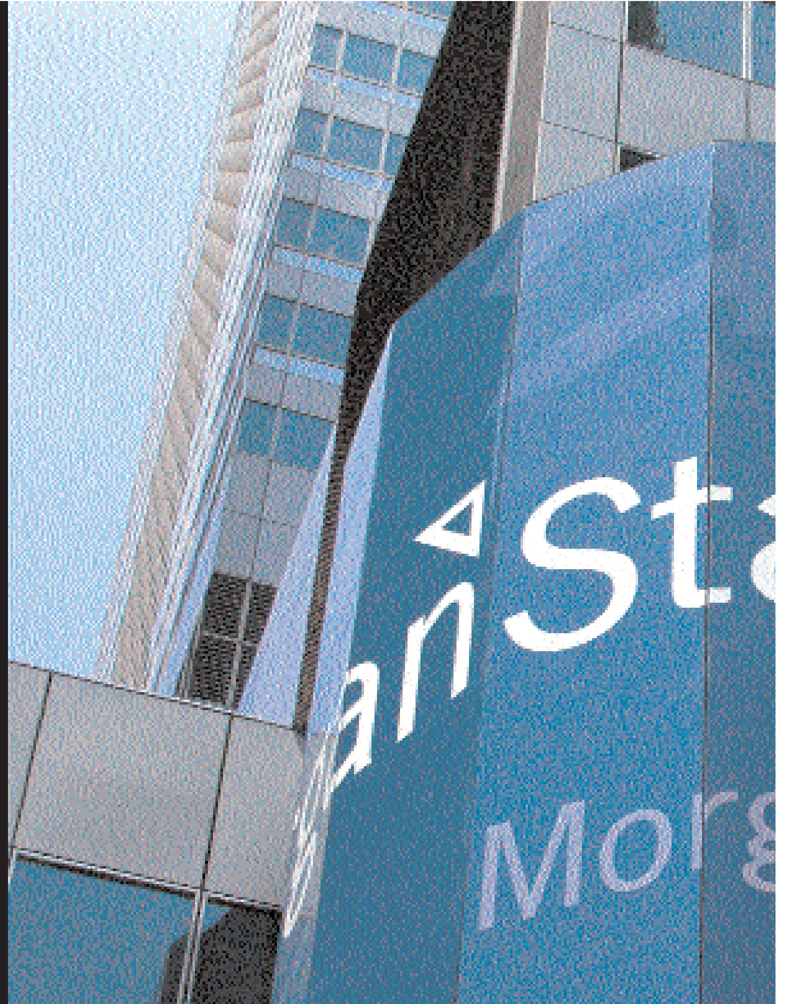
Issues of Interest

Winter 2003

Morgan Stanley Investment Management

Fixed-Income Year-End Review 2002



Morgan Stanley

Morgan Stanley Investment Management Fixed Income: Access, Responsiveness, Choice

Client Interaction

Morgan Stanley Investment Management believes that superior client service is as important as superior investment performance. Through our team of fixed-income portfolio specialists, we aim to provide our clients with the in-depth information needed to understand our portfolio management activities and our latest thinking on the key factors influencing the bond market. We also are committed to working with you to meet your specific needs, from creating cutomized reporting, where available, to assisting with asset/liability management.

In addition, we have created several web sites to allow clients increased access to our Firm at their convenience:

Public Web Site

Our public web site (www.morganstanley.com/im) provides updated performance, characteristics, and commentary for all of our investment strategies, and provides access to a range of investment publications and research.

Client Link

Client Link (https://secure.ms.com), a private, password-protected Internet site created by Morgan Stanley exclusively for clients, allows access to our online Fixed Income Resource Center, which provides current strategy updates and access to a range of our fixed-income research. Client Link also affords participation in online conference calls and access to award-winning Morgan Stanley Fixed-Income and Equity research.

Investment Vehicles

The fixed-income strategies discussed within this publication are available through separate account management and several pooled investment funds.

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1. Introduction

Calendar year 2002 marked the third consecutive year in which U.S. investment-grade bonds outperformed U.S. equities. The favorable performance for the asset class, however, resulted in extreme valuations in many areas of the market which pose new challenges and opportunities for bond investors in the new year.

U.S. Treasury yields fell precipitously during 2002, reflecting an extremely pessimistic market outlook for the economy. Buffeted by uneven economic growth patterns, significant market volatility, accounting concerns, and a wave of credit-rating downgrades, corporate bond investors faced one of the most difficult environments in memory. Mortgage investors confronted a period in which sharp declines in Treasury yields triggered both a spike in mortgage prepayments and significant changes in the composition of the mortgage universe. A rallying euro helped global bonds to outperform the broader-market U.S. fixed-income indices last year for the first time since 1998. Latin American economic and political woes dominated headlines within the emerging markets area, which tended to obscure continued improvement in credit quality within this sector as well as its favorable performance last year.

In short, 2002 was characterized by extreme shifts in risk premia and valuations, with investment-grade corporates, high-yield bonds, and current-coupon mortgages all reaching record-wide yield spread levels and U.S. Treasury yields falling to 40-year lows. Table 1 shows selected market data over the course of the year.

Table 1
Selected Fixed-Income Market Data for 2002

Instrument/Index	12/31/2001	2002 Range	12/31/2002
2-Year U.S. Treasuries	3.02%	1.60% - 3.73%	1.60%
5-Year U.S. Treasuries	4.30%	2.56% - 4.84%	2.73%
10-Year U.S. Treasuries	5.05%	3.57% - 5.43%	3.81%
Investment-Grade Corporates (spread)	183 bp	172 - 290 bp	210 bp
Current-Coupon Mortgages (spread)	95 bp	57 - 116 bp	75 bp
High-Yield (spread)	860 bp	720 - 1,116 bp	947 bp
Emerging-Markets Debt (spread)	728 bp	558 - 938 bp	725 bp
U.S. Dollar/Euro Exchange Rate	$0.8895	$0.8593 - $1.0492	$1.0492

Table: Selected bond yield, yield spread, and currency levels during 2002. U.S. Treasury yields reflect on-the-run (most recently-issued) securities. Investment-Grade Corporate, Current-Coupon Mortgage, High-Yield, and Emerging-Markets Debt data reflect option-adjusted yield spreads versus model U.S. Treasuries and are shown in basis points.
Source: Salomon Smith Barney, CS First Boston, J.P. Morgan Chase, Bloomberg, and Morgan Stanley Investment Management.

These intra-year valuation changes posed great challenges for bond investors last year, but have also created compelling opportunities in various sectors as we enter 2003.

This report is an annual review of Morgan Stanley Investment Management's taxable Core and Core-related Fixed-Income strategies, and is organized around the key decisions we make as fixed-income investors. The report also includes reviews of several of our non-core, or specialty, fixed-income strategies. We hope our clients find this report useful as a summary of the major factors that shaped bond markets and our strategies over the course of the year, and as a guide to our current thoughts as we enter 2003.

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We are proud of our heritage of attracting talented investment professionals to work in our team-based environment. Accordingly, we were pleased to welcome several new members to our team during the course of the year. In keeping with our desire to remain at the forefront of fixed-income knowledge and research, we also completed development of new quantitative methods for evaluating corporate credit risk. The past year also witnessed greater use of our Fixed-Income Resource Center website, and growing participation in our quarterly Core Fixed-Income client conference calls. We hope that these tools will continue to enhance the relationship between our clients and our team.

Looking ahead, our experienced team of fixed-income professionals, supported by an extensive array of fixed-income valuation tools and risk management systems, will strive to take advantage of the most attractive and appropriate fixed-income opportunities while paying careful attention to their associated risks. As always, we pledge our best efforts to provide our clients with both superior investment performance and client service in 2003 and beyond.

2. Core Fixed-Income Overview

While U.S. bond investors fared far better than their equity counterparts during 2002, they nevertheless encountered one of the most challenging market environments in memory. As corporate and mortgage yield spreads reached new highs and U.S. Treasury yields plummeted to levels not seen in over 40 years, the bond market reflected a sharply pessimistic outlook for corporate credit quality, mortgage prepayment patterns, and domestic economic growth.

The most significant developments involved the corporate bond arena. Just as Enron was a lightning rod for accounting and corporate governance concerns in late-2001, so WorldCom served as a focus for similar scrutiny during 2002. Yield spreads widened sharply in almost all corporate bond sectors amidst a wave of credit-rating downgrades, heightened fears of further erosion in credit quality, and the potential for new accounting irregularities to come to light. With investment-grade yield spreads reaching record-wide levels, however, the extra compensation offered by many issues eventually afforded ample compensation for accounting concerns and potential default risk.

Mortgage investors confronted an environment of sharp increases in prepayments as the refinancing wave reached unprecedented levels. The fear of prepayments, however, exceeded the actual prepayment experience. Prepayments were high, but in many cases they were slower than the prepayment speeds implicitly assumed by market prices and yield spreads.

The uneven pattern of economic growth and sharp curtailment in capital spending also affected the markets. As the economic picture deteriorated, U.S. Treasury yields declined sharply. Some portion of the Treasury rally was justified on the basis of selected economic data. The full extent of the rally, however, reflected an implicit market forecast for sustained economic weakness well beyond what could be expected using history as a guide.

Investors should require greater compensation for bearing greater risk. With the benefit of hindsight, it was rational to expect some movement toward higher yield spreads and lower Treasury yields as a response to accounting, prepayment, and economic concerns. Nevertheless, we believed that the market's actual response was an over-reaction reflecting an extremely pessimistic set of implied market forecasts.

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Remaining faithful to our value-driven investment philosophy, we identified extreme market forecasts throughout 2002 and scaled into attractive positions while scaling out of less attractive ones. This disciplined approach meant that we were sometimes early in implementing some strategies, which led to near-term underperformance for most of our Core and Core-related portfolios during 2002. The performance for three of these strategies is summarized in Table 2.

Table 2
MSIM Core Fixed-Income Composite Returns (net of fees)

	2002 Annual Return	10-Year Annualized Returns thorough 12/31/2002
MSIM Core Plus Fixed-Income Composite	7.6%	8.0%
MSIM Investment-Grade Fixed-Income Composite	8.4%	7.8%
MSIM U.S. Core Fixed-Income Composite	8.3%	7.6%
Salomon Broad Index	10.1%	7.5%

Table: MSIM Core Plus, Investment-Grade, and U.S. Core Fixed-Income composite returns and the Salomon Broad Index. The Core Plus strategy allows for opportunistic use of both non-U.S. dollar and below investment-grade securities. The Investment-Grade strategy focuses on issues carrying investment-grade ratings at the time of purchase, but allows for opportunistic use of non-U.S. dollar securities. The U.S. Core strategy is limited to dollar-denominated issues carrying investment-grade ratings at the time of purchase. Composite results shown are prepared and presented in compliance with the Performance Presentation Standards of the Association of Investment Management and Research (AIMR-PPS). AIMR has not been involved with the preparation or review of this report. Composite returns are shown NET of investment advisory fees. Please see the Composite Disclosure Statement in the back of this report for the full AIMR disclosure. Source: Salomon Smith Barney and Morgan Stanley Investment Management.

Our underperformance during 2002 was due largely to the unfavorable impact of our decisions in the corporate credit and interest-rate swap areas, with strategies allowing greater latitude in bearing credit risk experiencing a larger degree of relative underperformance. Active management of interest-rate and yield-curve risk also detracted from relative performance during the period. In contrast, our mortgage activities and opportunistic use of non-dollar bonds (where permitted) had a favorable impact on performance. Table 3 shows an attribution of 2002's relative performance for three of our Core and Core-related strategies versus the Salomon Broad Index.

Table 3
MSIM Core Fixed-Income Performance Attribution for 2002

	Relative Performance Impact (in basis points)		
Key Performance Factor	Core Plus	Investment-Grade	U.S. Core
Credit	-170	-90	-85
Mortgage	+15	+15	+15
Interest-Rate and Yield-Curve	-80	-80	-80
Non-Dollar	+15	+15	n/a
Interest-Rate Swap	-10	-10	-10
Fees	-20	-20	-20
TOTAL	-250	-170	-180

Table: Approximate relative performance impact of key decisions on the model MSIM Core Plus, Investment-Grade, and U.S. Core Fixed-Income strategies versus the Salomon Broad Index; actual client performance will be a function of client-specific investment guidelines. The Credit category is comprised of both corporates and asset-backeds. Fees reflect weighted average investment advisory fees for MSIM separately-managed Core-related Fixed-Income portfolios. Source: Salomon Smith Barney and Morgan Stanley Investment Management.

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All portfolios started 2002 with below-benchmark interest-rate risk positions, which were eliminated early in the year and then reinstated during the third quarter as the Treasury rally gathered increasing momentum. All portfolios also entered 2002 with above-benchmark sensitivities to yield-spread changes in the non-Treasury sectors, which we trimmed during the first half of the year. Part of this move was a response to the heightened risk of the corporate bond market, while some of it reflected our continuing use of interest-rate swaps as a spread duration management tool. Subject to guidelines, we entered into interest-rate swaps where portfolios paid a fixed-rate and received a floating-rate so as to minimize exposure to unattractive liquidity spreads (please see our special section, "Understanding Corporate Yield Spreads," on page 20 of this report for more information on interest-rate swaps); narrow liquidity spreads also justified either a neutral or below-benchmark exposure to the higher-quality end of the non-Treasury spectrum, such as agency debentures. Significant mortgage yield spread volatility and heightened prepayment fears as Treasury yields plummeted allowed for opportunities to actively manage our mortgage exposure. Where guidelines permitted, we maintained exposure to commercial mortgage-backeds (CMBS) via total return swaps where portfolios received the return on a select portfolio of high-quality CMBS issues in exchange for paying a floating-rate. In strategies allowing the use of non-U.S. securities, we also maintained a small, opportunistic non-dollar bond position to take advantage of the relative attractiveness of the euro currency and competitive real yields in Europe versus those in the U.S. We eliminated this position during the third quarter following a sharp rally in the euro.

Tables 4, 5, and 6 on pages 5 and 6 show key sector weights and characteristics for our Core Plus, Investment-Grade, and U.S. Core Fixed-Income portfolios over the course of 2002, along with year-end data for the benchmark.

As we have noted in the past, the percentage allocation to a given sector can be a misleading measure of fixed-income portfolio risk. For example, September 30 data in Tables 4 and 5 show that our Investment-Grade strategy had a slightly higher percentage allocation to corporates, or credits, than our Core Plus strategy. Since the Core Plus strategy included greater use of BBB-rated corporates as well as some opportunistic holdings of below investment-grade corporates, it actually had a higher sensitivity to corporate spreads than the Investment-Grade strategy. This is borne out in the September 30 spread duration line items, as the Core Plus strategy maintained a greater sensitivity to corporate spreads than the Investment-Grade strategy. While our reported cash positions appeared high from time to time in all strategies, this was due solely to our expansive definition of cash and equivalents which includes all highly-liquid securities with durations of less than one year and credit ratings of at least AAA.

Chart 1 on page 5 contains a risk profile comparing the sensitivities of Core Plus, Investment-Grade, and U.S. Core Fixed-Income portfolios and the benchmark to similar risks. As we enter 2003, all portfolios are bearing a below-benchmark level of interest-rate risk and additional sensitivity to mortgage prepayment risk. The Core Plus strategy's spread risk is near that of the benchmark, while credit-constrained portfolios have spread sensitivities further below that of the benchmark as a consequence of their more restrictive guidelines. The aforementioned use of interest-rate swaps as a spread duration management tool allows all of these strategies to maintain conservative spread risk exposures at this time.

Other sections of this report provide more information regarding our key decisions during 2002, and how Core and Core-related portfolios are positioned as we enter 2003. Broadly put, we see several instances where implied market forecasts for economic growth, credit risk, and prepayment risk remain extreme and can only be realized under extremely pessimistic scenarios. The key challenge for bond investors in 2003 is that economic growth could prove to be stronger than the market's prevailing forecast, in which case low Treasury yields and wide yield spreads are unlikely to persist. Accordingly, we have positioned portfolios to lean against these extreme implied forecasts while ensuring compliance with the spirit and letter of client guidelines.

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Chart 1
MSIM Core Fixed-Income Portfolio Risk Profiles: December 31, 2002

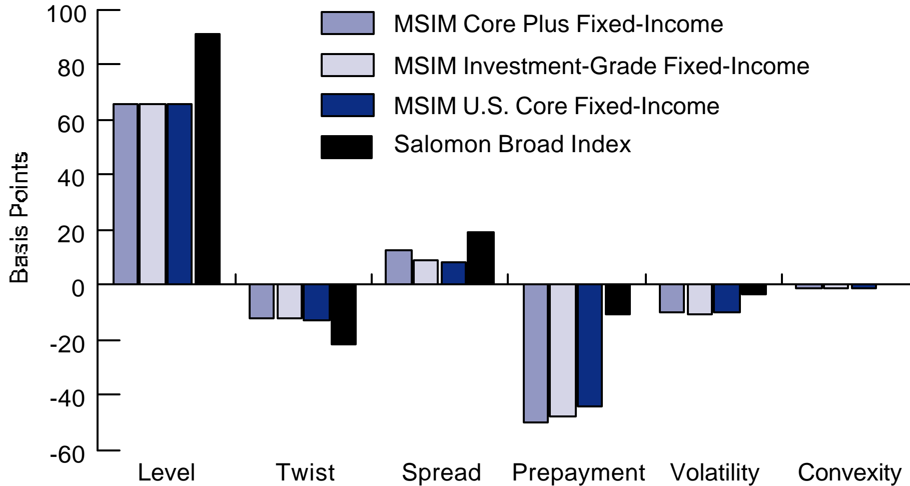

Chart: Comparison of the projected impact on performance of: a 1-standard deviation rally in bond prices; a 1-standard deviation flattening of the yield curve; a 1 standard deviation tightening in option-adjusted spreads; a 10 percent increase in prepayments; a 1-standard deviation increase in volatility; and convexity effects for a 1-standard deviation change in bond prices. Data represent basis point changes in the value of the model MSIM Core Plus, Investment -Grade, and U.S. Core Fixed-Income portfolios and the Salomon Broad Index.
Source: Salomon Smith Barney and Morgan Stanley Investment Management.

Table 4
MSIM Core Plus Fixed-Income Portfolio Trend During 2002

Sector/Strategy	MSIM 12/31/02	MSIM 9/30/02	MSIM 6/30/02	MSIM 3/31/02	MSIM 12/31/01	Salomon Broad Index 12/31/02
Government	14.3%	10.9%	10.8%	1.3%	1.4%	23.1%
Agency	4.3	4.6	3.1	2.6	2.7	14.0
Credit	22.1	22.4	25.8	28.9	35.0	26.4
Mortgage	52.5	51.0	43.3	46.1	52.0	36.4
Cash & Other	6.8	11.1	17.0	21.1	8.9	0.0
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Non-Dollar Exposure	0.0%	0.0%	2.0%	1.7%	1.7%	0.0%
Interest-Rate Sensitivity (yrs)	-1.0	-1.25	Neutral	Neutral	-0.25	---
Spread Duration (yrs)						
Agency	Neutral	Neutral	-0.2	-0.2	-0.2	---
Credit	+0.4	+0.4	+0.7	+0.7	+1.0	---
Mortgage	+1.4	+1.5	+0.8	+1.1	+1.3	---
Interest-Rate Swap	-2.6	-2.7	-2.4	-0.8	-0.2	---
TOTAL	-0.8	-0.8	-1.1	+0.8	+1.9	---
Average Quality	AA+	AA+	AA+	AA	AA	AA+

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Table 5
MSIM Investment-Grade Fixed-Income Portfolio Trend During 2002

Sector/Strategy	MSIM 12/31/02	MSIM 9/30/02	MSIM 6/30/02	MSIM 3/31/02	MSIM 12/31/01	Salomon Broad Index 12/31/02
Government	24.2%	19.3%	25.4%	1.7%	1.8%	23.1%
Agency	4.0	4.1	1.9	1.4	1.6	14.0
Credit	21.2	23.4	25.3	29.9	36.3	26.4
Mortgage	50.6	47.4	33.5	40.0	46.3	36.4
Cash & Other	0.0	5.8	13.9	27.0	14.0	0.0
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Non-Dollar Exposure	0.0%	0.0%	2.1%	1.7%	1.9%	0.0%
Interest-Rate Sensitivity (yrs)	-1.0	-1.25	Neutral	Neutral	-0.25	---
Spread Duration (yrs)						
Agency	Neutral	Neutral	-0.3	-0.3	-0.3	---
Credit	+0.2	+0.3	+0.4	+0.7	+1.1	---
Mortgage	+1.3	+1.4	+0.6	+1.0	+1.3	---
Interest-Rate Swap	-2.7	-2.6	-2.1	-0.6	-0.1	---
TOTAL	-1.2	-0.9	-1.4	+0.8	+2.0	---
Average Quality	AA+	AA+	AA+	AA	AA	AA+

Table 6
MSIM U.S. Core Fixed-Income Portfolio Trend During 2002

Sector/Strategy	MSIM 12/31/02	MSIM 9/30/02	MSIM 6/30/02	MSIM 3/31/02	MSIM 12/31/01	Salomon Broad Index 12/31/02
Government	27.6%	25.5%	16.1%	0.0%	0.0%	23.1%
Agency	4.3	4.4	2.5	2.3	3.1	14.0
Credit	17.1	17.5	20.1	21.3	31.6	26.4
Mortgage	48.7	48.9	39.8	47.5	56.8	36.4
Cash & Other	2.3	3.7	21.5	28.9	8.5	0.0
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Interest-Rate Sensitivity (yrs)	-1.0	-1.25	Neutral	Neutral	-0.25	---
Spread Duration (yrs)						
Agency	Neutral	Neutral	-0.2	-0.2	-0.1	---
Credit	-0.1	Neutral	+0.2	+0.2	+0.9	---
Mortgage	+1.3	+1.4	+0.8	+1.3	+1.4	---
Interest-Rate Swap	-2.6	-2.4	-2.3	-0.6	-0.1	---
TOTAL	-1.4	-1.0	-1.5	+0.7	+2.1	---
Average Quality	AA+	AA+	AA+	AA	AA+	AA+

Tables: Sector and characteristic trends for the model MSIM Core Plus, Investment-Grade, and U.S. Core Fixed-Income strategies and the Salomon Broad Index. The Government category includes all U.S. Treasury securities as well as sovereign securities issued by other major industrialized countries (where permitted by guidelines). The Credit category includes corporates and asset-backeds. Interest-rate sensitivity (IRS) is a proprietary measure of interest-rate risk for an average 100-basis-point interest rate change, taking into account the tendency for level shifts in interest rates to be non-parallel; the table shows the relative IRS position versus the benchmark. Spread duration is a measure of yield spread risk for an average 100-basis-point yield spread change; the table shows the relative spread duration position by sector and for the total portfolio relative to the benchmark. Numbers may not add due to rounding.
Source: Salomon Smith Barney, Standard & Poor's, and Morgan Stanley Investment Management.

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3. Corporates

For corporate bond investors, 2002 was the most challenging year in memory. Our corporate bond management activities hurt the relative performance of our full-authority Core Fixed-Income strategies last year, although clients with less permissive credit guidelines fared better than those permitting a broader range of credit authority. To put this difficult period in perspective, however, requires analysis of the factors influencing the market as we approached the start of 2002.

Looking back, our above-benchmark sensitivity to corporate bond yield spreads had a favorable impact on Core Fixed-Income portfolios during 2001 due mostly to our emphasis on high-quality issues. During that period, we took advantage of systematically wide yield spreads while avoiding many highly-publicized credit problems. Corporate credit risk levels remained high as investors entered 2002, due to the cumulative impact of rising financial leverage trends and growing uncertainty regarding corporate earnings and asset values in a period of sluggish, uneven economic growth. The potential reward for taking risk, however, was also at a high level, as corporate bond yield spreads were near then-historic wide levels.

In early 2002, we were becoming more optimistic that medium- and lower-quality credits would begin to outperform higher-quality corporates as the pessimism following 2001's terrorist attacks lifted and many companies began work to improve their balance sheets. We know now that our optimistic view was premature. Continued economic weakness, fraud revelations at several major corporations, the sharp decline in equity markets, and corporate liquidity concerns kept the corporate bond market under pressure through September. Moody's data covering the investment-grade universe over the first nine months of 2002 showed credit-rating downgrades outnumbering upgrades by more than a 5:1 ratio, with over $144 billion in corporate debt falling out of the investment-grade universe. In a year marked by extreme volatility, even small overweights to the most troubled sectors and companies had a disproportionate impact on performance. Investment-grade corporate yield spreads reached record-high levels during 2002, as shown in Chart 2.

Chart 2
Investment-Grade Corporate Yield Spreads

Chart: Option-adjusted yield spread for the Salomon Corporate Index. Data through December 31, 2002.
Source: Salomon Smith Barney and Morgan Stanley Investment Management.

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While well-diversified, our Core Fixed-Income portfolios were hurt in 2002 by overweight positions in telecommunications firms, which included holdings in WorldCom and Qwest. Despite a favorable decision to underweight electric utilities, exposure to several underperforming credits in this sector also detracted from relative returns. For full-authority portfolios, our opportunistic use of below-investment-grade holdings was modest in terms of market value weight, but any exposure was unfavorable in a year where high-yield indices posted substantial underperformance versus broad investment-grade indices.

The systematic increase in corporate credit risk levels appeared to outpace the rise in corporate yield spreads through mid-year. We reacted to the difficult environment by reducing corporate credit risk during the second and third quarters, especially within our credit-constrained Core strategies. Specific portfolio sales were driven by our fundamental credit analysis, and also guided by development of a new quantitative tool which has enhanced our ability to monitor rapidly-changing default risk within the corporate universe (please see our special section, "New Quantitative Tools: Distance-to-Default," on page 22 of this report for more information). By late-summer, we reached a point where we believed portfolios were positioned appropriately and renewed our emphasis on finding new corporate bond opportunities for potential inclusion in client portfolios. This move coincided with what appeared to be emerging signs of improving credit quality within the context of a depressed market.

Top-down indicators as well as our bottom-up research have revealed the start of a deleveraging trend in Corporate America. Net equity issuance has ceased to be negative. The corporate financing gap -- the excess of spending over internally-generated cash flow -- has improved significantly. Corporate profits are beginning to benefit from significant expense reductions, enhanced efficiencies, and the decline in the U.S. dollar versus some major currencies. Also, the reaction of policymakers and market regulators to accounting fraud and corporate governance failures has led to an improvement in investor confidence. Despite evidence of improving fundamentals, yield spreads remain quite wide and provide ample compensation for risk. In light of improving fundamentals and attractive valuations, our research is leading us to add incremental credit risk into portfolios. We are focusing on those sectors and securities which could benefit most from the aforementioned trends in balance sheets and cash flow, but where prices remain low (and yield spreads remain wide) due to the pervasive climate of caution among bond investors.

After a difficult year like 2002, it is worth reminding clients that the long-term case in favor of corporate bonds remains sound. As shown in Chart 3, the yield advantage offered corporates far outweighs the amount of yield spread needed to cover default losses. The chart also shows that yield spreads are well above average levels, again reflecting the cautious mood pervading the market.

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Chart 3
Corporate Bond Risk and Reward

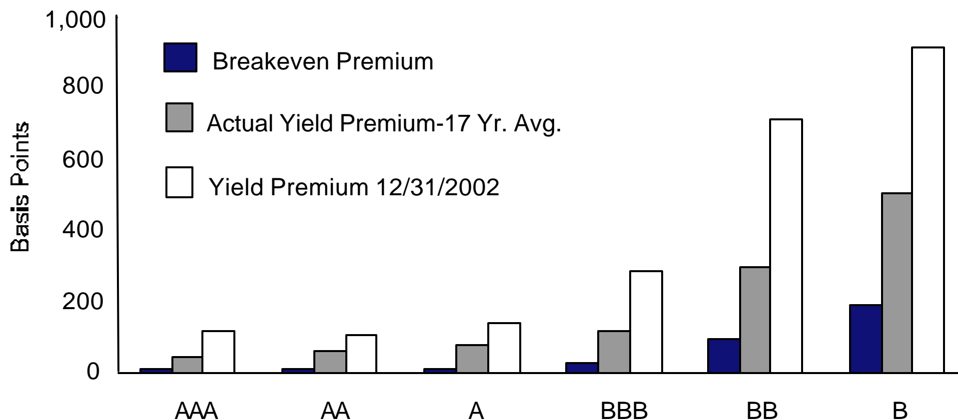

Chart: Yield premium (monthly average of new-issue, ten-year industrial bond yields) versus loss experience. Loss experience, or breakeven premium, is derived from Standard & Poor's default statistics for issuers rated AAA through B, using a weighted average of ten-year cohorts fro 1984 through 2002, and assuming the loss of one coupon payment and 60% of principal upon default. Data through December 31, 2002.
Source: Standard & Poor's and Morgan Stanley Investment Management.

Full-authority Core portfolios enter 2003 with an above-benchmark sensitivity to corporate yield spread changes and a focus on medium quality (i.e., A- and BBB-rated) credits. The picture is slightly different for credit-constrained Core portfolios. We believe there is less value in higher-quality corporate bonds (i.e., AAA- and AA-rated issues); these issues experienced only modest changes in yield spreads during 2002, and their primary risk is liquidity-related and not default-related (please see our special section, "Understanding Corporate Credit Spreads," on page 20 of this report for more information). Given the lack of value among higher-quality bonds, credit-constrained Core portfolios have corporate yield-spread sensitivities closer to those of their benchmarks. In all portfolios, however, we continue to assess opportunities and look to extend our corporate exposure in an appropriate manner.

Favored sectors include the auto, paper and forest products, media, and real estate-related areas. As always, we maintain an emphasis on diversification and small positions sizes -- a hallmark of our style. Despite the challenges of 2002, the new year finds us focused on carefully assessing values and risks so we can take advantage of the most appropriate corporate bond opportunities for our clients.

4. Mortgages

Mortgage investors faced an environment of heightened yield-spread volatility and prepayment fears during 2002. Chart 4 shows a longer-term history of option-adjusted yield spreads on fixed-rate current-coupon mortgages. While the volatility allowed us to add value by actively managing the spread duration of our mortgage holdings, our focus on higher-coupon issues hurt relative performance as short-term U.S. Treasury yields plummeted. These factors offset each other to a large extent, and our mortgage management activities had a small but favorable return impact on full-authority Core Fixed-Income portfolios.

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Chart 4
Option-Adjusted Yield Spreads on Current-Coupon MBS

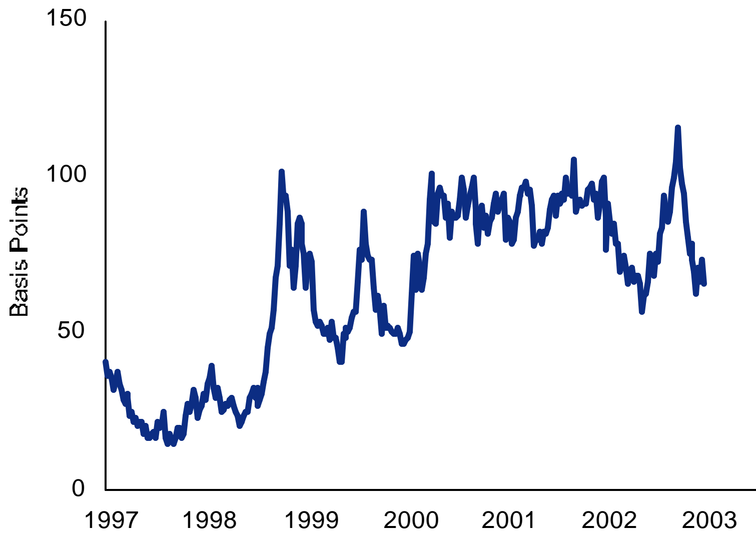

Chart: Option-adjusted yield spread on fixed-rate current-coupon FNMA MBS. Data through December 31, 2002.
Source: FNMA, Salomon Smith Barney, and Morgan Stanley Investment Management.

The option-adjusted spread (OAS) on current-coupon mortgages stood at 95 basis points as we entered 2002, which represented good historical value; consequently, our mortgage spread duration level within full-authority portfolios was correspondingly high at approximately 1.3 years above the mortgage component of broad market indices, such as the Salomon Broad and Lehman Aggregate. By late-May, two-year U.S. Treasury yields rose by 17 basis points and intermediate-maturity Treasury yields were nearly unchanged from year-end 2001 levels; current-coupon mortgage OAS, however, had tightened to just 63 basis points. As spreads tightened through the spring, we responded by reducing our spread duration level to approximately 0.8 years above the indices' mortgage component.

Mortgage yield spreads widened through the summer, with current-coupon OAS rising to 90 basis points by August and then 116 basis points by late-September. In response, we increased mortgage exposures by raising our spread duration in several stages before reaching a peak of nearly 1.5 years above the index by the end of the third quarter. Yield spreads then stabilized and moved lower for most of the fourth quarter, with OAS dropping to 75 basis points by the end of the year. Accordingly, we trimmed a portion of our exposure while maintaining an above-benchmark mortgage spread duration strategy within Core portfolios as the year came to a close. By bearing mortgage liquidity risk when the market was offering unusually attractive expected returns, we added significant value to portfolios over the course of 2002.

An increase in prepayment fears during 2003, however, offset most of the benefits derived from our successful spread duration management activities. In response to the Treasury market rally during the summer and fall, prepayment fears escalated as mortgage rates reached 40-year lows. Since our portfolios had an overweight in prepayment risk due to an emphasis on higher-coupon issues, this resulted in short-term underperformance. The main source of our prepayment risk overweight involved "enhanced mortgage cash" -- mainly, mortgage pools with coupons at or above 7.5-percent. For several years, we have held enhanced cash assets, such as higher-coupon short-duration mortgages, within client portfolios as a source of funds to pay for to-be-announced (TBA) mortgage contracts in the event that we elected to take delivery of these mortgages. This enhanced cash strategy

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outperformed commercial paper during 1999-2001, but detracted from relative performance last year. While these higher-coupon mortgages failed to keep pace with the sharp rally in short-term Treasuries, their cash-flow performance is sound; actual prepayment speeds remain at or below the market's implied prepayment speed forecasts, and the bonds continue to represent excellent value relative to other short-duration assets.

Our proprietary mortgage pool delivery management model proved quite beneficial to us during 2002. As noted above, we have the ability to take delivery of TBA mortgages as we always maintain sufficient cash equivalents to pay for these bonds. Mortgage pools of the same coupon and origination year, however, can have significantly different prepayment rates. Our proprietary pool delivery model allows us to identify mortgage pools likely to prepay faster or slower than their cohorts based on the pool's characteristics and past prepayment history. Given the large size of mortgage assets that we manage, we have found the delivery process for premium, or high-coupon, mortgage pools usually provides us with a cross-section of mortgages which would include both "fast-paying" pools and "slow-paying" pools (smaller bond managers usually receive only the faster pools). We sort through the pools we receive, and seek to retain the "slow" pools while selling the "fast" pools.

Chart 5
FNMA 8.0%-Coupon Pool Sorting

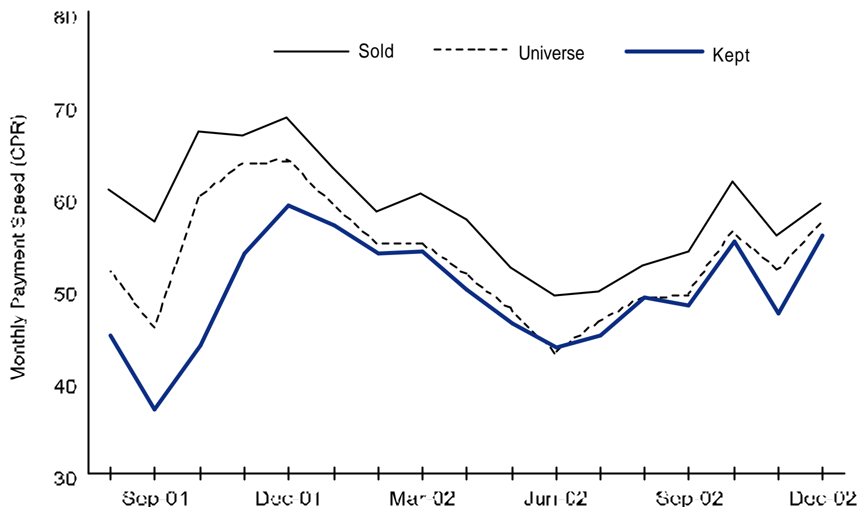

Chart: Prepayment speeds (constant prepayment rate or CPR) for FNMA 8.0%-coupons delivered to MSIM during the fourth quarter of 2001. Data through December 31, 2002.
Source: FNMA, Salomon Smith Barney, and Morgan Stanley Investment Management.

The success of this pool-sorting strategy can be seen in Chart 5 which shows the subsequent prepayment speeds of the FNMA 8.0%-coupon MBS delivered to us in the fourth quarter of 2001. The "Universe" line on the chart shows the monthly prepayment rate of all FNMA 8.0%-coupon pools; the "Sold" line refers to the prepayment rate of the pools we sold back to the market; and, of course, the "Kept" line identifies the pools we retained in client portfolios. When it is more attractive to take delivery of TBA mortgage pools rather than either "rolling" (i.e., deferring) or else liquidating the position, we will continue to use our pool-sorting model as a means of adding value to the pool delivery process.

Apart from the residential mortgage market, we continued to find value in the commercial mortgage-backed securities (CMBS) market through the use of total return swaps. Where guidelines permitted, we maintained a

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position where portfolios received the total return on a portfolio of AAA rated CMBS from highly-rated swap counterparties in exchange for paying a floating-rate. Use of CMBS total return swaps often affords greater total return potential and better liquidity than actual ownership of the underlying CMBS securities, and we maintain this strategy as we enter 2003 where permitted by client guidelines.

5. Interest-Rate and Yield-Curve Management

Interest-rate risk management decisions resulted in a drag on Core Fixed-Income portfolio performance last year. Portfolios ended 2002 with a sizable below-benchmark interest rate risk position. We view this as a highly attractive value opportunity with the potential to add significantly to relative returns in 2003.

Value opportunities during 2002 arose through shifts in the market's expectations for the growth path of the U.S. economy. We define these expectations by using our proprietary term-structure model to measure the path of the output gap priced into the U.S. Treasury yield curve. The output gap is the difference between current economic activity and long-run potential output, or the level of output consistent with sustainable full employment of the labor force and capital stock.

Chart 6 contains the Treasury market's expected path of the output gap at several points over the past twelve months. The chart also shows what an historic average expectation of the output gap path would look like given the starting point of the economy and the strong monetary stimulus in place. Using the historic average, the economy would return to its potential output level (i.e., where the output gap equals zero) in two to three years.

Chart 6
U.S. Treasury Market Implied Forecasts of Output Gaps

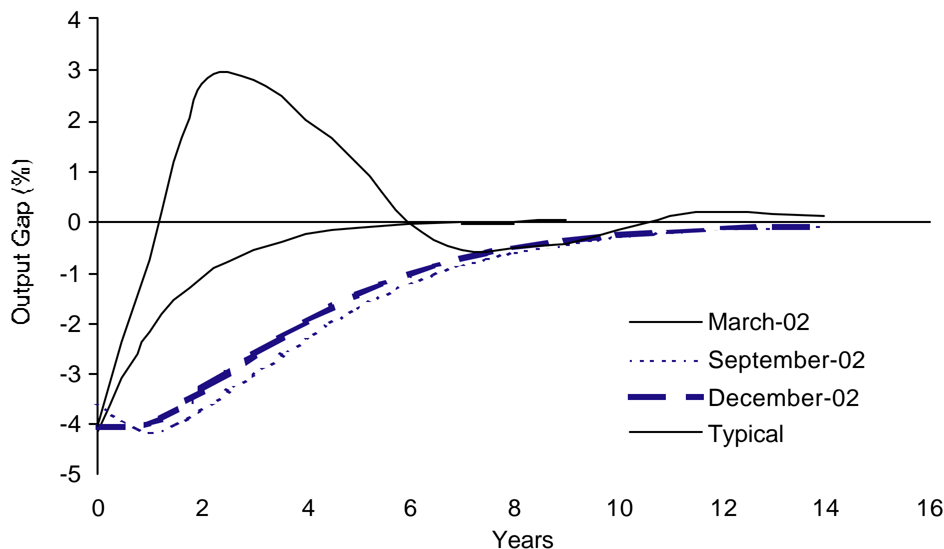

Chart: Market's implied forecasts for the path of the output gap as of selected dates, and an estimate of an average output gap path given the starting point of the economy and prevailing monetary policy stimulus. Implied forecasts derived from proprietary term-structure model.
Source: Federal Reserve Bank of St. Louis, Lehman Brothers, Salomon Smith Barney, and Morgan Stanley Investment Management.

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At the start of last year, the market's implied projection of the output gap was below -- or more pessimistic than -- this average path and portfolios were positioned with modest below-benchmark interest-rate sensitivities. By March, rising yields had put the market's output gap forecast in line with the average path (see Chart 6) and interest-rate risk was brought back in line with the benchmark. This marked the end of a short position that began in late-2000 which added a net 30 basis point excess return to full-authority Core portfolios.

Beginning in the second quarter, Treasury yields fell amid signs that the economic recovery was faltering as investors took shelter from revelations of accounting fraud and risk that military conflict in Iraq was imminent. We recognized that these latter factors were important but, by July, the persistent decline in yields again implied extreme pessimism about the economic outlook and we began to implement a below-benchmark interest-rate risk strategy. We achieved this by underweighting the five-year part of the yield curve, which is most sensitive to changing market perceptions of economic growth prospects.

By late August, our interest-rate risk target for full-authority Core portfolios reached one-year short of the benchmark. This made the powerful continuation of the rally in September costly for relative returns, but also created even more extreme valuations. By the end of September, the implied output gap in the Treasury yield curve meant the market expected the economy to remain below potential for another six years or more -- longer than any economic downturn since the 1930s; this is shown in Chart 6. In response, we extended the below-benchmark interest-rate risk position to a new target of -1.25 years.

Treasury yields began to rise in early October as evidence mounted that economic activity was firming again and as markets became more comfortable with accounting and geopolitical risk. We took back the last quarter-year reduction in interest-rate risk in late October after five-year yields rose by nearly 60 basis points, erasing much of September's underperformance.

At year-end, full-authority portfolios were one-year of interest-rate risk short versus the benchmark. The Treasury market remained highly pessimistic about future growth prospects, as shown in Chart 6, and yields would move sharply higher if it sensed that a sustainable recovery was beginning in 2003. While we are not certain about the timing of such a recovery, we view it as a likely outcome given the degree of policy stimulus in place, and believe that a defensive interest-rate risk stance is in the best interest of our clients.

6. Global and International Fixed-Income

Global and International Fixed-Income portfolios had mixed results in 2002. Interest-rate and currency decisions added relative value, while exposure to credit risk was a negative in a difficult environment for corporate bonds. Individual portfolio results for the year spanned a wide range, depending upon guidelines. Portfolios with little or no credit exposure outperformed their benchmarks, while those allowing corporate bonds underperformed in proportion to their degree of credit exposure.

Our Global Fixed-Income strategy had a total return of 15.4 percent, net of fees, versus a 19.5 percent return for the Salomon World Government Bond Index (currency-exposed) during 2002. Our International Fixed-Income strategy returned 22.1 percent last year, net of fees, versus a 22.0 percent return for the Salomon World Government Bond Index excluding the U.S. (currency-exposed).

Non-dollar bonds reversed a large three-year underperformance trend versus U.S. investment-grade bonds last year, as shown in Chart 7. Despite the fact that U.S. Treasury returns beat local currency government bond returns in most other markets, the Salomon World Government Bond Index (currency-exposed) outperformed the Salomon Broad Index during 2002.

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Chart 7
2002 Global and U.S. Bond Returns

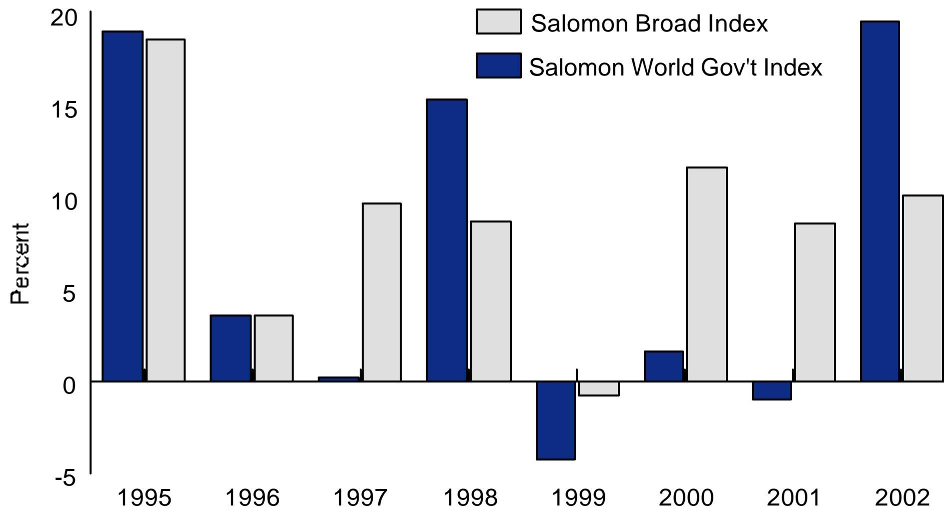

Chart: Total returns for the Salomon World Government Bond Index (currency-exposed) and the Salomon Broad Index for calendar years 1995 through 2002.
Source: Salomon Smith Barney and Morgan Stanley Investment Management.

Our interest-rate positioning during 2002 was generally defensive. Portfolios held a small underweight in Japanese bonds from the start of the year as low nominal and real yields offered inadequate compensation for growing fiscal risk. This underweight was increased to 0.5 years of duration in November when ten-year Japanese government yields fell below one percent. After closing a small short-duration position in U.S. Treasuries in March, portfolios held a neutral relative exposure to dollar-bloc interest-rate risk until late-summer. We then reduced dollar-bloc interest-rate risk to 0.5 years below the benchmark during the third quarter, as the U.S. Treasury market priced an increasingly pessimistic outlook for the U.S. economy. Exposure to European interest-rate risk was maintained at benchmark levels, reflecting higher relative real yields. Cross-country, or relative interest rate positions favored Canada and Germany versus both the U.S. and the United Kingdom.

Currency strategy during 2002 reflected two main themes. One was based on our value criteria of owning higher-yielding currencies that were weak in competitiveness or real exchange rate terms versus stronger, low-yielding currencies. This led us to hold positions in the euro against the yen, the Swedish kroner and euro against the Swiss franc, and the euro against the U.S. dollar. The second theme was to favor currencies tied to the global industrial cycle and that had been pushed to historically weak levels by pessimism about global growth. Accordingly, we held above-benchmark positions in the so-called "commodity currencies" of Australia, Canada, and New Zealand versus the U.S. dollar.

Holdings of corporate bonds, primarily those issued in U.S. dollars but also some in euro and sterling, had a significant negative impact on portfolio returns (please see our "Corporates" section on page 7 of this report for more information). Our separately-managed accounts within the Global Fixed-Income area have a wide range of allowed credit exposures and, in general, the credit impact on returns was greater in situations where the degree of credit authority was more permissive.

Global and International Fixed-Income portfolios enter 2003 in a defensive posture, on the view that market pessimism about economic growth is overdone. Duration is one year below the benchmark, with the underweight

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split evenly between Japan and the dollar-bloc countries. Portfolios are overweight the growth-sensitive commodity currencies, and also maintain exposures to the euro funded by yen and Swiss francs.

Many of our Core Fixed-Income portfolios allow the use of non-dollar bonds on an opportunistic basis. Opportunistic currency management added value to full-authority domestic portfolios last year. We maintained a two percent exposure to euro bonds and, hence, to the euro since late-2000, based on the cheapness of the euro versus the dollar and its competitive real interest rates. Euro appreciation added approximately 15 basis points to the relative performance of Core Fixed-Income portfolios last year by the time the euro currency and bond positions were closed during the summer.

7. Cash, Short-Term & Intermediate

The Cash, Short-term & Intermediate (CSI) portfolios had mixed results during 2002. While all CSI strategies generated respectable absolute returns, relative performance was driven by the degree of credit exposure and other unique attributes of each strategy within the CSI universe.

The CSI strategies are a series of short and intermediate duration strategies designed to meet various objectives of short-duration investors. Some of these strategies permit the use of corporate bonds even though the benchmark has no corporate exposure. While this approach has added value over longer time frames, the past year was quite unfavorable for corporate bond investors. Accordingly, strategies with above-benchmark corporate exposures tended to underperform their benchmarks, while those with limited or no exposure to corporates fared much better. The relative performance of our CSI strategies is shown in Table 7.

Table 7
MSIM Cash, Short-Term, and Intermediate (CSI) Composite Returns (net of fees)

Strategy Composite	2002 Annual Return	10-Year Annualized Returns through 12/31/2002
MSIM Short-Term Cash	2.2%	4.9%
90-Day U.S. Treasury Bills	1.7%	4.5%
MSIM Enhanced Cash	1.9%	5.1%
Three-Month Libor	1.8%	4.9%
MSIM Limited Duration Composite	5.1%	5.8%
MSIM Targeted Duration Composite	3.2%	n/a
Merrill Lynch 1-3 Year Treasury Index	5.8%	n/a
MSIM Intermediate Duration Composite	9.1%	7.0%
Lehman Intermediate Government/Credit Index	9.8%	7.1%

Table: MSIM Cash, Short-Term, and Intermediate Duration composite returns and their benchmarks. Composite results shown are prepared and presented in compliance with the Performance Presentation Standards of the Association of Investment Management and Research (AIMR-PPS). AIMR has not been involved with the preparation or review of this report. Composite returns are shown NET of investment advisory fees. Please see the Composite Disclosure Statement in the back of this report for the full AIMR disclosure.
Source: Lehman Brothers, Salomon Smith Barney, Merrill Lynch, and Morgan Stanley Investment Management.

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The following discussion briefly reviews the performance and attribution of each of the CSI strategies.

Short-Term Cash: These portfolios outperformed their primary benchmark last year. The strategy emphasized yield enhancement relative to its benchmark by owning commercial paper, agency discount notes, and higher-yielding short-duration asset-backed securities. The short-term nature of theses securities limited the spread sensitivity of the portfolios, allowing for their higher yields to generate a consistent source of excess return.

Enhanced Cash: These portfolios, which invest in attractively-valued, high-quality intermediate securities while maintaining an interest-rate risk level in line with their short-term benchmark, posted favorable relative performance for the year. The portfolios maintained significant overweights in the mortgage and asset-backed sectors for most of the year, and the resulting yield enhancement was responsible for most of the relative performance differential. The mortgage exposure was adjusted periodically during the year as valuations shifted within the sector; we reduced it following a narrowing of yield spreads in the first quarter, and increased it following a widening of yield spreads in the second and third quarters.

Limited Duration: These portfolios lagged their government-only benchmark for the year, with their corporate holdings accounting for the majority of the underperformance. The portfolios' below-benchmark interest-rate risk posture during the third quarter also detracted from relative performance. The portfolios' mortgage holdings, which were adjusted throughout the year in accordance with shifting valuations, added to relative returns for the year. There was some variation in individual client results solely due to variations among client-specific investment guidelines. Client portfolios allowing mortgages and/or Treasury interest-rate futures tended to outperform those that prohibited their use.

Targeted Duration: These portfolios significantly underperformed their all-Treasury benchmark during the year. The strategy invests in the most attractively-valued securities across the yield curve and is modeled after our Core Fixed-Income strategy, while employing an interest-rate risk hedge to match a shorter-duration benchmark. Among all CSI strategies, these portfolios carried the largest amount of corporate bond yield spread sensitivity relative to the benchmark. The severe widening of corporate bond spreads resulted in significant underperformance relative to the all-Treasury index. Like most CSI strategies, the portfolios' mortgage strategy added to relative returns for the year, but in this case was unable to offset the unfavorable impact of their above-benchmark corporate bond exposure.

Intermediate Duration: The Intermediate Duration portfolios underperformed their benchmark during the year. The primary detractor from relative performance was the below-benchmark interest-rate risk strategy during the third and fourth quarters, which averaged near two-thirds of a year below the benchmark. The portfolios also maintained a significant underweight in the agency sector, which also detracted from relative performance. A large portion of the corporate allocation was comprised of high-quality asset-backed securities, which outperformed equal-duration Treasuries but not other high-quality corporates. The portfolios' mortgage strategy, like that of the other CSI portfolios, added modestly to relative performance for the year.

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8. Emerging-Markets Debt

The emerging-market debt (EMD) asset class has spent the better part of the last decade trying to shake its reputation for high risk and volatile return pattern. With another year of muted volatility and solid returns under its belt in 2002, however, EMD is well-positioned for some overdue attention by investors seeking higher yields in 2003.

EMD performed quite well in 2002 due to the substantial decline in U.S. Treasury yields and contracting yield spreads for most EMD issues. More importantly, a number of positive trends gained momentum over the course of the year, including a continued improvement in overall credit quality, a steady decline in inter-country correlations, and continued new allocations to the EMD asset class.

EMD, as measured by the J.P. Morgan EMBI Global Index advanced 13.1 percent for the year, solidly outpacing the returns of most other fixed income sectors. During this same period, our EMD strategy returned 11.1 percent, net of fees. Relative returns were aided by security selection decisions in Russia, security selection in Indonesian corporates undergoing restructuring, and consistent underweights in both Ecuador and Uruguay. Defensive positioning in Brazil during the fourth quarter detracted from relative returns, as did an overweight in Venezuelan assets.

The EMD asset class got off to a very strong start in 2002 as spreads tightened by over 130 basis points during the first five months of the year. The rebound in the global economy and significant inflows into EMD were major factors driving this strong absolute performance. Motivated by evidence of a turn in the global economic cycle and low nominal interest rates in the developed world, many investors increased their EMD allocations. In addition, oil exporters such as Ecuador, Mexico, Nigeria, Russia, and Venezuela performed particularly well in this environment as a result of higher-than-expected oil prices.

The strong start for EMD gave way to a period of heightened volatility during the late-spring and summer. A left-leaning presidential candidate in Brazil unsettled the markets, as did a pause in global economic activity and revelations of corporate accounting scandals. These events rattled investor confidence in all financial markets and caused EMD to give back all of the gains earned during the first few months of the year. During the third quarter, the intensification of market volatility and the acknowledgement that new capital flows would not be forthcoming to Latin America caused EMD bond prices to fall further; yield spreads widened more than 300 basis points between May and the end of September. Fortunately, the asset class reversed course and rallied strongly during the final quarter of the year, allowing the yield spread on the overall index to end the year just below its starting level. The year-end EMD rally was largely a response to the improvement in other non-Treasury bond markets, the sharp turnaround in equity prices in the final few months of the year, and the U.S. Federal Reserve's early-November 50-basis-point cut in the federal funds target rate.

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Chart 8
Emerging-Markets Debt Country Returns

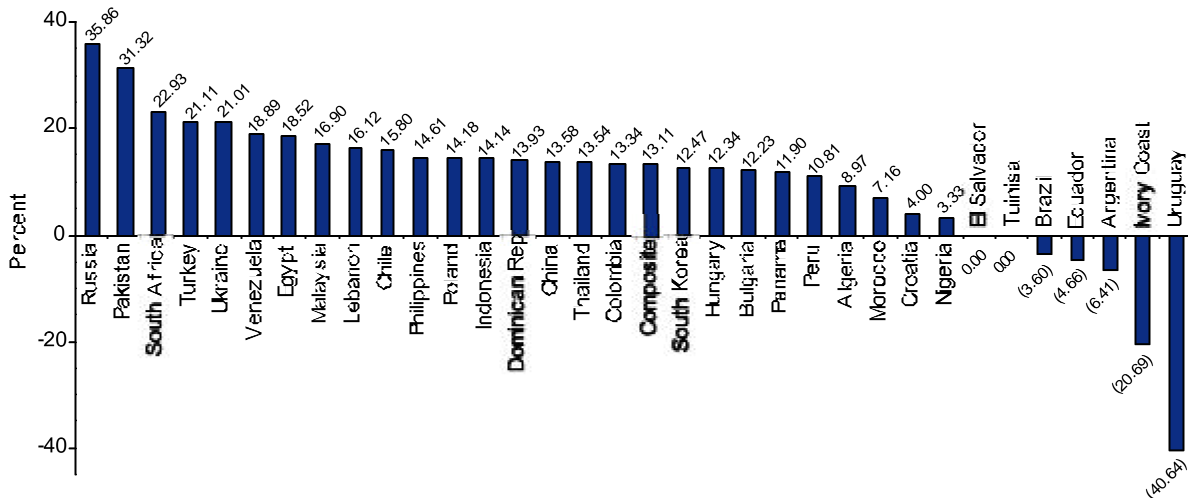

Chart: Country returns for the J.P. Morgan EMBI Global Index for calendar year 2002.
Source: J.P. Morgan Chase and Morgan Stanley Investment Management.

There was tremendous dispersion in the performance of EMD countries during 2002; as shown in Chart 8, a number of countries posted total returns above 20 percent – including Russia, South Africa, Turkey and Pakistan – while other countries such as Argentina, Brazil, and Uruguay experienced negative returns.

As is usually the case, the high current income provided by EMD bonds should provide some protection against the potential for rising interest rates within the developed markets. Moreover, the combination of favorable liquidity conditions, a rebounding U.S. economy, and the continuation of EMD inflows from new investors should provide a strong foundation supporting the EMD asset class in 2003.

9. High-Yield

The high-yield market experienced another disappointing year during 2002 with low returns, continued high default rates, and increased volatility.

After a favorable start to the year as a consequence of stronger-then-expected economic growth, rising equity prices, and asset class inflows, the market turned down strongly during the second and third quarters. Well-publicized accounting scandals at WorldCom, Adelphia, and other notable companies devastated investor confidence and led to huge declines in equity markets and significant underperformance for most corporate bonds. The tide turned during the fourth quarter, however as the equity market rallied, investor confidence improved, and the economy showed signs of stabilizing. With high-yield bonds looking much more attractive, asset flows turned positive for the market as the year came to a close. The spread of the CSFB High-Yield Index, as shown in Chart 9, reflected the volatile nature of the asset class during the year; the Index's yield spread versus U.S. Treasuries was at 868 basis points at the start of 2002, reached an all-time peak of 1,116 basis points during October, and then tightened to 947 basis points by year-end.

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Chart 9
High-Yield Index Yield Spreads

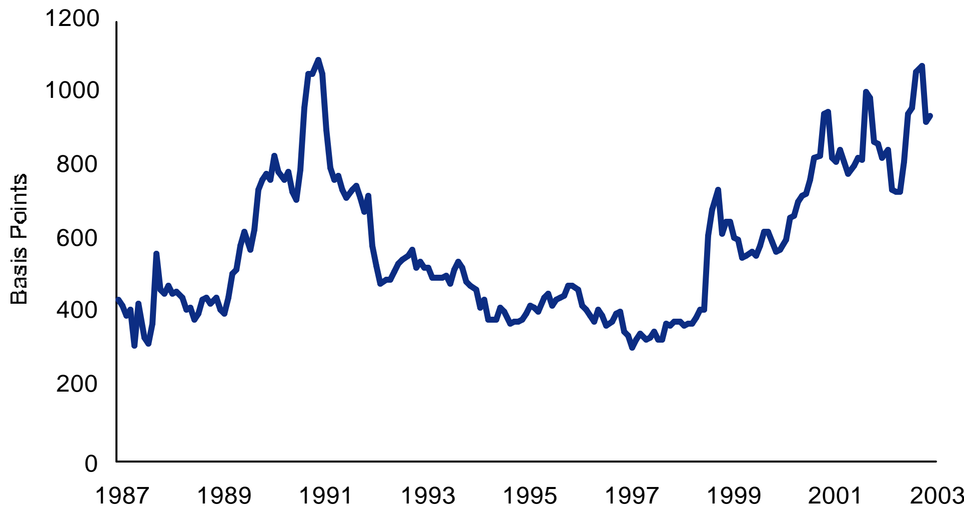

Chart: Yield spread-to-worst for the CSFB High Yield Index versus U.S. Treasuries. Data through December 31, 2002.
Source: CS First Boston and Morgan Stanley Investment Management.

Last year was characterized by a wide dispersion of returns between the various industry sectors. Industries that performed well included gaming/leisure, consumer products, broadcasting, media, and forest products -- all of which returned above 10 percent. The worst sector was the airline industry, which was devastated due to the bankruptcy filings of U.S. Airways and United Airlines along with continued low demand for both business and leisure travel. In addition, the cable industry was hit hard by many defaults in European cable companies along with falling asset valuations that began with the accounting fraud and bankruptcy filing at Adelphia. Other industries that experienced significant underperformance were telecom, utilities, and wireless communications.

Our High-Yield strategy underperformed the CSFB High-Yield Index for the year, with a total return of -10.8 percent, net of fees, versus 3.1 percent for the Index. Adverse security selection in utilities, cable, telecom, and broadcasting along with our overweight allocations to cable and telecom were the main reasons for our poor performance during the year. As mentioned earlier, telecom and cable issues had disastrous years due to deteriorating industry fundamentals and high default rates. In utilities, our security selection suffered from a focus on investment-grade issues which, as it turned out, actually underperformed most lower-rated issues in the same sector. On the positive side, our underweight positions in utilities and airlines and overweight in broadcasting helped relative performance, as did favorable security selection decisions within the financial sector.

Over the course of the year, we decreased our exposure to both the cable and telecom sectors and no longer have overweight allocations relative to the index. In addition, we increased our exposure to some of the cyclical sectors including manufacturing, transportation, and chemicals. As we enter 2003, our main sector overweights include the media, manufacturing, chemicals, and energy areas, while our main underweights include the consumer products, retailing, utilities, and services sectors. We believe the utility sector will continue to face challenges as a result of declining credit fundamentals. Our underweights in consumer products and retailing are due to the lack of competitive companies that can survive in the current environment.

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Despite the year-end 2002 rally, high-yield spreads are trading near historically-wide levels. These yield spreads offer very attractive value relative to underlying fundamentals. After a period of rising defaults, there is some evidence that default rates have started to decline. Corporate America's renewed focus on repairing balance sheets provides support for the view that the credit cycle might be turning more positive. Recent improvement in most economic data and an extremely accommodative monetary policy are helping to bolster investor confidence, and could prompt a continuation of the recent positive trend in asset class flows. Taken together, these factors could provide the spark for improved performance within the high-yield asset class in the coming year.

10. Special Section: Understanding Corporate Yield Spreads

Most corporate bond valuation processes involve reliance on the quoted yield spread over U.S. Treasuries as a measure of the reward for bearing corporate credit risk. This is a good starting point for a deeper evaluation of the relative risk/reward profile of corporate bonds.

One might believe that the entire yield spread constitutes a reward for bearing the default risk on a particular bond. This view, however, is only partially correct. Beyond default risk, corporate bond investors are also assuming liquidity risk for owning a security that is less liquid than comparable U.S. Treasury issues.

The interest-rate swap market allows us to evaluate the generic level of compensation for bearing liquidity risk in a non-Treasury instrument. In an interest-rate swap, one counterparty agrees to pay (receive) a periodic fixed-rate payment in exchange for receiving (paying) a periodic variable or floating-rate payment over a similar time horizon and based on a similar notional (or implied) face amount. Interest-rate swap counterparties are of very high credit quality, and the market is deep and liquid. Still, an interest-rate swap is not viewed as being of equivalent risk as Treasuries, so the fixed-rate payments on a swap are priced at a yield spread above the Treasury yield curve. Therefore, one can think of the swap spreads as being a form of compensation for bearing higher-quality, generic liquidity risk outside of the Treasury sector.

Chart 10 on page 21 shows that 10-year interest-rate swap spreads were priced at 21 basis points above the off-the-run Treasury curve as of year-end 2002; we refer to this as "premium for liquidity risk" on the chart. Since the A-rated corporate universe had a yield spread of 141 basis points over the same Treasury curve, the difference between these two yield spreads can be thought of as net compensation for the default risk associated with the A-rated universe; we refer to this as "premium for default risk" on the chart. Thus, any corporate bond's yield spread can be viewed as compensation for both generic liquidity risk as well as default risk.

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Chart 10
Liquidity Risk and Credit Risk: A Rated Corporates

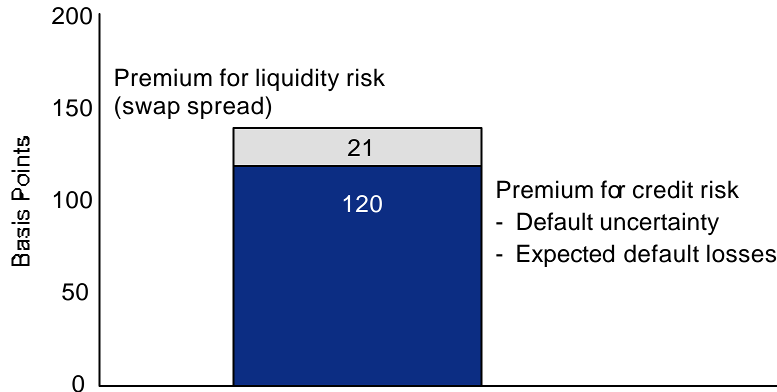

Chart: Components of A-rated corporate bond yield spread relative to off-the-run U.S. Treasuries. Data as of December 31, 2002.
Source: Salomon Smith Barney and Morgan Stanley Investment Management.

This approach allows us to assess the relative attractiveness of a corporate bond spread's two components. If the liquidity risk component is wide and the default risk component is narrow, we would be more likely to receive a fixed-rate and pay a floating-rate on interest-rate swaps and less likely to have a large exposure to corporate bonds. If the default risk component is wide and the liquidity risk component is narrow -- as was the case for most of 2002 -- we would look to increase our corporate bond exposure while paying fixed-rates and receiving floating-rates on interest-rate swaps. Of course, these examples assume that interest-rate swaps are permitted as part of the client's investment guidelines.

Interest-rate swaps can be useful tools to help modify portfolio risks. They can also of great use in understanding yield spreads in all of the non-Treasury sectors, and provide us with another method to analyze and capture the most attractive opportunities while minimizing exposure to sectors and securities with unattractive risk/reward profiles.

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11. Special Section: The MSIM "Distance-to-Default" Approach

During the course of 2002, the corporate bond market suffered through one of its most challenging periods in recent memory. Default rates soared, while credit rating downgrades dwarfed upgrades. In this environment, we recognized the need to evaluate whether additional information could be incorporated into our investment process that could act as a screen to enhance our assessment of relative value opportunities.

One tool that we have embraced during the course of this year is a distance-to-default (DTD) model. The model is based upon two key notions, first developed in the mid-1970's by noted academician Robert Merton:

- The payoff pattern on a held-to-maturity corporate bond position is very similar to the payoff pattern for a *short position in put options* on the assets of the firm, and:
- The payoff pattern on a firm's equity is similar to that of a *long position in call options* on the firm's assets, as equity holders benefit whenever asset values rise above the face amount of outstanding debt.

Using this intuition and available financial statement and equity market data, we constructed a methodology that extracts the firm's current asset value, volatility, and liabilities. For purposes of this model, risk is assumed to be how far a corporate bond issuer is from a theoretical default situation (i.e., where the firm's market value of assets falls below its face value of liabilities); this is also known as the "distance-to-default" (DTD). We then compared this estimate of risk for each corporate bond with the yield spread, or reward, offered by each bond. An example as of year-end 2002 appears in Chart 11.

Chart 11
Corporate Yield Spreads and the Distance-to-Default

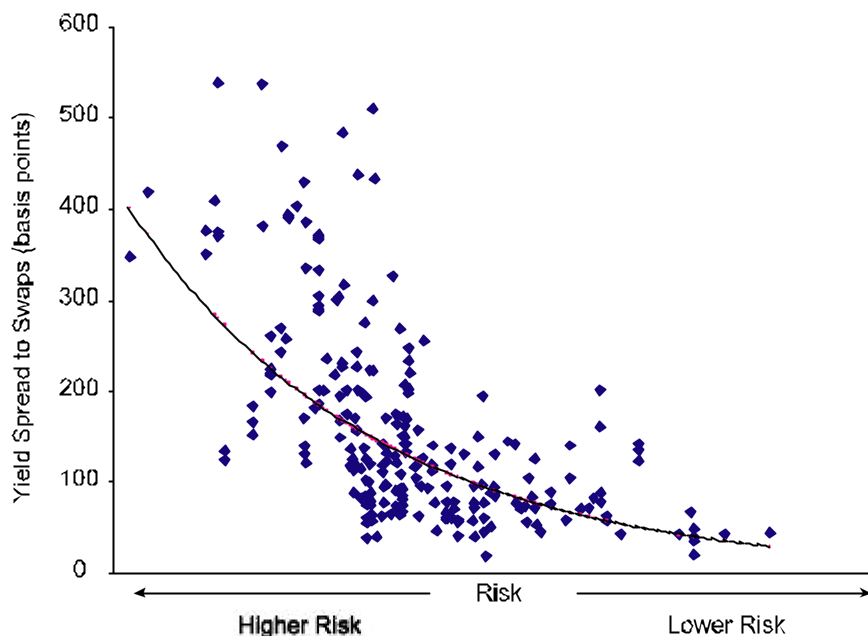

Chart: Yield spreads versus interest-rate swaps (vertical axis) and the distance-to-default (horizontal axis, in standard deviation units) for the Salomon Corporate Index. Data as of December 31, 2002.
Source: Salomon Smith Barney and Morgan Stanley Investment Management.

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Each data point on the chart represents a corporate bond within the investment-grade universe. Bonds which plot to the right of the regression line appear to offer attractive yield spreads relative to their risks, while those plotting to the left of the regression line appear less attractive relative to their risks. We have found that the model generally fits quite well with the data; a DTD framework does a far better job of explaining the distribution of yield spreads in the marketplace than reliance on the assigned credit rating, and the model proved effective in identifying recent corporate credit problems.

We anticipate that this quantitative approach will enhance our ability to screen the vast corporate bond universe, and allow us to focus our ongoing fundamental corporate credit research in the most appropriate areas. We are very optimistic regarding the benefits of using the new DTD model, and expect that it will be a focus of our corporate credit discussions with clients over the coming year.

Composite Disclosure

Global Fixed Income

Year	Composite	Salomon WGBI	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	19.02	13.27	2	411	0.7	N/A
1994	(0.91)	2.34	4	538	0.8	N/A
1995	20.58	19.04	5	965	1.3	2.5
1996	7.00	3.62	6	701	0.7	0.8
1997	0.48	0.24	6	696	0.6	0.6
1998	14.48	15.29	5	745	0.5	0.5
1999	(4.95)	(4.26)	4	617	0.4	0.3
2000	0.49	1.60	3	525	0.3	1.0
2001	0.82	(0.99)	2	259	0.2	N/A
2002	15.43	19.50	2	250	0.2	N/A

International Fixed Income Strategy

Year	Composite	Salomon WGBI ex US	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993						
1994						
1995	19.73	19.55	1	158	0.2	N/A
1996	6.29	4.08	1	159	0.2	N/A
1997	26.66	(4.25)	1	11	0.0	N/A
1998	15.92	17.79	1	31	0.0	N/A
1999	(10.33)	(5.09)	1	127	0.1	N/A
2000	(2.37)	(2.64)	1	89	0.1	N/A
2001	(4.54)	(3.55)	1	81	0.1	N/A
2002	22.13	22.01	1	109	0.1	N/A

Limited Duration Strategy

Year	Composite	Merrill Lynch 1-3 year Treasury	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	5.97	5.41	1	121	0.2	N/A
1994	(0.07)	0.57	1	63	0.1	N/A
1995	10.37	11.00	1	72	0.1	N/A
1996	5.27	4.98	1	121	0.1	N/A
1997	6.25	6.66	1	192	0.2	N/A
1998	5.63	7.00	1	231	0.2	N/A
1999	3.77	3.06	1	153	0.1	N/A
2000	7.93	8.00	1	183	0.1	N/A
2001	8.59	8.30	1	222	0.1	N/A
2002	5.12	5.76	1	493	0.3	N/A

Core Plus Fixed Income

Year	Composite	Salomon Broad	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	13.84	9.92	38	2,471	3.9	0.6
1994	(4.39)	(2.85)	42	3,822	5.9	0.5
1995	19.41	18.53	49	4,071	5.3	0.5
1996	7.20	3.62	49	4,583	4.8	1.1
1997	8.86	9.64	57	6,825	5.4	0.7
1998	7.44	8.72	77	11,790	8.3	0.5
1999	(0.67)	(0.85)	79	10,034	5.9	0.6
2000	11.11	11.60	59	9,335	5.4	0.3
2001	10.29	8.50	54	8,843	5.0	0.3
2002	7.61	10.10	50	8,570	4.9	0.5

Investment Grade Fixed Income

Year	Composite	Salomon Broad	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	12.96	9.92	17	1,779	2.8	0.4
1994	(4.30)	(2.85)	19	1,622	2.5	0.4
1995	18.94	18.53	19	2,079	2.7	0.3
1996	6.00	3.62	19	2,248	2.3	0.5
1997	9.94	9.64	22	4,154	3.3	0.2
1998	7.56	8.72	26	5,051	3.5	0.3
1999	(0.99)	(0.85)	36	6,435	3.8	0.6
2000	11.10	11.60	33	7,188	4.1	0.4
2001	10.35	8.50	28	5,327	3.0	0.3
2002	8.43	10.10	28	4,401	2.6	0.5

U.S. Core Fixed Income

Year	Composite	Salomon Broad	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	11.90	9.92	15	1,126	1.8	0.6
1994	(3.51)	(2.85)	16	748	1.2	0.3
1995	19.08	18.53	24	1,268	1.7	0.2
1996	4.41	3.62	25	1,670	1.7	0.6
1997	9.46	9.64	29	3,949	3.1	0.4
1998	7.62	8.72	26	2,604	1.8	0.4
1999	(0.95)	(0.85)	24	3,188	1.9	0.7
2000	10.96	11.60	23	2,850	1.6	0.4
2001	10.04	8.50	21	2,476	1.4	0.6
2002	8.27	10.10	21	2,241	1.3	0.6

Firm Assets ($B)

Year	($B)
1993	63.4
1994	64.5
1995	77.0
1996	96.0
1997	126.6
1998	142.8
1999	169.8
2000	173.9
2001	176.0
2002	172.3

Composite Disclosure

High Yield Strategy

Year	Composite	CSFB High Yield	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993	24.67	18.91	1	103	0.2	N/A
1994	(7.06)	(0.97)	1	177	0.3	N/A
1995	23.94	17.38	1	267	0.4	N/A
1996	15.29	12.39	2	382	0.4	N/A
1997	15.95	12.65	4	588	0.5	N/A
1998	3.22	0.58	4	874	0.6	0.2
1999	7.71	3.28	5	1,159	0.7	0.1
2000	(10.54)	(5.21)	5	923	0.5	0.1
2001	(5.68)	5.80	5	740	0.4	0.5
2002	(10.85)	3.10	5	411	0.2	1.3

Intermediate Duration

Composite	Lehman Intermediate Govt/ Credit	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
8.92	8.79	4	180	0.3	0.7
(3.02)	(1.93)	6	319	0.5	0.2
15.29	15.33	8	450	0.6	0.5
4.92	4.05	9	581	0.6	0.7
8.32	7.87	9	673	0.5	0.2
7.90	8.44	8	932	0.7	0.5
0.36	0.39	8	932	0.6	0.4
10.27	10.12	6	914	0.5	0.5
9.36	8.96	4	520	0.3	0.6
9.05	9.84	8	948	0.5	0.6

Emerging Markets Debt Strategy

Year	Composite	Blended Index*	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993						
1994	(25.63)	(18.35)	3	406	0.6	N/A
1995	28.88	26.38	4	497	0.7	4.5
1996	50.85	35.23	4	562	0.6	1.2
1997	20.06	11.95	5	660	0.5	1.8
1998	(29.91)	(11.54)	5	467	0.3	4.8
1999	32.11	24.18	5	711	0.4	5.3
2000	12.68	14.41	5	601	0.4	0.5
2001	11.30	1.36	5	538	0.3	1.0
2002	11.12p	13.11	5	575	0.3	0.8

Enhanced Cash

Composite	3-Month LIBOR	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
5.18	3.29	3	391	0.6	N/A
1.18	4.78	4	547	0.9	1.1
9.71	6.14	4	406	0.5	1.2
5.85	5.59	2	222	0.2	N/A
5.97	5.82	3	132	0.0	N/A
4.99	5.70	4	234	0.2	0.1
5.44	5.45	7	1,160	0.7	0.5
6.03	6.62	3	919	0.5	0.3
4.48	3.97	1	47	0.0	N/A
1.93	1.78	1	48	0.0	N/A

Targeted Duration

Year	Composite	Merrill Lynch 1-3 Year Treasury	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
1993						
1994	(0.52)	0.57	1	53	0.1	N/A
1995	10.93	11.00	1	51	0.1	N/A
1996	8.23	4.98	1	56	0.1	N/A
1997	7.18	6.66	2	138	0.1	N/A
1998	5.45	7.00	5	327	0.2	N/A
1999	4.72	3.06	4	282	0.2	0.6
2000	4.94	8.00	2	122	0.1	N/A
2001	10.61	8.30	1	25	0.0	N/A
2002	3.23	5.76	1	26	0.0	N/A

Short Term Cash

Composite	Salomon 3-Month T-Bill	# Accts	Comp Value ($MM)	% Firm Assets	Internal Std Dev
3.19	3.09	5	264	0.4	0.1
3.67	4.24	4	286	0.4	0.4
6.23	5.75	6	644	0.8	0.3
5.68	5.25	5	889	0.9	0.1
5.66	5.25	9	829	0.7	0.1
5.59	5.07	8	679	0.5	0.1
4.95	4.73	6	462	0.3	0.1
6.96	5.97	4	587	0.3	N/A
5.15	4.08	3	270	0.2	N/A
2.16	1.70	1	239	0.1	N/A

Morgan Stanley Investment Management has prepared and presented this report in compliance with the Performance Presentation Standards of the Association for Investment Management and Research (AIMR-PPS®), the U.S. and Canadian version of the Global Investment Performance Standards (GIPS®). AIMR has not been involved with the preparation or review of this report.

The composite results shown are NET of investment advisory fees.

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p indicates preliminary return.

* The Blended Index is comprised of the JP Morgan Emerging Markets Bond Index Plus from 1993 to 1999, and the JP Morgan Emerging Markets Bond Index Global from 1999 forward.