Distressed Debt Investing – An Overview

“I buy to the sound of cannons and sell to the sound of trumpets”
- Nathan Mayer Rothschild (1777-1836), 1810

“I buy when there’s blood in the streets, even if the blood is your own.”
- Nathan Mayer Rothschild, 1st Baron Rothschild (1840-1915), 1873

I. Overview

Distressed debt investing has been recognized as a distinct investment style for over the last two decades. Over that period, returns have outperformed most traditional asset classes with lower volatility, with the HFR distressed index providing 12.7% annualized returns vs. 8.0% for the S&P 500. In this report we begin by outlining the return characteristics and styles of distressed investing. One of the questions that investors ask about distressed investing is whether they should view distressed investing as merely a cyclical / opportunistic allocation or if one can make a profitable long term allocation to the asset class. There is no question that distressed investing follows the economic and credit cycles, with periods of extraordinary opportunities and returns. However, we make the case that, to be successful, one needs to have an ongoing allocation in order to be involved in the early stages of the opportunities that arise. Because most classic distressed investing is inherently a secondary market strategy, there is a “J-curve” effect whereas the critical mass of debt instruments is transferred from par buyers to distressed investors well-before the bottom of the market. Moreover, there are always idiosyncratic opportunities that arise at any stage of the credit cycle. Finally, after reviewing the investment analytics applicable to distressed investing in developed and emerging markets, we provide an overview of the market elements we see that should give rise to an extremely large opportunity set for profitable distressed investing over the next five years.

II. What is “Distressed Debt”?

The two lead quotes are often cited and ascribed to the Rothschilds, although there is no proof of them ever uttering such words. Nonetheless, the Rothschild dynasty was noted for its contrarian investing style and they are the most famous institutionalized distressed investors in early financial market history.

Distressed investing, at its most basic level, is a form of deep value investing typically with an event-driven element as well. Distressed investing can take many forms, although these days it is usually used in connection with distressed debt. One of the more widely accepted definitions of “distressed debt” is generally attributed to Martin Fridson, one of the deans of high-yield bond analysis. Mr. Fridson classified distressed debt as debt trading with a yield to maturity of greater than 1000 basis points more than the comparable underlying treasury security. Another commonly used criterion is debt that trades below 80 cents on the dollar. However, the distressed debt universe includes many other types of securities with different market prices, including defaulted fixed income instruments, stressed performing bonds, below-par bank loans, “busted” convertibles, credit default swaps, NPL portfolios, and post-restructuring equity, to name a few.

Distressed investing, sometimes pejoratively referred to as “vulture investing,” began to be recognized as a distinct investment style in the late 1980s/early 1990s with the problems with the US thrift industry and the collapse of the burgeoning high yield debt market and Drexel Burnham Lambert in 1990, followed by the success of investors in the mid-1990s involved with the Resolution Trust Corporation and other forms of distressed investing.

III. Long-Term Return Profiles from Distressed Debt Investing

Distressed investors can find value across the full credit cycle and their performance is mostly driven by both the overall credit market and idiosyncratic credit events. Performance tends to be better during and after economic turnarounds when spreads tighten. This is when the profits from the successful restructuring can be reaped. Distressed hedge funds can make money in all stages of the market cycle, by shorting overvalued securities in frothy markets and by moving to extremely high levels of cash in order to maintain the “dry powder” necessary to take advantage of when the market turns and opportunities arise.
Exhibit 1: Performance Comparisons – Distressed Index vs. Traditional Indices (12/31/89 – 7/31/10)

Exhibits 1 and 2 show the relative returns of distressed investing – as measured by HFR’s Distressed Debt Hedge Fund index – against the Credit Suisse high yield bond index, the S&P 500, the MSCI global equity index, and JP Morgan’s global bond index for the 20+ years from December 31, 1989 through July 31, 2010. Distressed outperformed all of these indices by two to four times, with an annualized return of 12.7% vs. 8.0% for the S&P 500, with significantly lower volatility. Correlation of distressed debt with equity was fairly muted at 0.5, and non-correlated with the global bond index (see Exhibit 3).

Exhibit 2: Performance Metrics – Distressed Index vs. Traditional Indices (12/31/89 – 7/31/10)

Exhibit 3: Correlation Statistics – Distressed Index vs. Traditional Indices (12/31/89 – 7/31/10)
In addition to having low correlation with traditional investments, distressed debt also outperformed in virtually all of the worst months for performance for both global equity and debt over that 20 year period, as shown in Exhibits 4 and 5.

Exhibit 4: Distressed Debt Performance During Ten Worst Months for World Stocks

![Graph showing distressed debt performance during ten worst months for world stocks.](source)

Source: Gramercy, Bloomberg

Exhibit 5: Distressed Debt Performance During Ten Worst Months for World Bonds

![Graph showing distressed debt performance during ten worst months for world bonds.](source)

Source: Gramercy, Bloomberg

IV. Distressed Debt Strategies

One of the most common strategies for distressed debt investing is buying securities at a distressed price to what the investor believes is the net present value of the recovery. Typically, investors focus on high yield bonds and leveraged loans (bank debt of non-investment grade companies), but investors also will consider structured credit products (such as mortgage backed securities and CDOs), trade claims, leases, receivables, vendor financing, and other debt-like instruments. Within this typical strategy, there are generally two types of institutional investing sub-strategies: passive and active.

A passive strategy is more trading oriented and investment managers do not receive non-public information. As such, they are not engaged in the restructuring negotiations and are not locked from selling their securities. The strategy tends to focus on larger companies with liquid securities with a shorter time frame to exit. Passive managers view the asset class from a cyclical standpoint and typically invest opportunistically. Passive managers can also make money by shorting securities they believe will decline in price.

The active approach is divided between non-control and control. Active non-control investors are often members of a creditor committee but typically do not lead the restructuring. They will likely receive non-public information...
and, as such, be restricted from selling their securities until after the restructuring process is complete. Active control managers will look to influence the process through a blocking position (size depends on the jurisdiction of the bankruptcy). They also look to play an active role by taking a seat on the board of a company and work closely with management. Both non-control and control active investors view the asset class in all credit environments.

In addition to more traditional forms of distressed corporate debt investing, there exist numerous strategies that distressed investors can utilize. We outline a few of these briefly.

Debtor-in-Possession Financing (DIP Financing), for example, is a unique form of working capital provided to companies in Chapter 11. This form of working capital is secured and usually more senior than all other securities issued by the company. It is often thought of as a life line provided to the company in dire need of capital. DIP financing typically has a maturity of between 12-24 months and allows the company to operate while restructuring its obligations. Such financing can ensure a better overall recovery for other creditors throughout the capital structure, as the obligor can use the rescue financing to hopefully avoid a liquidation and remain an on going concern. DIP financing is often provided by investors who have exposure in other parts of the capital structure and view the more senior lending as a way to increase the recovery value of their existing exposure. Additionally, DIP lending has become quite common among hedge funds and private equity funds and not just banks.

A similar type of strategy is rescue financing which is used to alleviate working capital issues for a company that might otherwise have to file for Chapter 11. Rescue financing can come in the form of secured lending and consist of equity and or warrants. Significant value can be garnered by providing desperately needed capital to a company that can in turn overcome liquidity constraints and turn around its business.

Another strategy employed by investors is a short executed though credit default swaps (CDS). Credit default swaps are derivatives whose value increases/decreases inversely with the underlying security. For example, if an investor has a bearish view of a company and believes it may default, purchasing a CDS contract will reflect that change in value.

Capital structure arbitrage is a strategy also commonly used by distressed investors. This strategy involves identifying mis-priced securities in different areas of the capital structure and taking advantage of the arbitrage opportunity. For instance, after considerable analysis of recovery valuation, discount rates (yields), asset coverage and a thorough understanding of all claimants within each class an investor may buy senior secured debt and short a security that ranks lower in the capital structure. Such a trade would profit if there is not enough to go around, that is to say either through liquidation or a restructuring the recovery on the senior instrument is significantly higher than the junior. Specifically, the difference in the recovery value of the two instruments is greater than the prevailing market price difference at the time the trade in implemented. Another capital arbitrage trade could include buying unsecured bonds and shorting the equity if the investor believes, for example, the common shareholders will get wiped out and there is something left over for bondholders.

There has been an active market for investments in NPL portfolios of defaulted bank loans – typically mortgage, commercial, and consumer loans – since the early 1990s with the RTC in the US. Such portfolios usually are offered only after significant pressure by regulators for banks to clean up their balance sheets (or after a bank is actually intervened) and there have been active markets in the last 20 years in the US, China, Thailand, Germany, and Mexico. One of the impediments to NPL investing is that it requires active servicing in order to realize value, an administrative and people-intensive burden many investors are unwilling to take on. In the most recent debt crisis, securitizations and CDOs offered analogous opportunities to specialists willing and capable of doing the appropriate analysis and work through the underlying instruments.

Post-reorganization equities can often present compelling risk-reward opportunities for a value investor. However, even though stocks of the companies that recently emerged from Chapter 11 can provide outsized gains to investors, there are issues such as concentrated holdings, illiquidity, lack of coverage, and the bankruptcy stigma that can make this a difficult investment strategy. For example, in their 2004 study “A Chapter after Chapter 11”, Lee and Cunney of JP Morgan looked at 117 companies that came out of Chapter 11 between 1988 and 2003. They found that relative performance (to the S&P 500) of these companies’ stocks averaged 85% in the first year after emergence. However, the same study showed that volatility of these stocks had been very high, with only 50% of the equities outperforming during the period.
V. Strategic Considerations

The credit cycle is a large driver for opportunities in distressed investing. Distressed opportunities are also caused by factors specific to certain countries or industries, or even individual companies. There is a fairly predictable pattern of distress and recovery on both a macro level with the economic cycle (see Exhibit 6) and on a micro level on a debtor specific basis.

Exhibit 6: Macroeconomic Equity and Credit Cycles

<table>
<thead>
<tr>
<th>Phase</th>
<th>Equities</th>
<th>Credit</th>
<th>Description and Market Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>↓</td>
<td>↑</td>
<td>Improving economy. Credit spreads tighten (i.e. credit markets rise) while equity markets still fall: Most interesting phase to be long distressed or credit risk in general as spreads quickly tighten. Balance sheets are being repaired and troubled companies restructured. In this situation credit outperforms equities.</td>
</tr>
<tr>
<td>2</td>
<td>↑</td>
<td>↑</td>
<td>Booming economy. Credit spreads continue to tighten while equity markets are rising: Everybody is happy and volatility across all asset classes is low or declining.</td>
</tr>
<tr>
<td>3</td>
<td>↑</td>
<td>↓</td>
<td>Softening economy. Credit spreads are rising (i.e. credit markets fall) while equity markets still rise: Late stage of the equity bull market as credit enters the emerging bear market. In this phase, corporate debt starts growing faster than profits and volatility is increasing.</td>
</tr>
<tr>
<td>4</td>
<td>↓</td>
<td>↓</td>
<td>Recession. Both equity and credit are in a bear market: This phase is bad for all risky asset classes. During this phase, investors can slowly build up exposure in the credit markets before phase 1 begins again. Entering the markets in this phase can yield the best future returns but requires patience as initial returns are often negative (J-curve effect).</td>
</tr>
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</table>

Just as there is a macro cycle that needs to be considered in the evaluation of the magnitude of distressed opportunities, there is also a micro cycle that needs to be considered (see Exhibit 7). It is important to note that, from a distressed debt investors’ standpoint, it is virtually impossible to buy at the bottom. Not only is it hard to know when the bottom is, but more importantly, the most significant trades in the secondary market typically occur prior to the commencement of the restructuring process and often even prior to the actual default. In order for a distressed investor to be able to purchase a significant position in the secondary market, they must be prepared to invest as the paper is offered, despite the “J-curve” effect where prices are likely to fall further until the restructuring process is commenced, which once completed will permit monetization at what will ultimately be a much higher level. It also suggests that a distressed investor needs to maintain significant “dry powder” in order to have sufficient capital for investment available when the opportunity arises.
Exhibit 7: Distress and Recovery Cycle at a Micro Level

Source: Gramercy

A. The Credit Cycle: Easy credit policies as a driver of systemic distress

The credit cycle typically starts when low interest rates and lenient credit standards create incentives for companies to raise funds to start new business projects. The easy credit environment is often accompanied by the expansion of the money supply by financial institutions and central banks. This sudden increase in monetary liquidity leads to a temporary expansion in corporate earnings, asset prices, and consumer price indexes. However, when the money supply decelerates or central banks raise interest rates, usually to ease inflationary pressures, the economy is pushed into recession or deflation. Industries that benefited from the easy monetary environment and companies with stressed balance sheets suffer the most and have to restructure and liquidate. Central banks intervene by lowering interest rates and increasing the money supply, thereby restarting the credit cycle.

Exhibit 8 shows that easy credit has been a predecessor of default and distress over the last two decades. The spikes in default debt in 2002 and 2008 were both preceded by sharp increases in new low-rated bond issue volumes that reached peaked at $31.0 billion in 1998 and $53.6 billion in 2007. Both these periods were characterized by a sharp expansion of the monetary base and/or reduction in interest rates. As explained above, the current period of low interest rates and abundant liquidity supplied by the central banks is planting the seeds for the next period of distress. While it is useful to take an opportunistic approach and monitor the credit cycle to overweight investment allocations into distress, the time lags between the stages as well as the policy-makers decisions are very difficult to predict, although the default peak has typically been 2-5 years after the high-yield issuance peak.

Exhibit 8: New Issue Volume vs. Defaulted Debt
A result the cyclicality of credit supply is concentrated debt maturity schedules. At the top of the previous lax credit cycle in 2007, there were many high yield bonds and leveraged loans issues, which are commonly structured with a five, seven, or ten year maturity. Accordingly, the next wall of debt maturities is coming in 2012-2015. This technical factor creates an enormous amount of debt that needs to be refinanced and will likely put pressure on the financial system. This next wave of distress will be further compounded if monetary conditions are tight and the supply of credit is restricted.

**B. Idiosyncratic factors as cause of company, industry or regional distress**

A second source of distressed investment opportunities is those that arise from idiosyncratic factors that impact specific companies, industries and countries. These factors include unsuccessful business plans, technological obsolescence, changes in competitive landscape, political crisis, and natural disasters, among others. These idiosyncratic opportunities can arise in a period of systemic distress or even in boom times. Exhibit 9 presents a stylized representation of the impact of these idiosyncratic opportunities for a distressed portfolio. Specialization in an industry or region is crucial for investors in order to have a competitive advantage. For example, distressed investing in emerging markets requires a very different skill set compared to those in the U.S. as most restructurings are executed out-of-court given the deficiencies of local bankruptcy laws.

**Exhibit 9  Stylized Impact on a Portfolio Level of Idiosyncratic Defaults Over Time**

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**C: Should investors make a long term allocation to distressed or merely a cyclical / opportunistic allocation?**

One of the questions that investors ask about distressed investing is whether they should view distressed investing as merely a cyclical / opportunistic allocation or if one can make a profitable long term allocation to the asset class. There is no doubt that distressed investing follows the economic and credit cycles, with periods of extraordinary opportunities and returns. However, there are technical factors inherent in most distressed investing which suggest that, to be successful, one needs to have an ongoing allocation in order to be involved in the early stages of the opportunities that arise. Because most classic distressed investing is inherently a secondary market strategy, there is a “J-curve” effect whereas the critical mass of debt instruments is transferred from par buyers to distressed investors well-before the bottom of the market.

It is important for investors to have cash ready to deploy as distressed opportunities arise and “forced selling” (the sale by par investors who are not allowed to hold defaulted or non-investment grade securities) puts pressure on asset values. Investors that allocate cash to distress opportunities late can easily miss the most attractive opportunities. Exhibit 10 shows the difference between early and late investing after the 2001/2002 recession (it is still too early to calculate the impact in the most recent downturn). Although there is no pure data on defaulted debt, we use high yields bonds with a two year holding period as a proxy. The analysis demonstrates that the optimal date to invest would have been October 2002 by generating a two-year annualized return of 23.4%. As it is difficult to capture the bottom of a credit cycle, it is better to invest early rather than late. In the aforementioned period, the average two year annualized return for investing 1-12 months earlier than the optimal month was 16.3%, whereas the average for investing 1-12 months later was 14.6%.
The second reason for maintaining an ongoing allocation is that there is virtually always some form of investment of distressed debt opportunities. These can be opportunities to short the debt of companies which appear to be heading for difficulties or investing in the idiosyncratic situations that arise. A prudent distressed manager will likely maintain a significant cash balance through boom periods when there is no systemic distress. The HFR distressed hedge fund index performance figures from Exhibits 1 and 2 above reflect long-term investing over several boom and bust periods. Gramercy has also done an 11 year historical analysis of the market for the spectrum of emerging markets debt (sovereign dollar and local currency, corporate, and distressed) captured in a long-only allocation product and found four episodes of outperformance of the distressed component. The product permits a reallocation on a basis that few investors in outside managers would be able to accomplish and highlights the need to be involved when the opportunity arises (see Appendix 1 for a further discussion).

VI. Keys to Investment Analysis and Performance

The key to distressed debt investing is to identify restructuring situations that are mispriced relative to the value of the underlying business franchise. However, just because an asset is cheap, it does not mean it is undervalued or that its intrinsic value will likely be achieved. The key to successful distressed investing is buying at the right price. As such, investors need to consider several key issues that are indispensable to distressed investing, including both valuation analysis and process risk. We bifurcate our discussion between the developed countries and the emerging markets, as the market and legal context is very different in each.

A. Analysis of a Distressed Investment in the Developed Markets

Distressed investing in the developed markets often is involved in some form of judicial insolvency procedure. Although most people think about Chapter 11 bankruptcy as the template for a restructuring procedure, each country has its own rules, many of which diverge quite significantly from Chapter 11. This is based not only on the very distinct cultural differences among various countries, but also the differences between common law and civil law procedures. The US bankruptcy code developed in the 1800s (with the first permanent code established in 1898) was based on English bankruptcy laws that were first created in 1543. Until recently, many countries’ bankruptcy codes reflected a criminal presumption (think “debtors prisons”) and a moral stigma around not paying one’s debts, and were also more oriented to liquidation instead of reorganization. Germany only introduced a reorganization procedure in 1999, although France has had a system aimed at job protection for several decades. This means that both creditors and debtors remain reluctant in many jurisdictions outside the US and UK to rely on a legal proceeding to resolve an insolvency as court proceedings remain untested or poorly understood.

Chapter 11, which was revised significantly in 1978 to generally the process we know today, is aimed at preserving the estate for the benefit of all stakeholders. Reflecting US capitalism, the rules embrace “creative destruction” while offering creditors protection through the “absolute priority” rule, which requires senior creditors to be fully compensated before junior creditors receive anything, and which almost always wipes out the interests of equity holders as debt is crammed down. There has been a trend in the last 20 years toward a revision of bankruptcy codes globally more along lines of Chapter 11, although cultural differences in places like Japan have meant that the revised proceedings are not always used or accepted. Although any further discussion of bankruptcy codes is beyond the scope of this brief report, we offer a short discussion on Chapter 11 in Appendix 2. In the US, a Chapter
15 proceeding was introduced to ensure coordination with recognized foreign proceedings but it is largely a mechanism to defer to the foreign court.

From a US distressed investors’ perspective, analyzing a defaulted corporate credit in Chapter 11 starts with a fundamental analysis of the enterprise value on a going concern basis. The analysis involves a combination of both fixed income and equity research skills, to understand both the sustainable debt level as well as the future prospects of the enterprise, respectively. The capital structure is a blank slate as the company can be expected to emerge as an “investment grade” company with markedly lower debt service requirements. From there, the investor needs to analyze the legal standing of the debt instruments to understand where they stand in the priority of the capital structure. Simplistically, it would not be atypical for senior secured bank loans to emerge unimpaired (albeit perhaps extended), senior unsecured bonds exchanged for all or most of the common equity, and junior creditors and shareholders wiped out. As there is significant information in the public domain and the court proceedings are reasonably transparent, most investors have similar information and the legal process is fairly predictable. As outlined in Section IV, here are a variety of strategies that can be deployed such as providing DIP financing or buying debt in the secondary market (and at different priorities within the capital structure), each of which has its own level of risk and return. The primary risks include miscalculating the enterprise value (due to further operational difficulties or fraud), having the process take longer than expected, or reducing return opportunities by paying too much because of competitive pressures in the secondary market.

B. Analysis of a Distressed Investment in Emerging Markets

Broadly, investing in distressed situations in the emerging markets requires a very different approach than that in the developed markets. If an investor needs to be cognizant that the process will not be governed by Chapter 11 rules when involved in situations in continental Europe or Japan, then it is even more imperative when operating in Latin America, Asia, or Eastern Europe. First, most companies (including the largest) in emerging markets are still controlled and managed by families for whom the equity is “patrimony,” such that they are unlikely to cede equity control in a reorganization, in effect putting themselves at the top of the capital priority structure. Second, although many countries have updated their insolvency codes in the last decade, the rules remain untested, courts are at best unsophisticated, and there is often a level of local corruption that puts an international investor playing by the rules at a disadvantage. Third, there are political issues that can limit the recoveries of international creditors for national interest, populist, or political interest reasons. Finally, by their nature, these are usually cross-border cases (international investors in bonds or loans governed by New York or UK law issued by an emerging markets country or company), which introduces a whole new level of complexities and jurisdictional issues.

Most emerging markets restructurings take place outside of a judicial proceeding. Accordingly, while fundamental financial and economic analysis is again the starting point for assessing value, it merely tells the investor what they deserve to get, not what they can expect to get. Creditors will only get what they negotiate. Accordingly, the “process risk” analysis is exceedingly important as it is these elements that will determine recoveries.

The first consideration is trying to gain an understanding of what the debtor’s controlling shareholders (or finance minister and other politicians in case of a sovereign default) want out of the process and how they are likely to handle the negotiation. The importance of this is heightened since the key discussions will occur face to face without a judge or trustee refereeing the process. The second element is to develop a sense of the other creditors in the process, since most of the emerging markets restructurings involving international investors are fairly large and have a diverse creditor base. It is important to be able to bring together behind one strategy commercial bankers, hedge fund managers, institutional investors, and private bank clients in order to effectively negotiate. Finally, it is essential to identify the negotiating leverage that creditors have upfront, so that the debtor negotiates in good faith. This leverage can include onshore and international litigation, offshore assets, business interruption risk, or political pressure. Over the years, a standard operating procedure has been developed where informal creditor committees have been accepted by EM debtors as necessary and beneficial to achieving a balanced restructuring resolution. In asking for concessions from creditors, debtors agree to reimburse the expenses of attorneys and financial advisors to facilitate a restructuring, and in many cases the there can be a resolution in a year or less if there is a good faith effort to achieve it (although 18-24 months is more typical).

Because there are relatively few distressed investors in emerging markets, there is less competition for secondary market paper and thus prices of debt instruments tend to be significantly lower than what you would expect in the developed markets. This permits greater flexibility in reaching an out of court settlement with the debtor and also permits a higher expected return profile. Although the lower certainty of the process can be a risk, especially to investors unfamiliar with the different cultural and jurisdictional issues, it typically manifests itself in things taking
longer to resolve as opposed to a company being liquidated or the investment being a total write-off. This risk goes up significantly if the underlying debt instruments are with much smaller companies, in local currency governed solely under local law, and so it is important to carefully consider the process risk elements before engaging in this.

**VII. Opportunities and Outlook for Distressed Debt Investing**

Despite the fact that the high-yield market and CCC-rated debt generated returns of over 50% and 90% in 2009, respectively, we believe distressed debt will continue to be interesting in the near future given the slowdown of the global economy and the significant amount of looming maturities. We believe we are still in the early-middle stages for distressed investment opportunities that should last for at least another 4-5 years.

**A. Developed Markets – US and Europe**

There is still uncertainty related to the effectiveness of the stimulus in the developed markets and whether it has created lasting demand for goods and services. Moreover, while the capital markets were all but closed in the second half of 2008, there has been record high yield issuance in the US since April 2009 (see Exhibits 11 and 12), setting the stage for a wave of defaults in several years (due to the time lags illustrated in Exhibit 8).

**Exhibit 11: High-Yield Market Size and New Issue Volume**

![High-Yield Market Size and New Issue Volume](image)

*Source: JP Morgan, Default Monitor, High Yield, and Leveraged Loan Research, August 2, 2010*

The maturity profile of leveraged loans originated in the private equity/LBO frenzy of 2005-08 suggests a distressed tsunami will not only come from the bond markets (see Exhibit 13). As a wall of maturities looms in 2013 and 2014, the “amend and extend” transactions that have allowed banks and their debtors to “kick the can down the road” will no longer be feasible and many of these deals, written at initial leverage terms of 6-9x leverage, will require a permanent fix.

**Exhibit 12: Maturity Schedule of High Yield Bonds and Leveraged Loans**

![Maturity Schedule of High Yield Bonds and Leveraged Loans](image)

*Source: JP Morgan, Default Monitor, High Yield, and Leveraged Loan Research, August 2, 2010*
Second lien and “covenant-lite” structures (see Exhibit 14) will likely complicate recovery actions by lenders over this upcoming period, but all signs point to a massive next wave of corporate defaults in a couple years, far surpassing the volume seen in the brief shake-out of 2008/early 2009. We also note that this will not only be a US phenomenon but that there was also a commensurate amount of risky lending in Europe (see Exhibit 15).

Exhibit 14: Lending Standards Relaxed in Times of Easy Money

Exhibit 15: European Loan Maturity Profile
Furthermore, the same credit bubble has inflated the commercial real estate sector, and a large percentage of these are likely to run into default. Indeed, during 2009, only 40% of post-2002 originated maturing CMBS loans paid off on their scheduled maturity dates. Deutsche Bank estimates that close to $1 trillion of commercial mortgages will mature over the next few years (see Exhibit 16).

**Exhibit 16: Commercial Mortgage Securities Maturities**

![Graphic showing commercial mortgage securities maturities](image)

Pundits have named the economic and financial market downturn over the last two years as “The Great Deleveraging.” The term “deleveraging” refers to the unwinding of liabilities and/or debt, and since the onset of the securitized mortgage in August 2007 it has become common wisdom that the US and global economies were paying down debt in aggregate, which would eventually normalize conditions so that economic growth and financial market performance could resume. In the US, it has often been stated that the deleveraging is taking place in all private sectors, offset by “temporary” stimulus by the government to cushion the impact: the consumer is paying down mortgage, credit card and other forms of debt, corporate America is now flush with cash, and banks and financials have recapitalized themselves and are rolling off securitization exposures and not replacing them. Unfortunately, long-term statistics regarding US total credit market debt to GDP tell a different story (see Exhibit 17).

**Exhibit 17: US Total Credit Market Debt to GDP Ratio 1920-2010**

![Graphic showing US total credit market debt to GDP ratio](image)

During the Great Depression and New Deal programs of the 1930s, total credit market debt as a percentage of GDP peaked at 300% of GDP. At the peak in the first quarter of 2009, it stood at $52.9 trillion, or 360% of GDP. At $52.1 trillion at the end of the first quarter 2010, it has only been reduced by 1.5%. The US government’s outstanding debt (direct and GSE) to GDP remains higher today than it was at the end of World War II, and this does not include...
contingent liabilities such as social security and medicare which may represent as much as another $45-50 trillion. And other developed countries may be similarly overlevered, with Ireland having $1.8 trillion of debt against GDP of $200 billion (900% ratio), the UK having $10.5 trillion of debt against GDP of $2.3 trillion (456%) and conservative Switzerland with a debt of $1.3 trillion versus GDP of $300 billion (433%).

We draw three conclusions about the impact of this leverage on prospects for distressed investing in the developed markets. First, there has been very little deleveraging to date in the overall US economy. Instead, funded by temporary government stimulus programs, the private sector has deferred the day of pain, and fundamental restructurings based on delevered asset values have yet to take place. Second, the sharp rebound in financial markets in 2009 was due to the application of government stimulus capital to the purchase of financial markets instruments and not due to a fundamental investment in the real economy or a revaluation of investors’ true appetite for risk assets. Third, while it is highly likely that there will be a deluge of distressed debt in the next five years, the true economic backdrop is likely to be anemic, especially as stimulus programs are slowly removed and true deleveraging begins to occur. This is likely to cap the upside of performance since there will be pressure on asset values, unless investment entry prices are reduced accordingly.

B. Emerging Markets – Latin America, CEEMEA, and Asia

There are many characteristics that make investing in EM distressed debt particularly attractive. Political dynamics, economic changes, structural factors, and an evolving investor base all result in high information asymmetries, leading to strong pricing inefficiency. In addition, there are few dedicated players in the space, allowing a manager with extensive expertise to capitalize on the wealth of opportunities and achieve outsized return level due to the lack of competition from other investors.

Similar to the situation in the developed markets, there was massive issuance of bonds and loans in emerging markets in the 2005-07 period, and volumes in 2009-10 nearly reached the 2007 peak (see Exhibit 18). There is an extremely high maturity schedule through 2013 (see Exhibit 19), with $1.02 trillion in emerging markets corporate and sovereign maturities over the next three years, or 40% of outstanding emerging markets external debt.

Exhibit 18: New Issue Volume of Emerging Markets Sovereign and Corporate Bonds

Although the breadth of the current and upcoming market opportunities is characterized by the same kind of maturity bulge as seen in the developed markets, there are some significant differences in the nature of the underlying assets. First, and most importantly, the catalyst for default is less likely to be due to the poor credit metrics of the individual debtor and more of what we perceive to be a lack of risk appetite for emerging markets credit by international investors which will preclude refinancing. This is crucial as local capital markets in emerging markets are at best undeveloped and, outside of China, few developing countries have banking systems that provide any significant capital to local private companies. Both the capital markets and leverage loan markets are going to be focused on the problems in the developed markets of the US and Europe and we expect there will be little interest in searching for yield and providing refinancing for the maturing debt in the emerging markets.
Second, most of the borrowers/issuers in emerging markets typically have far better individual credit metrics than
developed country debtors. While private equity and LBO financings were being done in the US and Europe at 6-9x
leverage in 2005-08, emerging markets deals were still being done at more standard 3-4x leverage levels. Finally,
the economies of the emerging markets are in far better financial condition than most of those in the developed
world which should provide support for the underlying rebound of the debtors once they get the liquidity relief (see
Exhibit 20).

**Exhibit 20: Debt-to-GDP Ratios of Developed vs. Emerging Markets Countries**

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**Analyst Certification:**
The research analyst(s) on the cover of this report certifies that: (1) all of the views expressed in this report accurately reflect his
or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst’s
compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research
analyst(s) in this report.
Appendix 1: Emerging Markets Debt Allocation Model

Emerging markets investing has developed into a full spectrum of investment opportunities which spans USD sovereign to local currency markets all the way to performing corporates and distressed situations. Gramercy has analyzed the investment cycle and the excess return potential by allocating based on a growth model signal among these four sectors for the emerging markets debt universe. We charted out the outperformance cycles (see Exhibit A1) for EM debt investing and find that cycles tend to last 1-2 years and move with the global investment trends.

Exhibit A1: Quartile rankings of the EMD subsectors over 6 month periods

<table>
<thead>
<tr>
<th>Asset Class, Semi-Annual Return (%)</th>
<th>1st Quartile</th>
<th>2nd Quartile</th>
<th>3rd Quartile</th>
<th>4th Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/1/98 GBI-EM, 16%</td>
<td>CEMBI IG, 2%</td>
<td>CEMBI HY, 9%</td>
<td>CEMBI IG, 5%</td>
<td>GBI-EM, 0%</td>
</tr>
<tr>
<td>6/30/99 CEMBI HY, 12%</td>
<td>EMBIG, 10%</td>
<td>GBI-EM, 3%</td>
<td>CEMBI IG, 4%</td>
<td>CEMBI HY, 8%</td>
</tr>
<tr>
<td>12/31/99 EMBIG, 13%</td>
<td>CEMBI HY, 9%</td>
<td>GBI-EM, 5%</td>
<td>CEMBI IG, 4%</td>
<td>CEMBI HY, 8%</td>
</tr>
<tr>
<td>6/30/00 EMBIG, 7%</td>
<td>CEMBI IG, 3%</td>
<td>EMBIG, 12%</td>
<td>CEMBI HY, 1%</td>
<td>GBI-EM, 0%</td>
</tr>
<tr>
<td>12/31/00 CEMBI IG, 8%</td>
<td>EMBIG, 7%</td>
<td>GBI-EM, 3%</td>
<td>CEMBI HY, 1%</td>
<td>GBI-EM, 0%</td>
</tr>
<tr>
<td>6/30/01 CEMBI IG, 8%</td>
<td>EMBIG, 6%</td>
<td>CEMBI HY, 1%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/01 CEMBI IG, 4%</td>
<td>EMBIG, 4%</td>
<td>CEMBI HY, 1%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>6/30/02 CEMBI IG, 11%</td>
<td>EMBIG, 1%</td>
<td>CEMBI HY, 1%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/02 GBI-EM, 16%</td>
<td>EMBIG, 12%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>6/30/03 CEMBI HY, 22%</td>
<td>EMBIG, 17%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/03 CEMBI HY, 9%</td>
<td>EMBIG, 7%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>6/30/04 CEMBI HY, 3%</td>
<td>EMBIG, 1%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/04 GBI-EM, 22%</td>
<td>EMBIG, 14%</td>
<td>CEMBI HY, 14%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>6/30/05 EMBIG, 5%</td>
<td>CEMBI HY, 5%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/05 EMBIG, 5%</td>
<td>CEMBI HY, 5%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>6/30/06 EMBIG, 5%</td>
<td>CEMBI HY, 5%</td>
<td>CEMBI IG, 4%</td>
<td>GBI-EM, 0%</td>
<td></td>
</tr>
<tr>
<td>12/31/06 EMBIG, 14%</td>
<td>CEMBI IG, 1%</td>
<td>GBI-EM, 1%</td>
<td>CEMBI IG, 1%</td>
<td></td>
</tr>
<tr>
<td>6/30/07 EMBIG, 2%</td>
<td>CEMBI IG, 1%</td>
<td>GBI-EM, 1%</td>
<td>CEMBI IG, 1%</td>
<td></td>
</tr>
<tr>
<td>12/31/07 EMBIG, 2%</td>
<td>CEMBI IG, 1%</td>
<td>GBI-EM, 1%</td>
<td>CEMBI IG, 1%</td>
<td></td>
</tr>
<tr>
<td>6/30/08 EMBIG, 12%</td>
<td>CEMBI IG, 3%</td>
<td>GBI-EM, 1%</td>
<td>CEMBI IG, 2%</td>
<td></td>
</tr>
<tr>
<td>12/31/08 EMBIG, 12%</td>
<td>CEMBI IG, 3%</td>
<td>GBI-EM, 1%</td>
<td>CEMBI IG, 2%</td>
<td></td>
</tr>
<tr>
<td>6/30/09 CEMBI HY, 18%</td>
<td>EMBIG, 15%</td>
<td>GBI-EM, 8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/31/09 EMBIG, 18%</td>
<td>CEMBI IG, 6%</td>
<td>GBI-EM, 2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Identifying the cycle is the critical step in asset allocating to the subsectors within EMD (Exhibit A2). The Gramercy Global Cycle Indicator (GCI) is a proprietary signal that helps to identify the peaks and troughs in the economic cycle and how best to capture the opportunity set. Distressed investments can occur over any part of the cycle, however, they tend to become most attractive during the bottom part of the global investment cycle and therefore an allocation should be maximized during that period.

Exhibit A2: Identifying the Economic Cycle Signals

One of the biggest challenges to investing in distressed debt is to have the capital available to address the opportunity as it arises. Within our asset allocation model, the decision to overweight or underweight distressed opportunities is guided by the GCI model. However, the asset allocation product is more limited in that is a long only, more liquid opportunity set for an asset allocation model. The true opportunity for higher returns that come from traditional distressed investing lies in a dedicated allocation to a manager who can both hedge the fund during the early periods of weakening bond prices but can then also identify the best entry point to maximize the return set.
Appendix 2: A Brief Overview of U.S. Corporate Bankruptcy Procedures

In the U.S., the traditional distressed opportunity typically arises when a company, unable to service its debt, files for Chapter 7 (liquidation) or Chapter 11 (reorganization) bankruptcy. Chapter 7 involves shutting a company’s doors and parcelling out its assets (or the liquidation value of such assets) to its creditors. Chapter 11, which recognizes the corporation as a going concern, gives the company legal protection from creditor actions to continue operating while working out a repayment plan, known as a plan of reorganization (“POR”), with a committee of its major creditors. The POR describes how creditors and shareholders are to be treated under the new business plan, and claimants in each class of creditors (per capital structure priority) are entitled to review and vote on the plan. Chapter 11 enables a debtor to continue to operate its business while it reduces debt, eliminates unprofitable operations and renegotiates contracts and/or leases. In effect, the Chapter 11 process seeks to preserve the value of the estate for the benefit of the stakeholders, although in giving a priority to ongoing operations and the most senior creditors, shareholders and junior creditors in the capital structure may be impaired or wiped out.

**Illustrative Chapter 11 Timeline**

![Illustrative Chapter 11 Timeline Diagram](image)

**Types of Chapter 11 Cases**

<table>
<thead>
<tr>
<th>Traditional Chapter 11</th>
<th>Pre-Arranged</th>
<th>Pre-Packaged (“Pre-Pack”)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Company files with</td>
<td>- Wide range of alternatives</td>
<td>- POR developed entirely out of court</td>
</tr>
<tr>
<td>no prior agreement</td>
<td>- Most extensive: Company files with a fully-developed POR and includes disclosure statement in First Day motions</td>
<td>- POR and disclosure statement (and voting materials) distributed to all creditors who must approve plan</td>
</tr>
<tr>
<td>on Plan of Reorganization (POR) with creditors</td>
<td>- Least extensive: term sheet with major creditors (nonbinding)</td>
<td>- Creditors cast ballots out of court and Company files for Chapter 11 with DS, POR and requisite votes</td>
</tr>
<tr>
<td>- Develops POR in Chapter 11</td>
<td></td>
<td>- First-day motion for Confirmation hearing</td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Takes the most time</td>
<td>- In weaker forms, just optics</td>
<td>- Can’t utilize some advantages of Chapter 11 (e.g., lease rejection, 1113/1114)</td>
</tr>
<tr>
<td>(e.g., 6-18 months)</td>
<td>- In stronger forms, similar to pre-pack</td>
<td></td>
</tr>
<tr>
<td>- Most expensive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A critical component of a debtor’s reorganization is its valuation. In a company’s disclosure statement, there are two types of valuations prepared. In a going concern valuation, an estimate of a reorganized debtor’s value is derived from three basic methodologies: (1) discounted cash flow analysis, (2) trading comparables analysis, and (3) precedent transactions. Another type of valuation is the liquidation analysis which estimates the saleable value of each of the firm’s assets, oftentimes taking into account severe haircuts, matched up against the firm’s liabilities. Theoretically, no creditor should receive less in reorganization than it would have in liquidation. The going concern valuation is highly scrutinized given its implications for “pie splitting,” as senior creditors likely want a low valuation while junior creditors want a high valuation.