

# The Case for Leveraged Loans

## An Attractive Source of Uncorrelated Returns

March 2009

David Frey, Partner, Portfolio Manager

Daniel Partlow, Managing Director, Director of Risk Management

*Over the past ten years, non-investment grade loans (also called “leveraged loans”) have evolved to become a true capital market asset class. The investor base has expanded beyond commercial banks to a market where more than half is held by a broad range of institutional investors including insurance companies, mutual funds, and hedge funds. Notably under-represented are pension funds, who should find the short duration, resistance to interest rates (relative to other fixed income assets), and the low correlation to bonds and equities very helpful in diversifying risk and enhancing their risk-adjusted returns.*

### A Brief Primer

The first point to address in any leveraged loan primer is the somewhat confusing nomenclature. While non-investment grade loans are most commonly referred to as “leveraged” loans, the securities themselves are not levered. The term “leveraged” does not refer to the company issuing the securities either, as all companies with debt are “levered.” It is best to equate the term “leveraged” with “non-investment grade” or “high yield” since the loans are issued by non-investment grade companies (i.e., companies rated below BBB-, typically with debt-to-EBITDA ratios in excess of 3.0 times). However, in the non-investment grade or high yield arena there are three key attributes that separate loans from high yield bonds and merit further discussion.

First, loans are generally senior and secured, with a first priority lien on all of the borrower’s assets. Their place in the capital structure is highlighted by an average recovery rate of 72%, compared with recovery rates of 44% and 33%, for senior unsecured bonds and senior subordinated bonds, respectively<sup>1</sup>. The second key distinction is that loans are typically governed by a credit agreement that includes “maintenance” covenants. These are specific ratios and other criteria that the borrower must be in compliance with at all times. This is in contrast to bonds which are typically governed by “incurrence” covenants, which are ratios or criteria that the borrower must be in compliance with only at the time of a specific action (such as borrowing additional debt, paying dividends, etc.). Maintenance covenants are intended to help protect the lender from deterioration in the

credit, as a borrower who is unable to maintain compliance with these predetermined ratios must seek to have them amended. Otherwise, the lenders have the right to demand immediate repayment. The amendment process allows lenders to impose greater discipline and constraints on the company’s management and may allow lenders to demand prepayments, additional equity or other necessary changes to the capital structure. The amendment process also allows lenders the opportunity to recalibrate the risk/reward dynamics of their investment when the risk increases, via interest rate increases and amendment fees. The third distinction is that loans are almost always floating-rate securities, and therefore have minimal interest rate duration risk. Non-investment grade loans are LIBOR-based, reset quarterly, and generally pay a fixed spread of at least 125 basis points. Given these attributes, a more descriptive, albeit wordier, name for the leveraged loan asset class would be “Non-Investment Grade Senior Secured Floating-Rate Debt.”

### Some History

The birth of the non-investment grade loan asset class coincided with the increase in leveraged buyouts in the early 1980s. This new form of lending was distinguished by a cash flow-based lending model, as opposed to a collateral-based lending model. Cash flow lending activity grew throughout the 1980s and early 1990s and was bolstered by the same investment thesis as for high yield bonds: while the risk of each loan individually is higher than an

<sup>1</sup> Credit Suisse, January 20, 2009

## Stanfield Capital Partners

investment grade or well collateralized asset-based loan, a substantial portion of these risks can be eliminated in a well diversified portfolio, yielding attractive investment returns.

Following the savings and loan crisis in 1991, banks began to place more emphasis on managing the inherent risk in their loan portfolios. Many banks sought to reduce their loss exposure, decrease the amount of capital required to support their lending activities, and focus more on fee generating businesses in an attempt to reduce earnings volatility and improve their return on capital. This led to the “syndication” of loans, where an agent bank would originate the loan and distribute portions of it to a group of other banks. As the market evolved, the group of syndicate members expanded to include other non-bank financial institutions and led to the development of the “institutional tranche” or “term loan B.” This is a term loan structured specifically for non-bank investors, as opposed to “pro-rata” tranches which are a combination of revolver and “term loan A” tranches still held primarily by commercial banks. Demand for institutional tranches grew concurrently with the explosive growth in Collateralized Loan Obligations (CLOs), which are securitizations of portfolios of leveraged loans. Institutional tranches now represent over \$860 billion of the estimated \$1.6 trillion of US leveraged loans outstanding<sup>1</sup>. Even though over half of the market is now held by non-bank financial investors, non-investment grade loans are still often called “bank loans”, as they continue to be originated by agent banks.

As the market grew, banks and institutional investors sought to diversify and actively manage their loan portfolios by increasing exposure to some companies and industries while divesting from others. This led to the development of an active secondary trading market beginning in the late 1990s. The growth and liquidity of the secondary trading markets are perhaps the most critical components in the evolution of the leveraged loan asset class into a true capital market. Secondary trading volume was \$584 billion in 2007 and \$506 billion in 2008<sup>2</sup>, which represents roughly one-third annual turnover of the \$1.6 trillion market.

The availability of third-party market prices has been another critical component. Beginning in 2000, the SEC directed bank loan mutual fund managers to use secondary trading prices to mark their portfolios to market for valuation purposes. Hedge funds and trading desks also mark their positions to market. This has made the loan market more transparent, has improved price discovery, and has made the loan market more efficient and dynamic than it was in the past. Loans now trade like securities, with secondary prices driven by similar factors of underlying company performance and outlook, supply and demand, relative value and overall market sentiment. As prices fluctuate, the effective spread and yield on the loan changes, resulting in a better or worse expected return for the buyer than the fixed coupon spread on the loan implies. This also drives relative value trading across loans, bonds and equity of a company and helps set new issue terms.

Calculating loan yields or spreads is not as straightforward as for bonds. Unlike bonds which have non-call periods and call premiums, loans are generally pre-payable at par at any time without pre-payment fees. Therefore, determining a spread-to-worst is a theoretical calculation which requires a somewhat arbitrary average life or pre-payment date. On average, between 1997 and 2004 loans had an average life of only 15 months<sup>3</sup>, despite having stated maturities of 6 to 7 years, due to the borrower being acquired, refinancing the debt or otherwise making unscheduled prepayments. Now, with the current difficult credit markets, loan investors are assuming longer spread-to-worst dates, of 3-4 years or to maturity.

Additionally, the standardization of loan contract conventions has increased significantly, greatly simplifying trade settlement and fostering secondary liquidity. In January 2004, the Loan Syndications and Trading Association (LSTA) and Standard & Poor's formally implemented CUSIP numbers for loans.

The growth in the secondary market and the broadening in the investor base also drove the creation of derivatives, synthetic securities and indices tied to leveraged loans, including single-name LCDS and the LCDX market indices which were launched in 2007. These tools, along with high

<sup>1</sup> Credit Suisse, January 20, 2009

<sup>2</sup> The Loan Syndications and Trading Association (LSTA)

<sup>3</sup> Standard & Poor's, October 2007

Stanfield Capital Partners

yield CDS and equity derivatives, provide a variety of ways for investors to hedge their portfolios, short individual loans or the broader loan market or pursue alternative credit strategies, such as capital structure arbitrage.

Leveraged loan performance compares quite favorably to other major asset classes, as shown in Exhibit 1. While the average annual return is comparable to other asset classes, the lower volatility of loans produces higher Sharpe Ratios

**Exhibit 1: Risk and Return January 1992 - September 2008**

Index	Annualized Return	Standard Deviation	Return/Risk	Sharpe Ratio
Credit Suisse Leveraged Loan	5.5%	0.86	6.4%	0.65
Credit Suisse High Yield	7.4%	1.75	4.2%	0.63
Merrill Lynch Corporate Master	6.1%	1.42	4.3%	0.51
Barclays Capital Aggregate	6.4%	1.07	6.0%	0.76
S&P 500	6.2%	3.91	1.6%	0.20
Dow Jones	7.5%	3.99	1.9%	0.28
NASDAQ	7.8%	6.95	1.1%	0.17
MSCI World	4.8%	3.86	1.2%	0.09

**Risk/Return Profile**

In this report, we present historical data since the origination of the Credit Suisse Leveraged Loan Index in 1992 through 2008. We also present the data excluding the fourth quarter of 2008, as the unprecedented stress in global financial markets caused most asset classes to become highly correlated and has thus significantly obscured prior historical relationships. Historical data for both periods are shown in the Appendix.

and risk-adjusted returns. The investment merits of loans also lead to better performance in periods of financial stress, as shown in Exhibit 2.

Beyond the favorable risk/return profile, a major attraction for investors is the diversification that leveraged loans provide. From a logical perspective, a floating-rate high yield security should provide diversification to the typical high-grade fixed-income portfolio, but the empirical evidence is striking. The correlation of the Credit Suisse

**Exhibit 2: Average Return During Historical Stress Scenarios\***

Index	Rising Rising Libor	Rising Treasury Yields	Falling GDP	Rising Oil Prices	Times of Crisis
Credit Suisse Leveraged Loan	0.51	0.80	(0.94)	0.24	(3.79)
Credit Suisse High Yield	0.20	(0.28)	(1.09)	0.28	(6.02)
Merrill Lynch Corporate Master	0.03	(1.71)	0.39	0.14	(0.93)
Barclays Capital Aggregate	0.10	(1.42)	0.78	0.34	0.82
S&P 500	0.32	(0.85)	(2.68)	(0.23)	(9.11)
Dow Jones	0.09	(0.75)	(1.94)	0.23	(8.12)
NASDAQ	0.95	(0.92)	(4.42)	0.19	(13.46)
MSCI World	0.50	(0.26)	(3.03)	0.21	(9.51)

**Performance Rank**

Index	Rising Libor	Rising Treasury Yields	Falling GDP	Rising Oil Prices	Times of Crisis	Across all 5 Scenarios
Credit Suisse Leveraged Loan	2	1	3	3	3	2
Credit Suisse High Yield	5	3	4	2	4	3
Merrill Lynch Corporate Master	8	8	2	7	2	6
Barclays Capital Aggregate	6	7	1	1	1	1
S&P 500	4	5	6	8	6	7
Dow Jones	7	4	5	4	5	4
NASDAQ	1	6	8	6	8	8
MSCI World	3	2	7	5	7	5

\*Rising Libor: Feb-Dec94, May99-Sep00, Apr04-Jun06. Rising Treasury Bond: Feb-Jun94, Jul03, Apr04. Falling GDP: Q300-Q301, Q407-Q408. Rising Oil: Mar-Sep09, Feb-Apr02, Nov06-Jun08. Times of Crisis: Aug 98, Jul-Sep 01, Sep-Nov 08

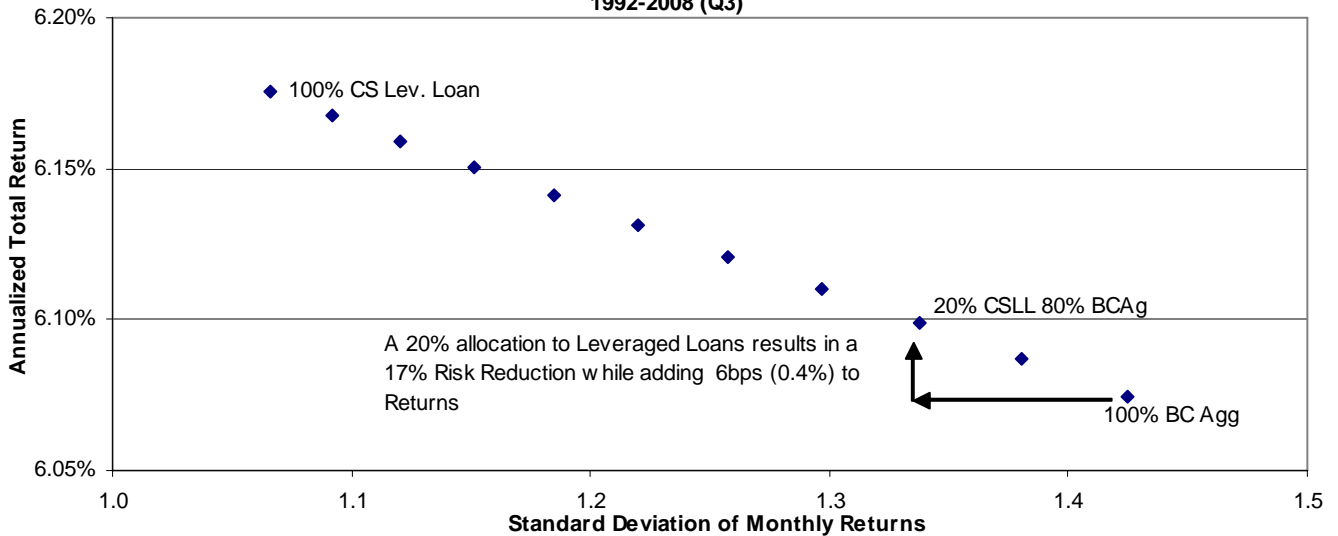
Stanfield Capital Partners

Leverage Loan Index returns to 10 year US Treasuries is +20% versus -78% for the Merrill Lynch Corporate Master investment grade bond index and -91% for the Barclays Capital Aggregate Bond Index. As a result, the correlation of returns of the Credit Suisse Leverage Loan Index returns to the returns for the Barclays Capital Aggregate Bond Index is only -0.02%.

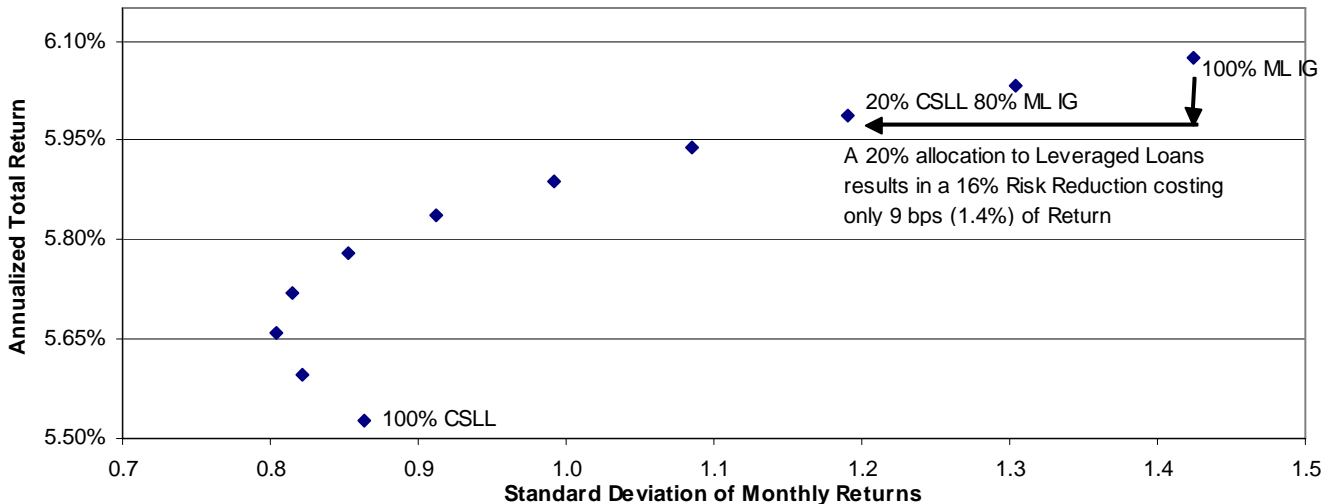
As shown on the efficient frontier in Exhibit 3, diversifying 20 percent of an investment in the Barclays Capital Aggregate

Bond Index with the Credit Suisse Leveraged Loan Index *increases* the portfolio return by 6bp or 0.4%, while decreasing the annualized return volatility by 17%. As shown in Exhibit 4, diversifying 20 percent of an investment in the Merrill Lynch Corporate Master investment grade bond index with the Credit Suisse Leveraged Loan Index decreases the portfolio return by 9bp or 1.4%, while decreasing the annualized return volatility by 16%. This equates to a 11.4 to 1 ratio of decrease in risk to decrease in return.

**Exhibit 3: Blended Portfolio Credit Suisse Leveraged Loan & Barclays Capital Aggregate 1992-2008 (Q3)**



**Exhibit 4: Blended Portfolio Credit Suisse Leveraged Loan & Merrill Lynch Corporate Master (IG) 1992-2008 (Q3)**



The diversification benefit of blending loans and equities is even more impressive. As shown on the efficient frontier in Exhibit 5, diversifying 20 percent of an investment in the S&P 500 Index with the Credit Suisse Leveraged Loan Index only reduces the portfolio return by 0.2bp or 0.05%, while decreasing the annualized return volatility 19%. This equates to a 380 to 1 ratio of decrease in risk to decrease in return.

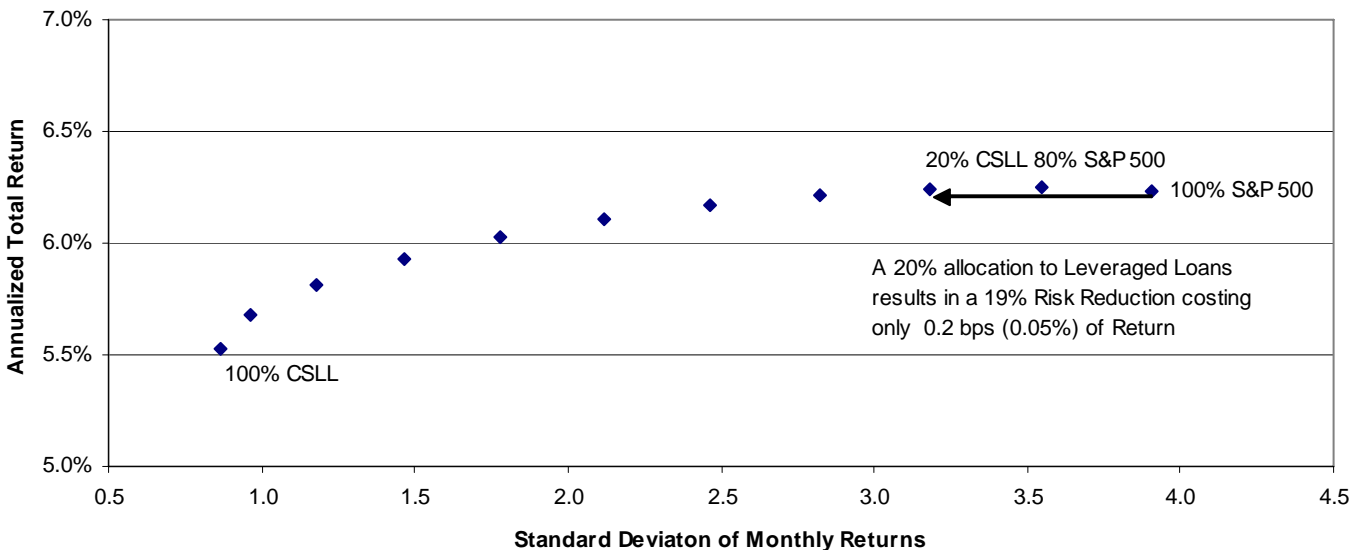
Intuitively, given their floating-rate income, non-investment grade loans should significantly outperform bonds and possibly equities in a very high inflation environment. Given the relatively benign inflation environment since the inception of the Credit Suisse Leveraged Loan Index in

1992, this investment benefit is difficult to demonstrate empirically.

**Conclusion**

The distinct structural characteristics and historic performance of leveraged loans makes a compelling case for investment. The investment attributes of floating rate exposure, the relatively low correlation of loan returns with equities and fixed income, and protection from loan's senior secured collateral position and financial covenants provide unique benefits and merit further consideration by a broad array of investors.

**Exhibit 5: Blended Portfolio Credit Suisse Leveraged Loan & S&P 500 1992-2008 (Q3)**



**About the Investment Advisor**

Stanfield Capital Partners LLC is an SEC-registered investment advisor founded in 1998, with a core focus on non-investment grade loans and related credit-based strategies. Stanfield's Managing Partners structured one of the first independently managed loan portfolios in 1990 and have one of the longest institutional track records in the non-investment grade loan business, with an average of 25 years of experience managing loans and high yield bonds through many different economic cycles. Stanfield's investment, risk and operations platform and active portfolio management style are uniquely suited to generate superior risk-adjusted return performance across a broad variety of credit investment products and market environments. Stanfield had approximately \$5.1 billion in assets under management as of March 31, 2009.

**Contact Information**

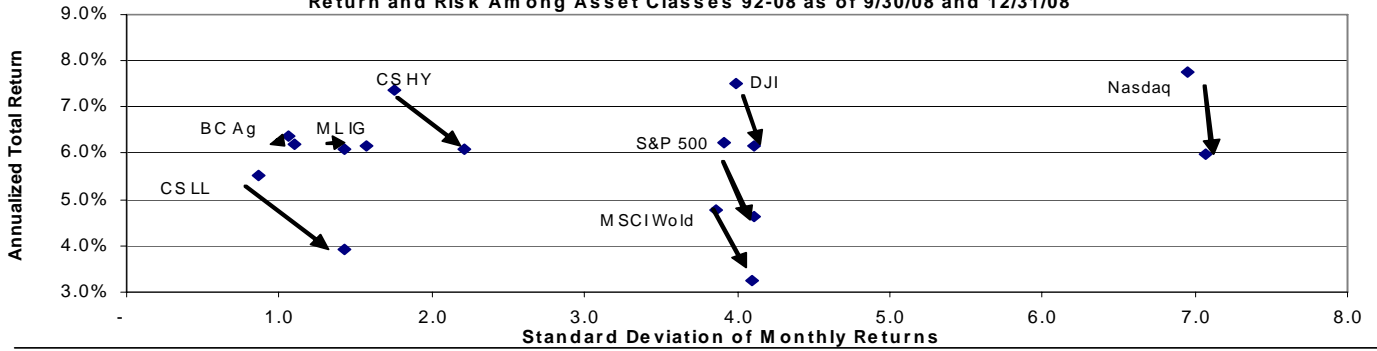
Stanfield Capital Partners LLC  
430 Park Avenue  
New York, New York 10022  
www.stanfieldcp.com

**Sharyn D'Silva**, Head of Client Services  
212 891 9638, [sdsilva@stanfieldcp.com](mailto:sdsilva@stanfieldcp.com)

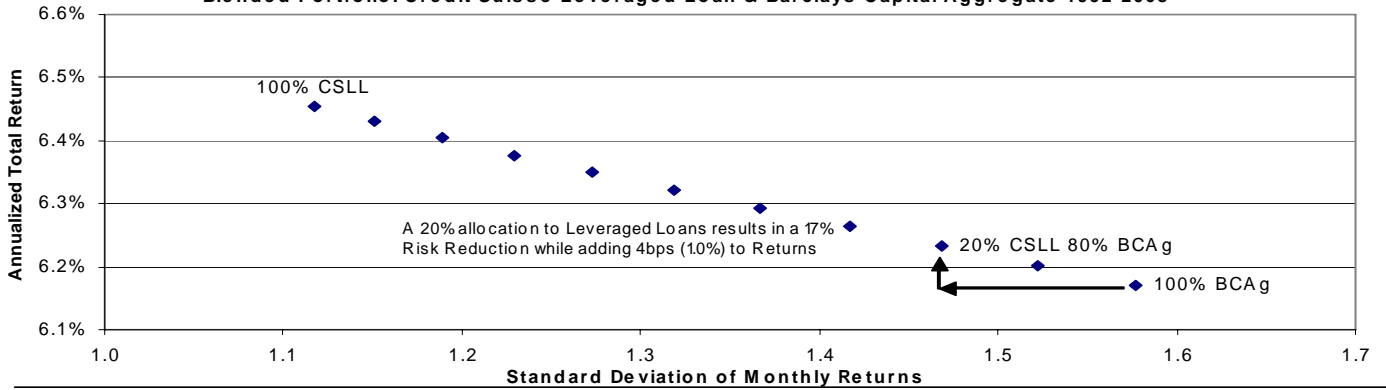
Stanfield Capital Partners

**Appendix**

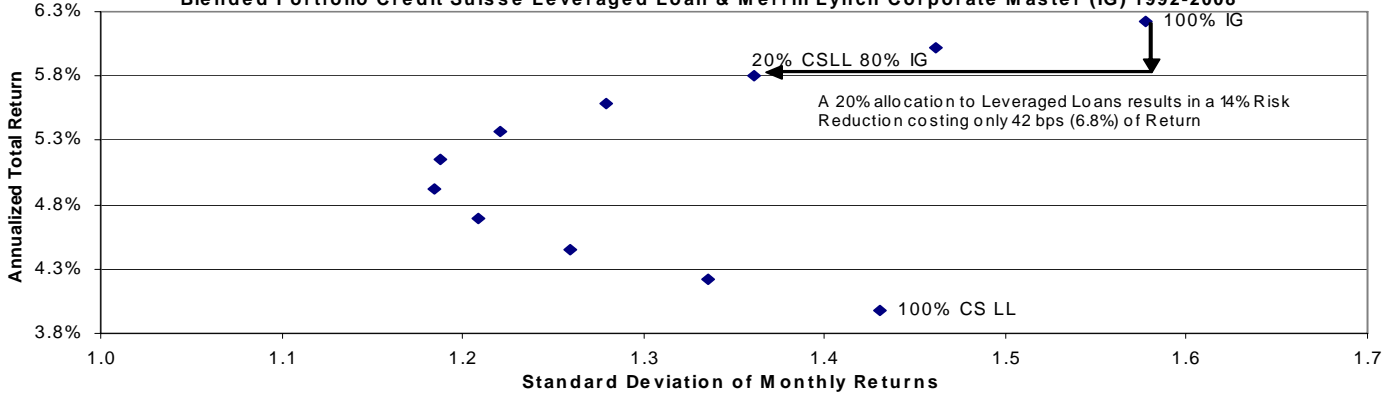
**Return and Risk Among Asset Classes 92-08 as of 9/30/08 and 12/31/08**



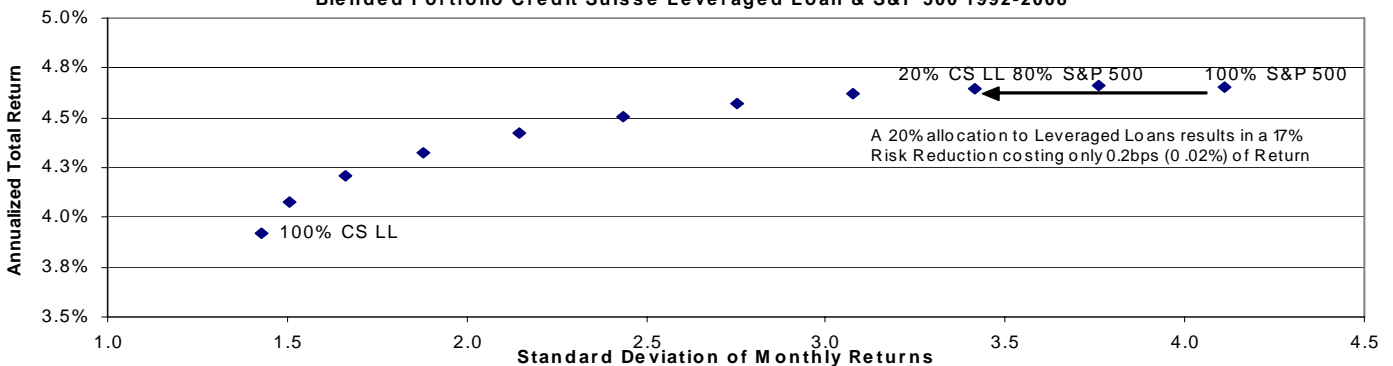
**Blended Portfolio: Credit Suisse Leveraged Loan & Barclays Capital Aggregate 1992-2008**



**Blended Portfolio Credit Suisse Leveraged Loan & Merrill Lynch Corporate Master (IG) 1992-2008**



**Blended Portfolio Credit Suisse Leveraged Loan & S&P 500 1992-2008**



**Appendix**

**Risk And Return Jan 1992 - Sep 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Annualized Return Jan 1992 - Sep 2008	5.5%	7.4%	6.1%	6.4%	6.2%	7.5%	7.8%	4.8%
St. Dev. Of Monthly Return Jan 1992 - Sep 2008	0.86	1.75	1.42	1.07	3.91	3.99	6.95	3.86
Return / Risk 1992 - Sep 2008	6.4%	4.2%	4.3%	6.0%	1.6%	1.9%	1.1%	1.2%
Sharpe Jan 1992 - Sep 2008	0.65	0.63	0.51	0.76	0.20	0.28	0.17	0.09

**Risk And Return Jan 1992 - Dec 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Annualized Return Jan 1992 - Dec 2008	3.9%	6.1%	6.2%	6.2%	4.7%	6.2%	6.0%	3.2%
St. Dev. Of Monthly Return Jan 1992 - Dec 2008	1.43	2.21	1.58	1.12	4.11	4.11	7.07	4.10
Return / Risk 1992 - Dec 2008	2.7%	2.7%	3.9%	5.5%	1.1%	1.5%	0.8%	0.8%
Sharpe Jan 1992 - Dec 2008	0.07	0.32	0.47	0.67	0.07	0.18	0.10	(0.03)

**Correlation of Returns to Economic Factors Jan 1992 - Sep 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
GDP	15%	5%	-12%	-19%	21%	16%	23%	24%
CPI	-5%	-10%	-5%	-4%	-9%	-5%	-8%	-14%
WTI	11%	1%	5%	0%	-1%	-6%	12%	7%
10Y US Treasury Yield	20%	5%	-78%	-91%	15%	20%	20%	18%

**Correlation of Returns to Economic Factors Jan 1992 - Dec 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
GDP	36%	18%	-11%	-21%	28%	23%	27%	30%
CPI	23%	-4%	-17%	-17%	-2%	1%	-4%	-8%
WTI	33%	17%	8%	-1%	9%	3%	17%	17%
10Y US Treasury Yield	27%	5%	-76%	-90%	16%	20%	20%	16%

**Correlation of Returns Between Asset Classes Jan 1992 - Sep 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Credit Suisse Leveraged Loan	100%	60%	23%	-2%	28%	23%	22%	31%
Credit Suisse High Yield	60%	100%	42%	19%	54%	51%	52%	55%
Merrill Lynch Corporate Master (IG)	23%	42%	100%	92%	20%	12%	10%	18%
Barclays Capital Aggregate (BC Ag)	-2%	19%	92%	100%	5%	0%	-5%	1%
S&P 500	28%	54%	20%	5%	100%	92%	80%	91%
Dow Jones	23%	51%	12%	0%	92%	100%	65%	85%
NASDAQ	22%	52%	10%	-5%	80%	65%	100%	75%
MSCI World	31%	55%	18%	1%	91%	85%	75%	100%

**Correlation of Returns Between Asset Classes Jan 1992 - Dec 2008**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Credit Suisse Leveraged Loan (CS LL)	100%	71%	25%	-1%	41%	35%	30%	43%
Credit Suisse High Yield (CS HY)	71%	100%	47%	22%	59%	54%	53%	62%
Merrill Lynch Corporate Master (IG)	25%	47%	100%	91%	26%	17%	14%	26%
Barclays Capital Aggregate (BC Ag)	-1%	22%	91%	100%	8%	2%	-3%	6%
S&P 500	41%	59%	26%	8%	100%	93%	81%	92%
Dow Jones (DJI)	35%	54%	17%	2%	93%	100%	67%	86%
NASDAQ (Ndq)	30%	53%	14%	-3%	81%	67%	100%	76%
MSCI World	43%	62%	26%	6%	92%	86%	76%	100%

**Avg. Return During Historical Stress Scenarios**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Rising Libor (Fb-Dc 94, My99-Sp00, Ap04-Jn06)	0.51	0.20	0.03	0.10	0.32	0.09	0.95	0.50
Rising Treasury Bond Yields (Fb-Jn 94, Jl-Jl 03, Ap 04)	0.80	(0.28)	(1.71)	(1.42)	(0.85)	(0.75)	(0.92)	(0.26)
Falling GDP (Q300-Q301, Q407-Q408)	(0.94)	(1.09)	0.39	0.78	(2.68)	(1.94)	(4.42)	(3.03)
Rising Oil Prices (Mr-Sp 09, Fb-Ap02, Nv06-Jn08)	0.24	0.28	0.14	0.34	(0.23)	0.23	0.19	0.21
Times of Crisis: (Au 98, Jl-Sp 01, Sp-Nv 08)	(3.79)	(6.02)	(0.93)	0.82	(9.11)	(8.12)	(13.46)	(9.51)

**Performance Rank**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Rising Libor (Fb-Dc 94, My99-Sp00, Ap04-Jn06)	2	5	8	6	4	7	1	3
Rising Treasury Bond Yields (Fb-Jn 94, Jl-Jl 03, Ap 04)	1	3	8	7	5	4	6	2
Falling GDP (Q300-Q301, Q407-Q408)	3	4	2	1	6	5	8	7
Rising Oil Prices (Mr-Sp 09, Fb-Ap02, Nv06-Jn08)	3	2	7	1	8	4	6	5
Times of Crisis: (Au 98, Jl-Sp 01, Sp-Nv 08)	3	4	2	1	6	5	8	7
Performance Rank Across All 5 Scenarios	2	3	6	1	7	4	8	5

**Avg. Risk Adj. Return During Historical Stress Scenarios**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Rising Libor (Fb-Dc 94, My99-Sp00, Ap04-Jn06)	0.36	0.09	0.02	0.09	0.08	0.02	0.13	0.12
Rising Treasury Bond Yields (Fb-Jn 94, Jl-Jl 03, Ap 04)	0.56	(0.13)	(1.08)	(1.28)	(0.21)	(0.18)	(0.13)	(0.06)
Falling GDP (Q300-Q301, Q407-Q408)	(0.66)	(0.49)	0.25	0.70	(0.65)	(0.47)	(0.63)	(0.74)
Rising Oil Prices (Mr-Sp 09, Fb-Ap02, Nv06-Jn08)	0.16	0.13	0.09	0.30	(0.05)	0.06	0.03	0.05
Times of Crisis: (Au 98, Jl-Sp 01, Sp-Nv 08)	(2.65)	(2.72)	(0.59)	0.73	(2.22)	(1.97)	(1.90)	(2.32)

**Performance Rank**

	CS LL	CS HY	IG	BC Ag	S&P 500	DJI	Ndq	MSCI
Rising Libor (Fb-Dc 94, My99-Sp00, Ap04-Jn06)	1	4	8	5	6	7	2	3
Rising Treasury Bond Yields (Fb-Jn 94, Jl-Jl 03, Ap 04)	1	3	7	8	6	5	4	2
Falling GDP (Q300-Q301, Q407-Q408)	7	4	2	1	6	3	5	8
Rising Oil Prices (Mr-Sp 09, Fb-Ap02, Nv06-Jn08)	2	3	4	1	8	5	7	6
Times of Crisis: (Au 98, Jl-Sp 01, Sp-Nv 08)	7	8	2	1	5	4	3	6
Performance Rank Across All 5 Scenarios	2	4	5	1	8	6	3	7