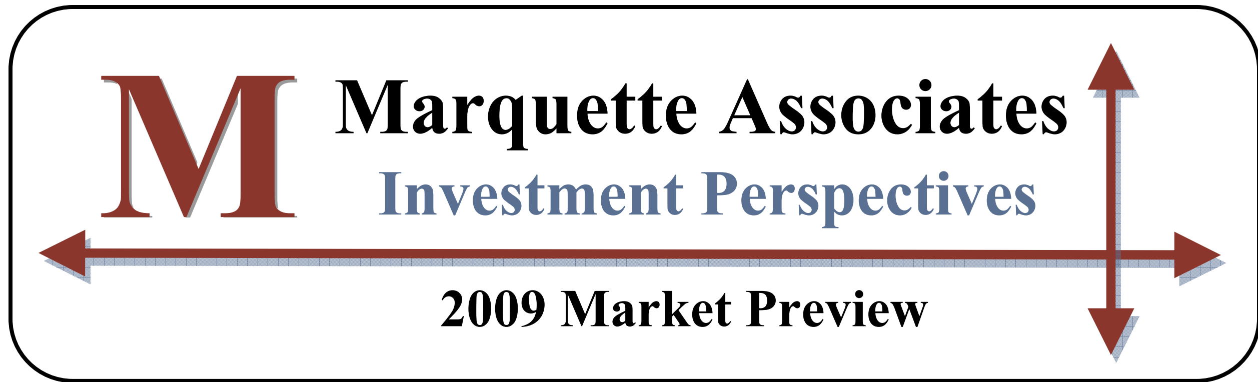


Our fourth quarter Investment Perspectives Newsletter provides an overview of 2008's turbulent events in each asset class. We also highlight potential investment opportunities going into 2009.

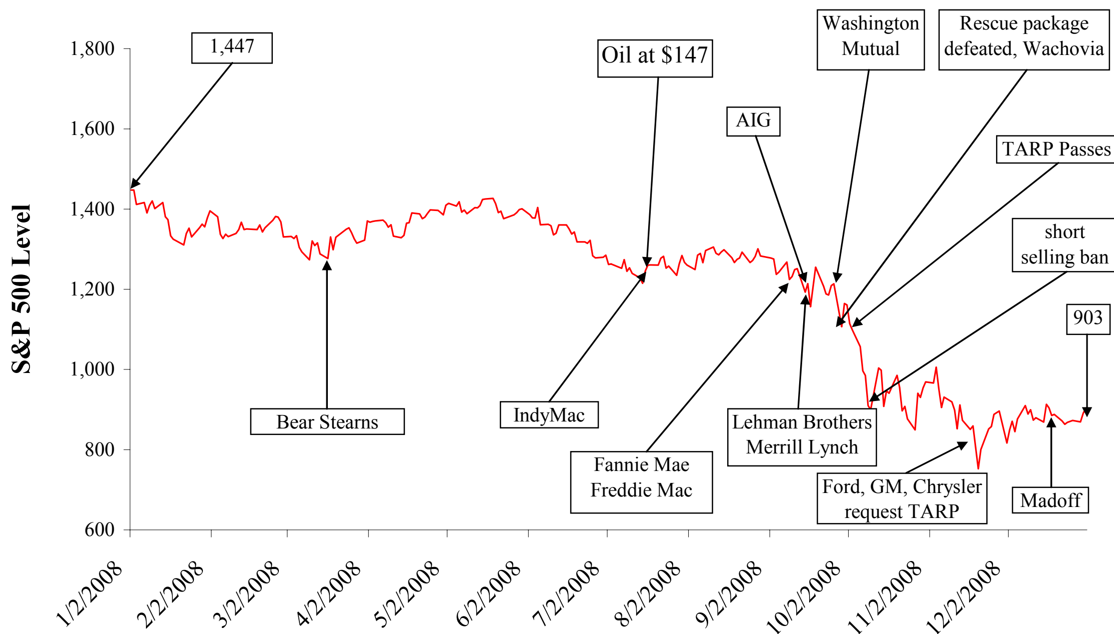
Overview	**Page 1**
U.S. Economy	**Page 3**
Fixed Income Markets	**Page 6**
U.S. Equity Markets	**Page 8**
International Equity Markets	**Page 12**
Hedge Fund Markets	**Page 14**
Private Equity	**Page 17**
Real Estate	**Page 20**
Infrastructure	**Page 23**

Investment Perspectives: Year in Review

No opening sentence can convey how difficult a year 2008 was for the financial markets. Most domestic equity indexes suffered losses over 35%, international stocks were crushed, fixed income prices dropped off a cliff as yields spiked, real estate values continued to fall and hedge funds blew up while getting hit with redemptions; it was the classic "correlation goes to one" as all asset classes delivered painfully negative returns. In total, close to $29 trillion was lost as a result of the global equity market declines. The only safe haven from the market carnage was in U.S. Treasuries, and investors flocked in droves, even accepting a negative yield on T-Bills for the comfort of (mostly) preserving the principal value of their assets. This "flight to quality" was representative of the fear running through investors as they took their money and made a mad dash for the exits. Their exit along with forced selling ("deleveraging") and limited liquidity from hedge funds, investment banks and other speculators collectively fueled the second worst calendar year return on record. The only worse year was 1931 when the S&P 500 fell 43.4% in the midst of the Great Depression. Although the economy has not dipped to Depression era lows, 2008 was a painful year.

While we are all eager to put the 2008 financial crisis behind us, it is important to understand how the year's events translated to overall market performance. The graph below overlays the S&P 500 Index with a timeline of 2008, with major news items highlighted. The trend is predictable – as bad news emerged, the stock market tumbled. The bad news was relentless, and drove the market (as measured by the S&P 500 index) to lows not seen since 1996.

S&P 500 Declines Substantially



Of course, the impact of the bad news was not limited to the stock and bond markets. As bankruptcies and bank failures mounted, institutions become increasingly reluctant to lend to one another, effectively bringing credit markets to a halt. Financial institutions and consumers alike faced scarce access to loans as the credit crisis permeated the economy. The seizure in the credit markets stalled day-to-day operations of many companies who rely on short-term debt as their lifeline, forcing them to reduce inventories and staff. As the short-term debt market dried up, money market funds – huge buyers of short-term debt – were forced to write down their holdings, which ultimately caused the Reserve Primary Fund (the world's oldest money market fund) to "break the buck," as its net asset value fell below $1.00. This in turn led to massive redemptions from money market funds, putting further downward pressure on the financial markets.

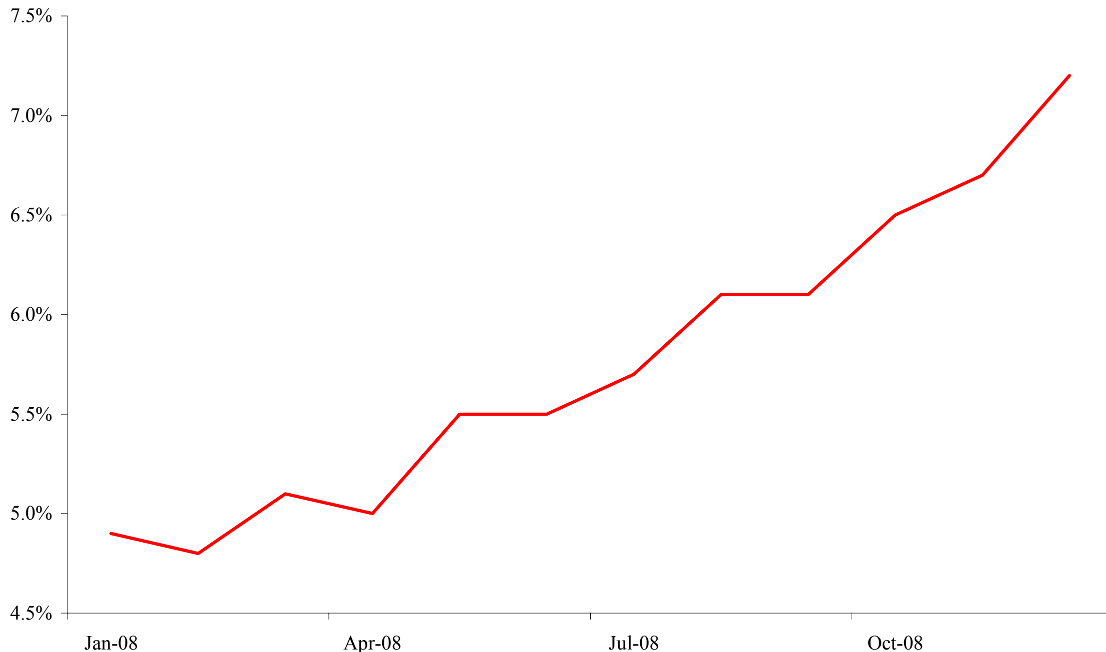
In the following articles, we will take a closer look at the impact of the financial crisis on individual asset classes, reviewing what happened in 2008 and what lies ahead in 2009. Analysis is offered for the following asset classes: fixed income, domestic equities, international equities, hedge funds, real estate, private equity and infrastructure. As a launching point, we take a broad view of the economy and examine some key macroeconomic themes.

A Macroeconomic Perspective: Looking at the Financial Crisis with a Wide Lens

There is little doubt that the U.S. economy is facing some significant challenges heading into 2009. We have been in a recession since late 2007, as major reductions in consumer spending, investment spending and home building have slowed growth. After a .5% decline during 2008's third quarter, real GDP plummeted 3.8% in the fourth quarter, the largest contraction since 1982. Optimistic predictions forecast the recession to end in the second half of 2009, while others predict the recession to last through 2010. Regardless of official end date, most feel that the next six months will feature additional economic contraction.

The unemployment rate rose to a 16-year high of 7.2% in December, as another 524,000 jobs were shed. Since the start of the recession in December 2007, the unemployment rate has increased by 2.3% and a total of 3.6 million jobs have disappeared. Job losses have been heavy in manufacturing, construction, and employment services. As the graph below illustrates, the unemployment rate has climbed steadily over the last eight months, and since unemployment lags the overall economy, it will likely increase through most of 2009.

2008 Unemployment Rate (%)



In addition to slowing growth and rising unemployment, rising energy prices in the first half of 2008 fueled widespread concerns about inflation. However, as oil prices tumbled from a high of $147 in July to under $45 at year end, inflation worries gave way to concern of deflation. On a month-over-month basis, the Consumer Price Index (CPI) fell 1% in December, further lending credence to the deflation worry. In an effort to

resuscitate the economy and prevent deflation, the government has embarked on an aggressive fiscal and monetary policy (see below for more detail) featuring low-interest rates combined with balance sheet expansion. Thanks to this swift response, deflation is likely to be a short-term phenomenon as the infusion of cash into the economy will likely truncate deflation and instead create inflationary pressure. Looking out into the next few years, the challenge will be to determine how quickly deflation swings to inflation and control upward pressure on prices.

In an effort to stem the negative momentum of the financial crisis, the U.S. Government has taken unprecedented actions by committing $8.5 trillion to a variety of programs designed to kick start the economy. The majority of these programs have been initiated by the Federal Reserve, with the Federal Deposit Insurance Company (FDIC) and Treasury Department also launching initiatives. We highlight the major programs for each entity:

Federal Reserve:

- $1.8 trillion Commercial Paper Program designed to unlock the short-term credit markets by directly purchasing 3 month unsecured and asset-backed commercial paper from eligible issuers.
- $900 billion Term Auction Facility which provides a negotiated rate for banks to borrow from the Fed; established to provide additional liquidity in the credit markets.
- $600 billion commitment to directly buy obligations of the government sponsored entities (GSEs) and GSE-originated mortgage back securities; GSEs include Fannie Mae and Freddie Mac. If successful, this program will lower mortgage rates and subsequently reverse the downward trend in the housing market.
- $540 million Money Market Investor Funding Facility to boost money market mutual funds via the purchase of assets from financial companies.
- $291 billion guarantee of Citigroup's toxic assets.
- Over $816 billion in assorted lending facilities and credit guarantees to financial institutions.
- Cutting the Federal Funds Rate to a target range between 0% and 0.25% in a further effort to revive the credit markets.

FDIC:

- $1.4 trillion in loan guarantees to reduce the risk from interbank lending.
- $139 billion guarantee to support the lending arm of GE Capital, another effort to uphold the credit markets.
- $10 billion guarantee of Citigroup's toxic assets.

Treasury Department:

- $700 billion Troubled Asset Relief Program (TARP); originally designed to purchase troubled mortgage assets from financial institutions. Its focus has now shifted to providing equity injections into these firms.
- $168 billion Stimulus Package; delivered via checks mailed to taxpayers in spring of 2008.

- $50 billion Treasury Exchange Stabilization Fund to moderate exchange rate volatility.

On top of all these programs, we expect some sort of stimulus package to be passed in the near future. Although the details are not finalized, the package is expected to contain tax cuts, infrastructure investments and other actions to foster economic growth.

Although it is impossible to predict what will happen in 2009, the above macroeconomic concepts may signal the birth of economic recovery. Most obvious will be a swing from negative to positive economic growth, as measured by quarterly GDP data. As the economy starts to grow, employers should experience increased demand for their products, and consequently, begin to hire more workers. In turn, the unemployment rate will presumably start to drop as more jobs become available. Thus, if we see positive GDP growth and a reduction in the unemployment rate, optimism will be warranted. Ultimately, these signs of recovery could then shift the focus away from government stimulus actions and towards thriving financial markets. We are all hopeful that a year from now we can summarize an expanding economy and healthy financial markets; positive economic indicators will be a first step in this direction.

Fixed Income Markets in 2008: No Safe Haven

Without question, 2008 is a year for the record books in the fixed income markets. The flight to quality that began in the second half of 2007 was the dominant theme throughout 2008, as investors sought the safety and liquidity of US Treasuries. This unprecedented flight to quality resulted in a re-pricing of risk on a larger scale than any time period since the Great Depression.

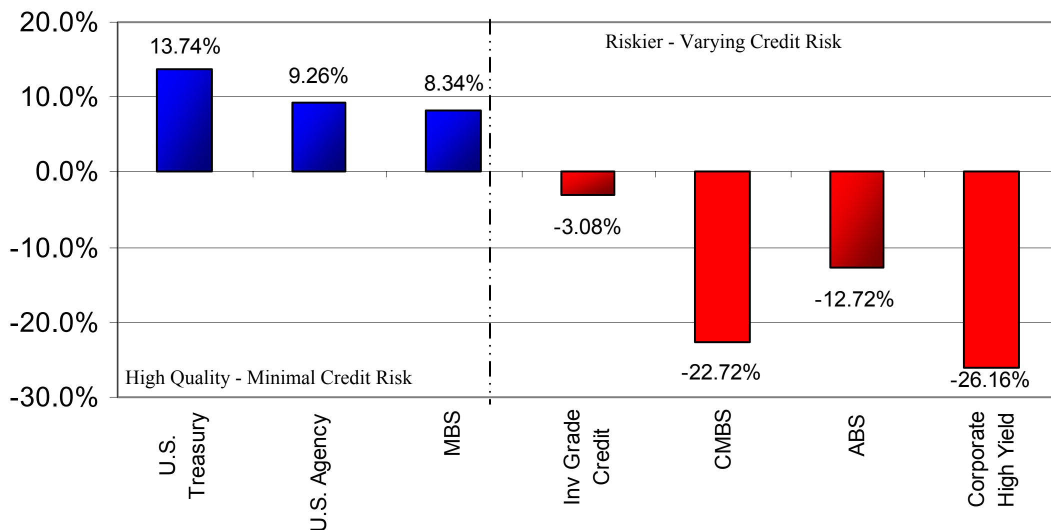
In the fixed income markets, risk is best measured by the yield spread (the difference in yield) between US Treasuries and any other security. The greater the risk associated with holding a security, the greater the risk premium (or yield spread) for that particular security. The table below illustrates the drastic re-pricing of risk that occurred over the past year in Agencies, Mortgage Backed Securities (MBS), Investment Grade Credit, Commercial Mortgage Backed Securities (CMBS), Asset Backed Securities (ABS), and High Yield Credit.

	Agencies	MBS	Inv Grade Credit	CMBS	ABS	HY Credit
OAS 12/31/07 (bps)	43.19	86.59	181.5	170.1	242.0	569.15
OAS 12/31/08 (bps)	92.95	144.63	492.6	1009.5	954.6	1662.40
Year over Year Increase	2.2x	1.7x	2.7x	5.9x	3.9x	2.9x

Source: Barclays Capital

The "price" of risk, as expressed by the Option Adjusted Spread (OAS) over US Treasuries, not only increased significantly over the year, it reached an all-time high in every sector during the fourth quarter of 2008. The massive flight to quality and re-pricing of risk that dominated the markets resulted in significant underperformance for all non-Treasury sectors in 2008.

Fixed Income Sector Performance 12/31/07 - 12/31/08



Source: Barclays Capital

Fixed Income 2009 Outlook

There is a significant amount of uncertainty surrounding the fixed income markets going into 2009. A recovery in 2009 depends on a variety of factors including the overall appetite for risk in the market, a stabilization of housing prices, government intervention in the market, and an end to the imbalance of supply and demand.

After a massive flight to quality in 2008, one of the key signs of a recovery in the fixed income markets will be an increased appetite for risk in the marketplace. An increased appetite for risk will be evident by a tightening of credit spreads, narrower bid-ask spreads, and increased liquidity in non-government securities.

Another factor that could have a major impact on the market in the near term will be government intervention. There are a number of proposals coming out of Washington that have the potential to significantly improve conditions in the fixed income markets. Some of the more widely discussed plans that will likely have the greatest impact include Fed purchases of MBS and ABS, the Treasury's deployment of the remaining $350 billion of the TARP, the creation of an "Aggregator Bank" that would buy the toxic assets off of struggling banks balance sheets, and Fed purchases of longer maturity Treasury Bonds in order to drive down borrowing costs.

A third trigger for a rebound will be a stabilization of housing prices. If a floor is established in housing, it will become much easier to establish an accurate price on many of the difficult-to-value mortgage-related securities that have been a significant part of the problem in fixed income markets over the past year.

The significant imbalance in supply and demand for fixed income securities that existed throughout 2008 was largely caused by forced selling from highly leveraged investors. As the markets begin to improve, these technical conditions that have dominated the market over the past year will start to erode. This will result in a return to an environment where fundamental valuations of individual securities will outweigh technical market conditions, and there will be price differentiation between fundamentally sound securities and securities that are permanently impaired.

The massive flight to quality and re-pricing of risk that occurred over the past year has created some extremely attractive opportunities the fixed income market. As of December 31, 2008, yields on investment grade corporate bonds, ABS, CMBS, and high yield corporate bonds averaged 7.5%, 10.5%, 11.6%, and 19.4%, respectively. All of these yields represent a significant increase over their historic averages. Over the past decade, yields on these securities averaged 6.0%, 5.2%, 5.7%, and 10.3%, respectively[1]. Despite the remarkable opportunities in the current market, there are still significant risks in these sectors. The slumping economy increases the probability of defaults in investment grade corporate bonds, and especially in high yield corporate bonds. In addition, falling housing prices, scarcity of credit, and lax underwriting standards in recent years all pose risks to asset backed and mortgage backed securities.

[1] Yield data from Barclays Capital.

Domestic Equities: A Year of Unprecedented Volatility

A Disaster

As the newspaper headlines and cable media outlets have hammered for months, 2008 ended as one of the worst markets in history for U.S. equities. No U.S. equity asset class posted a positive return in 2008. Of the 1,952 stocks traded on the New York Stock Exchange, only 159 managed to eke out a gain last year. The equity market is almost unrecognizable from a mere 12 months ago.

The quick rotation among sectors in 2008 was unprecedented, making it extremely difficult for active managers, who primarily focus on company fundamentals, to keep up. The following chart ranks the S&P 500 sectors from best performing to worst performing on a scale of 1-10 by month.

Market Rotation in 2008

S&P 500 Sector	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Telecom Services	8	9	1	6	4	7	8	2	8	1	1	5
Financials	1	10	9	3	10	10	1	8	2	10	10	6
Consumer Staples	6	3	2	10	7	5	3	3	1	2	4	7
Consumer Discretionary	2	6	6	7	9	8	5	1	4	8	7	2
Health Care	5	4	10	8	6	3	2	8	3	3	5	1
Utilities	7	8	4	5	5	2	9	9	5	4	2	9
Industrials	4	5	3	9	8	9	4	6	6	7	6	4
Materials	3	2	7	4	2	4	7	10	10	9	8	8
Information Technology	10	7	5	2	1	6	6	4	9	5	9	3
Energy	9	1	8	1	3	1	10	7	7	6	3	10

Source: Morgan Stanley/Harris Investment Management

In June, for example, energy was the best performing sector while financials were the worst. In July, however, that turned 180 degrees and financials took top billing while energy stocks, amid falling oil prices, nosedived precipitously. The roller-coaster ride didn't end in the summer. In September, the market fell into a tailspin because of the deleveraging that followed the failure of Lehman Brothers and the government's bailout of AIG. Financials were back at the bottom of the pile in October and November. The sheer volatility in 2008 indicated the market was trading on investor fear, technical factors, and left no sector undamaged.

As the chart below demonstrates, all of the Russell indexes posted steep negative losses in 2008, with the small-cap value index turning in the best relative result. All of the Russell small-cap indexes outperformed the median active manager in their respective asset classes in 2008. For example, the Russell 2000 Growth (the "Small Growth" cell – lower right-hand corner) lost 38% last year, a steep loss, but that ranked in the 27th percentile: 73% of active managers had losses greater than 38%.

Russell Index Performance in 2008

	Value	Core	Growth
Large	-36.85% 63rd	-37.60% 64th	-38.44% 46th
Mid	-38.44% 63rd	-41.46% 56th	-44.32% 59th
Small	-28.92% 27th	-33.79% 32nd	-38.54% 27th

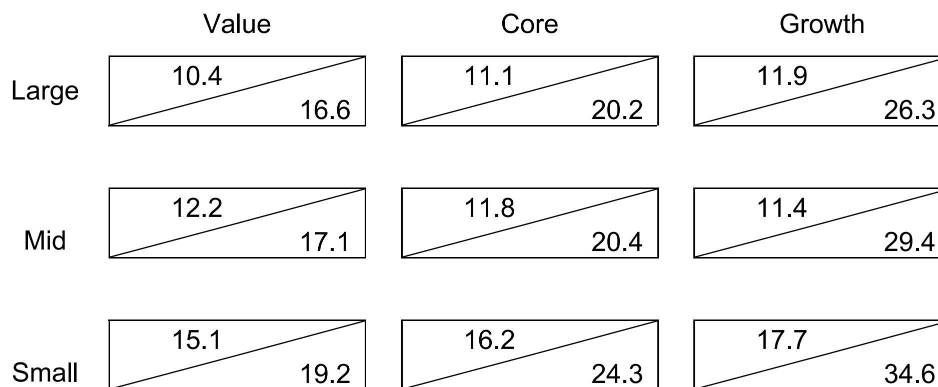
Source: eVestment Alliance. Data through 12/31/2008.

The Russell 2000 Value ("Small Value" cell – lower left-hand corner) was the best returning index, with a loss of 28%. That return ranked in the 27th percentile, outpacing almost 3/4 of active managers.

Reasons for Optimism

Despite the equity market's woeful performance in 2008, there are reasons for optimism coming into 2009. For starters, domestic stocks are extraordinarily cheap on a historical basis. The chart below details each of the respective Russell index's current P/E ratios against their 20-year averages.

Russell Indexes: Current P/E vs. 20-year avg. P/E



Source: Russell Investment Group, FactSet, JPMorgan Asset Management. Data through 12/31/2008.

All equity asset classes are trading below their historical P/E ratios, some significantly. The Russell Mid-Cap Growth Index, for example, is trading at an average P/E of just 11.4, 61% cheaper than its 20-year average of 29.4.

Cheap stocks are not the only reason to think that the market will improve going forward. Historically, equity returns coming out of a recession are enormous. The chart below shows the S&P 500 returns following previous recessions.

S&P 500 Returns Following Recessions

Recession End Date	% Change 6 months Later	% Change 12 months Later
10/31/1949	9.91	21.20
5/5/1954	18.33	29.94
4/30/1958	16.51	32.71
2/28/1961	6.48	10.66
11/30/1970	14.91	7.21
3/31/1975	3.39	23.38
7/31/1980	6.48	7.60
11/30/1982	17.22	20.21
3/28/1991	3.00	8.70
11/30/2001	-8.67	-17.98

Source: Navellier & Associates

As the data demonstrates, the first six to 12 months following a recession can be extremely lucrative, often featuring double-digit returns within a year. Although the 2001 recession did not respond as quickly, a 60-month bull market kicked off 13 months after that recession ended, further proof that the U.S. equity market rapidly recovers from recessions.

In this recession, an equity market rebound could be fast and furious, especially in small-cap stocks. The chart below shows the breakdown of companies in the Russell 2000 Index by stock price. Stocks priced less than $10 currently make up more than 59% of the index.

Russell 2000 Index Breakdown by Stock Price

Stock Price	# Companies	%
Less than $5	691	35%
$5-$10	470	24%
$10-$12	124	6%
$12-$15	163	8%
$15-$20	190	10%
$20-$25	123	6%
Greater than $25	196	10%

Source: Furey Research Partners/Factset. Data through 12/31/2008

With so many small-cap stocks trading at low levels, the next market upsurge could mirror 2003 when low-priced, small-cap stocks dominated the market. A similar move would produce very high returns in small caps while hurting the short market.

Conclusion

Given the global financial instability, housing concerns and growing unemployment, an improving domestic equity market is likely to be slow going. However, there is reason to believe a recovery will produce strong returns for U.S. equity investors going forward. Efforts to stabilize the overall world economy are being coordinated at a global level right now, as world leaders strive to jumpstart their respective economies. Such

dedicated action will help ignite economic activity and ultimately corporate profits, which in turn should lead to a stronger domestic equity market. The biggest unknown, of course, is how long it will take for recovery to occur; in the meantime, historically low-stock prices should draw some investors back into the market.

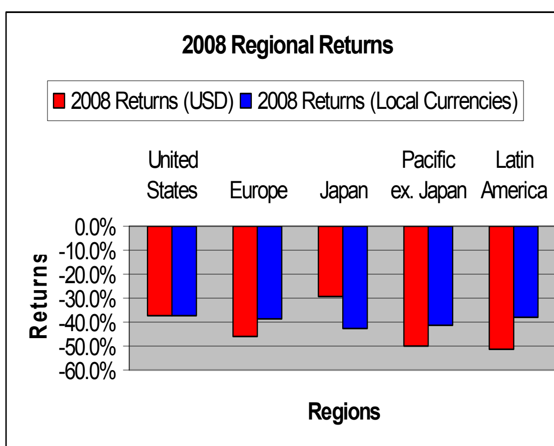
International Equities: No Place to Hide in 2008

There was nowhere to hide in the foreign markets during 2008 as the excessive leverage and sub-prime related issues that began in the United States spread worldwide. Another major contributing factor to negative international returns was the strengthening dollar, which had been on a downward trend for the past six years.

Source: Federal Reserve

The developed markets MSCI EAFE index returned -43.1% for the year, by far the worst calendar year in the history of the 38-year index (the previous low was -23.2% in 1990). Emerging markets dropped even further with a -53.2% return. Energy price declines and financial uncertainty in the developed world contributed to a slowdown in emerging regions.

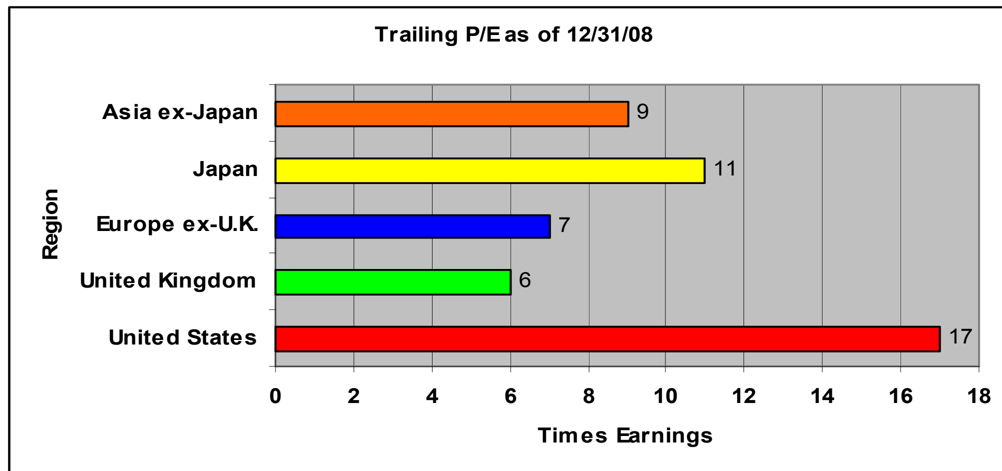
As seen to the right, currency movements had a significant impact on returns. The Japanese yen was the only major country to experience currency appreciation, which reduced the loss for Japanese stocks when measured in U.S. dollars. Most other foreign stocks had larger losses when measured in U.S. currency, thanks to the stronger dollar. As an example, Latin American stocks suffered the worst returns of all regions when viewed in U.S. dollars, as the stronger dollar translated to an additional 10% loss relative to the decline measured in base currency.



Source: Morningstar EnCorr

There are still lingering uncertainties in the international markets going into 2009. Along with continued turmoil in the financial sector, many developed nations now have contracting economies. Emerging market countries are experiencing slower economic growth as a result of falling commodity prices. Going forward, it is likely that slower economic growth will continue into 2009, which would negatively impact the international equity markets in the short term.

Even though the recession and slowing growth may last well into 2009, value opportunities may emerge. One reason to believe 2009 will bring some sort of rebound to the international equity front is the extremely cheap valuations of international stocks, even compared with domestic stocks. The chart below depicts the historically low P/E ratios of certain regional stocks.



Source: Standard & Poors, FactSet, JPMorgan

Using the S&P 500 Index as a proxy, stocks in the United States appear overvalued compared with international stocks. This can be explained by the heavier hit international stocks absorbed during 2008. As a result, international stocks are trading at lower P/E ratios and may be attractive for value-based investors.

Another encouraging signal for international stocks is that some market conditions have begun to display signs of stabilization. Credit markets have experienced tightening spreads and governments across the world have enacted various stimulus packages. Collectively, these factors should assist some businesses and industries to revert back to pre-financial crisis operations, which should translate into stronger international equity performance.

While there are still many concerns about the current international equity environment, there are some positives in the 2009 outlook. As long as the foreign markets show forms of stabilization, a rebound of stocks can be expected. The big question, of course, is when the market recovery will begin to take shape, and how long the rebound will last.

Hedge Funds: A Year of Extremes

Hedge Funds suffered through a challenging 2008. The industry began the year with record asset levels and finished the year facing many questions. In the interim, there were several events that led to the worst year in asset classes' history.

Government Intervention: January Rate Cuts

With the market declining in the first half of the month, the Federal Reserve cut interest rates a total of 1.25% in two separate decisions. Hedge fund managers who had taken short positions in the early month decline were caught on the wrong side of the market as heavily shorted sectors, such as financials and consumer stocks, rallied. The chart below shows the volatility of several sectors which were shorted, and then rallied at month's end.

Sector	Peak to trough	Recovery	Jan. Return
Consumer	-13.21%	+7.57%	-6.64%
Financials	-14.80%	+8.82%	-7.28%
Technology	-15.56%	+4.47%	-11.79%
Energy	-16.46%	+5.11%	-12.20%

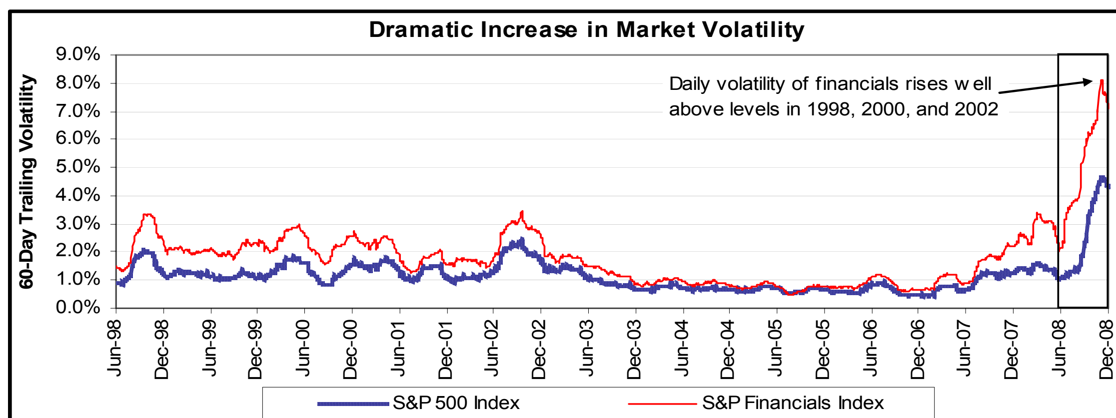
Source: ABS Investment Management

Bear Stearns Bailout

A similar trading pattern would occur again in March as trouble at the large investment banks became more apparent. In response to declining prospects in the financial sector, hedge funds again took short positions in the market. On March 17th, JPMorgan acquired Bear Stearns and hedge fund managers were hurt again as the financial sector rallied.

Short-Selling Ban

In response to significant declines in financial stocks, the government instituted a ban on short positions in almost 800 financial companies on September 17th. The ban resulted in deleveraging and increased volatility in financials and throughout the market.



Source: ABS Investment Management

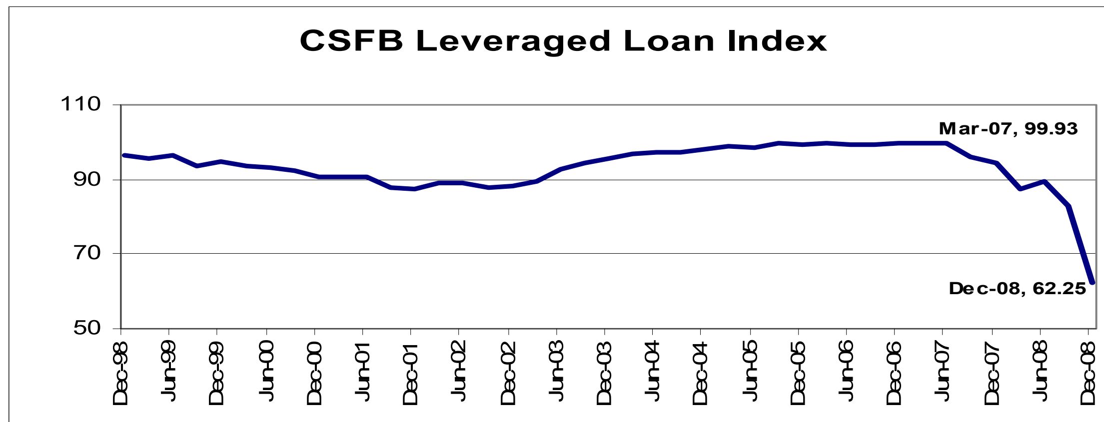
Deleveraging
As the credit crisis unfolded throughout the year, investors and institutions were forced to sell assets to reduce leverage in their portfolios. On a global scale, the forced selling drove down prices in common hedge fund investments both in credit (convertible bonds, bank loans) and equities. The deleveraging forced many equity managers pursuing short positions to decrease their borrowing. In order to reduce their leverage, they bought back their short investments which raised prices in heavily shorted positions.

Record Outflows of Assets
As a result of redemptions, investment losses and fund closures, hedge fund assets declined by 36% in 2008. After peaking at almost $3.0 trillion in the second quarter, hedge funds ended the year managing an estimated $1.8 trillion in assets.

Madoff Securities Fraud
On December 11th, Bernard Madoff was arrested and charged with securities fraud after admitting to running a longstanding ponzi scheme which may have cost investors over $30 billion. Large institutions and thousands of individuals were among the victims of this scheme, which has raised the potential for increased regulation of the hedge fund industry going forward.

Outlook on the Year Ahead
The upcoming year will be crucial for an industry that continues to undergo remarkable change. Entering 2008, there were an estimated 8,000 hedge funds in operation. After a year of disappointing performance and widespread redemptions, both smaller managers and larger established firms were forced to close. The remaining asset class is one that is increasingly dominated by larger firms with established infrastructures and decreasingly reliant on leverage to generate returns.

The sell-off of 2008 has created many investment opportunities for hedge fund managers in 2009. The deleveraging of large banks in the second half of last year has made bank loans attractive to hedge funds. In previous years, the limited return potential of bank loans would have resulted in little interest to hedge funds without the use of leverage. At today's price levels, they are very attractive.

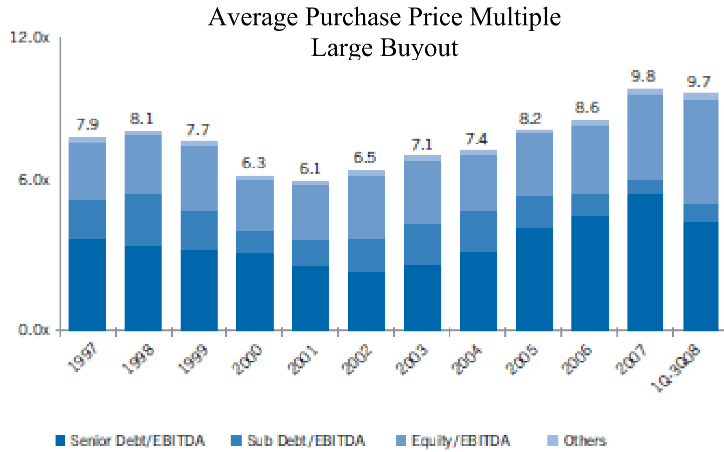


Last year's deleveraging has also moved convertible bond prices to an appealing level for managers. The temporary short-selling ban prevented convertible arbitrage investors from hedging their portfolios for a period last year which led to forced selling and dramatically lower convertible prices. It is believed that convertible bonds are trading at their cheapest levels in over two decades.

There are several signs that point to a good year for the hedge fund industry in 2009. The surviving firms will operate in a less crowded market than previous years. With the decrease in competition from other funds and proprietary trading desks, hedge funds should be better able to take advantage of market dislocations. As the redemption pressures that hurt hedge funds in the second half of the year are reduced, the forced selling that limited managers in 2008 should also subside. Finally, the balance of power in the industry shifted towards investors in 2008 and this trend should continue in 2009 with lower fees and increased transparency.

Private Equity Deals Hit the Brakes in 2008

The private equity market came to a near standstill in 2008 as transactions failed to get completed and fundraising slowed significantly. This was an abrupt change from the dramatic growth experienced over previous years, which was driven by ample liquidity and strong capital markets. The record volume of private equity transaction completed in 2005 through mid-2007 featured larger acquisition and leverage multiples. Recently, the larger end of the market was hit particularly hard as the leverage utilized in "mega" deals from 2005 through mid-2007 is no longer available. The markets now face the prospect of working through transactions completed during this period of excess and funds from these vintage years will likely struggle to meet return expectations.

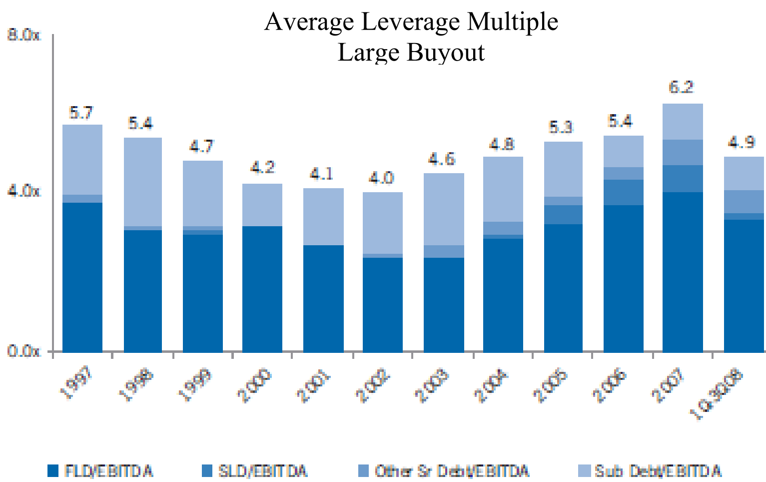


...purchase price multiples have only begun to decline from record levels.

Source: Standard & Poors

While the large deals are not dead, it will take time for the credit markets to heal and resume financing larger deals. In the meantime, transactions in the small and middle markets will continue to be executed. Deals will require higher amounts of equity and less reliance on debt. The reduction of available debt will keep pressure on price multiples which became excessive during 2005 – 2007.

...2008 transactions dealt with tightening credit markets.

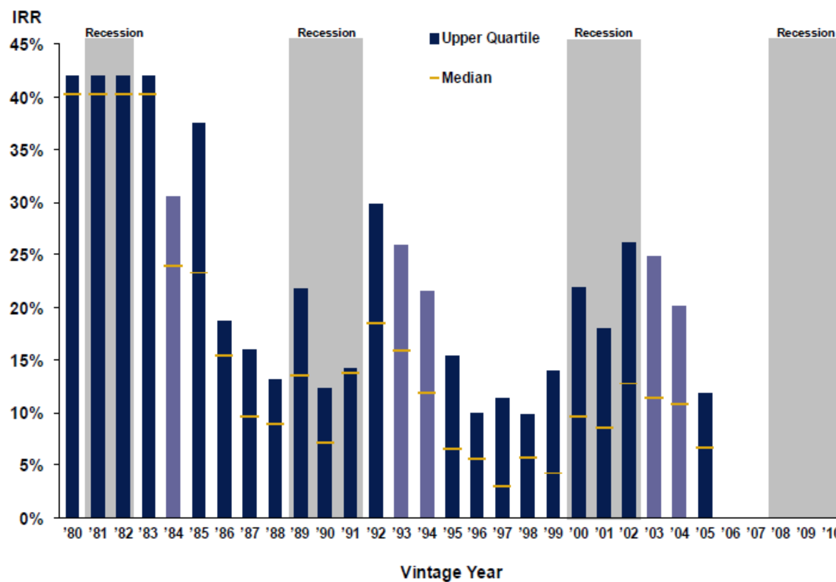


Source: Standard & Poors

Heading into 2009, the private equity markets will look for an easing in the credit markets as the industry attempts to invest the large amounts of capital raised over the past few years. Nearly $1 trillion in "dry powder" is available for transactions over the coming year. Transactions will likely become smaller in size, utilize more equity, and focus more on adding operational value to the portfolio companies. The latter is a departure from the "financial engineering" and quick profits that were prevalent during the previous boom.

Some of the strongest vintage years for private equity investments have been those made during or immediately after a recession. Recessions typically reduce the competition for deals and transactions executed in difficult environments will be at lower prices with less debt. The next 2 to 3 vintage years could present attractive investment opportunities, similar to 2002. Unfortunately liquidity constraints and the overall weakness in the capital markets will likely cause fundraising to be significantly less than the $400 million/year we experienced on average for 2006 – 2008.

Vintage Year Performance



…attractive return profiles are often available in vintage years following a recession.

Source: Venture Economics

With distress comes opportunity and there are several potential areas for investment in private equity that could generate strong returns over the coming years. The secondary market, in particular, has seen increased activity over the past year and this will likely increase in 2009. Many distressed limited partners (LPs) are looking to get out from under commitments made when their overall portfolios were performing well. An increasing supply of secondaries will keep pricing under pressure for the coming year as distressed LPs are forced to sell at significant discounts. The average high bid for both

buyout and venture secondaries continued the first-half decline and fell in the second half of 2008 to 61.0% of net asset value (NAV)[1].

In addition to secondary opportunities, distressed and mezzanine strategies typically perform well as the panic from the public markets spills over to the private markets. These opportunities do not come without considerable risk. Those who are early can easily have investments wiped-out, as experienced by TGP's 2008 investment in Washington Mutual.

In summary, 2008 was a difficult year for the private equity market. However, there is optimism that the challenges of the past year could create new opportunity for investors in the future. Although liquidity is scare and fundraising may slow, significant bargains are available for well-positioned funds.

[1] Cogent Partners

Real Estate: The Cycle Takes a Downward Turn

As 2008 came to a close, many investment managers and investors said goodbye to an extraordinarily challenging year, and hello to a year of possibilities. Unfortunately, such optimism about the future notwithstanding, institutional real estate managers are not in either of these groups. The poor economic environment, decreased debt opportunities, and falling appraisals began to have a dramatic negative effect in 2008's fourth quarter and will most likely continue in 2009.

Two components comprise the total returns of the NPI and NFI, the two most widely recognized real estate indexes[1]: income and appreciation. During 2008, these two factors moved in opposite directions, with income remaining stable over the year. Despite the steady income, a dramatic drop in the appreciation component had a profoundly negative impact on total returns:

Income:	1Q	2Q	3Q	4Q		2008
NFI	1.18	1.21	1.18	1.18	=	4.81%
NPI	1.26	1.27	1.25	1.26	=	5.15%
Appreciation:						
NFI	0.20	-0.89	-1.81	-12.05	=	-14.24%
NPI	0.34	-0.70	-1.42	-9.54	=	-11.15%
Total:						
NFI	1.37	0.32	-0.63	-10.92	=	-9.98%
NPI	1.60	0.56	-0.17	-8.29	=	-6.46%

One of the major factors in the appreciation component of return is appraised value, which establishes a current market value for each property. Appraisals utilize comparable sales/purchases information, as well as discounted cash flow modeling. According to data from Real Capital Analytics, 2008 sales transactions through October totaled only $129 billion, compared with $469 billion for the same period in 2007.[2] This represents a 73% decrease in activity, and has greatly reduced the quantity of credible comparables. Appraisers feel the lack of deals has completely changed the real estate environment. Normally, a property is appraised once per year, but in this unprecedented time, properties are being re-priced and written down more than once per year. As a result, values have spiraled downward at an increased pace.

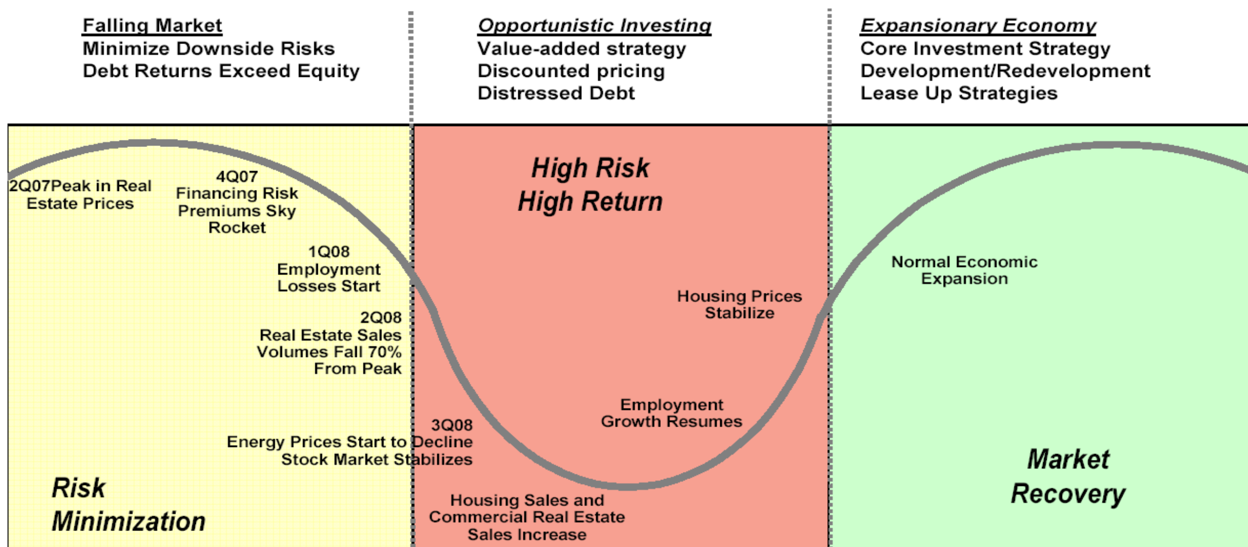
During prior real estate boom markets, the importance of readily available and reduced-cost debt led to higher levels of debt in a property's capital structure. As access to private financing became increasingly scarce in 2008, the quantity of potential buyers dropped significantly – as demand wanes, real estate prices tumble. In the United States, 60% of the mature real estate

[1] **NFI** = NCREIF Fund Index comprised of 26 open-ended real estate funds; and the **NPI** = NCREIF Property Index comprised of privately acquired and institutional real estate properties. NCREIF stands for the National Council of Real Estate Investment Fiduciaries.
[2] Principal Real Estate Investors; "Expectations & Market Realities in Real Estate 2009 - Market Aftershocks and the Road to Recovery;" p. 33.

capital markets are comprised of debt, the majority of which is from the private sector.[3] Because debt is of primary importance in real estate's capital structure, it was inevitable that the banking crisis had a significant impact on the cost of capital and the performance of the real estate market. Without private market financing, prospective buyers could not access sufficient capital to execute deals. Given the dependence on debt to finance real estate transactions, with the cost of credit skyrocketing, property values fell as cap rates[4] rose. Cap rates reflect the inherent risk in real estate transactions, and as the credit markets tumbled, rates increased in anticipation of additional real estate market struggles.

Real estate in 2008 can be summarized rather simply: reduced demand combined with deteriorating property fundamentals has caused a substantial reduction in transactions and subsequently, higher capitalization rates. The cost of owning real estate has come under extreme pressure as the cost of the debt has spiked, further increasing cap rates. Higher cap rates have led to decreased property values. Until transactions resume, the real estate market will continue to experience additional price volatility.

The chart below[5] depicts the normal cycles of real estate. In a falling market, prices peak, financing becomes more expensive, and sales volume declines; we are currently in this phase. In an opportunistic market, recovery begins as employment grows, prices stabilize, and volumes increase. Once this period is fully exhausted, expansion and recovery resume. This leads one to ask, when will we arrive at opportunity? The answers are when deals resume, prices stabilize, and the economic recovery begins.



---

[3] Chin, Henry, Peter Hobbs, and Ermina Topintzi; RREEF Research; "Global Real Estate Insights, Navigating through the Turmoil"; December, 2008, p. 6.
[4] Cap Rate or Capitalization Rate is defined as a ratio of a property's recurring earnings or net operating income divided by its price or market value.
[5] Butterfield, Jay, Walter Page; American Realty Advisors; September 4, 2008; p. 11.

Outlook for 2009

The five property types of real estate, as defined by the NCREIF, are apartments, industrial, office, retail, and hotels. For 2009, all the sectors will face pressure, but in different ways:[6]

- Apartments – will be negatively affected by the economic downturn, high levels of job losses, and rising unemployment. Rent levels may be reduced or held steady while vacancies could rise to 12% in 2009.
- Industrial – properties will benefit from relatively low levels of new supply, but with job uncertainty, plant closures, and dependence on the retail supply chain vacancies are projected to rise to 12% in 2009.
- Office – these properties are normally the hardest hit during a downturn and could experience increased vacancy rates up to 17% in 2009. Additionally, lease rates will not grow as significantly in an effort to attract and retain tenants in the building (thereby keeping the recurring earnings steady).
- Retail/Hotel – consumers are spending less on discretionary items, and therefore, hotels and stores will have lower sales which could lead to a wave of closures. Vacancy rates may rise to 9% through the cycle.

The performance prospects for real estate in 2009 and beyond will be driven by a combination of three integrated factors:

1. Expectations regarding rental growth and the changes in net incomes will affect cap rates.
2. The amount of capital allocated to real estate, which will be determined by investor perception of the asset class.
3. Real Estate performance versus other the asset classes will continue to fluctuate as spreads continue to move.

When the aforementioned factors converge, liquidity will return to the market as transactions resume and the asset class will become palatable once again. This will only occur when the financial markets stabilize, with a recovery in the credit markets as a necessary prerequisite. A stabilized financial market coupled with available credit will foster a return of confidence for both borrowers and investors. The rapid rise in cap rates is alarming, as it implies there has been a significant decline in value over the short term, but the depressed prices lead to tremendous investment opportunities for the long term investor. When the other asset classes begin to stabilize, the denominator effect will not be as prevalent and investors will allocate additional dollars to real estate.

However, these corrections will not happen immediately, and the ripple effects of scarce liquidity and decreased deal activity are likely to continue for the foreseeable future; additional volatility is likely in 2009. Despite the remaining struggles for real estate, current investors in the asset class are facing long queues that could extend redemption requests another 3 to 4 quarters. At that point, liquidity may return to the market as real estate enters into the recovery phase, therefore making real estate a viable portfolio component again. For new investors to the asset class, the current challenges in the real estate market create opportunities to get in on the "ground floor", and should not to be overlooked. So while the lack of liquidity is slowing investors from shedding their real estate exposures, it is also creating buying opportunities which may pay off for a long term investor.

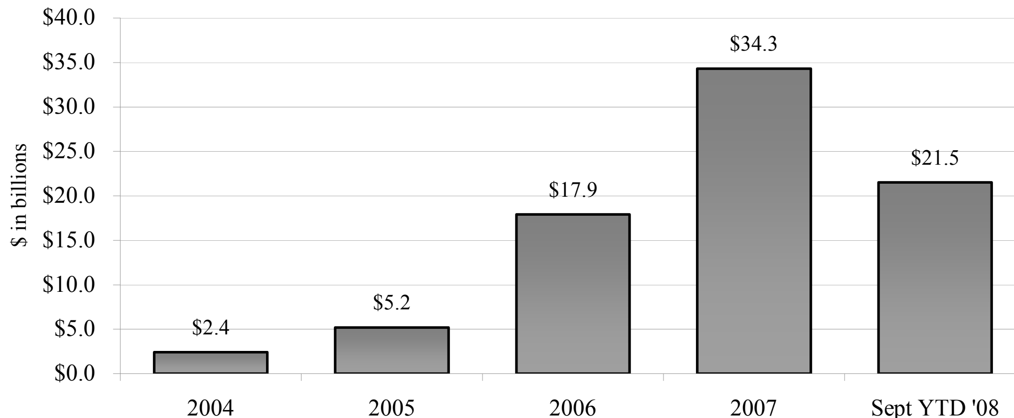
[6] Chin, Ibid, pgs. 15 – 16.

Infrastructure: A Bright Spot in 2008

Despite the unparalleled turbulent markets in 2008, infrastructure continues to attract institutional investors due to the long-term benefits of investing in this fast-growing asset class. Investors are drawn to infrastructure's stable, long-term, uncorrelated, inflation-linked returns.

Fundraising

Last year marked another robust period for infrastructure funds seeking capital. According to Preqin, the number of private funds actively raising capital doubled during 2008 to 86 funds.[1] Not surprisingly, fund-raising activity in 2008's second half became extremely challenging as institutional investors battled liquidity constraints and an over allocation to alternative asset classes in their portfolios (as a result of the "denominator effect"). Despite the difficult capital market environment, placement agent Probitas Partners estimates that more than $21 billion had been raised through September 30, 2008.



Source: Probitas Partners, Infrastructure Market Review & Institutional Investor Survey, Oct 2008

Global Economic Slowdown

Infrastructure has not been immune to the widespread implications of the global economic slowdown and credit crisis. To fully understand the impacts, one must realize that infrastructure has many subsectors, each with its own unique risk/return characteristics. To illustrate, we look at two defined subsectors, transport and utilities.

The transport sector, which relies on user-based revenues such as tolls, exhibits a higher degree of demand risk (patronage risk) compared with other subsectors. Traffic and volume growth tend to be correlated with GDP growth over the long term. Therefore, this sector is the most exposed to variations in GDP, as demand tends to drop in times of economic slowdown. This was particularly evident throughout 2008 as toll road traffic and airport passengers declined.

---

[1] Preqin, Infrastructure Spotlight, December 2008/Volume 1

The utilities sector (gas, electricity, water), given the monopolistic nature of such assets, is typically subject to strict regulation by government-related entities. As regulated entities, these companies charge a set price designed to fund expenses plus a certain return on capital. Since prices are mandated by regulators, these assets are most exposed to regulatory risk. The very nature of regulated assets helps mitigate downside risk: if costs increase, regulators allow price increases that maintain the target rate of return.

The differences between the transport and utilities sectors argue a strong case for asset diversification among infrastructure portfolios. While demand shocks may be evident over the short term, the business risk remains relatively low across mature assets as the long-term fundamentals do not change. The distress that has emerged in infrastructure assets has arisen from the financial risk placed upon these assets. Excessive leverage and short-term refinancing, especially by listed infrastructure funds, are causing more and more distressed sellers and not necessarily distressed assets.

Impact of Credit Crisis

Capital rationing by banks has limited the availability of debt financing; consequently, the cost of debt has risen dramatically. While sensitive to the specific deal and sector, credit spreads for core infrastructure deals have increased by approximately 300bps (from an initial level of 125bps) over the past 18 months.[2] Lenders are also requiring lower leverage levels, greater reserve requirements, market flex pricing (price adjustments up to the time of close), and upfront fees.

Surprisingly, banks remain open to loaning money to the infrastructure sector. As one would expect, banks continue to be more cautious and selective, only lending to high-quality infrastructure deals. These deals typically involve mature assets with a history of steady cash flows, which can be used as collateral. However, the appetite for banks to individually underwrite and syndicate large deals, as much as $1 billion pre-credit crisis, has disappeared. Banks are now willing to "club" together in reasonably sized deals, typically each taking $50-$150 million, which reduces the syndication risk for those participating.

2009 Outlook

Looking at 2009, we see two main themes for infrastructure. First, the credit crisis and global economic recession have exacerbated the budgetary and funding issues facing our states and municipalities. Governments will increasingly rely on the private sector to meet the growing infrastructure funding gap; thus, the demand for infrastructure investments should continue to be strong.

Second, the use of excessive leverage that caused rapid asset appreciation across the private markets is no longer feasible. Transaction prices and multiples are retracting to reflect the conservative underwriting, which will allow higher rates of return using less leverage and less risk. Ultimately, increased deal flow with conservative underwriting going forward suggests infrastructure will remain an attractive asset class for many institutional portfolios.

---

[2] Macquarie

180 North LaSalle Street
Suite 3500
Chicago, IL 60601
312-527-5500
www.marquetteassociates.com

The sources of information used in this report are believed to be reliable. Marquette has not independently verified all of the information and its accuracy cannot be guaranteed. Opinions, estimates, projections and comments on financial market trends constitute our judgment and are subject to change without notice. References to specific securities are for illustrative purposes only and do not constitute recommendations. Past performance does not guarantee future results.