

C A M B R I D G E A S S O C I A T E S L L C

U.S. MARKET COMMENT

THINKING ABOUT RISK?

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Introduction

Over the last two years, risk has paid better than diversification. In some ways, it was a set up. The global economy experienced an unusually synchronized recession in 2001 and early 2002, which in turn left most developed equities technically (not fundamentally) oversold and many “risk assets” downright cheap. Central banks responded as they typically do to very tight credit conditions by flooding the economy with liquidity. Subsequently all markets have risen substantially, with those most sensitive to liquidity and borrowing costs experiencing the sharpest gains. Such an environment breeds overconfidence, as implied volatility typically plummets and risk analysis is often written off as a waste of time. However, a look at each of the factors that underwrote this environment reveals that conditions are ripe for an entirely different set up—one that unduly punishes naïve risk taking. Credit conditions are extremely lax (as measured by record levels of M3 and high-yield bond issuance), credit spreads are at historical lows, and many assets are either technically or fundamentally overvalued.

Appetite for Risk

Nothing works up an appetite like starvation, and the market environment heading into the fall of 2002 was certainly no exception. High-yield and emerging markets bond spreads were 1,000 basis points (bps) and 925 bps above ten-year Treasury yields (2.2 and 1.8 standard deviations above historical means), small-cap U.S. equities traded at price-to-book ratio of 1.6 (near the low of 1.4 in 1991), and emerging markets equities had a price-to-earnings ratio (13.9) nearly half that of the MSCI World Index (more than one standard deviation below the historical discount). Though developed markets were not compellingly cheap, they had suffered a two-year beating. In other words, most assets were poised for a bounce. Over the period November 1, 2002 to December 31, 2004, the cumulative returns for emerging markets equities, U.S. small-cap equities, U.S. high-yield bonds, and emerging markets debt were approximately 103%, 79%, 54%, and 49%, respectively (Table A). While the correlation of returns on these asset classes was not particularly high over the period, it is clear that they all benefited from rising liquidity and easing credit conditions. For example, there has been a tight, inverse relationship between credit spreads and U.S. small-cap and emerging markets equity returns and a fairly strong, positive relationship between the gains on risk assets and rising M3 money supply (Tables B and C). Mid- to large-cap equities in developed markets also appreciated, but the gains were generally less significant (Tables D and E).

Now What?

Investors face a difficult environment: risk does not pay much and many assets are overvalued, which raises the cost of diversifying today. One approach is to eliminate exposure to opportunistic, low-quality bond investments, while diversifying exposure within equity allocations. High-yield bonds and emerging markets debt are best purchased when they are blood-in-the-streets cheap (fall of 2002) and best sold when they are overvalued (many months ago). For example, high-yield bond spreads (250 bps) and yields (6.7%) are at record lows, total and C-rated new issuance hit a new record in 2004, and trailing 12-

month defaults are near their historical low. Emerging markets debt yields (7.7%) are at a new low as well, while spreads are only 60 bps off their historical low. The substantially improved fiscal positions of emerging markets debt issuers are fully discounted into current prices. In addition, most of the emerging markets debt universe is priced in U.S. dollars, which means no currency diversification for U.S. investors.¹

For most equity assets, implementation and diversification are likely to become increasingly important. An index allocation can be a relatively simple and inexpensive way to invest in small-cap and emerging equities when they are cheap (2002), but as these markets become richer, the underlying securities may diverge according to their fundamental differences. For instance, there is the potential for divergence between the more richly valued net commodity consumers (e.g., China, India, and South Korea) and the generally cheaper commodity producers (e.g., Brazil, South Africa, and Russia). In addition, for investors with the appropriate capabilities, private equity investments may provide another form of diversification in emerging markets that currently lack adequate public shareholder rights or a market representative of the broad corporate sector. Finally, the recent synchronicity among developed markets is likely to be a temporary phenomenon, resulting from a coordinated recovery off a cyclical market bottom. There appears to be more relative value in non-U.S. than U.S. equity markets and the U.S. dollar remains fundamentally overvalued. Going forward, diversification should matter.

Hedge Funds—Not the Simple Solution

A carefully constructed and diversified hedge fund/absolute return portfolio can provide alpha and mitigate *some* equity risk. However, we believe very few hedge funds are worthy of consideration (i.e., 1% of the 8,000 fund universe) and would not advocate using hedge funds as a substitute for the spending insurance role reserved for Treasury bonds.² In fact, many hedge funds have been major investors in high beta assets, leaving them particularly vulnerable to any significant downturn in economic conditions and/or diminution of risk appetites. In addition, seemingly diverse strategies can have very similar sensitivity to macro factors (e.g., interest rate spreads). Further, traditional asset allocation often understates total asset class exposures and can provide an incomplete risk profile. For example, a significant long-only allocation to emerging markets debt and high-yield bonds, combined with an allocation to hedge funds that invest primarily in these areas, could have a synergistic, deleterious effect on the total portfolio in a flight to quality. The financial crisis in the third quarter of 1998 provides an extreme example of the functional difference between hedge funds and intermediate- to long-duration Treasury bonds. Hedge funds and absolute return funds of all stripes delivered returns of between -18.0% and -2.6%; and 366 stocks in the S&P 500 were down by an average of -21.5%, compared to just 121 appreciating, an average of 9.7%. Only U.S. Treasury and high-quality corporate bonds stayed above water (Table F). Most assets quickly rebounded, but the Fed also had more artillery in 1998 than it does today and fat-tail events rarely play out according to script. In short, investors that sell bonds to build a hedge fund allocation should make sure that the remaining bond

¹ Of course, currency risk remains, as the risk of default increases if currencies depreciate relative to the US\$.

² Treasury bonds are the most likely to rise in value during periods of deflation, prolonged economic contraction, and/or acute financial stress, thus providing spending support without having to sell other assets at distressed values.

allocation be of sufficient quality, duration, and size to provide at least the minimum insurance needed to preserve corpus and support spending.

Conclusion

It has been a nice ride. Previously distressed 401(k) investors are feeling ebullient again and the market seers generally concur that 2005 will be a year of flat seas and no wind. Such an event-free consensus, combined with high valuations among liquidity dependent assets, suggests that we may be experiencing the calm before the storm. Of course, no one can predict when the storm will begin. In fact, we have viewed high-yield bonds and emerging markets debt as overvalued (i.e., more risk than reward) for over a year.³ Investors should re-assess portfolio risk and seek diversification by sources of return, risk exposures, and portfolio function. We would *not* recommend putting it all in hedge funds and heading to the beach.

³ A summary of our valuation ratings across asset classes is included in our monthly *Market Update: Returns and Valuations*, while detailed notes on each valuation opinion are provided in our monthly *Notes on Current Valuations* at www.cambridgeassociates.com.

Table A

RETURNS ACROSS ASSET CLASSES IN U.S. DOLLARS AND LOCAL CURRENCY

November 1, 2002 - December 31, 2004

U.S. Dollars

	<u>AACR (%)</u>	<u>Cumulative Return (%)</u>	<u>Highest One-Month (%)</u>	<u>Date</u>	<u>Lowest One-Month (%)</u>	<u>Date</u>
MSCI Emerging Markets	38.8	103.4	9.3	Nov - 04	-8.2	Apr - 04
Russell 2000®	30.9	79.2	10.7	May - 03	-6.7	July - 04
LB High-Yld Bond Index	22.2	54.3	6.2	Nov - 02	-1.7	May - 04
JP Morgan EM Bond Global	20.1	48.8	5.7	Apr - 03	-5.4	Apr - 04
S&P 500	17.6	42.2	8.2	Apr - 03	-5.9	Jan - 03
MSCI World ex U.S.	27.7	69.9	9.6	Apr - 03	-3.8	Dec - 02
MSCI EAFE	27.2	68.4	9.8	Apr - 03	-4.2	Jan - 03
MSCI EASEA*	28.1	70.9	12.7	Apr - 03	-4.2	Jan - 03
MSCI Japan	24.1	59.6	13.4	Mar - 04	-5.9	July - 04

Local Currency

	<u>AACR (%)</u>	<u>Cumulative Return (%)</u>	<u>Highest One-Month (%)</u>	<u>Date</u>	<u>Lowest One-Month (%)</u>	<u>Date</u>
MSCI Emerging Markets	28.3	71.5	8.9	Oct - 03	-5.8	Apr - 04
MSCI World ex U.S.	13.8	32.4	8.2	Apr - 03	-6.9	Dec - 02
MSCI EAFE	13.4	31.3	8.5	Apr - 03	-7.3	Dec - 02
MSCI EASEA*	13.3	31.2	10.8	Apr - 03	-7.7	Dec - 02
MSCI Japan	14.3	33.5	8.0	Mar - 04	-5.6	Dec - 02

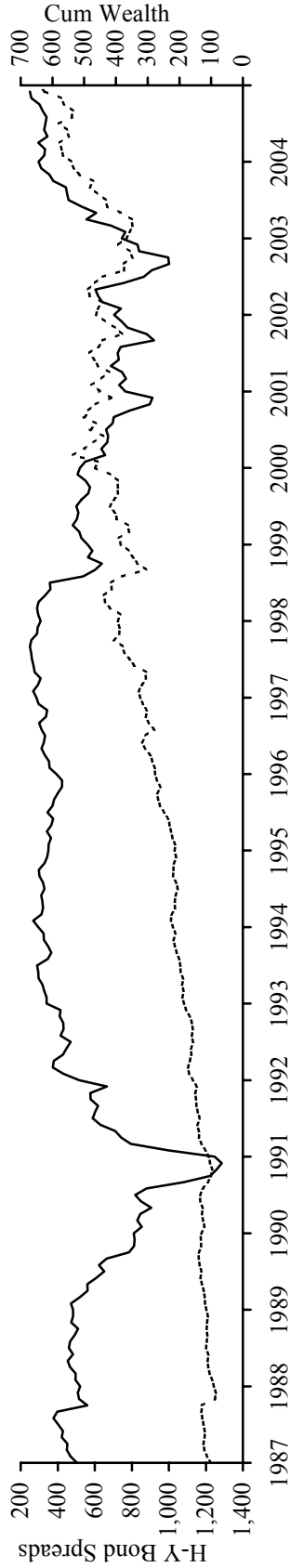
Sources: Frank Russell Company, Lehman Brothers, Inc., Morgan Stanley Capital International, and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

* MSCI EASEA = MSCI EAFE ex Japan.

Table B

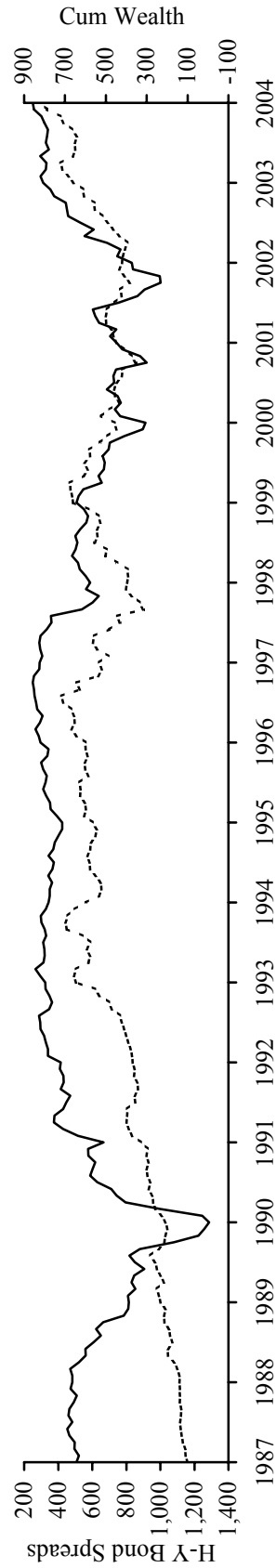
BOND SPREADS AND EQUITY RETURNS

**U.S. High-Yield Bond Spreads and Small-Cap Cumulative Wealth
January 31, 1987 - December 31, 2004**



— High-Yield Spread ····· Small-Cap Cum Wealth

**U.S. High-Yield Bond Spreads and EM Equities Cumulative Wealth
December 31, 1987 - December 31, 2004**



— High-Yield Spread ····· EM Cum Wealth

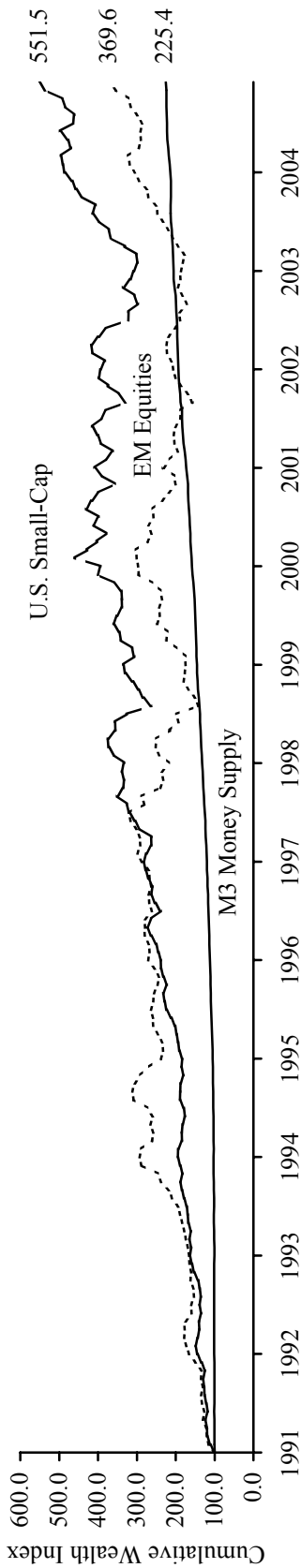
Sources: Lehman Brothers, Inc., Morgan Stanley Capital International, and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Table C

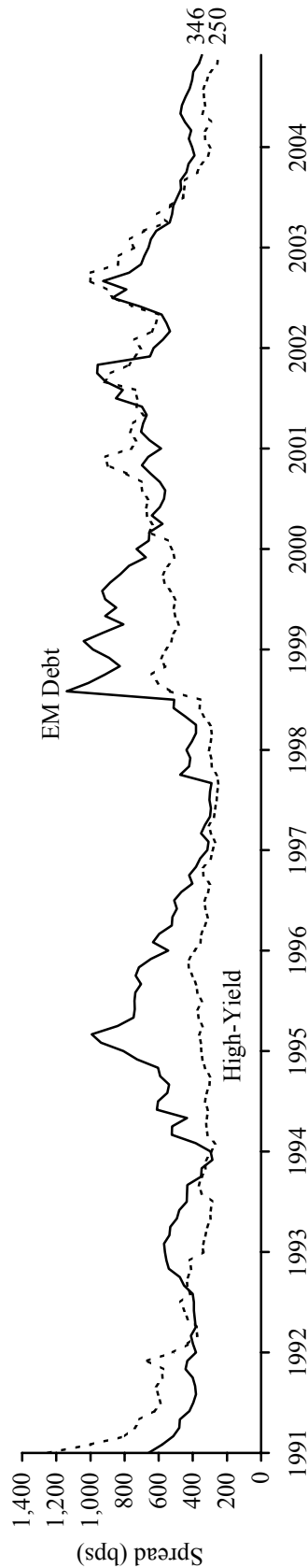
MARKET LIQUIDITY AND CREDIT SPREADS

February 1, 1991 - December 31, 2004

Cumulative Wealth of M3 Money Supply, U.S. Small-Cap, and Emerging Markets Equities



High-Yield and Emerging Markets Debt Spreads

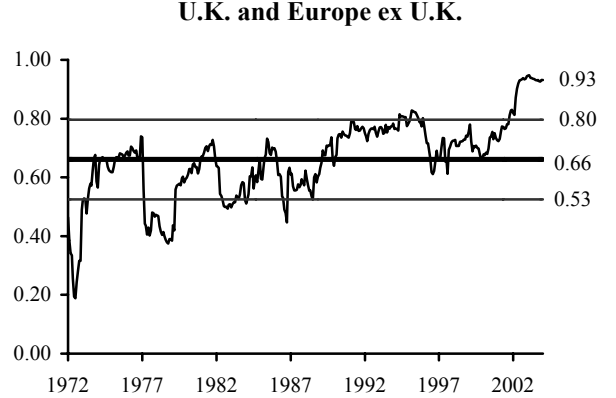
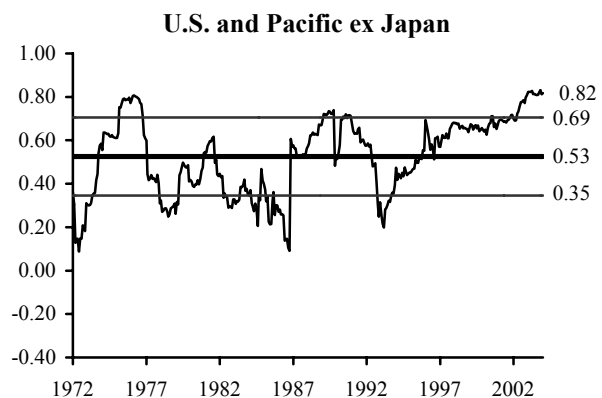
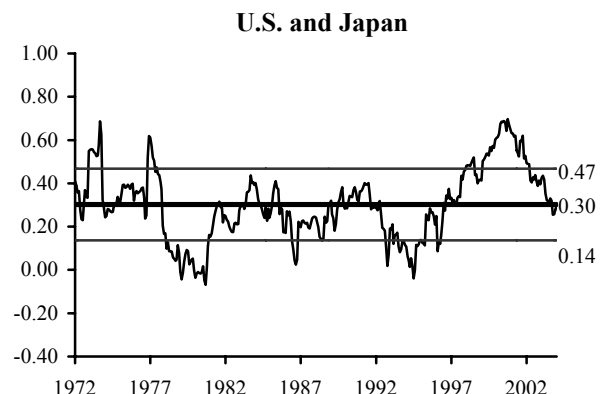
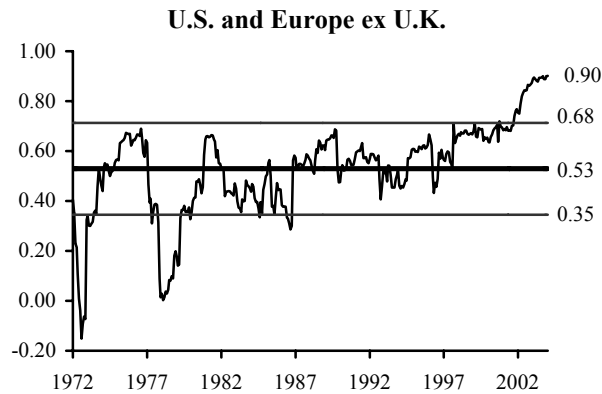
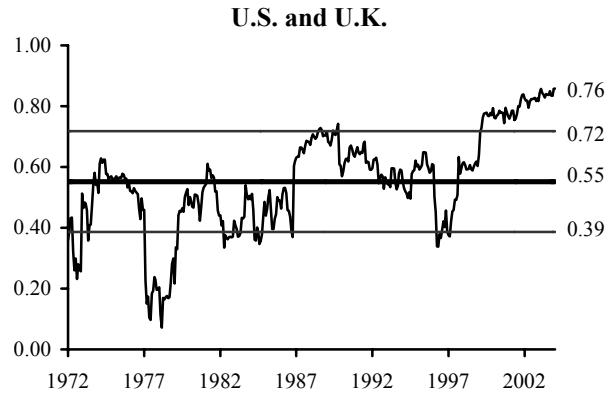
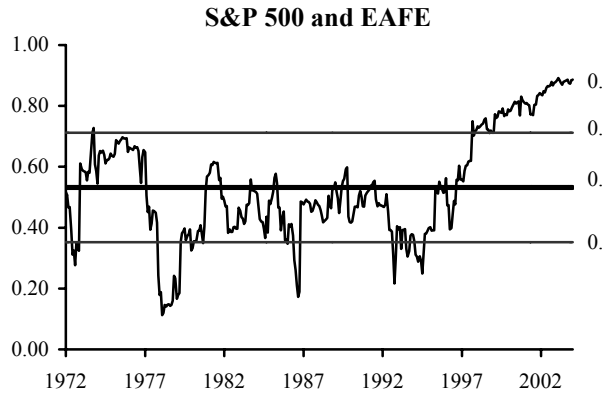


Sources: Lehman Brothers, Inc., Morgan Stanley Capital International, and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Table D

ROLLING 36-MONTH CORRELATIONS AMONG MSCI REGIONS IN U.S. DOLLARS

January 1, 1970 - December 31, 2004



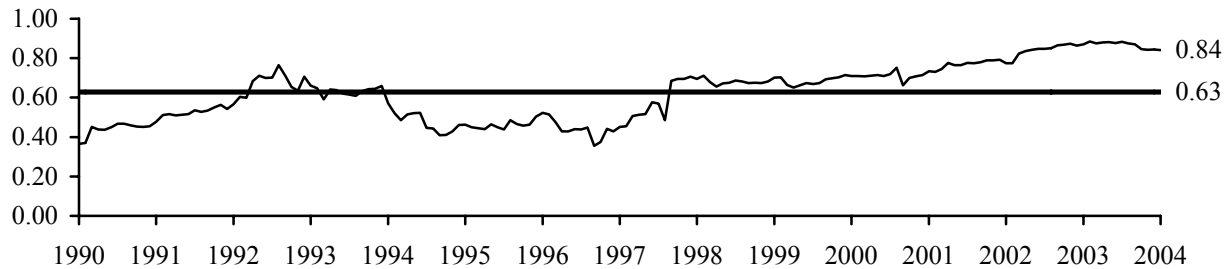
Note: The same analysis done in local currencies revealed similar correlation trends between markets.

Sources: Morgan Stanley Capital International and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

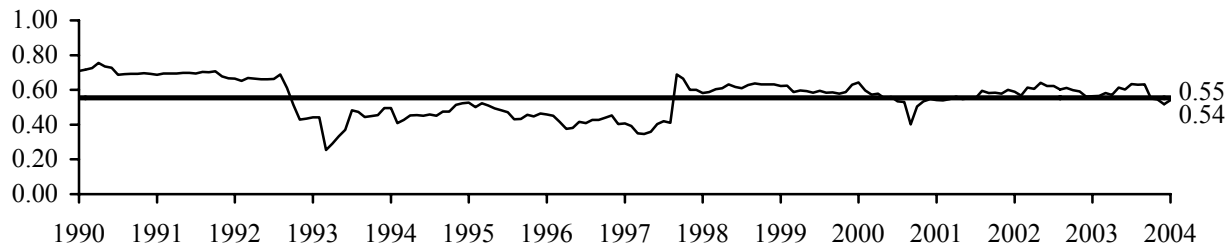
Table E

CORRELATIONS OF HIGH BETA ASSETS

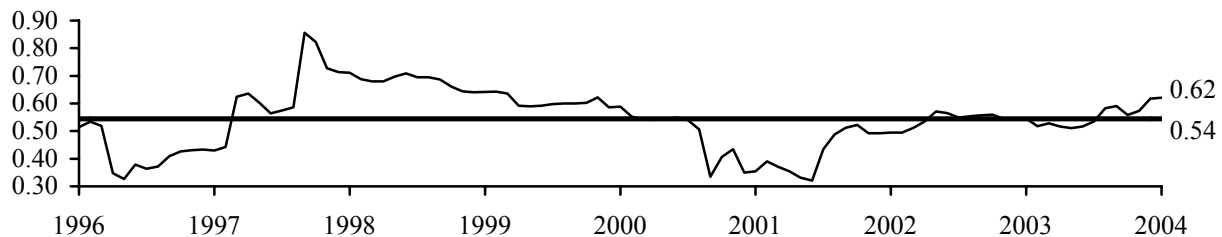
Emerging Markets Equities vs U.S. Small-Cap



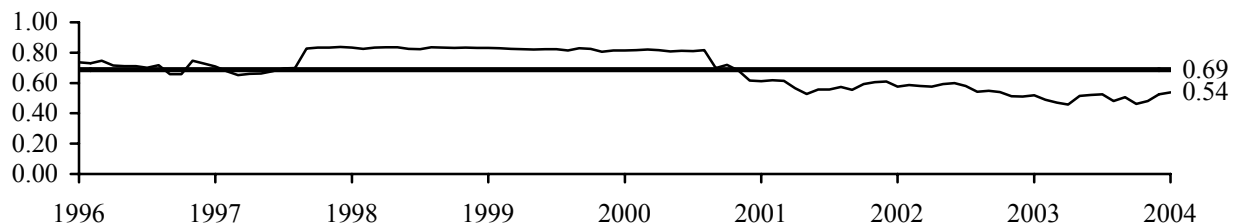
U.S. Small-Cap Equities vs U.S. High-Yield Bonds



U.S. High-Yield Bonds vs Emerging Markets Debt



Emerging Markets Equities vs Emerging Markets Debt



Sources: Lehman Brothers, Inc., Morgan Stanley Capital International, and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All correlations are done on a rolling 36-month basis and in U.S. dollars. Emerging markets debt data does not begin until January 1, 1994.

Table F

1998 FINANCIAL CRISIS: PERFORMANCE ACROSS ASSETS

A Sea of Red

	<u>3Q 1998 (%)</u>	
<u>Equities and Low-Quality Bonds</u>		
MSCI Emerging Markets	-22.0	
JP Morgan EM Bond Global	-20.6	
Russell 2000®	-20.1	
MSCI World ex U.S.	-14.7	
MSCI EAFE	-14.2	
S&P 500	-9.9	
LB U.S. High-Yield Bonds	-4.6	
<u>Marketable Alternatives*</u>		<u>Number of</u>
		<u>Managers</u>
Global ex U.S. Hedge Funds	-18.0	23
Distressed	-13.8	27
Fixed Income Arbitrage	-12.8	13
U.S. L/S Hedge Funds	-12.3	113
Event Arbitrage	-7.9	26
General Arbitrage	-6.9	42
Diversified Arbitrage	-4.2	22
Market-Neutral	-2.6	22
<u>Distribution of S&P 500</u>		
# of Stocks Declining	366	
Average Decline %	-21.5	
# of Stocks Increasing	121	
Average Increase %	9.7	
<u>High-Quality Bonds</u>		
LB Global Treasury Bond Index	8.6	
LB L-T Treasury Bond Index	7.9	
LB I-T Treasury Bond Index	4.8	
LB L-T Credit Index	3.0	

Sources: J.P. Morgan Securities, Inc., Frank Russell Company, Lehman Brothers, Inc., Morgan Stanley Capital International, Standard & Poor's, Standard & Poor's Compustat, and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

* Based on mean returns; median returns illustrate similar results.