



## Global Opportunities in Credit Investing

*by Claudio Phillips, Managing Director, Fixed Income and Commodities, Commonfund*



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## Executive Summary

The early stages of the 21st century have been marked by a dramatic leveling of the global playing field. In his bestselling book, *The World is Flat*, Tom Friedman concludes that a number of forces have combined to make it easier for “more people to collaborate and compete in real time with more other people on more kinds of work and from more different corners of the planet and on a more equal footing than at any previous time in the history of the world.” It is in this context that the world capital markets are evolving, and converging, where capital flows are less impeded by archaic banking and regulatory practices, where liquid public markets are developing, where investor protections are improving and where investing in global credit assets can represent attractive opportunities for investors. At the same time, as author Nassim Taleb argues in his book, *The Black Swan: The Impact of the Highly Improbable*, there is always a chance that an “an outlier, an event that lies beyond the realm of normal expectations” will occur that will in retrospect seem predictable but in reality is not. The two scenarios are inevitably related as the new free flow of information combined with the unpredictable (i.e., 9/11; the Dot-com boom/bust) will provide unprecedented opportunities in the global credit markets.

While the liquidity crisis which developed from the sub-prime mortgage crisis in the summer of 2007 does not fall under the Black Swan category (the crisis was not unpredictable, but it did surprise most participants by the violent decline of perceived credit worthiness), it is a good example of how fast markets react in times of stress and how intertwined the global monetary system has become. It would be

difficult to envision a scenario earlier this century where the failure of U.S. lenders to maintain high standards in the home mortgage space would be the cause of an Australian hedge fund collapse.

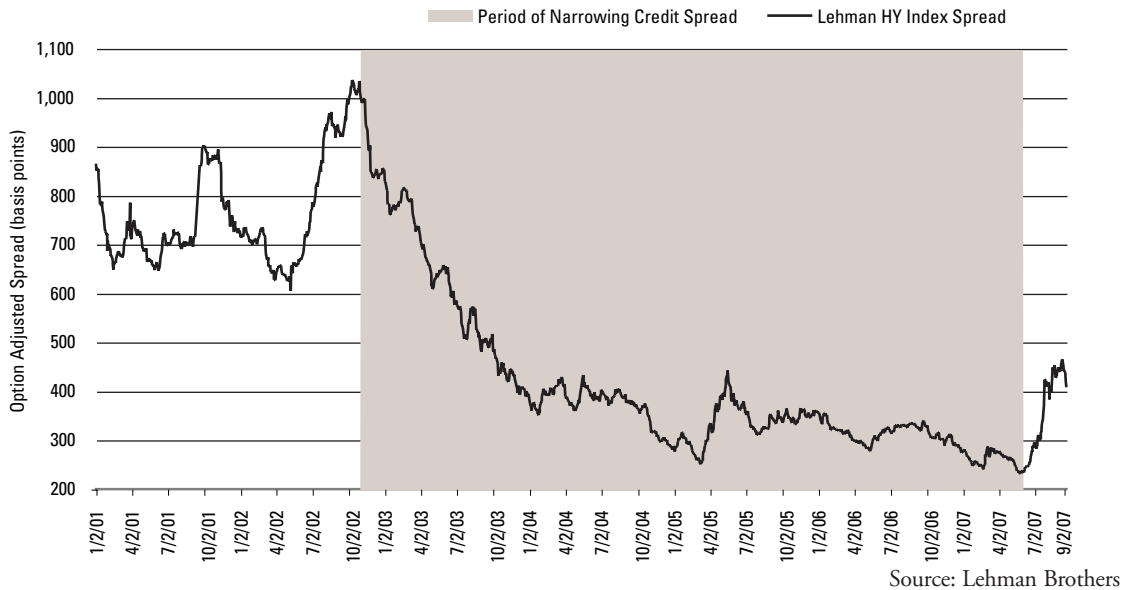
This is not to say, however, that this current environment is a new paradigm. A number of factors have changed, creating what we believe is a favorable global investment opportunity for credit based strategies. Driven in part by the need to comply with global banking treaties (e.g. Basel II) and accords to improve system capitalization, financial institutions (both public and private) have become more active in the management of stressed and distressed debt.

In addition, there has been a move towards greater clarity of various countries’ bankruptcy laws. While few countries have as creditor-friendly laws or legal systems as the United States or the U.K., the improving transparency in countries like Italy and China provides a certain confidence level to investors who now know the ground rules.

Clearly there remains risk in strategies that seek to gain from companies that have fallen on bad times. In addition to the inherent risks of credit management, the benign credit environment which existed from 2003 into the summer of 2007 spawned a new generation of financial tools and investment strategies which also allow for a greater diversity of investment options.

This paper will discuss and analyze the market for investing in global credit assets. It will define the market opportunity and introduce proven and new approaches to, and risks of, investing in distressed or troubled companies, assets and securities – both domestic and international.

**Chart 1**  
**Benign Credit Environment**



**Defining the Global Credit Market Universe**

The period between early 2003 and mid 2007 in the financial markets has generally been referred to as the benign credit environment (see Chart 1). During this period we experienced record debt issuance, a proliferation of new structured finance investment vehicles, and a

dramatic narrowing of credit spreads. A clear sense of complacency existed where it seemed every credit investor made money and no one was punished for

taking risk - no matter how cavalier the investment or investment structure. Previously, investors who wished to take stressed and distressed credit risk were effectively limited to the purchase of discounted loans and bonds with the occasional foray into the trade claim sector. Depending on a particular investor's

strategy, i.e. control or non-control, loans(private, illiquid, usually higher end of the capital structure) or bonds (public, liquid, usually subordinated), the debt buyer had what is now seen as a limited role. Investors would purchase the deeply discounted debt,

negotiate with the borrower through a committee, usually steered by the underwriting bank, and then get taken out of the investment at a level negotiated by the committee and the borrower.

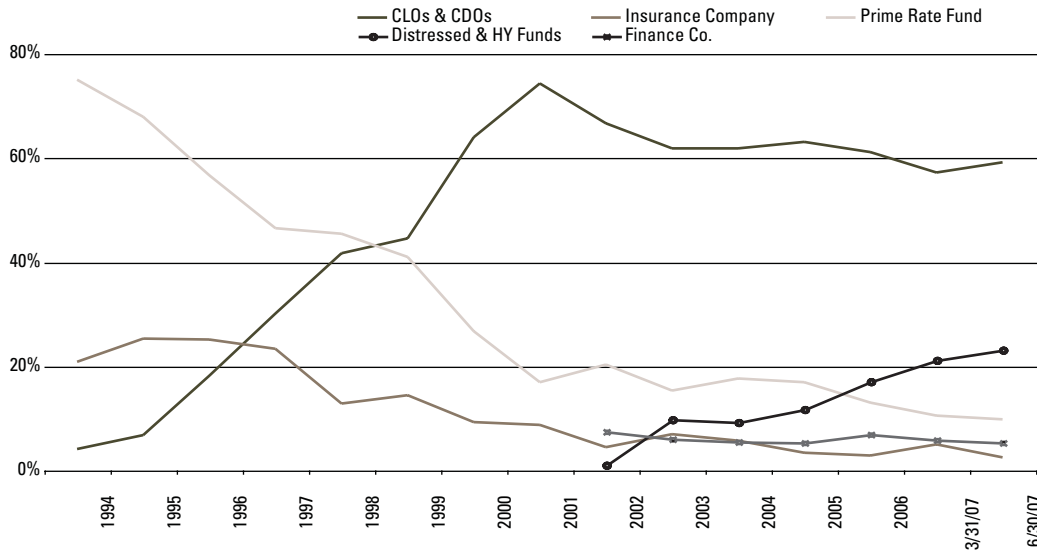
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The combination of historically high liquidity, new investment strategies, record debt issuance and new financial instruments created a very efficient credit market where it seemed every credit investor made money and no one was ever punished for taking risk, no matter how cavalier those investments were.

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The major investment banks would then lead (and get handsomely paid for) any sort of refinancing or re-capitalization (through the issuance of new equity). If the debt holders received equity in lieu of their debt, these equity positions were typically sold so investors could re-invest their capital in other

**Chart 2**  
**The Changing Face of the Loan Market**



Source: Standard & Poor's Leveraged Commentary and Data

discounted debt. This characterization began to change in late 2003 when deeply discounted distressed debt became more scarce.

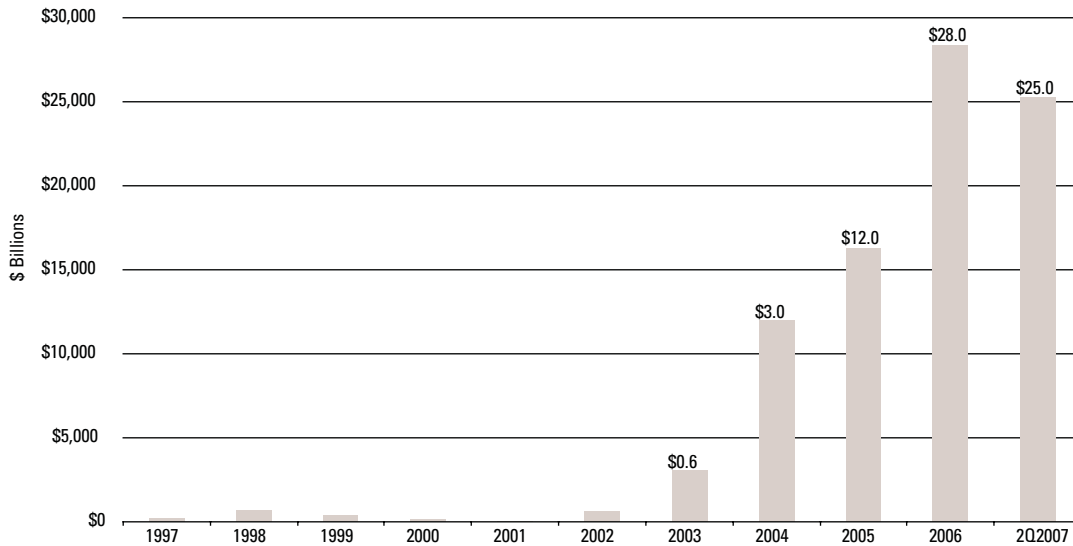
As opportunities in the distressed markets lessened, funds were forced to find other methodologies to maintain and increase their performance. This resulted in funds becoming more aggressive in the restructuring process at the expense of the banks and, in addition, the funds began to finance their own exit strategies, effectively disintermediating the investment banks. As illustrated in Chart 2, this new environment, created by historically low interest rates and seemingly limitless liquidity, allowed for the increased prominence of alternative and “structured finance” investment vehicles such as Collateralized Debt Obligation (“CDOs”) and Collateralized Loan Obligation (“CLOs”) which, in turn, brought substantial new capital to the markets. In this environment, the search for returns became extremely competitive and investors were forced to think outside the traditional credit and fixed-income norms in order to produce adequate results.

One of the most visible developments in the recent

evolution of the credit market is distressed financing. Portfolio Managers, given the lack of discounted debt and historically low default rates, have been forced to uncover companies that are on the verge of defaulting and then try to control the restructuring process before there is an actual bankruptcy. This has resulted in the financing of distressed companies, typically in the form of newly created loans, second liens or subordinated and mezzanine debt with equity components. The distressed companies targeted are frequently middle market companies with limited or no access to the capital markets. Investors typically look for opportunities to exit their financing arrangements within two to three years. The forms of such lending arrangements include:

**Mezzanine Debt:** There are a variety of funds which may provide mezzanine and other loans, often in situations where the credit is deemed too risky for traditional mezzanine lenders. In these circumstances more favorable terms are required than those received by traditional mezzanine lenders and as a consequence, investors expect higher internal rates of return and a shorter one- to three-year holding period.

**Chart 3**  
**2nd Lien Loan Volume**



Source: Standard & Poor's Leveraged Commentary and Data

**Corporate Private Lending:** These are opportunistic corporate lending situations for investors, as both leads and participants. Examples of such lending opportunities include bridge loans, secured mezzanine financings, debtor-in-possession financings (“DIPs”), junior secured asset-based loans and structured letters of credit (“LCs”). In terms of risk, these investments have a wide range, with DIPs being considered “super” senior while the LCs may be at the bottom of the capital structure. These investments may also presume a likelihood of a bankruptcy filing and are structured/priced for their illiquidity while providing downside protection.

**Second-Lien Financings:** The use of second lien financing has grown exponentially since 2003 (see Chart 3). Historically, this form of subordinated debt has been used to augment senior secured financings for companies which have access to the capital markets. Second-lien financing varies widely in the individual structure (i.e. legal framework within the capital structure) and, therefore, remains a sector that is untested in times of stress.

**Real Estate Private Lending/Investment:** Credit managers may also seek to originate and invest in

selected secured real estate lending opportunities in which a troubled borrower receives substantially less than the value of the pledged collateral securing the loan. These opportunities are generally more available at the low point of the economic cycle. Portfolio managers may also make direct acquisitions of stressed real estate properties, residential and commercial, both in the United States and abroad.

Not only have credit investors created new strategies over the last three years, but there has been an explosion of financial innovation, new instruments, and new investment opportunities in the credit markets in an environment that has offered fewer and fewer discounted debt opportunities. Many of these are derivative instruments known primarily by their acronyms including CDS and LCDS, for derivatives of single name credits, and CDX, LCDX, iTraxx, and ABX which represent derivative exposure to particular indices. (For more detailed descriptions of these instruments, please refer to the Appendix.)

The combination of historically high liquidity, new investment strategies, record debt issuance and new financial instruments created a very efficient credit market. Just as complacency set into the credit

markets (close to zero percent default rates, record issuance of every capital structure type, and historically tight credit spreads), the 2007 sub-prime crisis has proven that the “Credit Emperor” had no clothes: it has exposed those investment managers who did not effectively manage risk (“bull market babies”), while recognizing those managers who anticipated the inevitable credit volatility and hedged accordingly. The more important outcome is that the credit investment opportunities being presented now and going forward are likely to increase exponentially. The former result is more of a weeding out process which will result in successful risk managers having less competition as the bull market babies become cautious and risk adverse, having been severely punished for their complacency. The latter is the focus of this paper.

**At Commonfund, we expect that this surge in highly-leveraged buyouts will provide increased distressed investing opportunities in the future.**

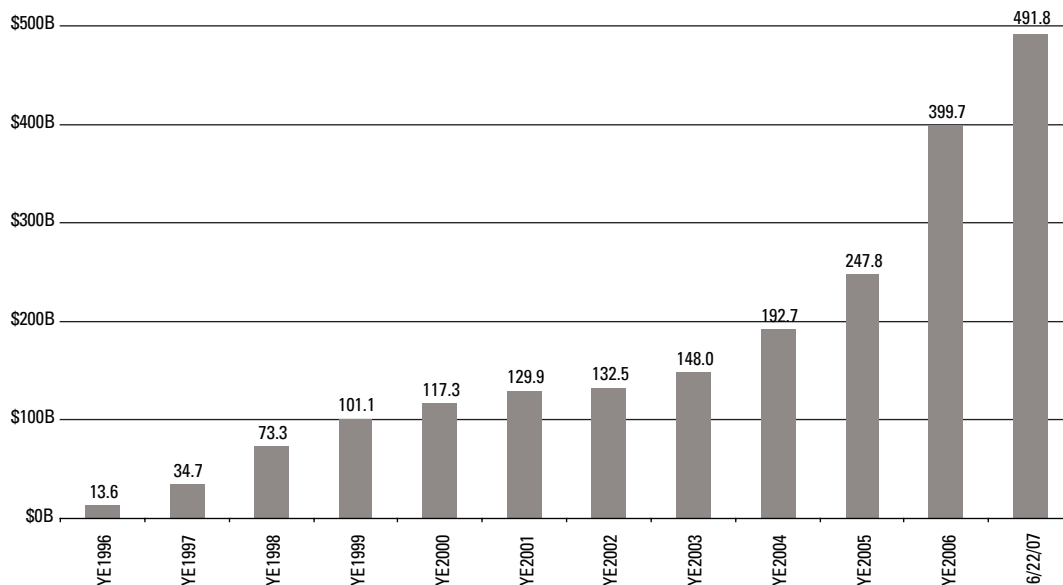
## Credit Investment Opportunities

The repricing of credit risk that started in July 2007 has created several types of investment opportunities. The initial opportunity and one of the most high profile is in the discounted bank loan market.

Due to excess liquidity in the financial system between 2003 and mid 2007, the bank loan market

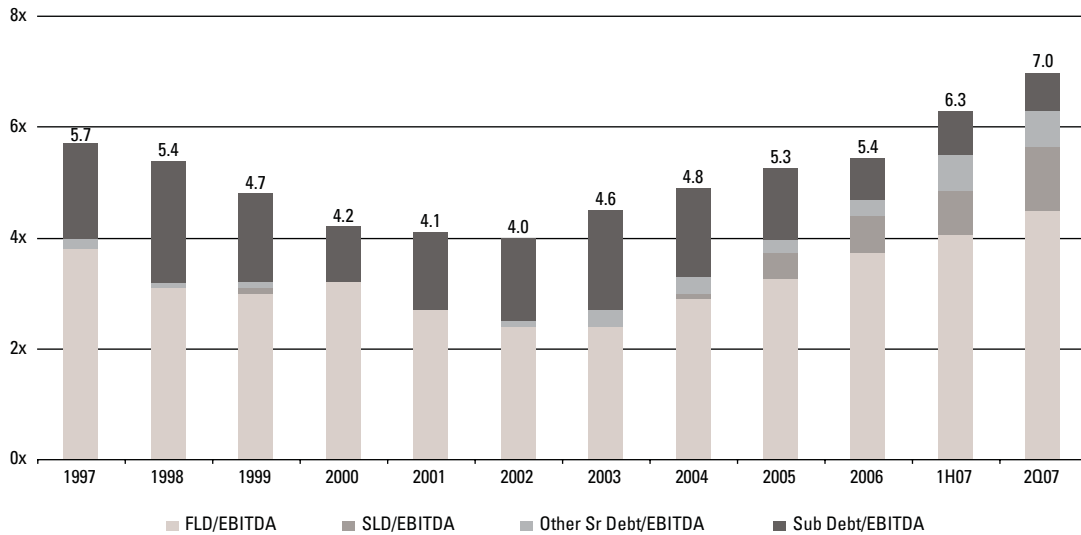
experienced unprecedented issuance, much of it at the expense of the High Yield bond market depicted in Chart 4 below. Bank loans are borrower friendly debt instruments as they are not subject to regulatory registration, have minimal call protection, became less encumbered by historically required performance covenants, and evolved into a bullet repayment structure. In addition, the benign environment also facilitated the surge in merger and acquisition activity and leveraged buy-out activity at increasing leverage and purchase multiples. Chart 5, on the next page, highlights the debt multiples for large corporate LBO’s over the past ten years.

**Chart 4  
Par Amount of Outstanding Leveraged Loans**



Source: Standard & Poor’s Leveraged Commentary and Data

**Chart 5**  
**Average Debt Multiples of Large Corporate LBO Loans (EBITDA > \$50m)**

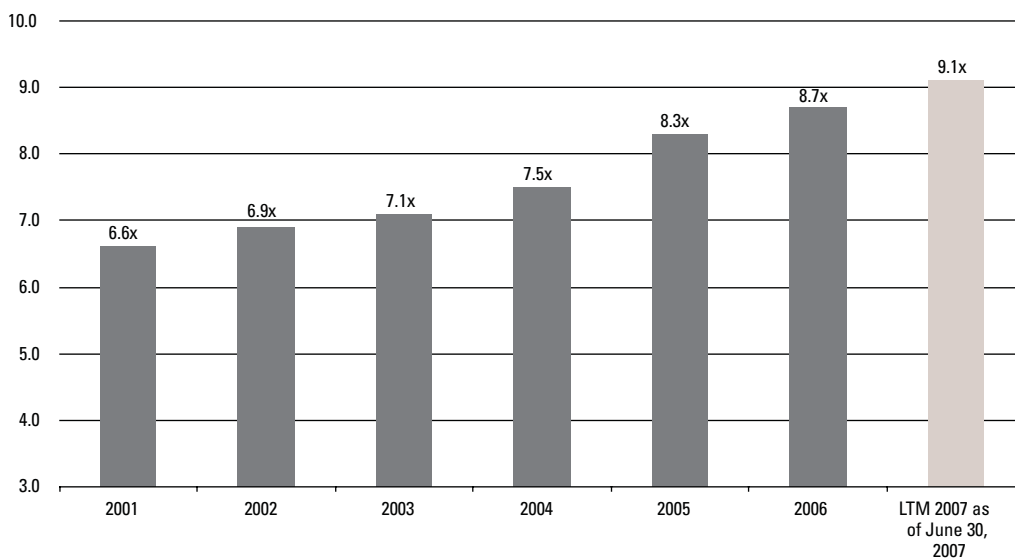


Source: Standard & Poor's Leveraged Commentary and Data

Purchase price multiples, shown on Chart 6, have been rising steadily in recent years from a trough of 6.6x EBITDA in 2001 to over 9.0x EBITDA in the first half of 2007. To finance these expensive acquisitions, private equity purchasers have used considerable leverage. According to S&P's Loan Commentary and Data ("LCD"), lenders in middle market LBOs financed at rates between 6.0x to 6.5x EBITDA in the first half of this year, up from 3.0x to 3.5x leverage in 2001. At Commonfund, we expect

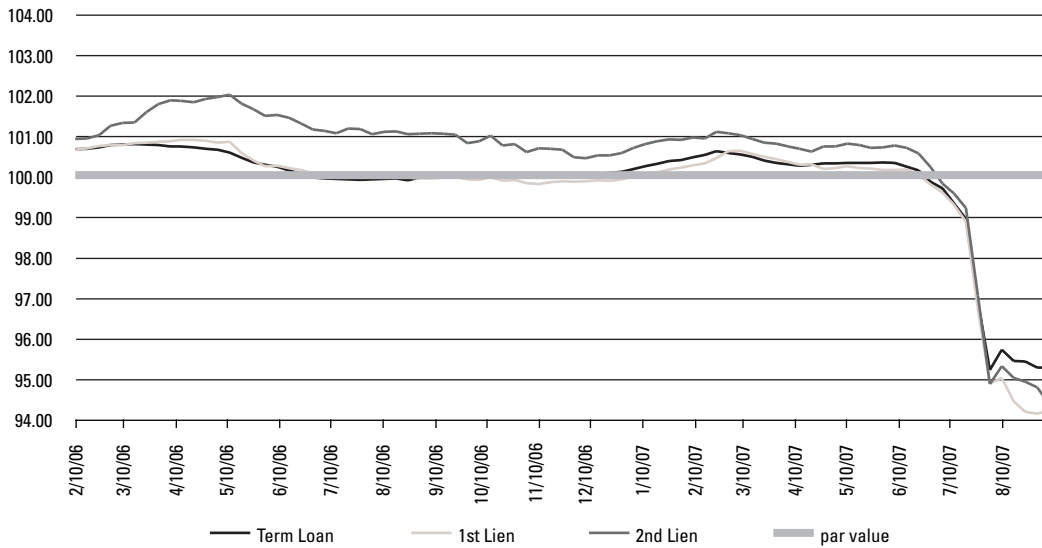
that this surge in highly-leveraged buyouts will provide increased distressed investing opportunities in the future. Since financial distress often follows overpayment for assets, opportunities for distressed investing typically increase on a lagged basis after excesses in the M&A (including LBOs) markets. The current trends of increased competition for transactions, high pricing expectations, high utilization of "dividend deals" (where the use of proceeds is primarily for special dividends to share-holders in

**Chart 6**  
**Higher Purchase Price Multiples**



Source: Standard & Poor's Leveraged Commentary and Data

**Chart 7**  
**U.S. High Yield Loan Average Price**



Source: Standard & Poor's Leveraged Commentary and Data

buyouts and of little economic value to the company), and aggressive use of leverage and floating rate debt (in a rising rate environment), may eventually contribute to future supply of defaulted securities.

However, there is an immediate opportunity as the finance providers \_\_\_\_\_ average price of for these acquisitions, who had made bridge loans with impunity for four years at low spreads, are now \_\_\_\_\_

With the unprecedented growth in lower quality debt issuance and the current liquidity squeeze, we foresee the default rate increasing dramatically from its current level.

unable to distribute the risk anywhere near the levels they had committed to for the financings. In effect, money center banks, as of this writing, are left underwriting these large positions and are hesitant to sell at large discounts so as to not take a realized loss. Estimates of these “hung” deals range from \$200 to \$400 billion. There have been negotiated one-off transactions, but there has not been an orderly liquidation of these unspoken for loans as of September 2007.

These “hung” bridge loans not only have provided an extraordinary new supply of discounted assets, but as importantly, the widening of credit spreads has forced the existing supply of loans to re-price.

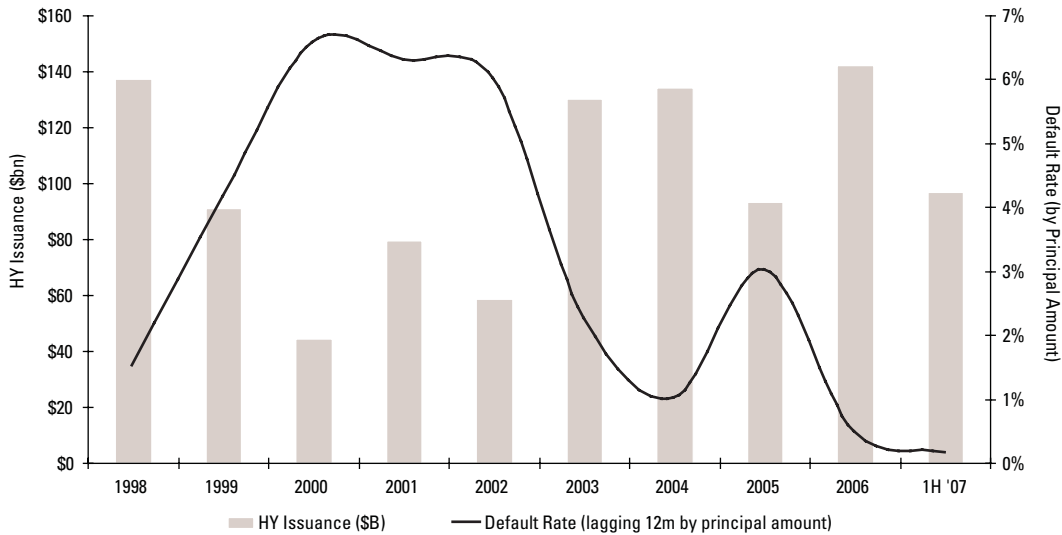
As seen in Chart 7 above, in less than one month, the \_\_\_\_\_ price appreciation

opportunities not seen in four years.

Although the short term opportunities are certainly attractive, we believe that the credit markets will provide an even larger array of investment possibilities in the future, both domestically and abroad, in the following areas:

**Defaulted debt:** With the unprecedented growth in lower quality debt issuance and the current liquidity squeeze, we foresee the default rate increasing dramatically from its current level. Historically, the lag

**Chart 8**  
**Year Lag between Peaks in HY Issuance & Rising Defaults**



Source: Lehman Brothers and Standard & Poor's Leveraged Commentary and Data

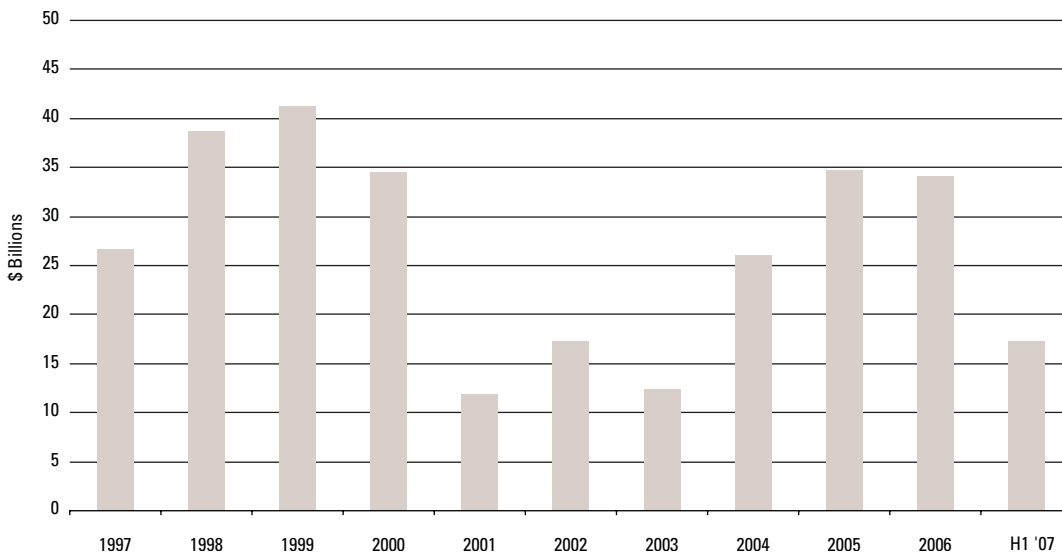
from issuance to an increase in default rates has been two to three years (see Chart 8). However, there might be a longer lag period due to the following:

1. Most corporate borrowers refinanced at tighter spreads in the past two years.
2. Borrowers were able to extend maturities from an average of three years in 2002 to over four years in 2007.
3. Loans were made with much less restrictive covenants which in effect allows the company greater performance latitude.

**Discounted debt:** As the financial market reprices new issues, outstanding debt will also continue to decline in price as the overhang in supply puts even more pressure on existing debt.

**Middle-market debt:** As shown in Chart 9, the middle market (companies with \$50 million or less EBITDA) was a great beneficiary of the latest excess liquidity cycle. Lenders now, however, may focus on larger cap companies as they no longer have to dig deep for yield. Middle market companies may need

**Chart 9**  
**Middle Market Leveraged Lending Volume (EBITDA \$50m or Less)**



Source: Standard & Poor's Leveraged Commentary and Data

to pay much higher rates for financing, which may in turn lead to an increase in defaults.

**Structured Vehicle Supply:** The proliferation of CDOs, CLOs and CBOs in the past cycle will also provide even more supply of discounted debt. As the default rate increases and cash flow slows into the protected tranches of these types of vehicles, managers will be

forced to sell assets for much needed cash. At this point, price becomes less important than liquidity, which

will allow for opportunistic buying.

**Derivative Market Fallout:** The Credit Default market has grown exponentially versus the physical debt markets. The key issue here is the ability of the market to handle multiple simultaneous defaults, which would require an orderly auction process among holders of protection. If there is any break in the counterparty risk stream, owners of debt who

thought they were hedged, might need to sell their holdings at technically stressed levels.

**Active Control of Companies:** Until the default rate spikes up to 2002 levels, there will not be a great increase in the number of large cap companies vulnerable to change of control through senior debt acquisition. The mid and small cap sector, however,

is expected to be very vulnerable as their sources of financing will be severely curtailed in an economic slowdown.

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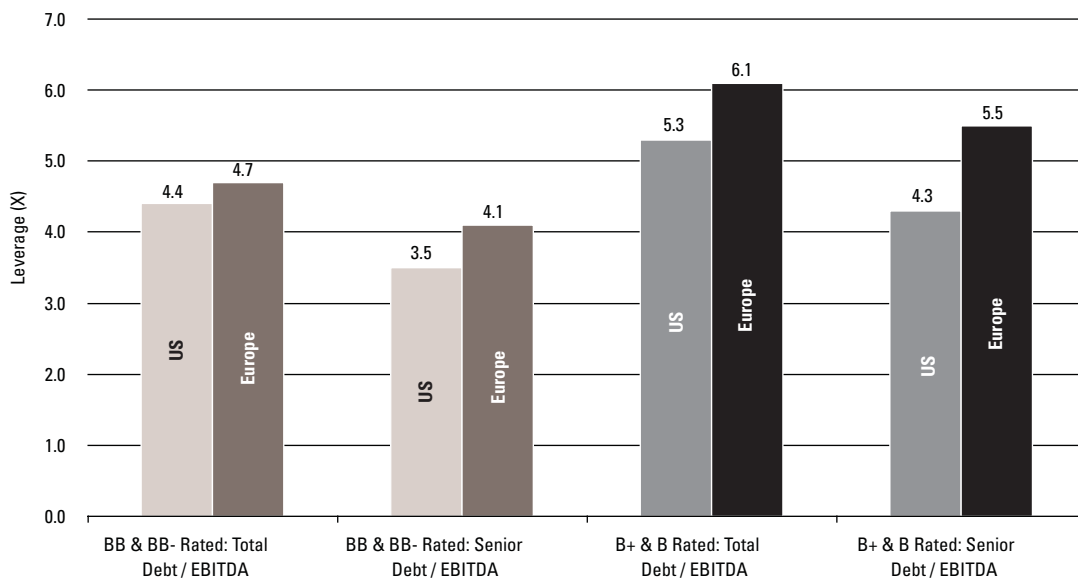
While the most immediate opportunities are expected to be in the U.S., due to the size of the U.S. debt markets, Europe may be subjected to the same type of stress.

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### European Opportunities

While the most immediate opportunities are expected to be in the U.S., due to the size of the U.S. debt markets, Europe may be subjected to the same type of stress. Due to a variety of technical factors, we see the European markets reacting even more violently to the current liquidity crisis for the following reasons:

**Chart 10**  
**New Issue Leverage in Europe vs. U.S.**



Source: Standard & Poor's Leveraged Commentary and Data

1. As highlighted in Chart 10, the average leverage level for European debt issues is substantially higher than in the U.S. by almost one full multiple which makes this debt more susceptible to company performance risk.
2. The European secondary markets are much less mature than in the U.S. as the increase in supply has not been matched by an increase in market makers who would provide an outlet for orderly liquidations. If there are forced position liquidations, the down moves could be steeper due to fewer participants.
3. The larger European funds which purchased corporate debt were themselves funded by investors who demanded aggressive redemption rights. In a volatile environment, this type of investor is more likely to redeem investments, forcing the manager to liquidate positions to meet cash requirements.

While the scenarios in Chart 10 are more high profile, there will continue to be opportunities in Europe on two major fronts:

**Government sales of public assets:** As European governments continue to divest themselves of public holdings (i.e. Germany selling public housing, utilities, etc.), the ownership laws are becoming more investor friendly.

In addition, the new government in France is seen as being more business friendly which may improve lender's rights in that country.

**Industry consolidation:** With the slow but sure evolution of the pan-European union, there is a certain amount of industry consolidation which will provide opportunities for investors with longer term capital. For example, the Italian bank community is being forced to reduce the amount of delinquent

bank loans it holds in order to comply with the Basel II Agreement. When there is a merger, two entities are formed, a "good bank" with the healthy loans, and a "bad bank" whose sole purpose is the orderly liquidation of the bad loans. These loans are sold in the secondary market to investors.

### Asian Opportunities

While Asia has benefited greatly from the excess liquidity seen in the 2003 to July 2007 time period, investments came in different forms. The Asian markets did not rely on debt for financing to the same degree as Europe and the U.S.; instead, investments were equity capital driven. In addition, this capital was provided intra-region from sources such as Taiwan into the Philippines or cash-rich local companies investing cross border within the region. Existing debt opportunities such as the Non-Performing Loan ("NPL") market provided early investors with a price advantage. However, the increase of investment capital quickly made pricing tighter and competition greater, which effectively negated any advantages late

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In the event of a global recession, Asia will again provide opportunities as there is a significant amount of infrastructure (roadways, hotels, railways, etc.) currently being financed at aggressive margins.

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entrants might have had. From a risk perspective, the disparity between legal lender rights and actual enforcement of the law also created a

sense of ambiguity which has toned down our enthusiasm in the NPL markets.

In the event of a global recession, Asia will again provide opportunities as there is a significant amount of infrastructure (roadways, hotels, railways, etc.) currently being financed at aggressive margins. There

is little room for error and given the lack of global liquidity, the region could suffer and require distressed-like financing.

### **Latin American Opportunities**

Much like Asia, the Latin American (“Latam”) capital markets were led by equity investments as well. The fiscal rehabilitation of Argentina, for example, resulted not in the issuance of more debt, but rather in the elimination of debt with industry consolidation and with capital provided by international equity investors.

In addition, as international banks, most notably Europeans, were themselves subject to tighter and tighter lending spreads, Latam was a borrower able to pay slightly higher rates than local G-7 institutions. This resulted in direct lending by the banks with private loans rather than the broadly syndicated bank loans of past cycles; consequently, spreads were at historically tight levels to the point where like-rated corporations in Mexico were priced at tighter spreads than their equivalent U.S. counterparts.

Latam, more than any other geographic region is susceptible to a slow-down in the U.S. economy given the region’s dependence on exports to the U.S. consumer. In the event of a downturn in the U.S. economy there will be plenty of investment opportunities as many of the export reliant industries, which are currently relying on inexpensive financing, will face difficult restructurings. As of now, however, there are better, broader opportunities in other geographic regions.

## Summary

The investment opportunities presented post July 2007 may be comparable if not greater than those in previous stressed/distressed cycles. The simplistic methodology of using corporate default rates as a barometer of available opportunities is as arcane as the belief that swans only come in one color. To this end, the explosion of new financial instruments, the increased volatility in credit spreads and a wider global credit reach have led to an environment which encourages appropriate credit investment but will punish those who become complacent. To achieve success, an investor must have a fundamental understanding of credit, the ability to be prepared for the ups and downs of the credit cycle (including technical liquidity squeezes), and most importantly, the experience needed to respond to the unexpected in a manner which would augment winning investments/strategies while mitigating the losing ones.

**Appendix**

**Credit Default Swap (CDS):** A credit derivative transaction in which two parties enter into an agreement, which allows the transfer of third party credit risk from one party to the other. One party pays the other a fixed periodic coupon for the specified life of the agreement. The other party makes no payments unless a credit event, relating to a predetermined reference asset, occurs. If such an event occurs, the party will then make a payment to the first party, and the swap will terminate. The size of the payment is usually linked to the decline in the reference asset’s market value following the determination of the occurrence of a credit event. Initially, most reference assets were unsecured corporate or sovereign debt. Over time, this has broadened to include loans (LCDS) and asset-backed securities.

**CDX:** A tradeable index of 125 equally-weighted single name Credit Default Swaps which is comprised of North American and Emerging Market companies. A new series is reset every six months.

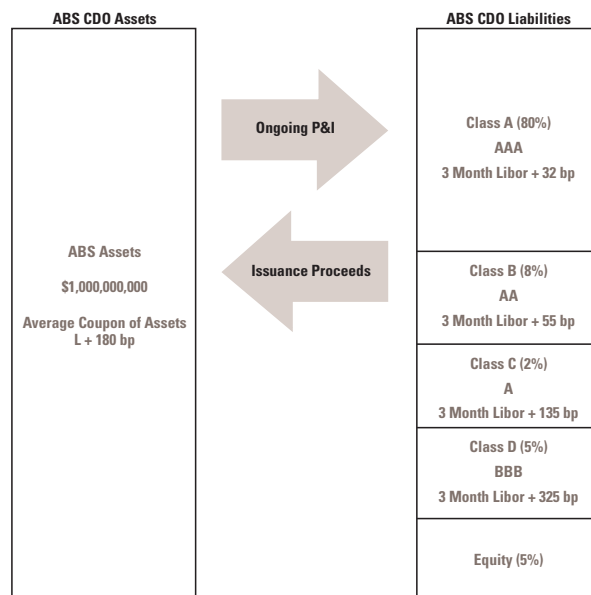
**LCDX:** A tradeable index with 100 equally-weighted underlying single-name loan-only credit default swaps (LCDS). The default swaps each reference an entity whose loans trade in the secondary leveraged loan market, and in the more recent LCDS market. A new series is reset every six months..

**iTraxx:** A tradeable index of 125 equally-weighted single name of the most liquid 125 CDS European investment grade credits. A new series is reset every six months.

**ABX:** An index of credit-default swaps based on 20 bonds that consist of sub-prime mortgages. A new series is reset every six months.

**Collateralized Debt Obligation (CDO):** A bankruptcy-remote special-purpose entity that purchases a pool of securities and funds the purchase of those securities by issuing debt liabilities collateralized by the underlying securities. The use of CDOs as a technology, rather than an asset class, increases the universe of assets that may be purchased for a CDO. Thus far, these asset classes include, but have not been limited to, leverage loans, high grade credit, high yield credit, and asset-backed securities. CLOs are backed by loans and CBOs are backed by bonds.

**Typical Mezzanine ABS CDO Capital Structure**



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### *General*

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Commonfund  
15 Old Danbury Road  
P. O. Box 812  
Wilton, CT 06897-0812

Tel 203-563-5000  
Tel 888-823-6246  
[www.commonfund.org](http://www.commonfund.org)

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