



STAYING COOL IN AN OVERHEATED, FEAR-DRIVEN MARKET

*A consistent risk-management process
MAKES THE DIFFERENCE*

by ALLAN KUNIGIS

Two years after Hurricane Katrina bore down on the Gulf Coast with a merciless fury, the US financial markets were hit by their own unusually potent storm. Beginning in the subprime mortgage market, the credit crisis of 2007 spread swiftly, affecting a wide range of seemingly uncorrelated markets. It caused loss and pain among numerous investors and investment firms that were not properly prepared. Fortunately, Barclays Global Investors had established a solid risk management infrastructure, which helped minimize damage when market volatility erupted.

The true test of withstanding volatility risk is stress-testing the risk management process under real, yet extreme, conditions. BGI, like every other investment manager, had that opportunity this summer. (For an analysis of what occurred in the markets during the volatile summer of 2007, read “What Happened?” on page 9.)

Consistent with our philosophy of Total Performance Management, BGI takes a rigorous, scientific approach to risk control. Beginning in the fixed income markets two years ago, BGI expanded the centralized process of independent investment risk review, which includes constant monitoring of everything from trade-level details to strategy, fund, business and company-wide perspectives. Reports are produced daily, weekly, and monthly.

IT ALL STARTS WITH ANALYSIS

Risk management is incorporated into every stage of the investment process, from the brainstorm of a new strategy on. Development begins with data analysis by the Advanced Strategies & Research Group, which includes a comprehensive peer review process, and then to the business’s investment committee—for example, the fixed income investment committee, for further review and feedback. If the initiative moves forward to product development, implementation concerns—such as risk budget and fund capacity—are addressed in conjunction with portfolio managers and traders.

Meanwhile, BGI’s centralized Investment Risk Management (IRM) Group reviews the strategy independently and applies its own risk measurement criteria. This is done initially for prospective strategies and on an ongoing basis for existing funds. The team analyzes information on all securities held in the portfolios and produces a daily risk report for the portfolio managers and investment committees. The report includes risk sensitivities, the value-at-risk, and the result of stress scenarios at the portfolio and strategy levels.

Any variances between the IRM’s findings and a strategy’s target ranges are highlighted and investigated. “Our goal is to explain the differences,” says Joe Masri, BGI’s Global Head of Investment Risk Management. “We also send our independent reports to the investment committee to help them decide if they are taking the optimal level of risk with any given strategy.” This comprehensive risk review becomes crucial when markets begin to behave erratically.

KNOWING WHEN TO CHANGE LENSES

Normally, discrepancies between the IRM’s reports and a strategy’s target range are small. But that can change abruptly as market volatility rises. “Because we review things independently and employ different risk models, we may pick up on increasing volatility or other factors ahead of the curve,” Masri explains. “When that happens, we discuss our findings with researchers, traders, and portfolio managers, and compare risk results.”

When volatility deviates from a normal range, the risk management team increases its scrutiny of market risk to take into account that volatility changes in one area could affect other markets. Once the analysis is completed, a review of hedging strategies or risk budgets is discussed with portfolio managers, to see if it is appropriate to maintain or reduce risk in the face of current events.

What's the tip-off to a changing market? It could be the onset of abnormally large daily gains and losses. For example, in a normal market, extreme daily movements might occur once or twice a year. When they happen more frequently, that's a red flag. "It means we need to examine events from the perspective of a stressed environment," Masri notes.

That means closer monitoring of all markets, determining trends and optimal risk levels, and possibly reducing risk exposure. When market turbulence exploded during the summer, BGI benefited from having identified early warning signs and from closely monitoring asset-backed securities and leveraged loan products for the previous nine months.

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"We had the tools in place to be able to value securities when market problems initially occurred and when the crisis spread to leveraged loans. Having accurate, timely information and a good understanding of what was happening helped us make quick, rational decisions," Masri says.

The crisis began in the second quarter, with several subprime hedge funds halting redemptions or declaring significant losses. That resulted in higher credit spreads, which affected credit arbitrage funds and leveraged loan funds, such as Sowood Capital, which did not have subprime investments but had highly leveraged positions in leveraged loans. Once these hedge funds failed, the entire collateralized loan obligation (CLO) market was affected.

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A TALE OF TWO MARKETS

Close monitoring and frequent communication among BGI colleagues led to two very different conclusions about risk exposure within fixed income and equities in early August. While it was quite clear that fundamental factors had changed in the fixed income market, calling for a ratcheting down of risk exposure, this was not the case in equity markets. True, equities were highly volatile, with a dramatically high spike in the dispersion of returns between stocks. But BGI correctly identified that as driven by technical issues, including forced selling, as certain hedge funds needed to sell stocks to meet margin calls and to gain quick access to liquidity.

"We didn't reduce risk in equities because we determined that the market disruption was driven by liquidity, rather than fundamentals," says Russ Koesterich, head of US active equity strategies. "We agreed to monitor the market closely, but not to reduce our risk." That decision, initially made on August 7, was reviewed again on August 8 and 9, but the conclusion was the same. As it turned out, that was the right call, vindicated by the equity market's recovery by the end of August.

REINING IN THE RISK

Elsewhere, however, BGI did rein in risk, which was also the right decision. For example, the Global Markets Strategies Group (GMSG), which runs some of the firm's leveraged funds, "decided to take risk off the table in a very structured way," according to Dick Meese, senior research officer. "By the second week in August, we had our target risk running at about two-thirds of its normal level."

Case in point, one strategy's exposure to the carry trade was reduced. The carry trade seeks alpha by borrowing in low-yielding currencies in order to invest in the currencies of higher-yielding countries. "That's a very populated trade," Meese explains, "and when people unwind that, the currencies can move quickly enough to erode the interest rate differential that you're trying to capture."

Meese estimates that by reducing exposure to the carry trade and reducing risk in other ways, this strategy alone saved \$250 million-worth of performance in August.

AVOIDING A CASH CRUNCH

The market that bore the greatest brunt of the liquidity crunch was, ironically, the one that investors would typically assume was the safest: cash. "It froze virtually overnight," says Mike Williams, head of Global Index and Markets Group (GIMG). "There were many, many sellers and no buyers. Liquidity was being hoarded, and no institution wanted to take the risk of lending to another one."

Once again, BGI had to rely on its research and risk models to help identify values in the absence of market transactions. During the meltdown, the IRM team conducted a full-scale analysis to determine the key reasons for the collapse of each hedge fund that went under.

"We identified that overvaluation of subprime securities, lack of liquidity and financing of positions were all key drivers for the failure of several funds," says Masri. "As a result, we conducted a full review of liquidity management and the effect of limited liquidity on our portfolios."

OUTPERFORMING OUR PEERS

While fund performance varied across BGI, a common thread in August was that through a rigorous, scientific investment approach and close attention to risk management, BGI outperformed most peer managers. "Our performance stood up well in relation to the market," says Matt Scanlan, head of the Americas Institutional Business (AIB). "In most cases, BGI was in the top decile of our clients' portfolios and manager mixes during this challenging period."

"Client feedback has been positive in general," says Marie Chandoha, head of BGI's North American fixed income business. "Many told us, 'I have bigger problems with other mandates in my portfolio.' So, considering the difficult market, we performed well and communicated effectively with clients."



Marie Chandoha is BGI's North America Fixed Income Business Head.

Reaching out to clients and consultants to keep them apprised of market moves made a difference. Part of the problem during the credit crunch was a crisis in confidence, leaving many hedge funds to sell positions in order to meet redemptions. At the earliest signs of market turbulence, BGI held various client conference calls to discuss the changing market environments and BGI's response.

"I believe the worst thing you can do in a volatile period is to go radio silent with your clients," Scanlan says. "It creates dislocations and fosters rumors. Clients with structured and hedge-fund-type positions need information and reassurance, particularly during these periods."

AN OPPORTUNITY TO LEARN AND INNOVATE

Just as adversity builds character, BGI gained invaluable insight from the summer's market disruptions. By closely studying what occurred, the firm will better understand how a complicated portfolio of securities actually behaves in such an uncertain environment.

"I think it shows that despite BGI's size, we can move quickly and nimbly," says Meese. "And we can continue to look for opportunities for alpha, even while we're reducing risk."

"Within fixed income, it was a good learning experience because we captured new information and we're continually honing our risk tools and our hedging strategies to improve them," observes Chandoha.

"We had an opportunity to learn quite a bit," summarizes Blake Grossman, BGI's global CEO. "This stress-tested many aspects of our investment approach. We realize how fleeting liquidity can be and we've made a few improvements in how we manage it. Overall, however, I think BGI performed incredibly well, and this experience underscored the importance of having an investment philosophy that is firmly rooted in taking a scientific approach, and having such good risk controls integrated into it." ♦

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