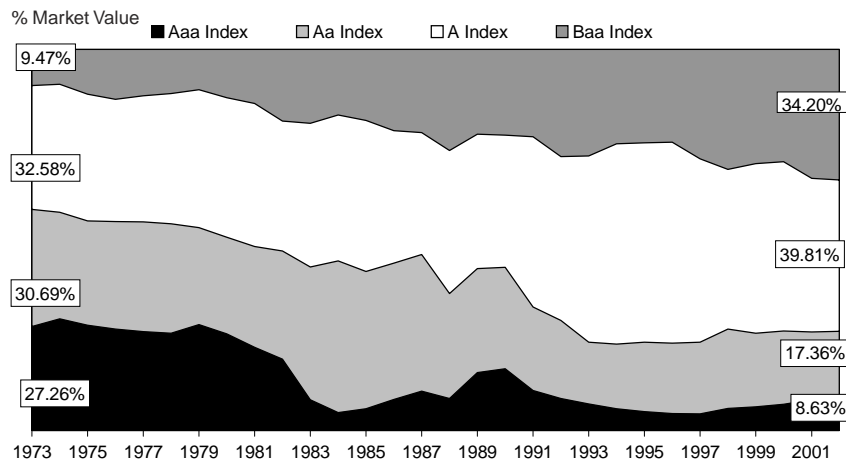
Figure 2. **Credit Index Scuds**

	Par (US\$ bn)	% of Credit Index
1997	3.8	0.50
1998	22.0	2.44
1999	19.6	1.75
2000	26.3	2.20
2001	63.6	4.50
2002	4.2	—
Total	139.5	

THE CREDIT INDEX: MONITOR THE BBB BUCKET

Due to rating downgrades at **Ford Motor Company, Halliburton, and Mead** during January, \$14.5 billion of Credit Index paper migrated to the BBB Index from the single-A basket. Partly as a result, the BBB portion of the Credit Index jumped to 34.2%, up from 33.8% at the start of the year. The share of BBB borrowers in the Credit Index is the highest since the inception of the Credit Index in 1973.

Quality Analysis of the Lehman Brothers Credit Index, 1973–January 31, 2002



Looking forward, the BBB index is likely to gain further Credit Index share. For example, in the event that **AT&T** (A3/BBB+, on watch negative) and **DaimlerChrysler** (A3/BBB+, outlook negative) were lowered by Moody's, a huge \$36.6 billion of market value would fall into the BBB zone. In addition, given **WCOM's** (A3/BBB+) price action last week, this borrower could end up in the BBB Index—another \$27.0 billion. Therefore, if these three issuers were lowered by Moody's, the BBB Index share would rocket to about 37.6%, while the single-A index would fall to approximately 36.4% from almost 40%. On the flip side, **AOL, Q, FON,** and **TYC** are among the largest Baa1 rated names—unlikely to be raised to A3 in the near term, in our view.

We believe a further increase in BBB paper within the Credit Index would likely exacerbate the bifurcation in the high-grade market over the next few months. In other words, the high-quality, seemingly rich paper may continue to trade well, while lower-quality securities may languish. If these credit trends and Moody's ratings rampage continue, high-quality corporate buyers may see their universe shrink further at the expense of the BBB bucket.

A SIGN OF STRESS

At times during the past week, about 16 Credit Index borrowers spread curves were completely flat or inverted—a clear sign that investors are on edge. In addition to tough current economic conditions and the ENE hangover, some common themes among these issuers continue to be: lots of outstanding paper inside of 5-years, limited access to the CP market, and credit specific concerns such as asbestos or accounting. All these factors make spread less important and dollar price more so—resulting in spread curve flattening. Of note, these 16 names account for nearly 10% of the Credit Index market value. In our view, given the challenges that many borrowers face today, the market is

likely to continue to be unforgiving over the next couple of months toward those names with perceived credit issues.

TOUGH TO MAKE A U-TURN

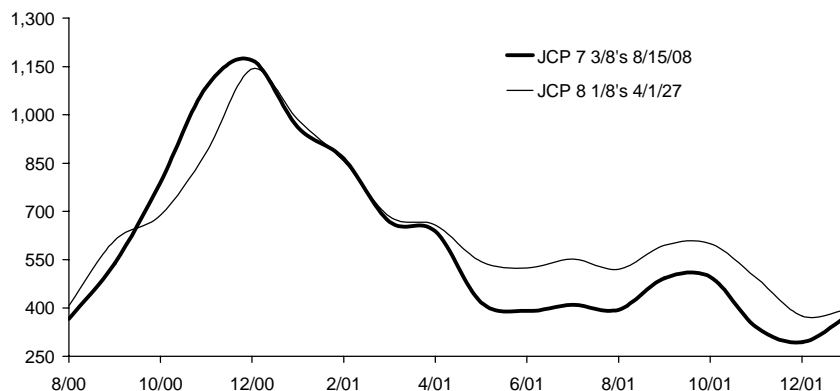
Falling below investment grade tends to be a one-way street—at least in the short run. Few credits that have dropped below investment-grade have returned to the high-grade universe, particularly since 1997. However, a few borrowers have stabilized (or have appeared to) in the mid-BB zone.

STABILIZED SCUDS

We examined the borrowers that fell out of the Credit Index due to rating downgrades since 1997. We found that on average, about one borrower per year has stabilized in the BB category. In February 1998, **Columbia Healthcare** was lowered to Ba2; in August 1999, **Waste Management** dropped to Ba1; in December 2000, **Xerox** was cut to Ba1; and this last March, **JC Penney** was lowered to Ba1. These four borrowers' ratings and debt securities have generally stabilized (although the jury may still be out on XRX, and on Friday, WMI had its outlook shifted to negative by Moody's). **Importantly, HCA, WMI, XRX, and JCP 10-year paper has narrowed 500+ bp on average from its peak, highlighting the outsized return opportunity.** JC Penney paper returned 78% in 2001, and had JCP been in the Credit Index for all of last year, this issuer would have contributed about 16 bp of excess return.

Looking at historical JC Penney spreads and prices is generally illustrative of the other three names. All four names fell hard and fast, but have since gained much of their lost ground. Figure 3 shows Penney 08 and 27 spreads since August 2000. JCP was lowered to Ba2 in March 2001, but the spread peak (+1,100+ bp) was three months prior. Now, Penney is trading about where it was in August 2000. Note that the JCP spread curve has normalized over the past six months. Figure 4 highlights the price performance of JCP 08s and 27s over

Figure 3. **JC Penney Spreads, August 2000 - January 31, 2002**



the same period. Near the spread peak in December 2000, these two bonds were trading within only 4 points of each other, compared with a wide of 18 points in November last year.

Despite similar ratings, these four stabilized scuds are trading in a wide range. Columbia Healthcare (Ba1/BB+) 10-years are around +240 bp, compared with Waste Management (Ba1/BBB) 10-years at +180 bp, Xerox (Ba1/BB) 16s at +480 bp, and Penney (Ba2/BBB) 08s at close to 400 bp.

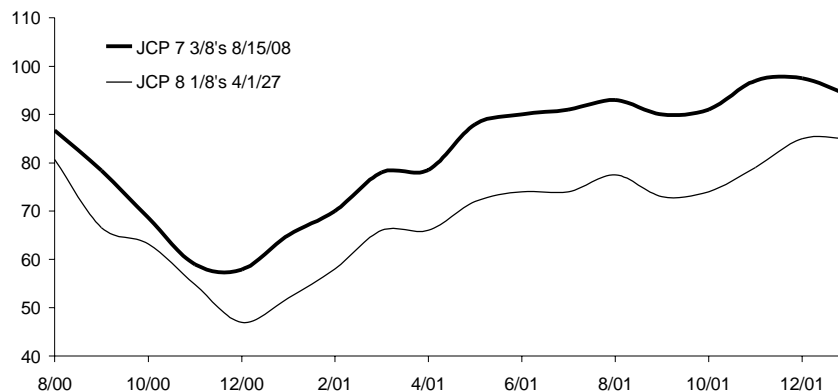
Not many borrowers that have dropped below investment-grade have returned to the high-grade universe. Those that do tend to be the larger-cap names. Since most scud bond valuations get obliterated once they appear to be sinking, huge upside exists if the credit stabilizes in the BB range. In our view, now is not the time to invest in risky names, generally speaking. However, in the event that the economy continues to show signs of improvement over the next few months, we believe the risks of investing in rebounding scuds will be worth examining.

JANUARY PERFORMANCE REVIEW

The first month of 2002 was characterized by robust activity and volatility with respect to both interest rates and credit events. Demand for credit product was solid throughout the month; using mutual fund flow data as a proxy for demand indicates investors put their money to work over the course of January. Equity, high grade, and high yield mutual funds all saw net inflows. The month, however, was heavily polarized. High-grade spreads ratcheted in early on as investors repositioned themselves for the new year, only to give back gains due to asbestos claims, accounting policies, and the foggy expectations on the ratings agency front. In like fashion, the 2s-30s Treasury curve saw high intra-month volatility, steepening 18 bp at the start of January only to end the month 16 bp flatter.

Nevertheless, the Credit Index OAS tightened 3 bp during January, to +161 bp, generating +21 bp of excess return. Given the increased market uncertainty, higher-quality Aa+ credits

Figure 4. **JC Penney Dollar Price**, August 2000 - January 31, 2002



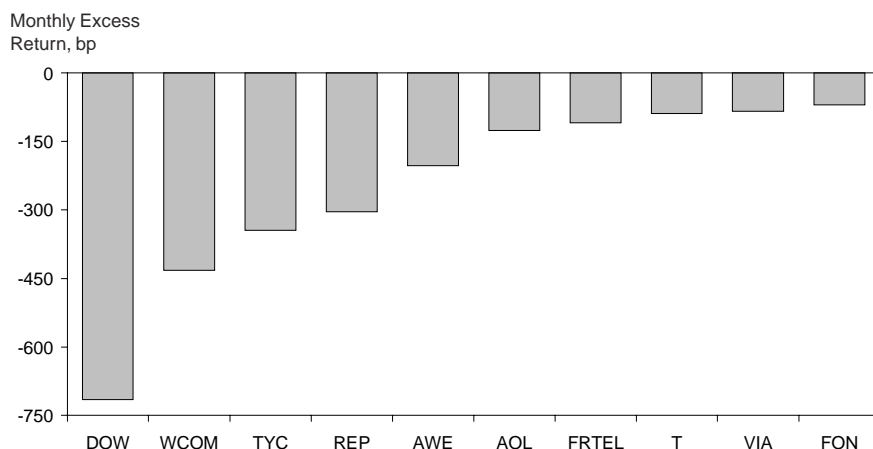
(+27 bp) benefited at the expense of lower-rated BBB (-11 bp) and crossover (-78 bp) securities. By maturity, the back end (+37 bp) continued its strong run, although to a less-pronounced degree than in prior months.

January high-grade supply was a healthy \$55.3 billion, with 62% of issuance concentrated in the in the 1- to 5-year maturity bucket and 45% in finance. A flood of mixed earnings releases helped form a general outlook of a rough 1Q02 with a recovery taking hold in 2H02. Numerous constructive economic indicators—particularly, positive 4Q01 GDP growth and an unexpectedly low unemployment rate—helped underpin a cautiously optimistic Fed. Still, sector performance varied greatly, as most market movements developed from company-specific concerns.

The effects of credit scuds within a given sector helps explain the relative underperformance for some of January’s worst performing industries. For example, **WorldCom** accounts for over 10% of the telecom sector and contributed -46 bp to the telecom sector’s -100 bp of excess return. Similarly, **AOL Time Warner** (-126 bp) represents about 24% of the entertainment sector and largely drove its less-than impressive returns.

The best performing sectors of the month—airlines (+378 bp), lodging (+181 bp), and gaming (+104 bp)—have posted steady recoveries since September 11. While air traffic was down more than 80% in mid-September, it is now down only 20%, as the industry continues to offer discounted flights, package deals with resorts/casinos, and better security measures. Equally important in explaining the relative outperformance of these three sectors is the fact that numerous weaker credits fell out of the Credit Index (e.g., **AMR, MAR, PPE, HOT, MGG**) following aggressive rating actions in 4Q01. Overall, we think that the primary drivers of sector performance in January solidify our strong emphasis on *credit* selection, or, more specifically, the importance of avoiding the blowups, relative to *sector* selection.

Figure 5. **January's Worst Performing Issuers**
With at least \$1+bn of Debt in the Credit Index



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MARKET UPDATE

A Tough Week Takes the Shine Off a Good January Performance

Credit spreads widened last week in euros and tightened in sterling, as shown in Figure 1. Volatility was even higher than indicated by the weekly spread deltas, as there was a lot of movement intra-week. The market was affected by issuer-specific newsflow around U.S. names such as Tyco, Worldcom, and PNC. In addition, NTL, the U.K. cable operator, announced that it would restructure its debt. This was not a surprise—its issues were rated in the lower part of the high yield category before the event. But it nonetheless represented another negative piece of issuer-specific news for the market. It also had a direct knock-on effect in the high grade market. France Telecom owns 18% of the company, and its bonds have underperformed the sector over the past few weeks. Spreads on FT's paper widened further on speculation that FT may be obligated to guarantee EUR4.7 billion of debt for MobilCom, a German mobile phone service provider.

Figure 1. Euro and Sterling Markets Weekly Spread Deltas

Sector	Est. Spread Chg. Jan 23-Feb 1	Percent of the Index	Contribution to Market Delta
Euros			
Senior Banks	0	34%	0.0
Lower Tier 2	-4	8%	-0.3
Upper Tier 2	-2	1%	0.0
Tier 1	-4	1%	0.0
Telecoms	16	15%	2.4
Autos and Auto Finance	7	8%	0.6
Utilities	2	8%	0.2
Other Industrials	1	15%	0.2
Other Financials	0	10%	0.0
Total Estimated Change		100%	3
Euro Swap Spreads			
5 Years	-1		
10 Years	-2		
Sterling			
Senior Banks	0	20%	0.0
Lower Tier 2	-3	8%	-0.2
Upper Tier 2	-3	1%	0.0
Tier 1	-4	1%	0.0
Telecoms	4	10%	0.4
Utilities	0	8%	0.0
Autos and Auto Finance	0	4%	0.0
Other Industrials	-8	36%	-2.9
Other Financials	0	12%	0.0
Total Estimated Change		100%	-3
Sterling Swap Spreads			
5 Years	1		
10 Years	0		
30 Years	-5		

The big new issue news concerned Ford's EUR5 billion 3-year issue. The issue came around 20 bp back of pre-announcement secondary market levels, but widened further post-launch. By Friday afternoon, it was trading at a spread of 215 bp on a swapped basis, 45 bp wider than its launch spread. The impact on the rest of the sector was fairly muted. GMAC's spreads were largely unchanged and are now trading around 30 bp tighter than Ford. By contrast, in dollars, Ford paper trades around 60 bp wider than GMAC.

The cheap launch level of the Ford issue went against our general expectation (as expressed in last week's edition of *GRV*) that large new issues would be more tightly priced versus secondary levels in 2002 than in 2001. While we think this will be true in most cases, it will still differ for some issuers (such as Ford) with particularly heavy financing needs. Also, the performance of Ford's bonds was further hurt last week by negative headlines about the safety of the Explorer vehicle. The market's tone improved in the late afternoon on Friday as more positive news emerged.

Despite the spate of ugly headlines last week, the broad corporate bond markets performed well in euros and dollars in January. The euro corporate market clocked up 46 bp in excess returns, so is off to a good start. The performance for sterling was more modest, with the market posting a 5 bp return over the government market. Figures 2 and 3 provide sector, quality, and subsector data for the euro corporate market. Unlike the pattern toward the end of last year, excess returns were approximately equal for Aa, single-A, and Baa issuers. Clearly, risk-aversion has risen as issuer-specific problems have taken their toll. We still believe in the spread compression trade. But it might be delayed until investors are more confident that the impact of changed accounting rules and new rating agency practices are fully in the market.

STRUCTURED CREDIT MARKET COMMENT

The Telco Rollercoaster

Last week, default swap spreads on telecom service providers widened by approximately 20 bp. This widening was slargely driven by the news around France Telecom (FT) and Deutsche Telekom (DT). Spreads on FT also suffered, for the reasons we discussed above.

Figure 2. **Euro-Aggregate Index January 2002:
Excess Returns by Rating Category**

	Total	Aaa	Aa	A	Baa
Financials	50	16	46	83	39
Industrials	44	-2	73	39	41
Utilities	45	85	25	47	121
Corporates	47	16	48	56	44
Sov/LA	35	9	40	27	96
Local Governments	3	-1	7	18	0
Pfanbriefe	-2	-2	0	0	-2
Euro-Aggregate Index	8	2	9	41	49

Figure 3. Euro-Aggregate Corporate Index January 2002: Key Data By Sub-Sector

	Percentage of the Index	Modified Duration	Average Rating Quality	Excess Returns October (bp)	OAS Jan 31, 2002 (bp)	Cumulative Excess Return Jan 2001-Dec 2001
Banking	35.08	4.84	AA2/AA3	47	43	126
Communications	17.77	4.03	A3/BAA1	52	127	203
Finance Companies	8.66	3.18	AA3/A1	48	106	13
Electric	5.07	4.42	AA3/A1	42	69	130
Consumer Cyclical	7.91	3.76	A3/BAA1	53	115	114
Consumer non Cyclical	7.24	3.92	A2/A3	53	73	174
Insurance	3.30	5.00	AA1/AA2	89	44	111
Capital goods	3.31	4.39	A2/A3	61	97	95
Basic Industry	1.80	3.84	A2/A3	45	125	156
Brokerage	1.43	3.68	AA3/A1	56	70	91
Energy	1.79	4.91	A1/A2	-54	156	7
Technology	1.88	3.23	A3/BAA1	-7	170	-968
Utility Other	1.30	5.14	A2/A3	32	85	290
Industrial Other	1.62	4.07	A3/BAA1	-65	181	-28
Transportation	1.40	6.21	AA2/AA3	120	74	0
Financial Other	0.43	5.98	AA2/AA3	-43	71	200
Natural Gas	0.38	4.63	A2/A3	121	114	-2541
Total	100.00	4.35	A1/A2	47	85	95

As a result, 5-year protection on FT is now trading at 220/240 bp, 10 bp wider than 5-year protection on KPN. (Prior to Moody's outlook change to Negative late on Friday.)

By contrast, DT spreads started to widen when it became apparent that the German regulator is intent on extracting certain guarantees from Liberty Media before it will allow Liberty Media to purchase DT's cable television network. According to news reports, Liberty Media is balking at the fact that it is supposed to upgrade the network to the point at which it can be used to provide telephone services competitive with those offered by DT over its phone network. Investors in DT fear that Liberty Media may consider such an upgrade too costly and may simply walk away from the deal. This would threaten DT's asset disposal and debt reduction plans and jeopardize its current low single-A rating. As a result, 5-year protection on DT is now trading at 140/155 bp

Following this week's spread widening, FT's default swap spread curve is now relatively flat. While recent developments have made FT a riskier credit, we think these risks should be less of a concern for the immediate future, but more so further down the road. If the market comes to agree with this view, the default swap spread curve should steepen. We therefore recommend that investors sell FT 3-year protection at 190 bp and buy FT 10-year protection at 205 bp. This position has a small negative carry and can be unwound for a capital gain if the spread curve steepens.

Mirroring the dynamics of last week, telecom equipment manufacturers continued to underperform service providers. With the bankruptcy filing of Global Crossing (a large

U.S. operator of fiber-optic networks) and Worldcom bond spreads widening by 100 bp on speculation about a downgrade to junk status, it is apparent that demand for network bandwidth remains weak. Thus, with bandwidth demand low and old network equipment available at all-time low prices, we believe demand for new network equipment will remain subdued for awhile. As a consequence, we think default swap spreads on the likes of Ericsson, Alcatel, and Nokia, which have widened over the week, will remain wide for the near term. We still believe that spreads between equipment manufacturers and service providers could widen further. We therefore continue to recommend that investors buy 5-year protection on manufacturers and sell 5-year protection on service providers.

Default Wider than Cash—A New Trend?

For certain names, we are starting to see a change in the trend between default swap spreads and cash spreads—the bond asset swap spreads are now trading through the default swap spreads for the same credit. Last year, in the European default swap market, default swaps traded tighter than cash, mainly on the back of the huge bid for credit risk arising from the creation of “exotic” structures (such as synthetic CDOs and default swap baskets). So far this year, we have not seen the bid return, with investors still licking their wounds from CDO exposures to the likes of Railtrack, Swissair, and Kmart. **With this exotic bid currently missing from the market, the relationship between cash and default swaps is becoming more sensitive to the creditworthiness of each issuer.** For example, in the case of Rolls Royce, protection used to trade 10–15 bp tight to cash and is now trading 15 bp wide to cash. Similarly, we expect the basis of Usinor and Heidelberger Zement to invert, with the credit outlook deteriorating for these two issuers. Currently, bonds for both Usinor and Heidelberger Zement are trading 5–10 bp wide to default swaps. We recommend that investors go long the basis (long protection, long the bonds) on these two credits, as both trades have positive carry (5–10 bp). If, as we expect, the premium for protection on these credits increases and the basis inverts, investors could unwind both these basis positions at a capital gain.

Long Convexity with the BA Basis

Following the failure of the alliance between British Airways (BA) and American Airlines (AA), BA bond prices dropped by 5 points and default protection widened from 400 bp to 550 bp. We think current price levels look a bit overdone, with the BA 2016 at a level of 84. Moreover, this failure means that the airline does not have to relinquish its valuable slots at Heathrow and could lead to new M&A scenarios for BA with some European partner—not an all-negative outcome, in our opinion. Given this backdrop, we recommend that investors go long the basis between BA 2016 and 5-year protection. At a price of 84, the yield to swap spread for 2016 is 590 bp (if the investor buys the bond outright). With 5-year protection at 550, this trade has a positive carry of 40 bp. By buying protection for the same notional as the bond (default protection is a par product), we think the investor is being overcompensated in the event of default. In fact, in the event of an immediate default, the investor is implicitly long a covered put with an intrinsic value of $100 - 84 = 6$ points. On the flip-side, due to the duration mismatch between the longer-dated (2016) bond and the 5-year default swap, plus the low dollar price of the 2016, any increase in value of the 2016 will cause the 2016 duration to increase and the relative spread difference to tighten a lot faster than if the bond and default

swap were duration matched. The investor is, therefore, effectively long convexity. On any upside, if conditions improve, i.e., through a merger with a European partner, a debt write-off via equity issuance, or equity-linked financing, the investor will gain. On any further spread widening, the positions net positive convexity should cushion the negative mark-to-market impact.

MARKET ANALYSIS

Relative Volatility in Euros and Dollars; It's Not All It Appears to Be

The lower volatility of the euro corporate market has long been an accepted fact. But when we analyze it more closely, some interesting patterns appear. Relative levels of volatility vary by sector and quality. For example, annualized spread volatility for Baa euros is higher than in dollars, largely due to the higher proportion of telecom companies in the bucket and the impact of fallen angels. The relative volatility of bond pairs is also interesting, with some big differences in autos, but much less in telecoms.

Absolute Volatility in Euros and Dollars

Figure 4 shows levels of annualized volatilities in dollars and euros on a fixed-rate basis, segmented by sector and quality. We have run this data from 1999 to 2001 and for 2001 alone. As expected, in most cases, 2001 volatility is above the 3-year average—one of the reasons we now have a higher equilibrium level of credit spreads. Euro spread volatility is less than in dollars for most buckets. One reason for this is the different nature of the investor base, with more buy-and-hold participants in Europe. Also, many portfolio managers are in the build-up phase of investing, so they are looking to buy issue and not sell them. That said, the difference between spread volatilities in euros and in dollars is perhaps less than might be expected, given the lower level of fixed-rate spreads. This is due in part to the rapid pace of downgrades in the euro market. As we have written in the past, in 2001 alone, the Baa sector grew from 8% to 20% of the market.

The industrial and Baa areas are two buckets for which the “euros are less volatile” story does not hold. We need to investigate this further. But one possibility is that the high levels of downgrades have increased volatility. The small size of the Baa sector, especially in 2001, means that the impact of fallen angels would be magnified.

Figure 4. **U.S. Credit Index Volatility versus Euro-Aggregate Corporate Index, bp**

		Financial	Industrial	Utilities	Aaa	Aa	A	Baa	Corp. Index
Dollars	1999-2001	42	45	48	-	25	41	53	39
	2001 Vol	54	59	69	-	28	57	63	51
Euros	1999-2001	25	47	48	13	13	30	93	25
	2001 Vol	37	71	51	10	11	41	133	37

We also focused in on some bond-level situations (Figure 5). The comparison between the telecom and auto pairs is especially interesting. The relative volatilities of euros and dollars in telecoms are almost equal, while in autos, dollar assets display consistently higher spread movements. Again, this is consistent with cheaper LIBOR valuations in dollars. The absolute level of spread volatility is much higher in autos than in the other asset classes. Credit spreads are also wider in auto paper, of course, but not by the same degree of magnitude as the level of volatility. It's also worth noting that the level of spread volatility is about the same for the auto companies as for the bonds of Unilever, despite the latter's lower level of risk and absolute spreads.

Figure 6 shows our quality and sector buckets on a "normalized" basis. This technique adjusts different asset classes for their relative levels of volatility, so as to allow better comparisons. Specifically, we take the current spread and subtract the 12-month average spread from that. The resulting figure is divided by the average spread volatility over the past 12 months. The result is expressed in the number of standard deviations above or below the mean level. A figure in positive territory indicates that spreads are cheap, and negative figures indicate that the asset class is expensive. See the monthly *Credit Markets Strategy* for a full description. On a normalized basis, the spreads in most of the buckets are close to their mean levels, indicating that they are fair value. Another way of looking at this is to say that the market does an excellent job of pricing corporate bonds in relation to their relative volatilities.

Figure 5. **Bond-Specific Spread Volatility: June 2001-December 2001**
swapped basis, bp

Telecoms	
USD FT 7.75% 2011	24
EUR FT 6.625% 2010	19
USD BT 6.875% 2011	16
EUR BT 8.375% 2010	18
Autos	
USD Ford 6.875% 2006	157
EUR Ford 5.625%2006	119
USD DCX 7.25% 2006	147
EUR DCX 6.125% 2006	115
Food	
USD Unilever 6.875% 2005	21
EUR Unilever 5.125% 2006	11

Figure 6. **Normalized Spreads in Dollars versus Euros***

	Financial	Industrial	Utilities	Aaa	Aa	A	Baa	Corp. Index
US Credit Index	-0.35	0.82	0.34	-	-1.21	0.01	-0.07	-0.13
Euro-Aggregate Corporate Index	0.40	0.12	-0.53	-2.02	-0.65	-0.12	-0.02	0.40

* Measured in terms of the number of standard deviations from the 12-month mean.

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WEEKLY EMERGING MARKETS PORTFOLIO UPDATE

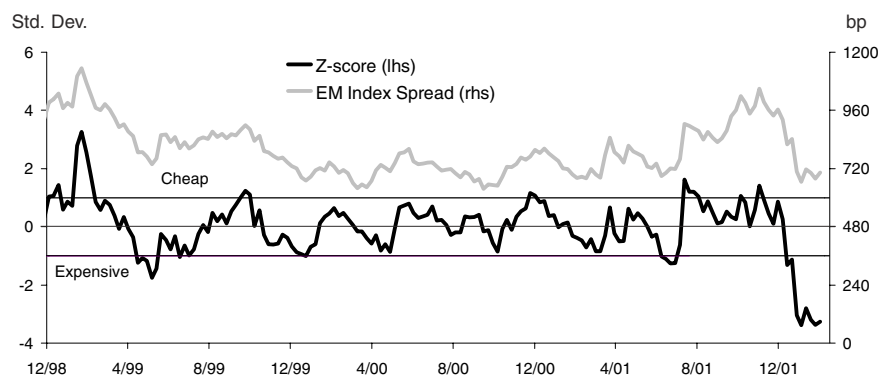
- Our “actual versus justified EM spreads” analysis suggests that emerging markets debt remains at a rather extreme relative valuation.
- Nonetheless, we still believe that EM spreads are not likely to back up meaningfully; instead, we would expect EM to underperform if and when other financial assets begin to rally. Interestingly, and perhaps counter-intuitively, we think that the end of the Fed’s easing cycle could provide an underpinning for that process to take place.
- Given our relatively benign view of the EM marketplace, this week we lowered our weighting in **Mexico** and **Bulgaria** to underweight and increased our overweights in **Brazil**, **Ecuador**, and **Russia**.

Market Comment

The strong rally witnessed in the EM market over the past two months is generating some debate about whether the asset class has gone too far too fast. Support for the view that it has is provided by our “actual versus justified EM spreads” methodology, by which we calculate the fair value of the EM Index spread given its historical relationship with U.S. BB high yield spreads, commodity prices, and the NASDAQ. We then express the difference between our fair value estimate (the justified spread) and the actual spread observed in the marketplace in terms of a Z-score (i.e., how many standard errors is the actual spread in the market from the justified spread).

The apparent expensiveness in EM spreads has been evident for some time now (Figure 1), but we have been arguing that we do not expect a meaningful back-up in spreads as a result. The more likely outcome, we believe, is that the EM marketplace will not participate fully in the recovery in other asset classes if and when that should materialize. One reason for our view is that despite the apparent relative expensiveness of the asset class, it still provides an attractive yield (10.95%). A second reason is that the end of the Fed’s easing cycle may actually help EM spreads. While it is true that funding costs are

Figure 1. Actual versus "Justified" EM Spread Z-Score



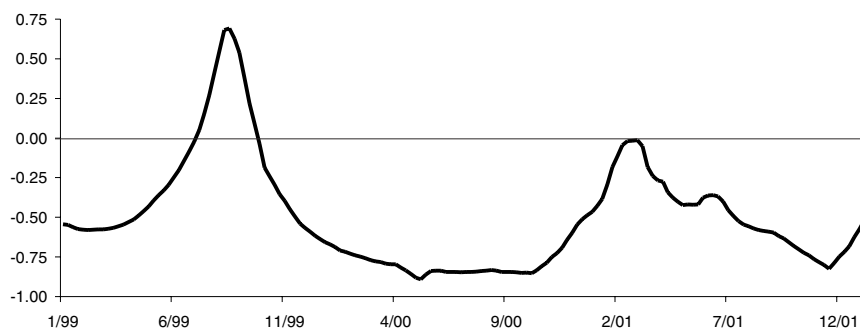
likely to rise modestly, it is also true that the end of the Fed's easing cycle implies a recovery in U.S. economic activity—an important determinant of the credit quality of Latin American sovereigns, which comprise nearly two-thirds of the EM asset class. Figure 2 suggests that a negative correlation between the Fed funds rate and EM spreads has, in fact, been evident for some time now.

Portfolio Changes

What the foregoing implies is that maintaining exposure to the higher-beta, higher-yielding credits still makes sense. Indeed, over the past week, we have made the following changes to our recommended portfolio (see our Emerging Markets Model Portfolio below):

- We reduced our exposure in **Mexico** to underweight. The domestic political environment has soured considerably in the aftermath of the Pemex election financing scandal; it is conceivable that important legislation will be caught up in the brewing melee between President Fox's PAN and the PRI. Furthermore, it seems that the market has largely priced in the possibility of an S&P upgrade for the Mexican sovereign. The Mexico sovereign sub-index of the Lehman Brothers EM Index is trading just 9 bp wide to the BBB sector of the Lehman Credit Index (on an OAS basis). Lastly, at current levels, the Mexico portion of the EM Index represents a substantive yield give-up (415 bp) to the rest of the EM Index, which, in a stable-to-positive market environment, could cause significant underperformance. We purchased more Brazil and Ecuador with the proceeds and slightly reduced our zero-weight in Argentina. (Please see "Mexico: Time to Wind Down," January 28, 2002).
- We changed our allocation to **Bulgaria** to an underweight position. With the rally we have witnessed in Bulgarian assets over the past three months, we think that the risk-reward for the credit is unattractive. Although the financing for 2002 is unlikely to be a problem, we expect the overall financing requirement to increase—as a result of both a widening current account deficit and weaker-than-expected capital account inflows. Further, political risk is on the rise—with strains between different groups

Figure 2. 1-Year Rolling Correlation of EM Spreads to Fed Funds Rate

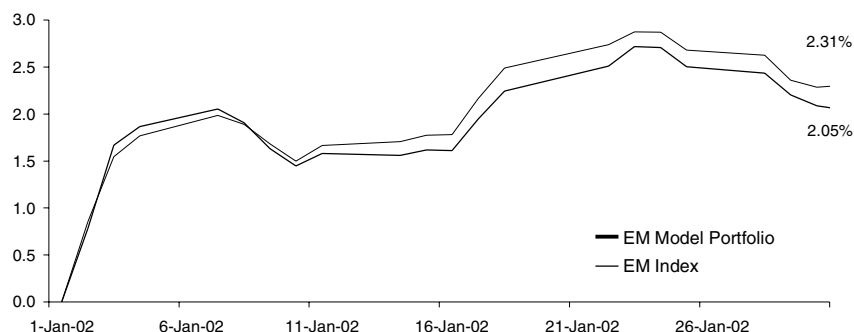


Sources: Bloomberg and Lehman Brothers.

within the ruling party beginning to show. Although we do not foresee a breakdown of the government, we may see increased tensions within the ruling party, which, in turn, could hurt the smooth functioning of the government, including the reform implementation process. We remain constructive from a medium-term perspective. As the economy gets further intertwined with EU accession dynamics, it will be the recipient of further upgrades, as well as further spread tightening. Finally, once the government undertakes the much-awaited Brady swap, we could see spreads on Bulgarian Brady bonds tighten to levels close to those of its euro-denominated Eurobonds. This will also create a scarcity of dollar paper—especially as investors seek to hold Bulgaria because of diversification considerations. We would view a spread level of 450 bp as an attractive entry level for the IABs. Buy more Ecuador. Some degree of stability has been achieved in the oil market, relations with the multilateral lending institutions seem to be on course, and the carry is huge. We used the proceeds of our sales in Bulgaria to increase our overweight in Russia. We also held some cash to take advantage of any opportunity arising from the hiccups in the broader financial markets.

EMERGING MARKETS MODEL PORTFOLIO, as of Close January 31, 2002

Performance Since Inception



	Portfolio Weighting	3-Month Spread Beta	Index Weight (%) (A)	Portfolio Weight (%) (B)	Relative Weight (%) (B/A)	YTD Index Return (%)	YTD Index Contrib. to Return (%)	YTD Portfolio Contrib. to Return (%)	Portfolio Outperform. (bp)
TOTAL			100.00	100.00	100	2.05	2.05	2.31	26
Americas	Under		63.05	60.54	96	1.00	0.64	0.72	8
Argentina	Under	6.61	3.59	0.98	27	0.62	0.02	-0.04	-6
Brazil	Over	0.54	20.00	25.79	129	1.21	0.25	0.29	4
Colombia	Under	0.28	3.28	2.91	89	-1.32	-0.04	-0.04	1
Costa Rica	Neutral	0.19	0.16	0.16	100	1.63	0.00	0.00	0
Dominican Rep.	Neutral	0.22	0.26	0.26	100	2.43	0.01	0.01	0
Ecuador	Over	0.41	1.11	3.76	339	6.56	0.07	0.12	5
El Salvador	Under	0.29	0.17	0.00	0	0.66	0.00	0.00	0
Guatemala	Under	n.a.	0.17	0.00	0	2.42	0.00	0.00	0
Jamaica	Under	0.21	0.20	0.00	0	1.77	0.00	0.00	0
Mexico	Under	0.28	24.53	19.29	79	1.59	0.37	0.37	0
Panama	Neutral	0.15	2.06	2.06	100	2.51	0.07	0.07	0
Peru	Under	0.20	1.75	1.55	88	4.93	0.08	0.07	-1
Uruguay	Under	0.15	0.55	0.45	83	-6.13	-0.04	-0.03	1
Venezuela	Under	0.34	5.22	3.34	64	-3.05	-0.17	-0.11	6
E. Europe	Over		24.09	27.23	113	4.78	1.12	1.32	20
Bulgaria	Under	0.06	1.98	1.41	71	-1.35	-0.03	-0.03	0
Croatia	Neutral	0.04	0.31	0.31	100	0.96	0.00	0.00	0
Russia	Over	0.25	16.75	20.62	123	6.02	0.98	1.18	20
Slovakia	Under	n.a.	0.16	0.00	0	1.37	0.00	0.00	0
Turkey	Neutral	0.21	4.39	4.39	100	3.66	0.15	0.15	0
Ukraine	Neutral	0.31	0.50	0.50	100	3.20	0.02	0.02	0
Asia	Under		5.49	5.02	91	2.02	0.10	0.10	-1
Indonesia	Under	0.88	0.18	0.00	0	0.66	0.00	0.00	0
Kazakhstan	Neutral	0.20	0.39	0.39	100	3.35	0.01	0.01	0
Philippines	Neutral	0.31	4.12	4.12	100	1.90	0.07	0.07	0
Thailand	Under	0.06	0.80	0.50	63	2.29	0.02	0.01	-1
Middle East	Under		2.79	2.17	78	0.63	0.02	0.02	0
Lebanon	Under	0.26	2.79	2.17	78	0.63	0.02	0.02	0
Africa	Under		4.57	4.23	92	3.64	0.17	0.16	-1
Algeria	Over	n.a.	0.45	1.00	221	1.53	0.01	0.01	0
Cote d'Ivoire	Neutral	n.a.	0.06	0.06	100	0.00	0.00	0.00	0
Egypt	Neutral	0.28	0.72	0.72	100	1.84	0.01	0.01	0
Morocco	Neutral	4.17	0.70	0.70	100	5.76	0.04	0.04	0
Nigeria	Under	0.74	1.58	1.01	64	5.71	0.09	0.08	-1
S. Africa	Under	0.13	1.07	0.75	70	1.47	0.02	0.02	0
Cash	Over		0.00	0.81		0.00	0.00	0.00	0

Note: The model portfolio assumes that security selection in each country precisely duplicates that of the Lehman Brothers EM index. The aim of the portfolio is to assist portfolio managers in credit selection only.

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AGENCY MBS

Summary Recommendations

- Take some profits in mortgages while maintaining a core overweight.
- Buy 15-year 7s versus 30-year GN 7.5s.
- Despite the recent strong run, synthetic premiums still look cheap.

On a Roll—MBS Index is up 55 bp Versus Treasuries in January

After a disappointing run during the past year, mortgages have started 2002 on a refreshing note. For the month of January, the MBS Index posted 55 bp in gains versus Treasuries and 41 bp versus swaps (Figure 1). The driving factor behind mortgage returns was the sharp decline in implied volatility. From its peak, implied volatility (as measured by LBOX) has dropped by more than 10%, adding close to 40 bp in excess returns. Lower realized volatility also helped mortgage performance as convexity losses were quite negligible.

We started the past week on a positive note for mortgages. There were two factors behind our bullishness. First, we expected a further decline in volatility. Second, we were calling for an OAS tightening on mortgages. While implied volatility remained reasonably firm over the week, 30-year TBA conventionals tightened by 4-6 bp in LOAS across the board. At current valuations, mortgages look fair on an OAS basis. The real upside from here is a further decline in implied volatility. While a hard one to call, we think the next round of declining volatility needs to be accompanied by a market selloff. Mortgage rates have to be north of 7% for mortgage convexity risk to abate significantly. Longer term, we think it is a good bet to retain a core overweight in mortgages. Active investors should take some profits based on recent performance and look for a better entry point - especially in the event of supply induced cheapening.

Trade Updates

Our mortgage basis trade—long 30-year FN 6.5s and short 2-/10-year debentures—has posted 55 bp in total returns. This is close to our initial target and we are tempted to take profits in this position. However, fundamentally we think there is upside from a further decline in volatility and we will hold on to this trade. Having said that, we will reduce allocation from a strong overweight to a more moderate one.

Figure 1a. **Curve-Adjusted Excess Returns**, January 2002, bp

	versus		
	Tsy	Swaps	Agy
Index	55	41	53
Conv 30	55	42	53
GN 30	61	48	59
Conv 15	46	29	42

Figure 1b. **Index Return Attribution versus Treasuries**, January 2002, bp

Excess Return	55
Due to:	
Carry	11
Implied Vol	40
Convexity	-1
Others	5

One of our bold recommendations in the recent past was to use mortgages for a curve flattener position (FN 7s versus 2-year and 5-year swaps). So far, it has had a lackluster performance with total P&L of only $^{5}/_{32}$. Speaking of lackluster trades, our recommendation to buy 15-year conventional 7s versus 30-year conventional 7.5s has not really moved either. We continue to like both of these trades but admit that repricing in the immediate future looks a tad unlikely. Another trade that we like currently is to short GN premiums, especially GN 7.5s. With the GN-FN 7.5s swap at $^{17}/_{32}$ - $^{18}/_{32}$, the recent GN premium outperformance is overdone. We recommend selling GNs versus 15-year conventional 7s.

Mortgage Basis It was another good week for mortgages, with the MBS Index outperforming Treasuries and swaps by 8 and 10 bp respectively on a curve-adjusted basis. Over longer term, we still like the mortgage basis as a bet on volatility and **recommend an overweight**. We recommend **buying 30-year FN 6.5s versus 2-year and 10-year agencies** as a vehicle to sell Vega. This trade is 55 bp in the money since our recommendation. We also favor using mortgages as a curve flattener trade and **recommend buying conventional 7s versus 2-year and 5-year swaps**.

30-Year Conventionals We **recommend buying 6.5s over 6s**. The recent richening in 6s has been driven by rolls, which have been trading close to fail. We think this level is unsustainable, especially given the recent rally. This trade is up 9 bp for the week. In addition, we recommend **selling seasoned passthroughs** into the CMO bid. While the 1998/1999 vintages are less susceptible to home price correction, the current pay-ups reflect that and the TBA roll is too attractive to give up.

30-year GNMAs GN premiums had a remarkable run this week, with GN-FN swaps appreciating by $^{4}/_{32}$ - $^{7}/_{32}$. Nonetheless, the technicals and liquidity in this sector do not justify taking a strong view on the GN/FN basis and we recommend a **neutral allocation**. Having said that, we recommend adding **seasoned exposure through GNs**. Not only are pay-ups smaller, the opportunity cost of giving up the TBA roll is also lower.

15-Year Conventionals We **recommend a neutral allocation to the 15-year sector**. Despite the attractive pick-up in OAS versus 30-year counterparts, we are cautious given our view around volatility. However, we **recommend buying 15-year 7s versus 30-year 7.5s**. The volatility risk is minimal, better prepayments result in a carry advantage and the swap is cheap from a historical perspective. We also **favor TBA 15-year 6.5s versus 1997/1998 30-year 7s** due to the better prepayment characteristics of the former. Within the 15-year sector, we **recommend taking exposure through TBA 6s and 6.5s versus the wings**.

Mortgage Derivatives Newer WAM 6.0/6.5% IOs continued their strong run this past week while their premium counterparts lagged. Most of the recent gains posted by the unseasoned lower coupon IOs are due to the attractive carry on these IOs. We continue to **favor the newer WAMs in the lower coupons** and the **seasoned vintages in the premium IOs**. On the heels of a decline in implied volatility, synthetic premiums fared extremely well as they gained $^{3}/_{32}$ - $^{8}/_{32}$ versus collateral. We continue to **favor synthetics as a way to sell volatility** with limited extension risk. Our favorite trade is to combine 6.5s with seasoned 7% IOs in lieu of 7.5s.

In the IO/PO market, it was a continuation of recent themes. Newer WAM 6/6.5% IOs had a strong run while their premium counterparts put up a lackluster show. Versus their current coupon hedge ratios, long WAM lower coupon IOs gained $8/32-20/32$, while premium IOs lost $12/32-20/32$. That makes January another great month for the lower coupon IOs. The strong performance of these IOs over the past several weeks has been mostly due to the attractive carry on these IOs. On a fundamental basis, we continue to like this sector. Meanwhile, premium IOs were hurt by the prints seen on unseasoned 7/7.5% trusts during the past few months.

On the heels of a decline in implied volatility, synthetic premiums put up a strong run this past week. Synthetics gained $3/32-8/32$ versus premium collateral with synthetic 7.5s off of 6.5s being the best performers. While the gains are tempting, we would wait for further upside and recommend taking premium exposure through the IO market. Despite this strong run, synthetics are still $5/32-8/32$ cheap from a historical perspective. They also offer an attractive $3/32-5/32$ carry advantage. Besides, synthetics allow investors to sell volatility with limited extension risk. Our favorite trades continue to be synthetic 7.5s and 7s off of 6.5s collateral.

Figure 2. **IO Performance**, January 2002

	Trust	Price	LOAS	Excess Retns (32nds)			
				Swaps		CC	
				1-Wk*	Jan	1-Wk*	Jan
6.0	FHT 212	27-27	209	-3	37	8	50
6.5	FHT 214	27-25	219	7	46	20	63
7.0	FNT 309	20-01	729	-26	-26	-12	-7
7.5	FNT 308	17-08	1012	-34	-72	-20	-54
8.0	FNT 306	18-13	623	-34	-34	-21	-17

* Close of 1/31/02.

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NON-AGENCIES

Tiering in California Jumbos

California concerns continue to weigh on the non-agency market in early 2002. Fundamentals have worsened since we last wrote about the topic (see *MBS & ABS Weekly Outlook*, August 6, 2001)—unemployment has risen significantly in Northern California, while home prices have begun to fall. As a result, tiering has emerged in both the senior and subordinate sectors of the non-agency mortgage market. In the following discussion we provide an update on dynamics in the California residential market, then analyze the implications of senior and subordinate tiering. Our primary conclusions are:

- Credit performance shows general signs of weakness, but California loans continue to outperform their non-California counterparts.
- The run-up in home prices prior to the current recession is similar to that of 1990 on a nominal basis, but actually greater on an inflation-adjusted basis.
- Relative to 1990, the California home price run-up preceding this recession is closer to that of the U.S. overall, while differences within the state are greater.
- Tiering in both the AAA and investment grade subordinate sectors appears to reflect more of a liquidity difference, due to the 50% California concentration limit imposed by many investors, as opposed to principal loss concerns.

Market Fundamentals

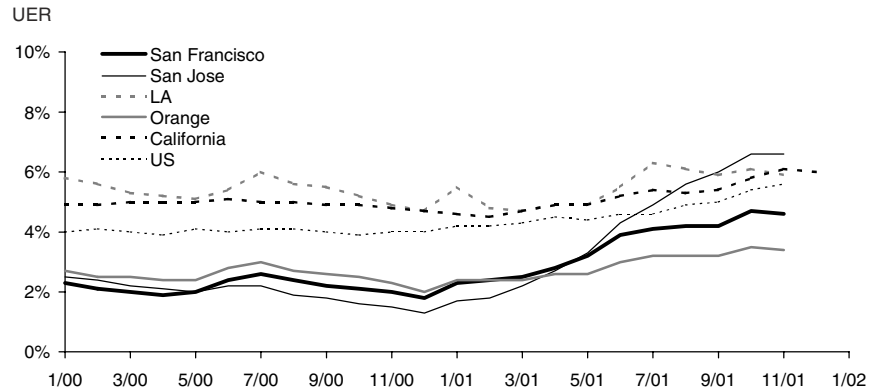
With the economy moving through a recession, the toll on California's workforce has been significant. The unemployment rate for California in December 2001 stands at 6.0%, a 1.5 percentage-point increase since the low of February 2001 and 0.2 percentage-points higher than the national unemployment rate. **Not surprisingly, unemployment rates have risen more dramatically in California's Northern region. Santa Clara County, for example, saw its unemployment rate surge 5.2 percentage-points since the beginning of 2001** (Figure 1). Moreover, according to the latest economic data available for December 2001, California posted the biggest volume of initial claims in the country, with 39,239 claims filed in mass layoff events (source: BLS).

At the same time, home price appreciation has abated, with visible declines in the Northern region. Third quarter 2001 home price levels, in fact, declined 1.2% and 5.5% on an annualized basis in San Francisco and Santa Clara County, respectively (Figure 2). Yet, the repeat home sales index does not provide the most timely data available on the housing market. Median home prices, although a less exact measure, are reported more frequently. The trends in median home prices support the turn-around seen in home price levels, accenting an even sharper decline in the Northern region. In San Francisco, median home prices dropped 1.4% while Santa Clara County posted a decline of 8.5% in the fourth quarter of 2001. In contrast, Southern California median home prices continued to climb through the end of 2001.

Credit Performance

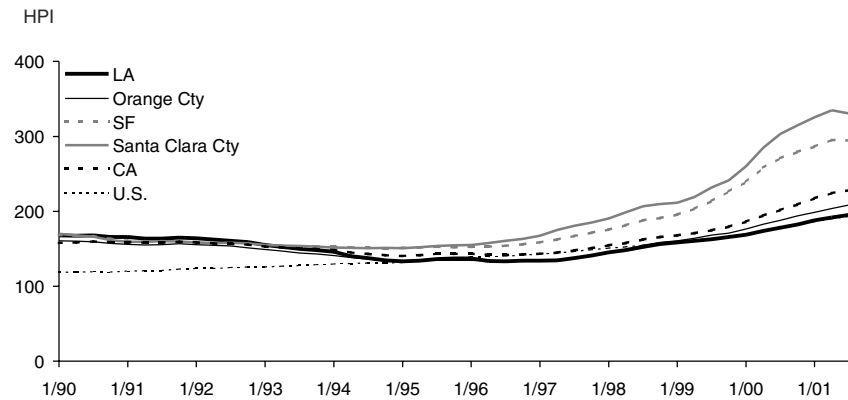
While delinquency trends, in general, are not favorable, California loans continue to perform better relative to their non-California counterparts. In Figure 3, we compare

Figure 1. Regional CA Unemployment Rates



Source: U.S. Bureau of Labor Statistics.
 Note: Unemployment rate for California is seasonally adjusted, while regional unemployment rates are non-seasonally adjusted.

Figure 2. Repeat Home Sales Price Indices, 1Q87=100



Source: Freddie Mac Repeat Sales Index.

60+ day delinquencies on seasoned pools (1996-1998 originations). These vintages should have reached their peak seasoning levels in delinquency terms (a loan originated in mid-1998 would be approximately 40 WALA in Nov. 2001). Yet, both California and non-California loans have exhibited weaker performance since early 2001, with the non-California pools showing a greater relative decline.

The same basic trends - general declining credit performance and greater weakness in non-California loans - are also present in newer vintages. In Figure 4, we plot delinquency seasoning curves by WALA for newer vintages (allowing comparisons on a seasoning adjusted basis). Notably, the 2000 vintage is underperforming significantly, however the relationship between California and non-California remains similar. Overall performance appears slightly better in the 2001 vintage, although the data is insufficient to strongly support this conclusion.

Our use of the 60+ day delinquency measure raises the issue of structural differences in foreclosure procedures across states. Put simply, since the 60+ measure includes loans in foreclosure and REO, states in which the foreclosure process takes longer should exhibit higher delinquencies by the 60+ day measure. The California foreclosure timeline, as

Figure 3. Delinquencies in Seasoned Vintages, 60+ Day Delinquencies

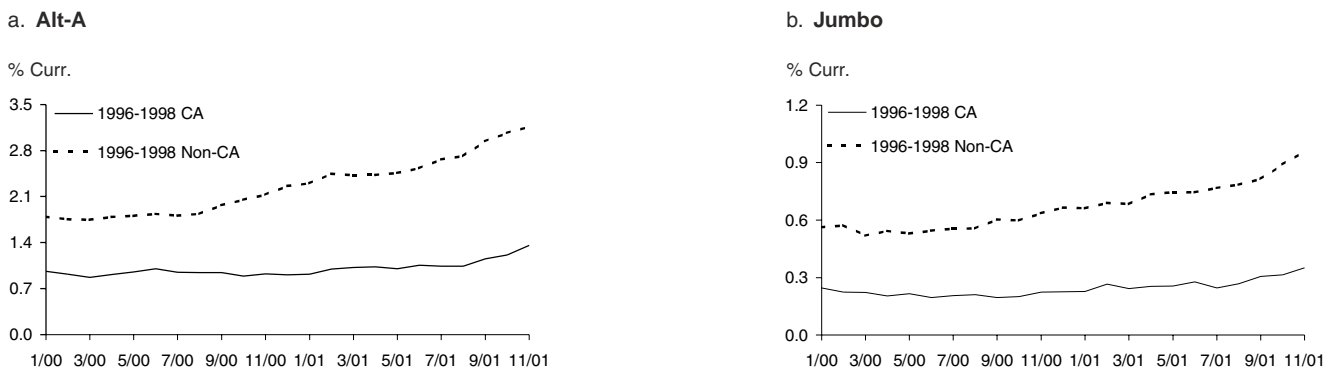
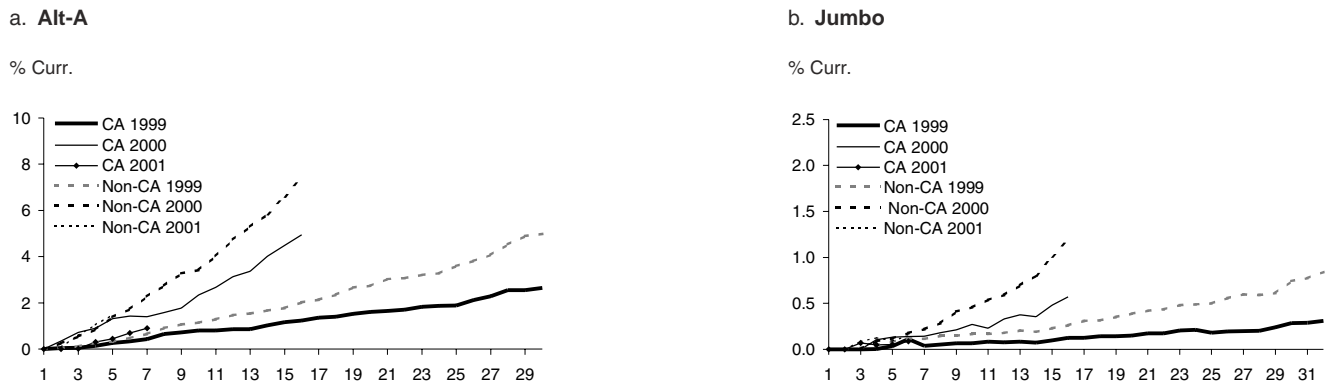


Figure 4. Delinquency Seasoning Curves in the Newer Vintages, 60+ Day Delinquencies



measured by FNMA guidelines, is four months. This is significantly shorter than other states with significant jumbo concentrations, such as New York and New Jersey, both with ten month foreclosure timelines.

California loans exhibit lower delinquency levels even when the difference in foreclosure timelines is taken into account. In Figure 5, we show 60 to 90 day delinquencies, which eliminates the differences in foreclosure timelines among states. Clearly California loans outperform by this measure as well, and show no signs of weakening relative to their non-California counterparts. The next logical question is: “have California loans ever underperformed using these delinquency measures?” Without going into excruciating detail, the simple answer is ‘yes’. Loans originated in the early 1990s which weathered the more extreme California recession exhibited considerably higher 60+ day delinquency levels: **the current outperformance of California loans does not appear to be the result of subtleties in the foreclosure process or measurement methods.**

What's Next?

Although some divergence in the California housing market is evident, how the housing market will perform in the coming months, and how this will impact the credit performance of California loans, is less clear. A comparison with the early 1990s experience is hard to avoid. In the three years prior to the 1990 recession, California home prices appreciated by 10.8% on a nominal annualized basis (Figure 6), as compared to 4.9% for the U.S. overall. Over the three year period ending 3Q01, home prices increased by a similar amount in California, 11.6% on a nominal annualized basis, versus 6.8% for the U.S. overall.

Recent home price appreciation in both California and the U.S. overall outpace levels seen in the period preceding the 1990 recession when adjusted for inflation (9.6% versus 6.9% annualized at the state level). However, inflation adjusted California

Figure 5. **60- to 90-Day Delinquencies in Seasoned Jumbo Loans**

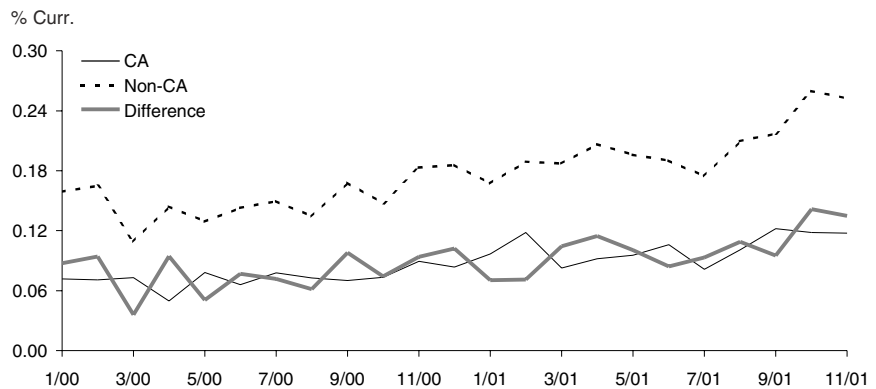


Figure 6. Home Price Appreciation Leading Up to the Recession, % Change

	1987 to 1990		1998 to 2001	
	Nominal (Total /Annualized)	Real (Annualized)	Nominal (Total /Annualized)	Real (Annualized)
Los Angeles	74/15.9	11.8	39/9.1	7.1
Orange County	64/14.0	10.0	48/11.1	9.0
San Francisco	73/15.8	11.7	72/15.5	13.4
Santa Clara County	69/15.1	11.0	79/16.7	14.6
CA Overall	47/10.8	6.9	51/11.6	9.6
U.S.	20/4.9	1.2	28/6.8	4.8

Source: Freddie Mac Home Price Appreciation Index.

appreciation leading up to the current recession is two times that of the U.S. overall—it was approximately three times higher in the period preceding the 1990 recession. This suggests California home prices may not diverge from the overall U.S. market as dramatically.

That being said, the difference between northern and southern California regions appears more pronounced in the current recession versus that of 1990. Both real and nominal home price changes were relatively similar across the major metro areas prior to 1990. However, in the past three years, northern California valuations have increased much more in both real and nominal terms. In fact, **on an inflation adjusted basis, the recent run-up in northern California valuations is actually greater than the increases in both northern and southern California prior to 1990**, despite the fact that nominal changes appear similar (reflecting the impact of lower inflation leading up to the present recession).

From its peak in July 1990 to its trough in January 1995, California home prices fell 12.2%, while home prices in the Los Angeles metro area plummeted 20.6% over the same period. In contrast, overall U.S. home price appreciation never actually declined in the early 90s. Since the recession of the 1990s impacted Southern California more severely, the sharper home price decline comes as no surprise. More importantly, the decline experienced by the Los Angeles housing market during the 1990 recession may give some indication of a worse-case scenario for the northern California housing market in the current recession.

Tiering in Seniors

The market has begun to tier jumbo loan packages according to California concentration, but only to a limited degree. Generally, deal arbitrage for pools backed by less than 50% California loans is similar, regardless of how far the concentration drops below 50%. That is to say, the market is generally not tiering California concentrations less than 50% on the AAA side. In response, pools trading with greater than 50% California concentration are generally split into two pools: one with less than 50% CA concentration, and one with 100% CA concentration. **At present, the discount applied to the 100% CA pool is approximately 12 ticks.**

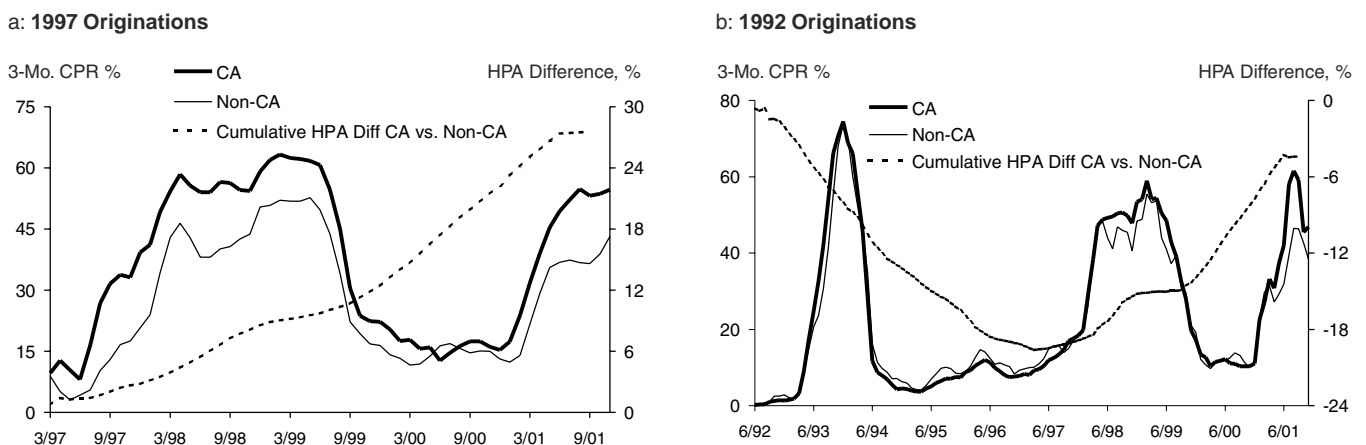
From a convexity standpoint, a deeper/more protracted recession in California relative to the rest of the country could affect both callability and turnover in jumbo collateral. To illustrate this point, in Figure 7, we compare actual prepayment experience for 8.5 GWAC jumbos from two origination periods, 1997 and 1992. The figures also show the difference in cumulative home price appreciation between the California and non-CA loans.

Due in part to greater home price appreciation (as well as other factors such as loan size and transaction costs) **both callability and turnover are significantly greater in CA loans originated after the trough in home prices, relative to same vintage non-CA loans** (Figure 7a). Looking back to 1992 originations, **the impact of a deeper recession and home price declines in CA caused both turnover and callability to converge with that of non-CA loans in the early to mid-1990s**. As shown in Figure 7b, CA loans in this vintage experienced less, and in fact negative, home price appreciation relative to non-CA through the mid-90s.

What does this imply for tiering in the AAA sector? A convergence in prepayment characteristics would imply no price differential between CA and non-CA loans, for convexity reasons. A more severe view would note that turnover in the CA pools from the early 90s actually fell below that of non-CA pools (the 1994-1996 periods in Figure 7b), implying greater extension risk in the event a similar economic scenario plays out this time. Approximating this effect by lowering turnover by 1 CPR in our model has a significant impact: the extreme steepness of the yield curve causes extension to weigh heavily on OAS valuation. OAS for a current coupon passthrough (6.5 coupon/7.08 GWAC) declines by 14 bp. Conversely, a constant OAS valuation would suggest a 17 tick price concession in the lower turnover scenario, versus the 12 tick concession in the current market.

Is extension risk driving the current CA price tiering? We tend to think not. While extension risk in general has become a greater focus in 2002, we view the primary driver

Figure 7. Prepayment Behavior of California and Non-California Loans



of CA price tiering to be a credit driven liquidity concern. Many investor's have set a somewhat arbitrary CA concentration limit of 50%, primarily for credit reasons. Rightfully so, jumbo investors are not focusing on the risk of principal loss in the AAA sector, however the headline risk associated with a major home price correction in northern CA, would likely widen AAA spreads. The self-imposed cutoff of 50% CA concentration suggests investors are seeking a simple rule to limit their exposure to "California spread duration". The fact that current tiering has not moved beyond a greater than/less than 50% concentration cutoff indicates that **the market has tiered CA concentrations based on the liquidity effect of the self-imposed 50% CA concentration cutoff. We would not expect extension risk to contribute to tiering until CA delinquencies begin to show weakness relative to non-CA loans.**

Subordinate Tiering

Tiering in the subordinate classes is also currently defined by the greater than/less than 50% cutoff. In Figure 8, we show current generic new issue spreads, as well as the concession assigned to subordinates from a 100% CA pool. While these spread concessions are significant, we would argue that the market is not yet pricing in a significant weakening in credit. Credit spreads, in general, are only just at their wides of 2001. For example, BBBs are now trading 122 bp wider than AAA NAS bonds, very much in line with levels seen in early 2001. At the same time, the 25 bp spread concession for greater than 50% CA concentrations adds only minimal loss coverage. For example, generic new issue BBBs run at their pricing speed of 275 PSA reach a zero yield at approximately 140 SDA (assuming a 25% severity). Priced to a 25 bp wider spread, the zero yield SDA multiple only increases to 145 SDA.

Clearly an economic/home price environment consistent with that of the early 1990s would cause weakness in jumbo subordinates. In previous research, we have found that cumulative losses increased by a factor of four in lower SATO CA jumbo pools (more representative of the jumbo market today, after the segmentation of the alt-A market), relative to non-CA loans in the early 90s. **At present it appears the investment grade subordinate market is approaching tiering from a liquidity perspective (similar to that of AAAs): bonds backed by collateral pools with greater than 50% CA concentrations are being penalized more for the impact of investment constraints on liquidity than for principal risk.** Once again, additional tiering will likely result from a change in relative delinquency performance. Fundamental credit concerns are likely to be focused in the northern region.

Figure 8. **Investment Grade Subordinate Spreads**
bp to interpolated Treasury Curve

	Current Spread	>50% CA Spread Concession
AA	178 bp	10 bp
A	190	15
BBB	285	25

Asset-Backed Securities

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MARKET OVERVIEW

A string of strong economic indicators over the past few weeks (including a positive 4Q GDP print) was interrupted on Friday by a relatively weak employment report. Though the headline number of 5.6% looks positive, our economists note that the decline in the jobless rate was “likely caused by a drop in the number of people looking for work as discouraged job seekers give up their unemployment search,” and interpret the jobs report as a sign that risks to the outlook remain. From our perspective, even if the quick recovery materializes, we return to our view that consumer credit is generally a lagging indicator: consumer chargeoffs will probably remain elevated over the year, tempering our enthusiasm for a “down in credit trade” at current valuations. Though we believe that CDOs will lead a technical BBB rally in 1Q, we are fairly lukewarm on the subordinate basis for total return investors.

At the ABS level, the news was mixed over the week. Conseco announced significant positive news in terms of 2002 cash flow generation (see below), but the MH market seems more focused on rating agency risk (S&P/1999 vintages) at the current juncture and spreads ended the week meaningfully wider. In the aircraft sector, as discussed below, the agencies moved senior securities in the EAST transaction to downgrade watch, due to weak cash flow generation last month. These individual events – along with recent news from e.g. Fingerhut and Nextcard—emphasize the material credit risk present in the current market and underscore the importance of security selection; they also reinforce our recommendation to keep powder dry and to overweight relatively conservative RRBs and cards. Not all special situations are negative, though. To the contrary, we discuss below value in Providian C pieces, where, despite difficult collateral performance trends, structural protections create an attractive risk/reward at current valuations.

Conseco Inc. Announcement of Cash Generation Plan; A.M. Best Comments; Debt Tender Offer

Late Tuesday, Conseco Inc. issued a memo to shareholders discussing its updated strategy for paying off its debt obligations coming up by the end of 2002. Prior company announcements had estimated that approximately \$310-400 million of additional cash would be needed to meet 2002 obligations; the new memo states that the company will be taking a number of actions to help generate about \$750-\$800 million. Aside from repurchasing public debt at a discount, the three largest segments are the reinsurance of parts of the supplemental health and/or life insurance blocks, selling the Variable Annuities business, and joint venturing the MH floorplan business.

Following this announcement, A.M. Best, which had placed the insurance subsidiaries’ financial strength rating (A-) on review in October, released commentary. The statement opines that over the near term “policyholder interests will remain secure . . . and capital maintained in . . . insurance subsidiaries will remain well within Best’s near term expectations for their current rating levels.” However, the ratings remain on review with negative implications. The announcement sets out a number of key future dates/events: during 1Q, the terms (amounts and timing) of the previously mentioned cash generation strategies, and a review thereof; during 2Q, execution of these liquidity alternatives; and

during 3/4Q, “evidence of the successful execution of its operational restructuring efforts.” The memo also notes that in 3/4Q “A.M. Best will only consider the appropriateness of affirming the current financial strength rating of the Conseco insurance subsidiaries upon both the successful execution of its alternative 2002 liquidity initiatives and when the rating agency is satisfied that the levels of cash produced from its restructured operating subsidiaries will more than adequately cover its 2003 debt commitments.”

Later in the week, Conseco announced a tender offer for its 10 ¼ 6/02 Conseco Finance debt; the company, as described above, had repurchased 2002 debt in the open market at a discount, but the current tender is at par, and for all of the remaining 6/02 debt.¹ The unsecured markets reacted favorably to this string of news over the week, with 2002 CNC debt pulling toward par.

S&P Places EAST Class A on CreditWatch With Negative Implications

On Thursday, S&P placed the EAST Class A-1 and Class A-2 notes on CreditWatch with negative implications. S&P had already placed the lower rated classes on CreditWatch and downgraded the Class C note in October 2001, but had not taken action on the senior level until now. S&P believed that the \$24.5 million in cash reserves provided the Class A notes with “ample liquidity” but opines that the current environment has weakened since the last rating action, and that the current support may not be enough to support the AA rating if the trust continues to deteriorate. S&P cites the difficulty in the leasing market, the impact of airline insolvencies and liquidations in the fleet, and the higher than expected aircraft-on-ground (AOG) as reasons for concern and will continue to monitor the trust closely going forward.

Over the past few months, since S&P’s most recent action, monthly lease revenues have continued to decrease. In October 2001, 3-month average revenues were down about 18% versus the prospectus assumption; that number dropped to 54% this month. As S&P noted in its action, the significant drop in revenues has been due to higher than expected AOG and financial difficulties among a number of lessees. Like S&P, though, we continue to believe that the Class A notes have little liquidity risk and should successfully service their debt. To put the current month’s liquidity draw in perspective, the trust used \$102K of the Class A Cash Collateral Account this month, out of \$24.6 million total funds.

In terms of principal, the Class A notes may take a permanent reduction of about 37% above the 8% base case revenue stress and additional 5% stress due to the TWA bankruptcy before taking a loss. While this month’s revenues are worse than a 50% total reduction, an indefinite continuation of this performance is unlikely over the life of the deal. Even if the trust experiences a 40% revenue reduction for five years and 30% thereafter (both stresses above the new base case reduction), Class A noteholders will still receive full principal.

¹ Disclosure: Lehman Brothers will manage the tender offer and is currently providing investment banking and financial advisory services to Conseco Inc.

Nonetheless, the current situation merits attention, and we expect that over the course of the next few months, as we receive the quarterly report and see how future revenues come in, we should have a better idea of how the trust is being impacted and how it will continue to be impacted going forward. We believe this is also how the rating agencies will proceed.

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RELATIVE VALUE IN CERTAIN PROVIDIAN BBB SUBORDINATES

The recent excess spread deterioration in the Providian Master Trust (PNBMT) has created attractive relative value opportunities in certain subordinate BBB tranches. The logic behind this counterintuitive result is based on two structural features of the PNBMT trust: 1) sharing of excess spread across PNBMT series and 2) trapping of excess spread in a Class C reserve account. In the PNBMT trust, like many other credit card master trusts, excess spread can be shared among series. This excess spread sharing allows series with high excess spread to provide funds to series with low excess spread in some circumstances. In particular, if a series must fund its Class C reserve account due to low excess spread levels, it may receive excess spread contributions from other series in the PNBMT trust. This can greatly accelerate trapping of excess spread.

The PNBMT series 1999-2 and 2000-1 currently require 4% funding for their Class C reserve accounts. These series have been trapping spread—both internally-generated and contributed from other series—since May 2001 and are currently at their target levels. As a result, a considerable amount of cash has been trapped to support the Class C securities issued in these transactions. For example, the PNBMT 1999-2 series has \$25 million in its Class C reserve account, while the PNBMT 2000-1 C series currently has \$21 million of cash. The PNBMT 1999-1 series has also trapped a small amount of cash (\$6.4 million) for its Class C securities.

The build-up of cash in the note reserve accounts has substantially boosted the credit support for the 1999-2 and 2000-1 Class C securities (Figure 1). With the incremental credit protection provided by CCA and excess spread, the 1999-2 and 2000-1 Class Cs can withstand almost a quadrupling of charge-offs at the current payment rate (based on a 12-month ramp to peak charge-offs). If we stress the payment rate by 50%, these securities can withstand more than a doubling of defaults before sustaining a principal writedown. The 1999-1 Cs have also benefited from an incremental cash cushion, albeit by a smaller amount.

Figure 1. **Stress Runs for Selected PNBMT Subordinate BBB Securities***

		1999-1	1999-2	2000-1
Credit Enhancement	Spread Account	1.0%	4.0%	4.0%
	CCA	3.5%	3.0%	3.0%
	Excess Spread**	4.7%	2.1%	1.4%
	Total	9.2%	9.1%	8.4%
Current Pay Rate (8.6%)	Charge-off multiple	1.9	3.7	3.9
	Charge-off Rate	15.6%	30.3%	32.0%
Stressed Pay Rate (4.3%)	Charge-off multiple	1.7	2.2	2.1
	Charge-off Rate	13.9%	18.0%	17.2%

*12-month ramp to peak charge-offs.
**3-month average excess spread adjusted for sharing.

Nevertheless, the 1999-2 and 2000-1 Class Cs have widened significantly in recent months on perceived weaker fundamental credit. This has created an attractive buying opportunity since credit protection has actually increased, not decreased, for these securities. For example, the 2000-1 C floaters are currently trading 40-50 bp wider than comparable average life bonds from benchmark issuers. While some of the spread differential can be explained by other factors (PTP restrictions, headline risk), we believe that this spread gap is overly wide given the strengthened credit profile due to excess spread trapping. Moreover, the 2000-1 Cs are trading at a discount given their wider spread levels, resulting in a potential benefit to early amortization.

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CMBS DELINQUENCIES AND DEFAULTS: A LONG-TERM OUTLOOK

Delinquencies on the Rise

December 2001 marked the largest one-month increase in delinquent loans in CMBS transactions. Over the month, loans that were delinquent by 60 or more days (excluding 2001 transactions) rocketed to 1.29%, a 0.27% jump from November. More importantly, December remittance reports provided the first clear indication that the performance of securitized commercial real estate transactions had in fact deteriorated. Prior to December, steadily climbing delinquency rates on CMBS transactions were not materially distinguishable from the natural aging of commercial mortgage loans.

What implications will rising delinquency rates have for CMBS bondholders? Do CMBS transaction structures offer enough protection? In the following discussion, we embark upon the task of developing a framework for answering some of these questions.

How “Supportive” is Credit Support?

CMBS transactions have traditionally offered substantial credit protection to senior and mezzanine bondholders. The level of credit support appears fairly generous when compared to other structured credit sectors, like non-agency residentials, HELs, MH, subprime and CDOs. For instance, the credit support on BBB CMBS is more than 5 times the levels in BBB Jumbos. The market is well aware of the initial caution imposed by the rating agencies in setting credit support levels for CMBS transactions; since the advent of commercial mortgage securitization, credit support has been trending lower. This trend has been driven by a number of factors, most notably stricter loan standards, increased standardization, and the greater presence of investment-grade loans. But CMBS investors often express concern that credit support is too low. Delinquency rates (and ultimately defaults) may once again rise to stratospheric levels and wipe out the credit support on senior and mezzanine classes. So far, the evidence does not support that concern.

Admittedly, the evidence collected so far is not nearly complete and certainly not convincing enough to comfort investors. CMBS transactions will need to navigate through a complete market cycle before investors are fully confident that credit support is satisfactory. The problem: if indeed we produce enough convincing evidence, new transactions would quickly adjust to reflect new assumptions—credit support would adjust downward. Opportunistic investors should look to determine **now** whether or not there will be enough support to weather the credit cycle.

Is currently available information adequate to make such a determination? Not particularly, though it does make a compelling short-term case. In Figure 1a, we highlight current subordination by vintage year and credit rating. Taken in isolation, credit support seems quite generous; BBBs receive anywhere from 10% to 14% loss protection from classes with lower priority in the transaction structure. But credit support is only part of the story. We also need to determine how high losses can go. Absent a rich data set of losses, we're forced to focus on delinquency rates, inferring from them the potential defaults and losses. In Figure 1b, we measure the **delinquency coverage multiple (DCM)**—the current level

of credit support divided by the current delinquency rate. It is clear that **current** credit subordination levels cover current delinquency rates many times over. For example, BBBs originated in 1998 have enough credit support to cover delinquencies 11x, while single-As cover 23x. Generous credit levels would seem set to shield investment-grade bondholders from ever escalating delinquencies – at least over the short run.

Over the longer term, investors need more information. Will credit support levels be adequate in the future, through the ebb and flow of market cycles, and as loans approach balloon dates? Credit support levels are expected to grow on outstanding classes as transactions age; loans inevitably pay scheduled (and unscheduled) principal amounts, and the transactions will ultimately de-lever. But the increase in credit support should not be expected to keep pace with rising delinquencies. This point is very clear from Figure 1b; older vintages have lower DCMs despite the fact that these transactions had higher credit enhancement levels at deal origination. As deals age, these coverage multiples are bound to fall lower. Long-term investors need to develop rational expectations about how far they can fall. More importantly, how will rising delinquencies translate into actual losses? With the help of delinquency behavior that we have already observed, guidance from other credit sectors, and some conservative assumptions, we present a framework for evaluating how delinquencies, defaults and losses may behave as deals age.

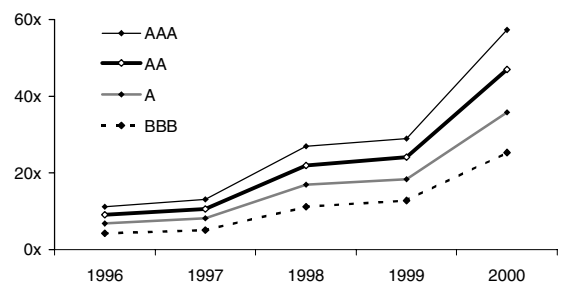
Start with the Evidence: The Delinquency Curve

To build credible projections, we begin with the evidence that history has provided. As we have stressed often in the past, delinquency rates should always be framed within the context of seasoning. Our seasoning curve is based on post-1995 transactions, since there were not enough transactions in earlier vintages to conduct a meaningful analysis. The seasoning curve rises upwards consistently and transactions have so far behaved in line with this curve. But as loans age further, we do not expect delinquencies to go on rising.

Figure 1a. **High Credit Subordination** (Subordination, %)

Vintage	Current Credit Rating			
	AAA	AA	A	BBB
1996	35.8	29.2	21.8	13.6
1997	32.5	26.4	20.4	12.6
1998	30.5	24.8	19.1	12.6
1999	27.8	23.1	17.6	12.3
2000	22.9	18.8	14.3	10.1

Figure 1b. **Subordinations Cover Delinquencies Comfortably**
Subordination/Delinquency Ratio

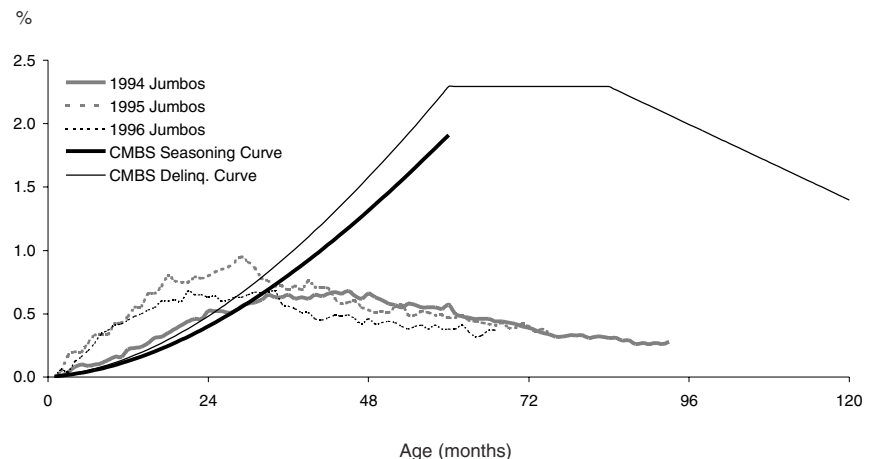


To get an idea of how delinquencies behave post 5 years of seasoning, we look at the residential Jumbo market. Here, we define the delinquency rate as the ratio of delinquent loans to the original deal balance. This minimizes the effect of the different prepayment behavior in Jumbos. Figure 2 shows the delinquency curves in 1994-1996 origination Jumbos. The delinquency curves rise for the first 2-3 years, plateau and then start declining. With aging, loans default and cease to be considered as delinquencies. These defaults gradually start outweighing fresh delinquencies. We expect the delinquency curve to have a similar shape in the CMBS market.

To build the CMBS delinquency curve, we have retained the seasoning curve until the point where we expect it to plateau. However, we believe that the time period on which our seasoning curve is based represents a better than average credit environment. Looking ahead, in order to represent a more realistic credit environment, we have accelerated the seasoning curve by a factor of 20%.

We expect the CMBS delinquency curve to plateau in the vicinity of 5 years. Already, the 1996 vintage (as a percentage of original balance) has shown signs of plateauing around the 5 year mark. This is later than most other sectors, especially Jumbos. We believe this is due to at least two reasons. First, CMBS workouts require more time than Jumbos, keeping loans in delinquent status for a longer period. Also, CMBS offers significantly higher prepayment protection than other sectors. Some loans that later become delinquent are prevented from prepaying in a refi wave, further pushing back the plateau. Based on experience in other sectors, we expect the plateau to last close to 2 years, before the delinquency curve starts to fall.

Figure 2. **CMBS Delinquencies to Plateau Later than Jumbos**



The Default and Loss Curves

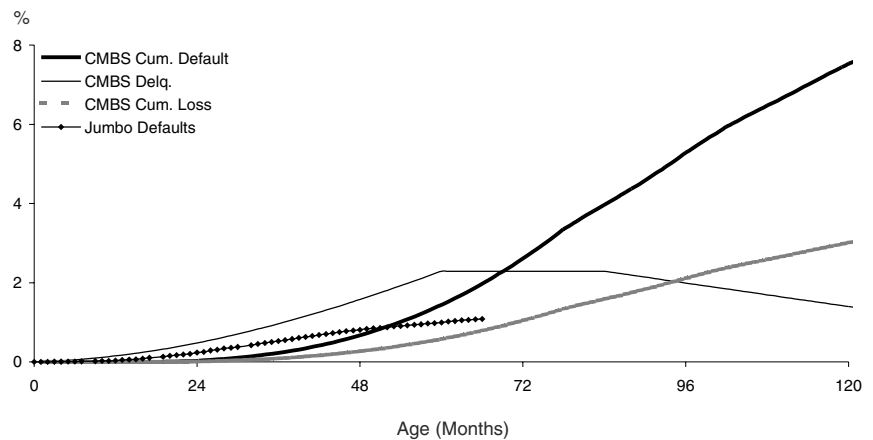
We use the delinquency curve as a basis for building a default curve. Making conservative assumptions based on the results of our roll rates analysis, we project that 50% of freshly delinquent loans default in 18 months while the remaining become current again in 3 months. Initially, the curve has a very gentle slope, as defaults are few and sporadic. However, as delinquencies pick up, the slope of the default curve increases. This slope starts decreasing as the delinquency curve starts to fall. The CMBS cumulative default curve, just like the default curve in Jumbos, is S-shaped.

The loss curve is a by product of the default curve. We have assumed the loss severity to be 40%. This is a conservative assumption based on empirical evidence. It is this loss curve that will determine whether or not the credit protection levels that CMBS transactions offer are adequate.

How Do Credit Subordination Levels Measure Up?

The question that we seek to answer is whether credit subordination levels on CMBS classes will be sufficient protection against losses when the bonds approach maturity. To achieve this, we calculate the total life for assets in the CMBS Index and use our projected loss curve to estimate losses close to their maturity. We then compare these losses with original credit support levels for each bond; the resulting loss coverage multiples are shown in Figure 4. We expect credit support levels in CMBS transactions to cover losses

Figure 3. **Expect Losses to Reach 3% in 10 Years, on Average**



CMBS: Snapshot of Projected Losses

Age	1 Yr.	2 Yr.	3 Yr.	5 Yr.	10 Yr.	15 Yr.
% Cum. Losses	0.00%	0.01%	0.09%	0.58%	3.01%	4.04%

several times over, down to BBs. For example, at the BBB level, credit support through maturity is projected to cover cumulative losses 3-4 times. And, the 1999 vintage is expected to provide the most protection for BBB holders. In Figure 5 we plot by credit rating how the loss coverage multiples fall as deals age. We choose to start at the 5 year mark because prior to that point in the aging process, losses are too low for the loss coverage multiples to be meaningful. Early on, the multiples fall briskly, but as the deal ages, the fall becomes more and more gradual.

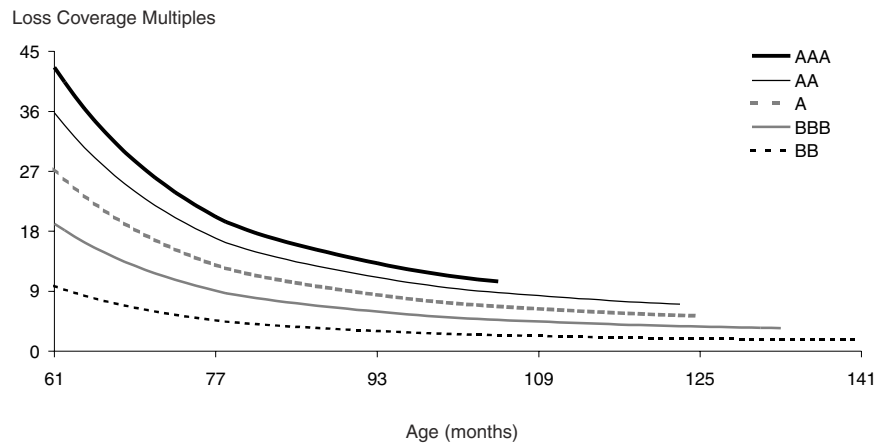
We have to state some obvious caveats. The analysis here is made for the “average” transaction. All vintages are assumed to behave in the same way, and so is each transaction within the vintages. While we believe this to be a fair estimate of average losses, each transaction has its own story, and the market will surely see equity pieces surviving without a scratch, as much as investment grade tranches wiped out by losses.

We have no doubt that the years to come will see a rise in CMBS loan defaults. However, diversified CMBS investors, especially in investment grade CMBS need not be alarmed by this credit deterioration. The generous credit subordination levels that CMBS deals have to offer are sufficient to cover expected losses.

Figure 4. **Support Covers Projected Losses Many Times Over**

Credit Rating	Vintage							
	1995	1996	1997	1998	1999	2000	2001	Overall
AAA	11.99	13.57	14.53	12.80	12.80	11.17	16.77	13.45
AA	8.01	7.69	7.80	7.62	7.44	6.32	5.84	7.19
A	6.17	5.75	5.75	5.82	5.56	4.83	4.49	5.42
BBB	3.80	3.38	3.42	3.69	3.77	3.40	3.21	3.61
BB	2.32	1.60	1.62	1.77	1.92	1.78	1.63	1.76

Figure 5. **Loss Coverage Multiples Fall with Aging**



Global Fixed-Income Market Data

LEHMAN BROTHERS BOND INDEX RETURNS, January 31, 2002, %

MACRO INDICES

Returns	Price	Coup.	Curr.	WTD	MTD	YTD	Returns	Price	Coup.	WTD	MTD	YTD
Global Aggregate	-0.02	0.10	-0.48	-0.41	-0.90	-0.90	U.S. Universal	0.02	0.11	0.13	0.84	0.84
U.S. Agg: 300 mn	0.07	0.11	0.00	0.18	0.80	0.80	U.S. Aggregate	0.07	0.11	0.18	0.81	0.81
Pan-Euro: 300 mn	-0.03	0.11	-1.81	-1.73	-2.54	-2.54	U.S. Corp High Yield	-0.68	0.13	-0.56	0.70	0.70
Asn-Pac Agg: 300 mn	-0.23	0.04	0.41	0.22	-2.54	-2.54	Eurodollar (ex-Agg.)	0.05	0.09	0.15	0.70	0.70
Eurodollar: 300 mn	0.06	0.09	0.00	0.15	0.70	0.70	EMG (ex-Agg.)	-0.76	0.15	-0.61	2.45	2.45
144A: 300 mn	-0.22	0.12	0.00	-0.10	1.02	1.02	144A Invest. Grade	-0.26	0.12	-0.14	1.01	1.01
Canada TSY: 300 mn	-0.11	0.12	0.69	0.69	0.44	0.44	CMBS Other	0.03	0.15	0.18	1.27	1.27
Euro-Yen: 300 mn	-0.14	0.04	0.44	0.34	-2.60	-2.60	Emerg Bonds	-0.02	0.10	0.08	0.33	0.33
Global High Yield	-0.84	0.14	-0.85	0.83	0.83							
U.S. Corp High Yield	-0.68	0.13	-0.56	0.70	0.70							
Pan-Euro High Yield	-4.21	0.21	-3.55	0.16	0.16							
EMG High Yield	-0.79	0.15	-0.64	2.50	2.50							

U.S. AGGREGATE INDEX

Returns	Price	Coup.	WTD	MTD	YTD	Returns	Price	Coup.	WTD	MTD	YTD
Aggregate	0.07	0.11	0.18	0.81	0.81	Inv.-Grade CMBS	-0.12	0.11	0.00	1.15	1.15
Intermediate	0.03	0.11	0.14	0.71	0.71	ERISA-eligible	-0.12	0.11	-0.01	1.13	1.13
Govt./Credit	0.02	0.11	0.12	0.73	0.73	Aaa	-0.13	0.11	-0.01	1.09	1.09
Intermediate	-0.07	0.10	0.03	0.52	0.52	Aa	-0.15	0.11	-0.04	1.21	1.21
Long	0.26	0.12	0.38	1.36	1.36	A	-0.15	0.11	-0.04	1.41	1.41
Government	0.12	0.10	0.22	0.65	0.65	Baa	0.11	0.12	0.23	1.62	1.62
Intermediate	0.00	0.10	0.10	0.43	0.43	U.S. Credit	-0.11	0.11	0.00	0.85	0.85
Long	0.42	0.12	0.54	1.24	1.24	Intermediate	-0.16	0.11	-0.05	0.63	0.63
1-3 year	-0.03	0.09	0.06	0.24	0.24	Long	0.04	0.12	0.16	1.53	1.53
Treasury	0.15	0.11	0.26	0.67	0.67	Corporate	-0.12	0.11	0.00	0.85	0.85
Intermediate	-0.01	0.10	0.10	0.34	0.34	Intermediate	-0.17	0.11	-0.06	0.63	0.63
Long	0.44	0.12	0.56	1.29	1.29	Long	0.06	0.12	0.18	1.51	1.51
1-3 year	-0.03	0.10	0.06	0.20	0.20	Industrial	-0.15	0.11	-0.03	0.71	0.71
3-5 year	-0.01	0.11	0.11	0.40	0.40	Utility	0.07	0.12	0.19	1.38	1.38
5-7 year	0.02	0.11	0.13	0.44	0.44	Financial Inst.	-0.12	0.11	-0.02	0.91	0.91
7-10 year	0.06	0.11	0.18	0.62	0.62	Non-Corporate	-0.06	0.10	0.04	0.83	0.83
10-20 year	0.33	0.13	0.46	1.21	1.21	Intermediate	-0.05	0.10	0.05	0.60	0.60
20+ year	0.59	0.11	0.70	1.40	1.40	Long	-0.09	0.12	0.03	1.70	1.70
Agency	0.05	0.09	0.14	0.60	0.60	Sovereign	-0.35	0.12	-0.24	0.82	0.82
Intermediate	0.01	0.09	0.10	0.55	0.55	Supranationals	0.13	0.09	0.22	0.66	0.66
Long	0.32	0.10	0.42	0.93	0.93	Foreign Agency	-0.06	0.10	0.04	0.53	0.53
Noncallable	0.04	0.09	0.13	0.61	0.61	Foreign Local Govt.	0.20	0.10	0.31	1.29	1.29
Callable	0.13	0.08	0.21	0.57	0.57	Aaa	0.11	0.09	0.20	0.69	0.69
ABS	0.03	0.10	0.13	0.66	0.66	Aa	0.01	0.10	0.11	0.83	0.83
Credit Card	0.13	0.10	0.23	0.75	0.75	A	-0.23	0.11	-0.11	0.91	0.91
Auto	-0.03	0.09	0.06	0.45	0.45	Baa	-0.08	0.12	0.04	0.81	0.81
Home Equity	0.02	0.11	0.13	0.63	0.63						
Utility	0.29	0.10	0.39	1.03	1.03						
Manuf. Housing	-0.53	0.12	-0.40	0.27	0.27						
MBS Fixed Rate	0.17	0.12	0.29	0.93	0.93						
GNMA 30-year	0.23	0.13	0.35	1.01	1.01						
Conv. 30-year	0.16	0.12	0.28	0.94	0.94						
GNMA 15-year	0.13	0.12	0.25	0.76	0.76						
Conv. 15-year	0.15	0.11	0.27	0.77	0.77						
Balloon	0.06	0.11	0.17	0.64	0.64						

EURODOLLAR INDEX

Returns	Price	Coup.	WTD	MTD	YTD
Eurodollar Composite	-0.11	0.10	-0.01	0.65	0.65
Corporate	-0.25	0.11	-0.14	0.64	0.64
Sovereign	-0.04	0.09	0.05	0.65	0.65
Supranational	0.07	0.09	0.16	0.63	0.63

CMBS INDICES

Returns	Price	Coup.	WTD	MTD	YTD
Inv.-Grade CMBS	-0.12	0.11	0.00	1.15	1.15
Non ERISA-eligible	-0.05	0.12	0.07	1.42	1.42
CMBS High Yield	0.11	0.18	0.29	1.13	1.13
BB	0.10	0.15	0.25	0.92	0.92

U.S. HIGH-YIELD CORPORATE INDEX

Returns	Price	Coup.	WTD	MTD	YTD
High Yield	-0.68	0.13	-0.56	0.70	0.70
BB	-0.74	0.12	-0.63	0.36	0.36
B	-0.51	0.15	-0.36	1.03	1.03
CCC	-1.83	0.25	-1.58	-0.97	-0.97

EMERGING-MARKETS INDEX

Returns	Price	Coup.	WTD	MTD	YTD
Emerging Markets	-0.79	0.15	-0.64	2.05	2.05
Brady	-0.79	0.11	-0.67	1.35	1.35
Int'l Issue	-0.90	0.16	-0.74	1.99	1.99
Americas	-1.21	0.15	-1.06	1.00	1.00
Europe	-0.21	0.14	-0.07	4.78	4.78
Asia	-0.09	0.15	0.07	2.02	2.02
Africa	0.92	0.10	1.00	3.64	3.64
Middle East	-0.20	0.17	-0.04	0.63	0.63

GLOBAL BOND INDEX

	Price	Coupon	Unhedged Returns			Currency-hedged Returns				
			Currency	WTD	MTD	YTD	Currency	WTD	MTD	YTD
Global Treasury	-0.05	0.09	-0.65	-0.62	-1.72	-1.72	0.00	0.03	0.24	0.24
Global (ex US)	-0.12	0.08	-0.88	-0.92	-2.51	-2.51	-0.01	-0.05	0.10	0.10
G7	-0.05	0.08	-0.44	-0.40	-1.61	-1.61	0.00	0.03	0.20	0.20
G6 (G7 ex US)	-0.13	0.07	-0.61	-0.67	-2.51	-2.51	0.00	-0.06	0.01	0.01
Lehman Majors*	-0.05	0.09	-0.61	-0.57	-1.71	-1.71	0.00	0.03	0.23	0.23
Lehman Majors (ex US)	-0.12	0.08	-0.81	-0.86	-2.50	-2.50	-0.01	-0.05	0.08	0.08
US Treasury	0.15	0.11	0.00	0.26	0.67	0.67	0.00	0.26	0.67	0.67
Canada	-0.11	0.12	0.69	0.69	0.44	0.44	-0.01	0.00	0.03	0.03
France	-0.08	0.11	-1.99	-1.96	-2.79	-2.79	-0.03	-0.01	0.41	0.41
Germany	-0.05	0.11	-1.99	-1.94	-2.74	-2.74	-0.03	0.02	0.46	0.46
Italy	-0.01	0.11	-1.99	-1.89	-2.77	-2.77	-0.03	0.06	0.43	0.43
Japan	-0.25	0.04	0.45	0.23	-2.75	-2.75	0.03	-0.18	-0.57	-0.57
United Kingdom	0.18	0.13	-0.66	-0.35	-1.38	-1.38	-0.05	0.25	1.33	1.33

* Lehman Majors includes US Treasury, Canada, France, Germany, Italy, Japan, United Kingdom, Australia, Belgium, Denmark, Netherlands, Spain, and Sweden. MTD=month to date. YTD=year to date.

PAN-EUROPEAN AGGREGATE INDEX (Currency-hedged)

	Pan-Euro Aggregate						Pan-Euro Aggregate (EUR500 mn Outstanding)					
	Price	Cpn.	Currency	WTD	MTD	YTD	Price	Cpn.	Currency	WTD	MTD	YTD
Pan-Euro Agg. Index	-0.03	0.10	0.00	0.07	0.70	0.70	-0.04	0.10	0.00	0.06	0.69	0.69
Government	-0.03	0.10	0.00	0.07	0.68	0.68	-0.03	0.10	0.00	0.07	0.68	0.68
Treasury	-0.03	0.10	0.00	0.07	0.68	0.68	-0.03	0.10	0.00	0.07	0.68	0.68
Non-Corporate	0.04	0.09	0.00	0.14	1.16	1.16	0.07	0.09	0.00	0.16	1.22	1.22
Corporate	-0.03	0.10	0.00	0.07	0.93	0.93	-0.09	0.10	0.00	0.01	0.92	0.92
Collateralised	-0.06	0.09	0.00	0.02	0.31	0.31	-0.06	0.09	0.00	0.03	0.32	0.32

PAN-EUROPEAN HIGH YIELD INDEX

	Returns					
	Price	Coup.	Curr.	WTD	MTD	YTD
Pan-Euro High Yield	-4.21	0.24	0.01	-3.96	0.00	0.00
High Yield (Euro)	-4.05	0.26	0.00	-3.78	-0.18	-0.18
High Yield (non-Euro)	-4.54	0.19	0.02	-4.33	0.39	0.39

EURO-AGGREGATE INDEX, all returns in euros

	Euro-Aggregate					Euro-Aggregate (EUR500 mn Outstanding)				
	Price	Cpn.	WTD	MTD	YTD	Price	Cpn.	WTD	MTD	YTD
Euro-Aggregate Index	-0.08	0.10	0.02	0.57	0.57	-0.08	0.10	0.02	0.58	0.58
Government	-0.06	0.10	0.04	0.57	0.57	-0.06	0.10	0.04	0.58	0.58
Non-Corporate	-0.10	0.09	-0.01	0.60	0.60	-0.09	0.09	0.00	0.64	0.64
Corporate	-0.15	0.10	-0.05	0.78	0.78	-0.16	0.10	-0.06	0.87	0.87
Collateralised	-0.07	0.09	0.02	0.29	0.29	-0.07	0.09	0.02	0.30	0.30

ASIAN-PACIFIC AGGREGATE INDEX, all returns in yen

	Price	Coup.	Curr.	WTD	MTD	YTD
Asian-Pacific Agg.	-0.23	0.04	-0.04	-0.22	-0.52	-0.52
Government	-0.24	0.04	-0.05	-0.24	-0.57	-0.57
Treasury	-0.24	0.04	-0.04	-0.24	-0.58	-0.58
Agency	-0.20	0.05	-0.08	-0.24	-0.46	-0.46
Local Authority	-0.27	0.05	-0.22	-0.43	-0.62	-0.62
Credit	-0.17	0.04	0.04	-0.09	-0.23	-0.23
Corporate	-0.17	0.04	0.05	-0.08	-0.21	-0.21
Financial Inst.	-0.09	0.04	0.08	0.03	0.17	0.17
Industrial	-0.31	0.04	0.02	-0.25	-0.53	-0.53
Utility	-0.26	0.06	0.00	-0.21	-0.88	-0.88
Non-Corporate	-0.29	0.05	-0.20	-0.44	-0.54	-0.54
Sovereign	-0.31	0.06	0.00	-0.25	-0.57	-0.57
Supranational	-0.21	0.08	-2.06	-2.19	0.76	0.76
Foreign Agency	-0.25	0.03	0.00	-0.22	-0.91	-0.91
Foreign Local Auth.	-0.31	0.05	0.00	-0.27	-0.91	-0.91

U.S. TREASURIES AND AGENCIES, February 1, 2002

	Current	Change (bp)			Last 3 Months				Last 12 Months			
		1wk	MTD	YTD	High	Low	Avg.	St. Dev.	High	Low	Avg.	St. Dev.
CURRENT ISSUE TREASURY YIELDS (%)												
Issues												
1-mo	1.68	-0.5	0.5	0.5	2.18	1.59	1.79	1.28	3.66	1.51	-	-
3-mo	1.75	3.6	-1.0	4.1	2.06	1.57	1.77	3.56	5.08	1.49	3.16	1.08
6-mo	1.87	4.1	-2.1	7.2	2.05	1.62	1.83	3.38	5.04	1.62	3.15	1.03
1-yr	2.22	-2.3	-0.5	15.3	2.48	1.90	2.15	3.01	4.96	1.90	3.31	0.93
2-yr	3.08	-10.5	-6.9	3.1	3.22	2.31	2.96	1.97	4.87	2.31	3.67	0.67
5-yr	4.31	-10.7	-5.7	-2.7	4.52	3.48	4.20	0.95	5.05	3.48	4.46	0.39
10-yr	4.99	-8.7	-4.2	-5.3	5.23	4.20	4.90	0.59	5.52	4.20	4.99	0.28
30-yr	5.40	-7.6	-3.3	-7.5	5.63	4.79	5.35	0.48	5.90	4.79	5.48	0.20
5-yr TIPS	1.63	-5.8	0.0	-31.2	2.21	0.93	1.76	0.88	2.96	0.93	1.79	0.44
10-yr TIPS	3.05	-9.5	-3.7	-25.3	3.37	2.59	3.11	0.37	3.37	2.59	3.06	0.18
30-yr TIPS	3.51	-3.9	-2.4	-0.0	3.64	3.14	3.45	0.16	3.64	3.14	3.47	0.08
TREASURY YIELD CURVE SPREADS (bp)												
2-5yr	122.9	-0.1	1.2	-5.7	135.5	103.3	124.7	115.8	135.5	15.0	79.3	35.0
5-10yr	67.7	2.0	1.5	-2.7	78.6	61.0	69.2	48.4	90.1	15.0	53.3	17.9
10-30yr	41.3	1.2	0.8	-2.2	60.2	33.6	45.4	28.8	89.7	30.4	49.2	13.7
2-30yr	231.9	3.0	3.6	-10.6	262.9	220.2	239.3	165.5	275.4	61.4	181.9	58.5
AGENCY SPREADS VS. BENCHMARK TREASURY (bp)												
FNMA Benchmarks												
2-yr	5.5	4.5	0.5	-9.0	31.0	1.0	15.7	33.4	48.0	1.0	28.5	10.4
5-yr	50.5	-0.2	-1.0	-7.0	69.0	39.5	51.7	16.9	71.5	39.5	57.0	6.5
10-yr	66.5	-0.5	-0.5	-8.0	81.5	48.4	68.7	16.5	88.0	48.4	73.5	6.6
30-yr	81.5	2.0	-1.0	1.5	88.0	71.5	79.5	9.8	88.0	66.5	77.2	4.3
FHLMC Reference Notes												
2-yr	20.5	2.0	-0.0	-2.0	33.5	12.5	22.7	23.5	58.0	12.5	31.1	8.1
5-yr	37.5	-0.8	-1.0	-10.5	55.0	35.0	43.7	29.0	73.0	35.0	55.3	8.6
10-yr	67.5	-0.8	-0.5	-6.8	81.3	55.0	69.3	17.0	89.5	55.0	74.5	6.6
30-yr	82.0	2.5	-1.0	1.5	88.5	72.0	80.0	9.2	88.5	68.0	78.4	4.3
Callable												
5-yr(nc 2)	66.0	2.0	0.0	-13.0	83.0	52.9	68.8	171.9	225.0	52.9	130.5	58.9
10-yr(nc 3)	103.5	4.5	0.5	-10.5	115.0	84.0	102.5	127.4	233.3	84.0	147.7	44.1
FITTED CURVE SPREADS (bp)												
Fitted Agency Curve Spread to Fitted Treasury Curve												
2-yr	22.6	2.8	-1.1	-2.4	29.8	16.8	22.6	16.4	43.8	14.5	28.3	5.8
5-yr	44.3	0.5	-1.5	-5.3	56.8	38.4	46.5	16.4	65.8	38.4	52.3	5.7
10-yr	47.2	0.7	0.0	-2.8	55.5	38.2	47.0	21.0	70.4	38.2	54.9	6.8
30-yr	71.1	3.7	-1.0	7.2	72.8	60.6	66.8	9.5	78.4	60.6	69.4	3.9
Fitted Agency Curve Spread to Fitted LIBOR Curve												
2-yr	-15.4	2.1	-0.8	4.8	-13.0	-21.4	-16.9	5.3	-7.0	-25.9	-17.2	2.6
5-yr	-12.2	0.7	-1.6	1.6	-8.1	-14.8	-12.0	8.1	-3.9	-20.8	-14.6	3.0
10-yr	0.8	-0.8	-0.8	-3.7	8.5	0.4	4.9	16.4	19.4	-9.0	-0.4	6.1
30-yr	14.1	-1.5	-1.0	3.3	17.6	8.9	14.4	20.3	37.4	-5.2	9.2	8.6

CAPITAL MARKETS VOLATILITY, February 1, 2002

	Current	5-day Chng.	20-day Avg.	Last 3 Months (11/7/01-2/1/02)			Last 12 Months (1/30/01-2/1/02)		
				High	Low	Avg.	High	Low	Avg.
U.S. Treasury Implied Volatility									
2-yr	41.58	0.87	44.34	57.52	39.62	48.65	57.52	21.19	34.58
5-yr	30.75	0.47	32.25	42.36	29.60	35.59	42.36	20.35	28.13
10-yr	23.45	0.23	24.64	32.93	23.13	27.86	32.93	16.87	22.67
30-yr	15.65	0.70	15.83	19.67	14.94	17.29	19.67	12.00	14.60
U.S. Treasury Yield Volatility, annualized rolling 20-day volatility									
2-yr	47.12	-0.95	43.67	71.12	30.64	51.86	71.16	14.08	34.24
5-yr	27.33	-1.60	28.03	47.50	23.73	35.16	47.50	13.81	26.02
10-yr	18.61	-2.03	21.09	37.13	18.56	28.45	37.13	12.07	21.45
30-yr	13.65	-2.04	16.09	35.70	13.61	22.99	35.70	8.40	15.88
Japan Govt. Yield Volatility, annualized rolling 20-day volatility									
2-yr	44.97	1.20	62.11	133.30	27.01	74.51	273.27	27.01	128.99
5-yr	44.42	-0.53	47.26	61.09	29.14	46.18	121.46	29.14	70.47
10-yr	17.50	1.46	16.11	24.39	14.77	19.23	74.05	14.77	33.99
30-yr	10.09	2.82	8.95	17.09	7.27	12.56	70.79	7.27	25.51
German Govt. Yield Volatility, annualized rolling 20-day volatility									
2-yr	25.11	0.26	24.45	41.17	21.14	30.84	41.17	8.34	21.93
5-yr	21.25	-0.42	20.49	33.76	15.57	24.88	33.76	7.65	17.49
10-yr	16.50	-1.23	16.65	25.24	14.32	19.43	25.24	6.41	12.83
30-yr	12.93	-0.99	13.83	21.67	12.32	17.44	21.67	5.97	11.25
U.K. Govt. Yield Volatility, annualized rolling 20-day volatility									
2-yr	22.21	-4.61	23.68	34.36	15.89	27.43	34.36	8.32	18.49
5-yr	16.68	-4.37	18.60	25.87	12.95	21.13	25.87	8.93	15.42
10-yr	14.90	-3.70	17.26	22.95	13.03	19.08	22.95	9.18	14.81
30-yr	13.80	-2.81	16.54	22.40	13.63	17.69	22.40	7.71	14.25
Implied LIBOR Cap Volatility									
1-yr	36.64	2.97	36.21	53.79	0.00	40.63	53.79	0.00	27.16
2-yr	31.71	1.30	31.70	40.15	0.00	32.85	40.15	0.00	25.32
5-yr	24.23	0.39	24.30	28.88	0.00	24.48	29.24	0.00	21.71
7-yr	22.55	0.24	22.72	26.44	0.00	22.80	26.90	0.00	20.60
LIBOR Volatility, annualized rolling 20-day volatility									
1-mo	21.25	-1.97	18.81	23.22	9.74	19.44	52.25	2.43	17.57
3-mo	28.41	0.53	22.28	33.88	10.62	25.13	41.33	4.57	18.47
6-mo	37.81	0.85	31.03	44.85	17.63	35.14	44.85	6.92	23.49
12-mo	50.30	0.69	43.01	67.11	24.81	49.64	67.11	9.44	29.99
Swap Spread Volatility, annualized rolling 20-day volatility									
2-yr	35.14	-1.76	27.49	37.07	15.57	23.01	80.33	13.10	27.56
5-yr	22.39	-0.09	26.89	45.67	22.36	32.81	67.72	11.53	27.84
10-yr	24.95	-0.19	29.21	38.17	20.19	31.06	50.64	14.58	29.11
30-yr	30.90	0.78	34.22	58.51	29.28	42.30	65.99	12.76	33.53
Implied Swaption Volatility									
1x5-yr	22.35	0.10	23.69	26.45	22.25	24.11	26.45	0.00	21.02
1x10-yr	20.65	-0.05	21.85	23.70	20.40	22.06	24.05	0.00	19.61
2x3-yr	21.10	0.30	22.55	24.80	20.80	22.65	24.85	0.00	19.90
5x10-yr	16.65	0.00	17.68	18.60	15.95	17.57	19.30	0.00	15.88
Spread Sector Volatility, annualized rolling 4-week volatility									
	Current			High	Low	Avg	High	Low	Avg
10 yr-agency	39.71			83.96	18.49	40.51	83.96	13.10	34.93
FNMA 30-yr par TBA (ZV)	73.79			92.71	58.72	73.79	92.71	14.95	45.75
5-yr fixed rate credit card	20.77			59.60	18.38	38.42	59.60	10.94	29.71
5-yr HEL	86.08			86.08	34.21	53.69	86.08	6.03	38.79
Baa 10-yr corp. bullet	20.77			127.37	20.77	72.89	127.37	20.77	51.85

GLOBAL CURRENCY RATES, February 1, 2002, bp

per USD	Spot (per USD)		Appreciation of USD Relative to Currency (%)			Realized Exchange-Rate Volatility		
	2/1/02	1/25/02	1-week	MTD	YTD	1-mo.	2-mo.	3-mo.
Japanese Yen	133.88	134.38	-0.37	0.08	2.15	2.75	5.43	7.07
Euro	1.16	1.16	0.41	-0.02	3.40	5.03	3.41	2.44
United Kingdom Pound	0.71	0.71	-0.27	-0.04	2.94	3.31	2.34	2.16
Canadian \$	1.59	1.61	-1.04	0.04	-0.34	1.86	2.19	1.61
Australian \$	1.96	1.94	1.45	-0.53	0.49	3.20	2.32	1.74
New Zealand \$	2.40	2.36	1.58	-0.29	-0.19	3.56	3.04	2.46
Danish Krone	8.63	8.59	0.41	-0.01	3.32	4.89	3.27	2.34
Swedish Krona	10.67	10.68	-0.10	0.27	1.70	4.82	3.48	2.60
Norwegian Krone	9.11	9.08	0.32	0.08	1.58	2.94	2.05	1.66
Brazilian Real	2.41	2.41	0.06	0.00	4.39	4.60	4.27	7.04
Mexican Peso	9.15	9.12	0.27	-0.14	-0.26	1.54	1.25	1.16
Thai Baht	44.08	44.07	0.01	0.07	-0.35	0.83	0.79	1.06
South Korean Won	1317.85	1327.60	-0.73	0.26	0.33	2.08	3.29	3.08

per Euro	Spot (per Euro)		Appreciation of Euro Relative to Currency (%)			Realized Exchange-Rate Volatility		
	2/1/02	1/25/02	1-week	MTD	YTD	1-mo.	2-mo.	3-mo.
Yen	115.28	116.18	-0.77	0.10	-1.21	3.76	4.62	6.73
Danish Krone	7.43	7.43	0.00	0.01	-0.08	0.18	0.21	0.18
Swedish Krona	9.19	9.23	-0.51	0.29	-1.64	1.14	2.89	2.31
Norwegian Krone	7.85	7.85	-0.09	0.10	-1.76	2.20	1.80	1.36

per GBP	Spot (per GBP)		Appreciation of GBP Relative to Currency (%)			Realized Exchange-Rate Volatility		
	2/1/02	1/25/02	1-week	MTD	YTD	1-mo.	2-mo.	3-mo.
Euro	1.64	1.63	0.68	0.01	0.45	2.08	2.02	1.71
Yen	189.28	189.47	-0.10	0.11	-0.77	2.14	5.13	7.21

GLOBAL SWAP SPREADS, February 1, 2002, bp

	Current	Change			2001				Current	Change			2001			
		1-week	MTD	YTD	Hi	Low	Avg			1-week	MTD	YTD	Hi	Low	Avg	
U.S.								Japan								
2-year	37	-1	-1	-9	45	35	40	2-year	3	0	0	0	4	2	3	
5-year	65	-2	-2	-11	76	65	68	5-year	-6	1	1	-4	-2	-8	-6	
10-year	70	-2	-2	-7	77	65	70	10-year	-1	0	0	0	-1	-5	-3	
30-year	69	-2	-2	-3	72	60	66	20-year	3	-1	-1	-5	10	3	6	
Germany								U.K.								
2-year	22	0	0	0	24	20	22	2-year	36	-3	-3	0	41	36	39	
5-year	25	1	1	-3	29	24	26	5-year	35	-4	-4	-10	47	35	43	
10-year	27	1	1	-1	28	24	26	10-year	41	-3	-3	-11	53	41	48	
30-year	17	1	1	3	19	12	16	30-year	31	-1	-1	-11	42	31	37	

U.S. TED (TREASURY-EURODOLLAR) SPREADS, February 1, 2002, bp

	Current	Change			2002 YTD		
		1-week	MTD	YTD	Hi	Low	Avg
2-year	38	-1	-2	-11	43	35	38
5-year	67	-2	-2	-16	81	67	72
10-year	87	-4	-2	-9	97	86	90

MONETARY POLICY WATCH: SELECTED 2002 WORLDWIDE CENTRAL BANK MEETINGS

	Feb	Mar	Apr	May
U.S. Fed Reserve Board	-	19	-	7
European Central Bank	7,21	7,21	4,18	2,16
Bank of Japan	7,8,28	19,20	10, 11, 30	20, 21
Bank of England	6,7	6,7	3,4	8,9
The Riksbank (Sweden)	8	19	26	-
Bank of Canada	-	5	16	-
Reserve Bank of Australia	11	-	-	10

* Not all monetary policy meeting dates have been released.

2002 CENTRAL BANK MOVES

G7	Local Rate	12/31/01	2/2/02	Rate Change (bp)			YTD		
				WTD	MTD	YTD	Easings	Tightenings	
U.S.	Fed Funds Rate	1.75%	1.75%	0	0	0	0	0	
Japan	Official Discount Rate	0.10%	0.10%	0	0	0	0	0	
EMU	Repo*	3.25%	3.25%	0	0	0	0	0	
UK	Base Rate	4.00%	4.00%	0	0	0	0	0	
Canada	Overnight Rate	2.25%	2.00%	0	0	-25	1	0	
G7 Average		2.27%	2.22%	0	0	-5			
Possible Round-2 EMU Candidates									
Denmark	Repo Rate	3.60%	3.55%	-5	-5	-5	1	0	
Sweden	Repo Rate	3.75%	3.75%	0	0	0	0	0	
Norway	Deposit Rate	6.50%	6.50%	0	0	0	0	0	
Switzerland	3-mo LIBOR	1.25%-2.25%	1.25%-2.25%	0	0	0	0	0	
Round-2 EMU Average		3.90%	3.89%	-1	-1	-1			
Other Major Central Banks									
Brazil	Meta SELIC	19.00%	19.00%	0	0	0	0	0	
Chile	Target Rate**	6.50%	6.00%	0	0	-50	1	0	
Czech Republic	2-wk Repo Rate	4.75%	4.25%	-25	-25	-50	2	0	
Hungary	Central Base Rate	9.75%	9.00%	0	0	-75	2	0	
Poland	Repo Rate	11.50%	10.00%	-50	-50	-150	1	0	
Australia	RBA Target Cash Rate	4.25%	4.25%	0	0	0	0	0	
New Zealand	Cash Rate	4.75%	4.75%	0	0	0	0	0	
Hong Kong	Savings Rate	5.13%	5.13%	0	0	0	0	0	
South Korea	Overnight Call Target	4.00%	4.00%	0	0	0	0	0	
Philippines	PPCBON (Overnight)	7.75%	7.50%	0	0	-25	1	0	
Average of Other Major Central Banks		7.74%	7.39%	-8	-8	-35			
Total Average		5.49%	5.29%				Total	9	0

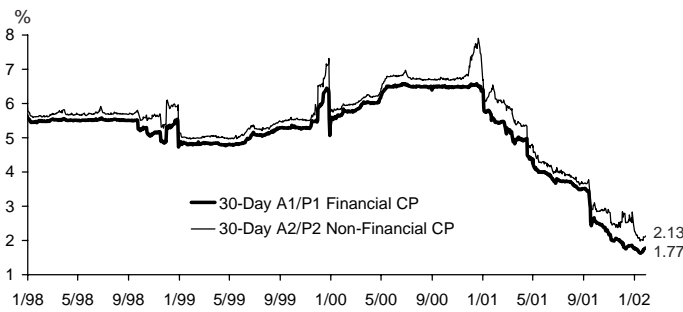
* For the purpose of signalling monetary policy, the minimum bid rate plays the same role previously performed by the rate in fixed-rate tenders.

** On August 9, 2001, Chile changed its monetary policy from targeting a real interest rate to targeting a nominal interest rate. All Chilean interest rates have been restated to reflect this change.

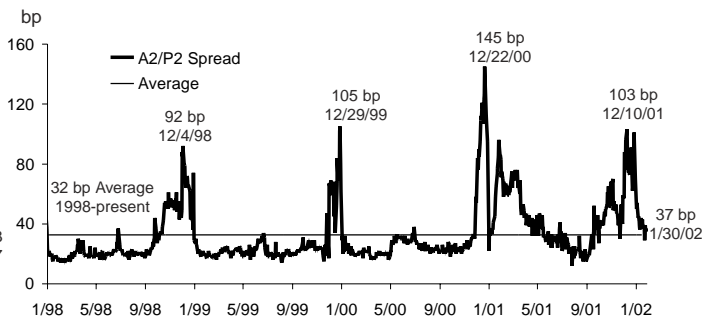
U.S. COMMERCIAL PAPER

	Outstanding (\$ bn)		YTD Change (%)
	1/2/02	1/30/02	
Total U.S. Commercial Paper Outstanding (Seasonally Adjusted)	1,436.4	1,442.5	0.4
Non-Financial	224.7	238.3	6.1
Financial	1,211.7	1,204.2	-0.6

30-Day A1/P1 Financial and 30-Day Non-Financial A2/P2 Discount Rates, January 1998-January 30, 2002



A2/P2 Non-Financial Spread over A1/P1 Non-Financial CP, January 1998-January 30, 2002



Source: Federal Reserve Board of Governors.

MBS

SPREADS AND YIELDS FOR SELECTED MBS, February 1, 2002, bp, March settlement

	WAM (mos)	Price	Projected			Zero Vol. Spread	OAS			90-day OAS			OA Dur. (yrs)
			% PSA	Yld. (%)	Static Sprd.		Curr.	1-wk. Chg.	High	Low	Avg.		
30-yr GNMA													
6.5	354	101-04	193	6.32	134/10yr	116	56	-1	75	46	60	4.4	
7.0	353	102-30	237	6.41	210/5yr	139	62	-3	83	54	66	3.4	
7.5	346	104-15	411	6.02	184/3yr	157	67	-7	94	63	75	2.1	
8.0	347	105-21	580	5.51	133/3yr	172	76	-8	108	75	89	1.5	
9.0	345	107-03	641	5.47	239/2yr	210	129	-2	160	124	140	1.4	
30-yr FHLMC Gold													
6.5	352	100-30	196	6.36	137/10yr	126	58	-1	71	48	59	3.9	
7.0	339	102-14	518	5.98	180/3yr	151	67	-2	73	32	59	2.5	
7.5	337	104-01	549	5.70	152/3yr	156	64	-3	75	36	61	1.6	
8.0	336	105-18	547	5.54	136/3yr	147	50	-5	66	8	47	0.9	
9.0	338	106-24	862	4.35	127/2yr	138	64	-9	87	61	74	0.7	
15-yr FHLMC Gold													
6.0	171	100-31	243	5.76	145/5yr	100	68	-2	79	60	70	3.4	
6.5	157	102-20	438	5.41	123/3yr	113	67	-4	80	56	68	2.3	
7.0	156	103-27	551	5.09	201/2yr	121	67	-4	77	37	61	1.7	
7.5	153	105-01	571	4.91	183/2yr	124	67	-4	89	50	69	1.2	
8.0	151	106-01	580	4.87	179/2yr	127	69	-5	79	33	61	0.9	
7-yr FNMA Balloons													
6.0	336	101-19	403	5.23	105/3yr	119	93	-1	102	47	78	2.1	
6.5	351	102-25	570	5.23	104/3yr	120	80	0	96	66	83	1.9	
7.0	350	103-06	793	5.08	200/2yr	137	91	-3	98	39	81	1.3	
7.5	349	103-26	825	5.09	201/2yr	150	102	-3	106	-18	70	0.9	

GENERIC ABS SPREADS, February 1, 2002

	Princ	(Bid)	1-wk	3-mo		Off-the
	Paymnt	Static		Range	Wide	
	Wind (mo)	Sprd*	Chg			Runs
Credit Cards (Bullets)						
Fixed (AAA)						
2-year par	1	48	3	66	46	48
3-year par	1	76	0	94	74	76
5-year par	1	77	-1	94	76	77
7-year par	1	95	0	100	81	95
10-year par	1	94	0	108	88	94
Floating (AAA) (spread to 1-mo. LIBOR)						
2-year	1	3.5	-1.5	10	4	
3-year	1	5	-1	11	5	
5-year	1	9	-2	16	9	
7-year	1	16	-1	25	16	
10-year	1	23	0	33	23	
Bank CLOs (spread to 3-mo. LIBOR)						
Delinked (AAA)						
3-year	12	35	0	35	35	
5-year	12	45	0	45	45	
Linked (AA)						
5-year	12	55	0	55	55	
7-year	12	65	0	65	65	
Autos						
Fixed Retail (AAA)						
1-year	12	E+8	0	NA	NA	
2-year	12	56	3	117	54	
3-year	18	82	1	99	78	
Student Loans						
Floating (AAA)						
2.5 yr (3mo T-Bill)	60	55	0	65	55	
7.1 yr (3mo T-Bill)	60	80	0	100	80	

	Princ	(Bid)	1-wk	3-mo	
	Paymnt	Static		Range	Wide
	Wind (mo)	Sprd*	Chg		
Home Equity Loans					
Fixed (AAA)					
1-year	23	93	-4	149	93
2-year	1	104	1	178	104
3-year	26	134	-3	162	133
5-year	21	146	-1	171	146
7-year	27	179	1	197	178
11-year	79	184	0	201	180
Floating (AAA) (spread to 1-mo. LIBOR)					
3.5-year (LIBOR ARMs)	96	32	-1	36	31
3.5-year (HELOC)	120	31	-1	35	30
Manufactured Housing					
Fixed (AAA)					
1-year	22	121	2	152	99
2-year	3	149	6	194	128
3-year	22	184	6	184	132
5-year	26	197	3	201	156
7-year	22	220	3	220	182
10-year	53	252	6	252	191
(AA)					
11-year	255	300	0	300	265
(BBB)					
7-year	82	625	0	625	485
(BBB-/Baa3)					
16-year	229	1507	0	1507	1010

*All spreads quoted to the on-the-runs.

	2-yr	3-yr	5-yr	7-yr	10-yr
On-the-Run	39	69	67	80	72
Swap Sprd (bp)					
1-Week Change	4	1	1	1	1

SECONDARY MARKET BULLET BID SIDE SPREADS, February 1, 2002, bp

Maturity	AA				A				BBB			
	Sprd/ 1-wk Chg	High	Low	Avg	Sprd/ 1-wk Chg	High	Low	Avg	Sprd/ 1-wk Chg	High	Low	Avg
Industrials												
5	59/-1	95	58	74	85/-1	135	85	114	121/+4	170	117	142
10	81/-2	113	76	92	109/-1	161	109	136	136/+3	187	133	158
30	95/-2	125	95	107	132/-1	170	132	153	157/+3	199	154	177
Utilities												
5	-	-	-	-	114/+2	153	112	135	163/0	200	163	185
10	-	-	-	-	134/+2	168	132	154	182/0	220	182	205
30	-	-	-	-	151/-1	188	151	172	200/0	240	200	223
Finance												
3	55/-35	103	55	88	204/+12	210	177	195				
5	78/-26	125	78	105	210/+17	237	170	206				
10	100/-18	148	100	131	220/+13	253	207	227				
Banks												
3	60/0	115	60	84	83/0	120	83	102				
5	78/0	120	78	97	92/-1	127	92	111				
10	105/0	138	105	123	133/+6	170	127	146				
High Yield												
10	395/+14	550	381	468	620/+7	932	613	787				

APPROXIMATE BENCHMARK BID SPREADS OF THE 20 LARGEST ISSUERS IN THE CREDIT INDEX, February 1, 2002

	2 yr.	5 yr.	10 yr.	30 yr.	Mkt. Val. (12/31, \$ mn)	% Credit Index	MAD
Ford/Ford MotCred(Baa1/BBB+)/(A3/BBB+)	235	270	270	280	66,068,460	3.53	5.16
CitiGroup /Citicorp (Aa1/AA-)	50	75	100	120	47,832,960	2.56	4.20
GM/GMAC (A3/BBB+)/(A2/BBB+)	180	180	210	220	46,822,988	2.50	5.59
IBRD (Aaa/AAA)	30	50	62	75	32,038,382	1.71	3.46
BankAmerica Corp (Aa3/A)	70	85	130	145	27,005,604	1.44	4.95
AT&T (A3/BBB+)	170	190	210	225	26,617,666	1.42	6.55
GE (Aaa/AAA)	35	70	85	n/a	26,484,578	1.42	4.01
Mexico (Baa3/BB+)	90	224	265	293	26,062,550	1.39	6.92
Worldcom Inc (A3/BBB+)	325	350	285	290	25,124,620	1.34	5.93
Household Finance (A2/A)	150	190	200	n/a	24,514,672	1.31	4.44
IADB (Aaa/AAA)	35	55	67	80	23,840,072	1.28	4.06
Verizon Communications (A1/A+)	75	90	119	135	23,804,724	1.27	6.90
Tyco International (Baa1/A)	325	300	260	265	19,738,796	1.06	3.72
Wells Fargo (Aa2/A)	60	80	110	n/a	19,540,992	1.05	3.98
DaimlerChrysler (A3/BBB+)	180	185	205	215	19,374,996	1.04	5.56
Republic of Italy (AA3/AA)	30	60	70	90	19,347,694	1.03	5.17
Qwest Communications Intl (Baa1/BBB+)	315	300	280	290	19,025,838	1.02	6.13
Wachovia (A1/A)	80	95	120	n/a	17,548,658	0.94	4.43
Lehman Brothers (A2/A)	70	120	155	n/a	17,458,370	0.93	3.92
Morgan Stanley Dean Witter (Aa3/AA-)	75	90	130	n/a	17,047,308	0.91	4.11
Average 2/1/2002	129	153	167	195	543,299,928	29.15	
Change vs. 1/25/2002	23	21	17	18			
Year-to-date Change	8	15	7	6			

REPRESENTATIVE INVESTMENT-GRADE SPREADS

	Cpn.	Matur.	Rating	Approx. Bid			Cpn.	Matur.	Rating	Approx. Bid			
				1/25/02	2/1/02	Chg.				1/25/02	2/1/02	Chg.	
Industrial						Emerging Yankees							
Wal-Mart	5.450	8/1/2006	AA2/AA	50	50	0	KDB	7.375	9/17/2004	Baa2/BBB+	160	160	0
CSX	6.750	3/15/2011	Baa2/BBB	135	135	0	ROK	8.875	4/15/2008	Baa2/BBB+	150	180	30
Philip Morris	7.500	7/15/2009	A2/A	145	145	0	Endesa	7.750	7/15/2008	Baa1/BBB+	315	325	10
Qwest Comm	7.250	2/15/2011	Baa1/BBB+	250	280	30	Mexico	9.875	2/1/2010	Baa3/BB+	265	270	5
Daimler Chrysler	7.300	1/15/2012	A3/BBB+	200	215	15	Average				223	234	11
Tyco Intl	6.375	10/15/2011	Baa1/A	148	260	112	Yankee/Euro						
Sprint	6.875	11/15/2028	Baa1/BBB+	215	230	15	Republic of Italy	4.375	10/25/2006	AA3/AA	63	60	-3
Conoco Funding	7.250	10/15/1931	Baa1/BBB+	118	118	0	Ontario Prov	5.500	10/1/2008	Aa3/AA	102	102	0
United Tech	7.500	9/15/2029	A2/A+	110	110	0	Israel Electric	8.250	10/15/2009	A3/A-	180	185	5
Average				152	171	19	PQ	7.500	9/15/2029	A1/A+	98	99	1
Finance						Crossover							
Ford	6.500	1/25/2007	A3/BBB+	243	272	29	Golden State	7.000	8/1/2003	Ba1/BB+	275	275	0
Prudential	6.375	7/23/2006	A2/A+	115	110	-5	Tricon Global	7.450	5/15/2005	Ba1/BB	270	270	0
GMAC	6.875	9/15/2011	A2/BBB+	200	212	12	Starwood	6.750	11/15/2005	Ba1/BBB-	350	350	0
BankAmerica	7.400	1/15/2011	Aa3/A	118	118	0	Columbia/HCA	7.000	7/1/2007	Ba1/BB+	200	200	0
Citigroup	6.500	1/18/2011	Aa1/AA-	98	98	0	TRW	7.125	6/1/2009	Baa2/BBB	260	260	0
Merrill Lynch	6.875	11/15/2018	Aa3/AA-	120	120	0	Average				271	271	0
Average				149	155	6	INVESTMENT-GRADE CREDIT QUALITY RATINGS CHANGES						
Utility						February 1, 2002							
El Paso	7.800	8/1/1931	Baa2/BBB	235	245	10	Moody's		Moody's		S&P		
CP&L	5.950	3/1/2009	A3/BBB+	125	115	-10	Up	Down	Dwngd	Ratio	Up	Down	Dwngd
Dynegy	8.125	3/15/2005	Baa3/BBB+	\$98	\$96	-\$2	Up	Down	Ratio	Up	Down	Ratio	Ratio
Capital Securities & Pfd						1998							
Riggs	8.625	12/31/1926	Ba2/B+	600	600	0	68	123	1.81	68	135	1.99	
Bankers Trust	7.900	1/15/1927	A2/A	220	225	5	30	48	1.60	28	55	1.96	
JP Morgan	7.540	1/15/1927	A1/A	205	215	10	103	166	1.61	93	178	1.91	
Sumitomo	9.400	Perp	Baa1/BB	550	575	25	82	209	2.55	63	198	3.14	
Average				394	404	10	YTD 2002	2	17	8.50	0	14	0.00
							Last Week	0	4	0.00	0	6	0.00

Global Fixed-Income Market Data

ISSUANCE VOLUME, \$ million

	1/28- 2/1	Jan 2002	Jan 2001	2002	2001
U.S. Treasuries and Agencies					
Treas (gross)	57,000	145,000	201,103	145,000	2,761,064
Treas (net)*	-9,400	-11,000	10,441	-11,000	16,188
Agencies	5,056	50,667	45,514	50,667	649,469
Subtotal	62,056	195,667	246,617	195,667	3,410,533
U.S. Securitized					
Agency**	-	-	47,012	0	948,719
CMBS	1,008	298	2,787	298	86,870
U.S. ABS	1,764	22,233	24,666	22,233	236,266
REMIC***	-	3,300	17,184	3,300	387,634
Subtotal	2,772	22,531	74,465	22,531	1,271,855
U.S. Corporates					
High Grade	6,050	50,509	70,948	50,509	587,805
High Yield	N/A	7,488	13,931	7,488	73,125
Subtotal	6,050	57,997	84,879	57,997	660,929
Total U.S. Issuance	70,878	270,473	405,961	270,473	4,414,639

*Includes Cash Management Bills.

** Agency Mortgages reflect issuance compiled on a monthly basis.

*** Reflects projected January 2002 supply; REMIC supply is not counted in Total U.S. Issuance.

UPCOMING TREASURY ISSUANCE, \$ billion

Issue	Auction	Settle	Size	Maturing	Net New Cash
Bills					
13 & 26 weeks	2/4	2/7	30.00	30.00	0.00
28-day (weekly)	2/5	2/7	12.00	6.00	6.00
13 & 26 weeks	2/11	2/14	30.00	30.00	0.00
28-day (weekly)	2/12	2/14	12.00	6.00	6.00
13 & 26 weeks	2/19	2/21	30.00	30.00	0.00
28-day (weekly)	2/20	2/21	12.00	6.00	6.00
13 & 26 weeks	2/25	2/28	30.00	29.00	1.00
28-day (weekly)	2/26	2/28	12.00	12.00	0.00
Coupons					
5-year note	2/5	2/15	16.00		
10-year note	2/6	2/15	13.00	4.20	24.80

APPROXIMATE BENCHMARK BID SPREADS OF THE LARGEST ISSUES IN THE HIGH-YIELD INDEX, February 1, 2002

	Coupon	Maturity	Rating	Outstand. (\$ mn)	% of Index	Price		Bid Spread (bp)	
						Current	1-wk Chg	Current	1-wk Chg
FINOVA GROUP INC	7.5	40132	NR/NR	3260	0.86911	38	0.5	2200.33	-26.9099
NEXTEL COMMUNICATIONS INC	9.375	40132	B1/B	2000	0.533196	72.5	-3.5	1072.24	98.276
ALLIED WASTE NORTH AMER	10	40026	B2/B+	2000	0.533196	101	-3	485.499	61.94501
NEXTEL COMMUNICATIONS INC	0	39493	B1/B	1627	0.433755	67	-2.25	1147.05	79.62
ECHOSTAR DBS CORP	9.375	39845	B1/B	1625	0.433222	104.25	-0.75	360.394	19.112
TELEWEST COMMS PLC	11	39356	B2/B	1536	0.409601	70.5	0	1450.94	9.05
WILLIAMS COMM GROUP INC.	8.5	39569	Baa3/BB+	1500	0.399897	30	-12	3680.26	1070.66
CHARTER COMM HLDS LLC	8.625	39904	B2/B+	1500	0.399897	95.5	-1.125	463.595	24.83701
CHARTER COMM HLDS LLC	0	40634	B2/B+	1475	0.393232	73.5	-0.5	647.971	14.659
LEVEL 3 COMMUNICATIONS	9.125	39569	Caa1/CCC+	1430	0.381241	39	-9	2763.25	591.6299
Average						69.125	-3.1625	1427.153	194.2879

INVESTMENT-GRADE CORPORATE ISSUANCE BY MATURITY, Week ending February 1, 2002, \$ million

	1-5 yr	6-12 yr	13 yr+	Total	%		1-5 yr	6-12 yr	13 yr+	Total	%
By Sector						By Credit Quality					
Industrial	800	600	0	1,400	23	Aaa	2,000	0	0	2,000	33
Utility	400	0	0	400	7	Aa	1,000	0	0	1,000	17
Finance	1,250	1,000	0	2,250	37	A	650	1,000	0	1,650	27
Non-Corporate	2,000	0	0	2,000	33	Baa	800	600	0	1,400	23
Total	4,450	1,600	0	6,050		Total	4,450	1,600	0	6,050	
	74%	26%	0%				74%	26%	0%		
By Structure						Total InvGrade					
Noncall	4,450	1,600	0	6,050	100	Other	0	0	0	0	0
Callable	0	0	0	0	0	FRN's	0	0	0	0	0
Putable	0	0	0	0	0	Pfd	0	0	0	0	0
Total	4,450	1,600	0	6,050		Total USD	4,450	1,600	0	6,050	
	74%	26%	0%				74%	26%	0%		

U.S. CORPORATE AND ABS ISSUANCE

Date	Size (\$ mn)	Issuer	Cpn. (%)	Maturity and Callability	Ratings	Spread (bp)	Manager(s)
2/1	1000.00	CCCIT 2002-A2	3ML+3	02/15/05	Aaa/AAA	3ML+3	SSB/LEH/ML
2/1	250.00	AMERICAN EXPRESS	4.250	02/07/05	Aa3/A+	120	MS
2/1	600.00	COMPUTER ASSOCIATES INTL	8.375	02/15/12	Baa1/BBB+	350	BAS/SSB
2/1	400.00	COMPUTER ASSOCIATES INTL	7.500	02/15/07	Baa1/BBB+	325	BAS/SSB
2/1	125.00	JACOBS ENTERTAINMENT	11.875	2/1/09@06	B2/B	791	CIBC/USBC/LIBRA
2/1	500.00	SOLECTRON CORP	9.625	2/15/09@06	Ba1/BB+	470	GS
1/31	125.50	CENTRAL P&L A1	S+7	1.9 A/L	Aaa/AAA	S+7	GS/BEAR/CSFB/ML/SSB
1/31	151.90	CENTRAL P&L A2	S+11	4.7 A/L	Aaa/AAA	S+11	GS/BEAR/CSFB/ML/SSB
1/31	107.80	CENTRAL P&L A3	S+14	7.3 A/L	Aaa/AAA	S+14	GS/BEAR/CSFB/ML/SSB
1/31	217.20	CENTRAL P&L A4	S+24	10.0 A/L	Aaa/AAA	S+24	GS/BEAR/CSFB/ML/SSB
1/31	195.00	CENTRAL P&L A5	S+34	13.0 A/L	Aaa/AAA	S+34	GS/BEAR/CSFB/ML/SSB
1/31	147.00	CONSECO 2002-A A-1A	1ML+25	0.95 A/L	Aaa/AAA	25	DBAB/CSFB/LEH/ML
1/31	56.00	CONSECO 2002-A A-1B	+85/E	0.95 A/L	Aaa/AAA	85/E	DBAB/CSFB/LEH/ML
1/31	68.00	CONSECO 2002-A A-2	S+120	2.00 A/L	Aaa/AAA	S+120	DBAB/CSFB/LEH/ML
1/31	102.00	CONSECO 2002-A A-3	S+115	3.00 A/L	Aaa/AAA	S+115	DBAB/CSFB/LEH/ML
1/31	53.00	CONSECO 2002-A A-4	S+137	5.00 A/L	Aaa/AAA	S+137	DBAB/CSFB/LEH/ML
1/31	65.00	CONSECO 2002-A A-5	S+165	7.59 A/L	Aaa/AAA	S+165	DBAB/CSFB/LEH/ML
1/31	42.00	CONSECO 2002-A M-1	1ML+185	5.45 A/L	Aa2/AA	185	DBAB/CSFB/LEH/ML
1/31	30.00	CONSECO 2002-A M-2	1ML+275	5.44 A/L	A2/A-	275	DBAB/CSFB/LEH/ML
1/31	200.00	MERISTAR HOSPITALITY CORP	9.125	01/15/11	B1/B+	440	LEH
1/31	500.00	MERRILL LYNCH & CO	5.360	02/01/07	Aa3/AA-	-	ML
1/31	480.00	SIX FLAGS INC	8.875	2/1/10@06	B3/B	391	LEH
1/30	250.00	CCCIT 2002-C2	6.950	02/18/14	Baa2/BBB	S+129	SSB/JPM/ML
1/30	376.00	IMM 2002-1 A-1	1ML+32	2.16 A/L	Aaa/AAA	32	CSC/GCM
1/30	1000.00	FFCB	3.875	02/01/05	Aaa/N/A	92.5	HSBC/MS
1/30	160.00	FHLB	4.125	11/15/04	Aaa/N/A	-	UBSW/USBPJ
1/30	152.50	FHLB	2.250	02/05/03	Aaa/N/A	-	FUJI/VS/WACH
1/30	150.00	FHLMC	3.400	2/13/04@8/02	Aaa/N/A	-	CSFB/JPM/UBSW
1/30	250.00	ARCEL FINANCE LIMITED	5.984	02/01/09	Aaa/AAA	180	
1/30	100.00	BAYERISCHE LANDESBANK NY	FF+14	02/14/04	Aaa/AAA	FF+14	BAS
1/30	130.00	BEAR STEARNS CO INC	FF+15	02/03/03	A2/A	FF+15	BEAR
1/30	150.00	PROTECTIVE LIFE US FNDG	3ML+25	02/04/05	N/A/N/A	3ML+25	
1/29	215.00	FHLB	5.350	2/12/07@03	Aaa/N/A	-	GCM/HSBC/MS/PRU
1/29	150.00	FNMA	3.950	8/19/04@03	Aaa/N/A	-	ML
1/29	150.00	SLMA	2.450	02/28/03	Aaa/N/A	-	BOCM/FUJI
1/29	2000.00	ASIAN DEVELOPMENT BANK	4.875	02/05/07	Aaa/AAA	51	HSBC/MSDW/NOMURA
1/29	100.00	BANK OF NOVA SCOTIA	2.160	02/04/03	Aa3/N/A	-	BAS
1/29	125.00	BANK ONE NA ILLINOIS	3ML+3	02/01/04	Aa2/A+	3ML+3	BAS
1/29	1000.00	BARCLAYS BANK PLC NY	3ML-7	07/31/03	Aa1/N/A	3ML-7	BAS
1/29	175.00	COVENTRY HEALTH CARE INC	8.125	2/15/12@07	Ba3/BB+	302	SSB/GS/LEH/CIBC
1/29	150.00	GOLDEN FUNDING CORP	3ML+50	08/01/05	N/A/N/A	3ML+50	
1/29	400.00	MERRILL LYNCH & CO	5.360	02/01/07	Aa3/AA-	-	ML
1/29	400.00	PETROLEO BRASILEIRO SA	9.125	02/01/07	Baa1/N/A	485	
1/29	400.00	SOUTHER CO CAP FUNDING	5.300	02/01/07	A3/A-	103	GS
1/29	1000.00	WELLS FARGO & CO	5.125	02/15/07	Aa2/A+	79	BEAR/CSFB
1/28	335.00	FFCB	1.830	08/01/02	Aaa/N/A	-	SELLING GROUP
1/28	1135.00	FFCB	1.720	05/01/02	Aaa/N/A	-	SELLING GROUP
1/28	157.00	FHLB	4.875	11/15/06	Aaa/N/A	-	BARCAP/LEH/ML/USBPJ
1/28	168.00	FHLB	2.375	02/04/03	Aaa/N/A	-	HSBC/UBSW
1/28	150.00	FHLMC	4.000	8/6/04@8/02	Aaa/N/A	-	CSFB/UBSW
1/28	150.00	FNMA	5.300	2/20/07@03	Aaa/N/A	-	FTN/HSBC/MS
1/28	150.00	AZTECA HOLDINGS SA	10.500	07/15/03	B3/B-	-	
1/28	250.00	BEAR STEARNS CO INC	2.610	02/28/03	A2/A	-	BEAR
1/28	1000.00	US BANK NA	6.300	02/04/14	A1/A	125	LEH/USBPJ
1/28	74.90	CORTS-SHERWIN WILLIAMS	7.250		A2/A	-	SSB

EUROPEAN CORPORATE AND ABS ISSUANCE, U.S. dollar only

Date	Size (\$ mn)	Curr.	Issuer	Coupon	Maturity	Rating	Price/Spread	Manager(s)
1/28	300.0	USD	Totalfianelf Capital SA	5.125	2/12/2007	Aa2/AA	72	ING,JPM
1/28	150.0	USD	Azteca Holdings SA	10.5	7/15/2003	B3/B-	N/A	BEAR
1/28	1000.0	USD	US Bank NA	6.3	2/4/2014	Aa3/A	125	Leh
1/28	175.0	USD	Gatx Corp	7.5	2/1/2007	Baa2/BBB+	N/A	JPM,SSB
1/28	300.0	USD	Toyota Motor Credit Corp	4.875	2/14/2006	Aa1/AAA	169	DRKW,INGBBL
1/29	250.0	USD	John Hancock Glob Fdg II	5.5	12/31/2007	Aa2/AA+	N/A	BNPPAR,RBCCAP
1/29	175.0	USD	Ritek Corp	0.5	2/5/2007	x/BB-	N/A	CSFB,JPM
1/29	300.0	USD	Ecolab Inc	5.375	2/7/2007	A2/A	88	CSFB,JPM,SSSB
1/29	300.0	USD	Kommunalkredit Austria	3M L +10	1/19/2005	Aa3/x	N/A	BASL
1/29	175.0	USD	Coventry Health Care Inc	8.125	2/15/2012	Ba3/BB+	302	SSB
1/29	1000.0	USD	Wells Fargo & Co	5.125	2/15/2007	Aa2/A+	79	BEAR,CSFB
1/29	400.0	USD	Petrobras Intl Finance	9.125	2/1/2007	Baa1/x	485	MS,UBSW
1/30	500.0	USD	Key Bank NA	3M L +200	2/7/2007	A1/A	N/A	CSFB,JPM
1/30	300.0	USD	Deutsche Bank AG	3.375	10/17/2005	Aa3/AA	N/A	
1/30	250.0	USD	AO Siberian Oil Co	11.5	2/13/2007	Ba3/x	721	SSSB
1/30	250.0	USD	Arcel Finance Limited	5.984	2/1/2009	Aaa/AAA	180	SSB
1/31	500.0	USD	AB Spintab	3M L FLAT	8/13/2003	Aa2/x	N/A	BARCLY
1/31	100.0	USD	Council of Europe	6.125	1/25/2011	Aaa/AAA	N/A	CSFB
1/31	140.0	USD	Macronix Intl Co	0.5	2/7/2007	x/x	N/A	DB,ML
1/31	200.0	USD	Meristar Hospitality Corp	9.125	1/15/2011	B1/B+	440	LEH
1/31	480.0	USD	Six Flags Inc	8.875	2/1/2010	B3/B	391	LEH

UPCOMING DATA RELEASES

Sunday • February 3

- Turkey: Consumer Prices (Jan)
- Turkey: Private Sector Mftg (Jan)
- Turkey: Wholesale Prices (Jan)

Monday • February 4

- Japan: Monetary Base (Jan)
- Malaysia: Trade Balance (Dec)
- Philippines: Exports (Dec)
- Euro Area: Consumer Confidence (Jan)
- Euro Area: Industrial Confidence (Jan)
- Euro Area: Producer Prices (Dec)
- Spain: Unemployment (Jan)
- Spain: Unemployment Change (Jan)
- U.K.: PMI Construction, Business Activity Index (Jan)
- U.K.: PMI Construction, Rates Charged Index (Jan)
- U.K.: Narrow Money (M0) (Jan)
- U.K.: CBI Distributive Trades Survey (Jan)
- Sweden: Consumer Confidence (Jan)
- Norway: Unemployment (Jan)
- Hungary: NBH Policy Meeting, 2-Week Repo Rate
- Hungary: Trade Balance (Dec)
- Hungary: Current Account Balance (Dec)
- South Africa: New Car Sales (Jan)
- U.S.: Domestic Auto Sales (Jan)
- Argentina: Gov't Tax Revenue (Jan)
- Peru: Central Bank GDP Data (Dec)

Tuesday • February 5

- Japan: Prelim Leading Diff Idx (Dec)
- Japan: Prelim Coincident Diff Idx (Dec)
- Philippines: Consumer Price Index (Jan)
- Taiwan: Consumer Price Index (Jan)
- Australia: NAB Survey: Business Conditions (Dec)
- Australia: NAB Survey: Business Confidence (Dec)
- Euro Area: Unemployment (Dec)
- Euro Area: ECB Refinancing Operation (Average Rate)
- Euro Area: Service Sector PMI (Jan)
- Euro Area: Composite PMI (Jan)
- Germany: Service Sector PMI (Jan)
- France: Service Sector PMI (Jan)
- Italy: Service Sector PMI (Jan)
- Italy: New Car Registrations (Jan)
- Spain: Industrial Production (Dec)
- U.K.: PMI Services, Business Activity Index (Jan)
- U.K.: PMI Services, Prices Charged Index (Jan)
- U.S.: Factory Orders (Dec)
- U.S.: Non-defense Cap Goods Ex Air (Dec)
- U.S.: Non-manufacturing PMI (Jan)
- Brazil: Inflation (Sao Paulo) (Jan)
- Argentina: Consumer Price Index (Jan)
- Argentina: Vehicle Sales (Jan)
- Chile: Inflation (Jan)
- Colombia: Inflation (Jan)
- Ecuador: Trade Balance (Dec)

Wednesday • February 6

- Germany: Employment Change (Nov)
- Germany: Unemployment (Jan)
- U.K.: Halifax House Prices (Jan)
- U.K.: New Car Registrations (Jan)
- Switzerland: CPI (Jan)
- Hungary: Industrial Output (Dec)
- South Africa: Retail Sales (Nov)
- U.S.: Non-farm Productivity (Q4)
- U.S.: Non-farm Unit Labor Costs (Q4)
- Canada: Building Permits (Dec)
- Canada: Help-Wanted Index (Jan)
- Brazil: Industrial Production Index (Dec)

Thursday • February 7

- Japan: BOJ Policy Board Meeting
- Japan: Tokyo Consumer Confidence (Jan)
- Hong Kong: Retail Sales (Dec)
- Philippines: Cen Bank Monetary Policy Mtg
- S. Korea: Cen Bank Monetary Policy Mtg
- Taiwan: Trade Balance (Jan)
- Taiwan: Exports (Jan)
- Australia: Trade Balance (Dec)
- Euro Area: ECB Governing Council Policy Meeting
- Euro Area: GDP (Q4)
- Germany: Manufacturing Orders (Dec)
- Netherlands: Industrial Production (Dec)
- U.K.: Manufacturing Output (Dec)
- U.K.: Monthly MPC Mtg, Repo Rate (Feb)
- Norway: Manufacturing Production (Dec)
- Switzerland: SECO Cons Confidence (Q1)
- Denmark: Retail Sales (Nov-Dec)
- Denmark: Industrial Sales (Dec)
- Norway: Real Mainland (Non-oil) GDP (Q4)
- Czech Rep: CNB Inflation Report
- South Africa: Electricity Production (Dec)
- U.S.: Initial Jobless Claims (2-Feb)
- U.S.: Consumer Credit (Dec)
- Mexico: Gross Fixed Investment (Nov)
- Mexico: Inflation (Jan)
- Peru: Trade Balance (Dec)

Friday • February 8

- Japan: BOJ Policy Board Meeting
- Japan: Bank Lending (Jan)
- Japan: M2+CDs (Jan)
- Japan: Domestic Wholesale Price Index (Jan)
- Japan: All-Household Spending (Dec)
- Japan: Core Machinery Orders (Dec)
- Germany: Industrial Production (Dec)
- Netherlands: HICP (Jan)
- Sweden: Riksbank's Repo Rate Announce
- Turkey: Industrial Production (Dec)
- Czech Rep: Unemployment (Jan)
- Czech Rep: CPI (Jan)
- South Africa: President Mbeki's State of the Nation Address
- U.S.: Wholesale Inventories (Dec)
- Canada: Unemployment (Jan)
- Canada: Housing Starts (Jan)
- Canada: Purchasing Managers Index (Jan)
- Brazil: Inflation (Jan)

Sometime in the Week:

- Indonesia: Real GDP (Q4)
- Spain: New Car Registrations (Jan)

Fed Rate Move Expected:

- March 19: no move

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303-224-6999 (International)

Passcode: 1484925

Host: Mr. Mark Howard, Global Credit Strategist

Publications: L. Pindyck, A. DiTizio, B. Davenport, W. Lee, D. Kramer, S. Bryant, J. Threadgill, R. Madison, A. Acevedo, K. Kim

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