

CHAPTER 10

Leverage Facilities and Risk Management

Until the beginning of the 2007 liquidity crash, leverage was the friend of the hedge fund community. It also was a friend of the fund of funds industry, specifically those that were able to use leverage to “juice” returns. By adding leverage of 1x, 2x, or 3x to a “conservative” portfolio of hedge funds that had low volatility and low correlation to the public markets, hedge fund returns could be increased by hundreds of basis points. The cost was seen as nothing more than the spread between the price of the loan and the return achieved. Simply put, money was cheap, returns were high, and leverage was good.

LEVERAGE AND PRIME BROKERS

While several large investment banks—whose clients were prime brokerage clients—were big providers of leverage. Many commercial banks provided the same sort of leverage facilities to managers and welcomed the money with open arms. Many of the banks providing credit were banks that were not based in the United States, but several U.S. money center banks such as JP Morgan Chase, Bank of America, and Citibank, and international banks such as Banque Nationale de Paris and Société Générale SA, also created a niche to finance the leverage transactions. The reasons were the same for all the banks as it was for the managers: money was cheap, and the returns were high and consistent. Simply put, loaning money to hedge funds and fund of funds was a profitable business.

The transactions, while sophisticated on paper, were for the most part quite simple. The leverage provider (the bank) performed due diligence on the fund manager. If a fund of funds was involved, it was performed on the manager of the portfolio along with the manager’s positions in the portfolio

to determine the quality and liquidity of the assets and the levels at which they could loan. Once the process was complete, the bank would take a collateral position on the underlying hedge funds. The collateral pledge of the underlying funds reduced the principal risk to the lenders, a key ingredient for the lender. This was the same as when a bank would give a buyer a mortgage for a house. The better the credit of the borrower (the hedge fund), the better the rate and collateral requirements.

While many fund of funds used leverage to juice returns, many also used leverage as a cash management tool. Fund of funds use lines of credit to preinvest with a manager in anticipation of incoming funds from investors, or to meet redemption requests from investors in the event that the investor does not carry large cash positions. Liquidity and valuation go hand in hand, and as long as the liquidity of the underlying hedge funds is not stressed or under other pressures from liquidity or mark to market issues, use of the letters of credits to fund redemptions should be fine. However, when the markets are stressed and performance deteriorates, many banks will pull lines of credit, and this can cause significant headaches for both managers and investors. Some believe that using leverage is like playing with fire—you can get burned. However, others believe it is a necessary tool to make the markets function. Either way, the key for managers is to communicate to investors how leverage is being used and to make sure investors understand this aspect of the firm's operation.

If the credit crisis has taught us anything, it is that cash is truly king and that when money dries up, a desert can result. Therefore, investors and managers need to be prepared, because the unthinkable can quickly become the thinkable.

RISK MANAGEMENT

In light of poor performance, fraud, and other issues surrounding investments, institutional investors including fund of funds said to hedge fund managers, “show me the money.” In other words, investors want to see what the manager has in its portfolio. Hedge funds, which are defined as secretive by the popular press, have come to the conclusion that they need to lift their veils of secrecy to maintain and attract investors in the post-credit crisis environment. Transparency is something that is now more than ever available to investors. Although hedge funds increasingly seem to be willing to cooperate and provide the information, many do not want to reveal their portfolio secrets. Many managers will give position detail to investment platforms and risk managers as long as the investments are kept confidential. At the same time, they will provide aggregate exposures and

position-level transparency to investors, subject to high levels of confidentiality. All of this has been driven by the need for investors, particularly pension funds, to get a better handle on risk.

Investors and their consultants are simply stating, “If you want our money, we want to know what you’re doing.”

The origins of risk management may be traced by some to the origins of asset/liability management by the banking industry in the early 1980s. It was the failure of thrifts that funded short-term liabilities (deposits) with long-term assets—30-year fixed-rate mortgages. As interest rates peaked in 1980–1982, thrift earnings were negative because of the mismatch. Funding short-term liabilities with rising costs versus long, lower-yielding assets caused a mismatch of earnings. Looking for a solution to model or “stress test” earnings gave rise to asset/liability management.

The early asset/liability models were created to stress-test earnings in periods of rising or falling interest rates. The results may have satisfied the bank regulators at that time, but they were less than satisfactory given that the assumptions used implied an immediate shift in interest rates.

As risk management came to be used more and more, its implementation was acknowledged to be more an art than a science. The interest rate hikes of 1994 led to the fall of several mortgage-backed strategies, including fixed-income guru David Askin’s Askin Capital Management’s hedge funds. Askin was forced to liquidate his funds after a bet he made on interest rates using derivatives went against him, wiping out nearly \$500 million.¹ Hedge funds were not the only losers in the derivative game; several other highly leveraged entities went under, including Orange County, California. The treasurer of the County, Robert Citron, purchased some derivative contracts that went against him, causing the County to lose \$1.5 billion and forcing it to file for Chapter 9 bankruptcy.²

As the markets unraveled in the summer of 1998, combined with the meltdown of Long-Term Capital Management (LTCM), it became apparent that more sophisticated tools were needed to protect the assets of hedge fund investors. From this environment came the birth of quantitative analytics to measure risk.

Technology Tools

Over the years, it seems that risk management has developed into a science. But unlike true math, it has limitations. It is important for investors and their advisors to look for ways to protect their assets during good and bad times. Understanding the risk of any investment can make it that much more rewarding, which is something that cannot be overlooked. Most “sophisticated” investors use one of the two firms that have the lion’s share of

the risk management market—RiskMetrics Group, Inc. and Measurisk LLC—to measure portfolio risk and provide solutions for many institutional investors. Technology, however, is not enough by itself.

In the recent market volatility, many of the models did not work because it became clear that history was not repeatable. There is an old adage in the fixed-income markets: “All bull markets end at the repo desk.” That fact has been repeatable, but all else has been a wild card. The failures of the highly levered Citron, LTCM, Petolon, Sowood Capital Management, or the many other fixed-income blowups all resulted from one thing—a margin call. The risk models did not calculate the resulting cost when whatever could go wrong did in fact go wrong. However, even the most sophisticated models could not detect the “when,” or “how” the provider of credit or leverage would reprice the collateral or change “the haircut” (margin requirement) for the collateral.

Risk management technology remains a tool to be used, but investors must remember that this technical tool is still just a series of equations that crunch numbers. Investors need to combine the use of quantitative measurements with common sense and instincts to arrive at an independent and reasonable assessment of the level of risk in the portfolio.

Defining Risk Management

So, what really is risk management? The simplest definition is “knowing what you own.” If you are a manager or an investor, you want to know what you own. Investors in a hedge fund or fund of funds may have access to holdings, but understanding the value, trading patterns, and liquidity of each individual security is another matter.

An analysis of hedge fund returns reveals that hedge fund managers make money in one of two ways: taking highly leveraged arbitrage bets or making unleveraged directional bets.

In the case of the highly leveraged bet, there have been winners and losers over time, depending on which side of the trade the manager is on when it is unwound. In the unleveraged directional bet, performance is bad when the bet is wrong. Yet, the loss may be the same in both cases. The role of the risk manager is to identify the risk, understand its structure, and determine how the outcomes of specific trades may affect the portfolio and investor returns. Or, in the words of the portfolio manager, “risk management is the level of volatility or drawdown that we can handle before investors redeem.”

Information Needs

The key to risk management is taking the available data and turning it into information. This is hard for many to accomplish in an industry

that is considered to be secretive. If a fixed-income manager provides complete transparency to investors and lists the entire portfolio of 500 positions (including bonds, futures, options, interest rate swaps, credit default swaps, and a few private placements with current market prices), the investor, along with the risk manager, now have a lot of data. It is a question not of how much data you have, but of what you do with the information.

You need information. The role of the risk manager is to take this data and turn it into valuable information that can be used to determine portfolio enterprise risk. The senior partner, managing partner, chief investment officer, and all investors want to know the answer to this question. It's not "where's the beef?" but "where's the risk?" While the frequency for calculation may be different depending on the status of the participant, access to this information should be readily available on a periodic basis.

Generally, in the hedge fund industry, there is a shortage of risk managers and people who actually perform risk management functions as both managers and investors. In many cases, the chief investment officer is the risk officer. In other cases, many hedge funds state that they have risk management systems, but in reality what they have is a report from the prime broker that indicates gross and net market exposures and shows liquidity trends of the portfolio. Many hedge fund managers will also explain risk management as "we limit our portfolio holdings to a maximum position size of 10 percent," or "we have a diversified portfolio of no fewer than 100 positions, limiting risk of concentration." Both of these statements are meaningless.

The biggest danger for risk managers is liquidity and funding. Risk managers and investors should ask how the fund survives in bad times. Hedge funds are generally long volatility. What happens when all goes awry? The biggest danger to most funds is liquidation along with the availability of unused capacity for funding.

Ask people who worked at Bear Stearns if what we have written is true. We know what the answer will be. If a bank has a liquidity problem and does not have enough capital to cover its trades, the side effect flows through to hedge fund clients and can pose a real problem.

Credit Crisis Affects Risk Management

In the wake of the collapse of Bear Stearns and the bankruptcy of Lehman Brothers, hedge funds are now looking at their prime brokerage relationships more closely and at the terms of the collateral that is held by the firm. Since hedge funds put up collateral that is held by the prime broker as margin for the hedge fund, many are now looking for other places to put the

cash. What happens if the prime broker fails? What happens to my collateral and cash? This is the newest concern for risk managers, something that was unthinkable a year or two ago.

Risk management for the investor is a case of paying for the best diversification, not the best returns. Structuring a portfolio with several managers that have exceptional return patterns makes sense when blended into a portfolio with lower-volatility managers. Marketing meetings with managers usually provide significant insight into how they operate; each meeting is a window into the portfolio. Investors need to ask questions and receive answers to make informed decisions on what strategy is best for their portfolio. However, to completely understand how the portfolio is going to react, investors should look at macroeconomic themes as well.

Analysis of portfolio results for an interest rate move of 100 bps or 200 bps, or a decline of a 5 to 10 percent move in equity indexes does not reflect changing liquidity in the capital markets or sudden withdrawal by capital market financing. The combination of estimated portfolio results from the model along with practical evaluation should lead to a more realistic expectation of portfolio volatility.

Technological advances have provided a wealth of information for investors that use risk management systems. Third-party risk aggregators receive position-level data from prime brokers as well as administrators from nearly 1,000 hedge funds. This data is crunched in all sorts of ways and provides many fund of funds and large institutional investors with aggregated risk reports and specialized reports of customized analytics based on managers and positions.

Value at Risk

The credit crisis has taught many of us that in view of the challenges of pricing asset-backed securities (ABS) and collateralized debt obligations (CDOs), the risk model that Wall Street has used for the past several years has proven to be worthless. Wall Street firms such as Bear Stearns, Merrill Lynch, and Citicorp spent tens of millions of dollars each year on risk management; now two of them are dead and the other seems to be on permanent life support. In connection with risk tolerances and risk limits, the testing process failed when it came to the subprime market. The Wall Street failure resulted from both failure of brain power and failure to resist risk. In the end, the securities could not be valued, and if they could, the results were considered invalid. Wall Street disregarded risk in favor of business and size of market share. Value at risk (VAR), which is used to calculate the amount of risk that an investor, hedge fund, or Wall Street bank can lose at any given time from any given position, failed to detect the

magnitude of the fallout resulting from the decline in residential mortgages and other credit instruments. Firms have now come to realize that algorithms are not a substitute for good old-fashioned due diligence. The meltdown of 2007–2008 demonstrated the flaws in the models, which could not calculate the idiosyncratic risk of ABS and CDOs. In addition, they failed to reject the risk that was inherent in the wake of greater profit potential.

Even a well-regarded firm such as Société Générale SA (SocGen) experienced a stumble, showing the other side of risk management. Banks have been proud to demonstrate the superiority of their controls and systems with checks and balances, but a junior trader was able to find a crack in the armor. Jerome Kerviel, a junior trader who supposedly was putting “vanilla futures hedging” trades lost more than \$7.1 billion of the bank’s capital.³ His misdeeds were discovered only after a routine check found that a trade had exceeded his limit. Had the one trade not exceeded his limit, it is possible that the fraud might never have been discovered. As long as hedge funds or investment banks reward traders with bonuses for making big profits, managers may take risks that may be “dangerous to our financial health.” Of course, with Kerviel, we see that simple checks and balances can uncover fraud but may not necessarily catch it before the losses materialize.

RISK

Investors must exercise a high level of on-site scrutiny to evaluate the actual risk profile and employ postinvestment monitoring to assess changes in risk limits that could lead to negative consequences.

As we have learned over time and were reminded again by the junior trader at SocGen, risk management and risk assessment are based on real-world procedures. Risk management is based on identifying risk and measuring risk. Risk is not bad; when properly used, it will increase returns. Without risk, returns would be minimal. However, when risk is mismanaged or not correctly priced, the investment outcome may not be satisfactory for the investors. All risk management models are quantitative and are supposed to be able to project market volatilities and variations, but the actual goal of the quantitative model should be to provide information to investors and related parties (trustees, advisors) about what will happen to the portfolio when the market zigs or zags. Quantitative measurement alone is not enough. Managers and investors need to employ a qualitative component that ensures that assumptions are correct and that before investment decisions are made both pieces of information are taken into consideration.

The risk manager should play an independent role in the process and should include and be constantly completing the following tasks:

- Recommending risk control parameters and changes in risk parameters to the executive board or finance committee
- Heading the risk committee
- Assisting senior management in educating the firm and traders about the risk management process to minimize unexpected events

Within the umbrella of hedge fund risk, risk takes many forms:

- Credit risk
- Interest-rate risk
- Market risk
- Yield-curve risk
- Leverage risk
- Derivative risk
- Liquidity risk
- Counterparty risk
- Operational risk

As discussed in Chapter 7 on systemic risk, any one or a combination of factors can throw the portfolio out of whack and push all assumptions to the wind. Investors must be aware of the interrelationship of each of the risks in the foregoing list and the impact each will have, both independently and collectively, on the value of the portfolio. The near default of LTCM represented a short-term setback to the proliferation and growth of hedge funds, but the hedge fund industry prospered thereafter. The systemic risk caused some pain, but once it passed, the world got back to normal.

LIQUIDITY ISSUES AT PRIME BROKERS

To make educated decisions, investors must understand the impact that hedge fund financing has on the global financial system. This is extremely critical in the fixed-income arena where many of the bond or credit derivative positions are highly customized and difficult to price, as SIV investors harshly learned in 2007–2008. In addition, because the prime brokerage business is highly concentrated among a handful of market participants, liquidity is complicated even further. The loss of Bear, Lehman, and Merrill certainly did not help.

VAR and available market data do not take into consideration the limited liquidity and the fact that a few credit market participants are providing liquidity to literally the whole bunch. Nor does it show the number of hedge funds with many highly specialized positions or hard-to-price securities. Thus, as more money flows into hedge funds and profit and leverage opportunities shift, investors must be sensitive to the flow of funds and the liquidity or illiquidity that may or may not exist as the markets expand and contract.

A walk down memory lane will serve investors and consultants well as they review the portfolio results in several different periods of significant market stress, including

- 1994—rising interest rates and yield curve inversion
- 1998—LTCM fixed-income spread widening and Asian contagion meltdown
- 2001—September 11 attacks
- 2000–2002—technology bubble burst
- 2006–2008—residential mortgage meltdown

This list will serve investors well in reviewing manager results during each of the stress periods as well as in other shorter, less well-publicized periods and will provide investors with the ability to evaluate manager results to see how each fund performed during these periods.

How to Evaluate Risk

As we look at our users' manual, investors must be cautioned that the performance numbers are only numbers and represent simply one factor of the investment decision process. Drivers who use GPS devices instead of relying on maps have often found themselves turning onto roads that don't exist; in the same way, the investment technology failed. It still pays to stop and ask questions, such as how do I get to this place or that place, or simply to look at a paper roadmap. The best question for hedge fund investors to ask and make sure they understand the answer to is: what is the risk of leverage?

Leverage can add significant amounts of return to a strategy. However, strategies that rely on high levels of leverage present a different risk profile when the rules change. As hedge funds and their investors learned to ask in 2007–2008, what happens when

- margin levels are raised by the stock exchanges or prime brokers?
- Wall Street dealers increase haircuts?
- liquidity disappears?

Regulation T of the Federal Reserve Board governs the amount of credit that brokerage firms may extend to customers and is limited to 50 percent. In other words, the investor may borrow \$1.50 with \$1.00 of equity. Because hedge funds are a profitable business to the Wall Street community, many prime brokers will extend credit at higher levels to hedge funds, based on various factors and positions. This is the profitable part of the puzzle. Before the credit crisis, the amounts varied depending on the strategy. Long/short equity managers were able to use leverage of two to four times; fixed-income leverage often ranged from five to ten times and in some cases often higher. For example, a fixed-income hedge fund used to be able to purchase \$10 million of mortgage-backed securities with only \$1 million equity capital. Today, things are different; but don't be fooled—leverage is available but expensive. If you are going to invest, ask the questions and get the answers.

Leverage and Its Risk

While leverage enhances returns in a flat market with low volatility, a shift in interest rates or a change in liquidity in the bond market presents an unforeseen challenge and can have devastating effects on a portfolio. In the markets of 1994, 1996, and 2007–2008, dealer haircuts were raised and liquidity disappeared in all cases when things got tough. The constant for most historical periods of market stress has been marked—or caused—by high levels of leverage that the Federal Reserve has intentionally or unintentionally sought to reduce, forcing the markets into a downward spiral. The chain of events goes like this: the Fed raises rates to cool the economy, bond prices fall, dealers raise haircuts, hedge funds are forced to sell bonds, spreads widen, stock prices fall, and leverage is reduced. But pain has been inflicted, and the evildoers have been punished; hedge funds along with numerous innocent investors lose billions.

While some fixed-income funds may flourish as bond spreads widen, most do not. Federal Reserve action to raise interest rates generally is a response intended to slow down or cool off the economy, or to wring leverage out of the system. Spread widening generally creates a challenging atmosphere for most bond investors, but particularly for highly levered hedge funds. Haircuts represent the margin requirements imposed by Wall Street dealers—either investment banks or commercial banks—that sell bonds to hedge funds. The haircut varies depending on the underlying collateral and may range from 1 percent to 10 percent for the most liquid securities, such as U.S. government bonds or agency securities such as Fannie Mae or Freddie Mac bonds, to 50 percent for less than liquid high-yield or distressed bonds. Before the subprime meltdown of 2006–2007, dealers gladly imposed haircuts on agency mortgage-backed securities from 1 to 3 percent,

thereby encouraging hedge funds to use maximum leverage. A hedge fund could buy \$100 million of Fannie Mae for \$1 million to \$3 million; now that's leverage! Although it may sound excessive to use 100 times leverage or 33 times leverage, U.S.-regulated, FDIC-insured banks historically used 15 times leverage, while Wall Street investment banks historically used 20 to 30 times leverage. However, the Federal Reserve action and that of the European Central Bank forced firms to lower leverage levels in an effort to bring sanity back to the credit markets. Sane we all may be, but the question is, was the cost worth it?

While spread widening hurts, a change in the haircut can amount to a body blow. The real death threat is the forced selling that occurs when bid/offer and interdealer market spreads widen, resulting in instantaneous losses. Analysis of the potential for a market spiral and systemic risk is part of the risk management process, but it brings us back to the realization that it involves the art, not the science to determine the effect of "what if" scenarios on a portfolio.

VALUATION RISK

In periods of market dislocation, one of the issues constantly raised is the basic question from each investor's questionnaire: "Please state how securities are valued." Sometimes it's a derivative of that question. However, the standard answer is "Monthly (or quarterly) we obtain three external market prices and take the average of the three to determine market pricing."

To understand valuation risk, the following questions relate specifically to fixed income strategies:

- Who provided the evaluations? Did the dealer who sold the securities to the hedge fund provide an evaluation, and what was the price—the highest?
- Are the final prices determined independently by the risk manager or CFO or by the portfolio manager?
- Does the prime broker or administrator obtain prices independent of the hedge fund?
- Is a pricing service used to obtain independent pricing?

For equity strategies, or less liquid positions, an additional question is to determine how prices are adjusted for positions that trade less frequently, have smaller trading volumes, or where the manager has a large position relative to the average daily trading volume. However, with the implementation of Financial Accounting Standard 157, it is very clear how managers, their administrators, and their auditors are going to price these sorts of positions.

Part of the due diligence required of the investor should include a review and understanding of the policies and procedures of the manager regarding pricing. Larger organizations will have systems of checks and balances to ensure that pricing is independent of the position trader. However, smaller firms need not be penalized by size as long as an independent verification of pricing occurs and prices can be justified. In the simplest terms, the hedge fund business is an industry of entrepreneurs who live by the age-old adage of Wall Street, “My word is my bond.” Investors should feel comfortable with the explanations provided by the manager and his team. However, in light of the Madoff fraud, make sure you really understand it and that it works properly. One can never be too careful.

Portfolio Information

A key ingredient of risk management is understanding the individual fund positions held by a fund of funds. Some investors require that all prospective fund of funds managers release portfolio positions to its research team before investing and is happy to sign a nondisclosure agreement to reinforce the confidentiality of the holdings and its respect for the manager’s work. This transparency is important and is used to monitor the manager, sector, and overlap of risk that may occur in the overall portfolio. Given that portfolio positions change over time, this transparency provides additional information about the manager’s ability to understand risk and to evaluate the methods that are used to mitigate both systemic risk and market risk. By looking at individual hedge funds within the fund of funds, the investor will be able to determine the source of the fund’s performance and evaluate whether the performance has been driven by strategy allocation or manager selection. If the fund of funds’ results deviate from the expected targeted return, an interim call to or even a face-to-face meeting with the manager may be required. You need to get answers.

As with all portfolio management products, fund of funds investors do not get involved in the overall portfolio selection process but do want to understand the macroeconomic view the fund of funds manager has and how this influences the portfolio and the tactical allocation process. Although debate is always healthy, if investors feel that the manager’s outlook is dramatically different from their own, redemption may be the only course of action.

A key strength of fund of funds managers is their ability to participate with strong results in good markets while preserving capital in periods of market stress. The drawdown history must be consistent within the risk guidelines and investment policy limits, and must offer a safer alternative than single-manager options.

Most fund of funds provide periodic performance update reporting at least monthly but sometimes more frequently, if available. As with hedge funds, fund of funds managers should also be available for periodic portfolio updates via conference calls. In addition, on-site visits are required at least annually, but preferably twice a year.

For many investors, accessing the flow of monthly information is always challenging. The lack of timeliness of delivery causes a constant headache for investors. Because of the lack of standardization or comprehensive or consolidated databases, prices, NAVs, and transparency reports are generally sent via e-mail or fax by the manager directly to investors or by the administrator to investors. Many hedge fund databases are not up to date in getting accurate performance results for funds, thereby compromising the timeliness and accuracy of reporting. Accessing complex derivative positions and side pockets adds to the confusion. As the hedge fund industry matures, administrators with new delivery technology will reduce the present reliance on manual reporting, which will improve the quality of data and market information.

THE DEMAND FOR BIG FIRMS

As the hedge fund industry grows, there are greater calls for the development of more robust organizations similar to those of their long-only brethren. Growth of assets in the period since 2000 has now given rise to the call for larger organizational structures and more transparency. The market meltdown has only helped this cause. As hedge funds and fund of funds seek higher levels of pension and other institutional assets, investors clamor for improved infrastructure and reporting systems. According to most allocators and consultants, despite the dislocation of 2008, the hedge fund industry is still poised for substantial growth over the next five to ten years. At the same time, moderation of returns will force investors to ask more questions and to demand greater transparency and risk management from the investment firms.

Investors expect to make a higher allocation to alternative assets, but are nevertheless frequently dissatisfied with performance.

There is a growing focus on governance, but the processes to make an assessment may be lacking.

The quality and scope of reporting needs attention, but investors must also learn to ask the right questions.

There is dissatisfaction among investors with some aspects of the current regulatory regime.⁴

PricewaterhouseCoopers published a financial services report in March 2008 titled *Transparency versus returns: The institutional investor view of alternative assets*. The report expressed several areas of concern, as shown on previous page.

With over 220 respondents to the survey, including institutional investors and alternative investment providers, risk management and transparency are as important as performance results but are still in the developmental stages at many firms. With the growth of the alternative investment industry, assets continue to flow to the firms that are building organizational structures.

In the early years of the fund of funds industry, many managers and investors alike believed that it was relatively easy operationally to manage a portfolio and manage the business. It is no longer a matter of getting the individual NAVs from each manager, aggregating the results, and reporting to LPs. By adding the value added of the fund of funds enterprise to the ongoing due diligence, the manager provides a wide range of indirect investment services and reporting, but investors want to know “How did you do last month?” If timing of the reports is often delayed, maybe it is time to put in a sell order. If the manager does not report the results in a timely, consistent manner, how can the NAV be trusted?

Never before has correct information, disseminated in a timely fashion, been more important.