RGA INVESTMENT ADVISORS, LLC

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October 2012 Commentary

In the Wake of Hurricane Sandy

The Month of October

The month of October was as spooky a timeframe in markets as it was in real life. Often times, particularly in the financial industry, we conflate the general state of being and mood of society with the fluctuations in markets. While this month the two aligned for the negative, it's important to maintain perspective and remember that markets, while important for financial planning purposes, mean little in the grand scheme of life. Family, friends and community are all of the utmost importance and instrumental in structuring our ways of life.

While our job is primarily to help navigate markets, we have spoken to several of you in the wake of Hurricane Sandy and are sorry to hear about the catastrophic damage in our region. Many of you live in the most affected of states, and we would like to offer our assistance in any way possible dealing with insurance claims, FEMA aid requests and whatever else might be needed in these challenging times. Please do not hesitate to give us a call.

How Financial Crises are Like Hurricanes

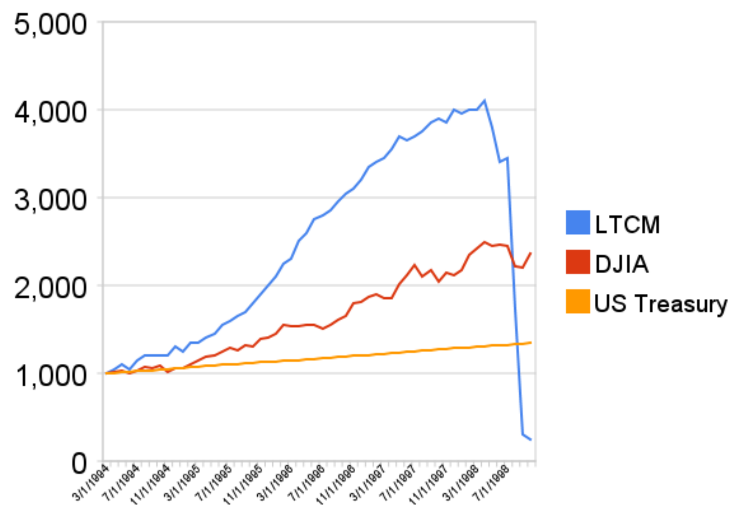
There are many parallels between the preparation for, arrival of, and devastation wrought by financial crises and hurricanes. Considering right now we are living in the wake of both, it's worth discussing some of the common threads between the two and some important lessons learned which can actually be deployed in order to better prepare for inevitable problems, and to mitigate risks if/when they actually occur. Typically before each, there is little concern about the prospect of a problem, even when close calls do provide a wake up call.

As it turns out, we are psychologically geared in such a way that these close calls end up causing more damage. Why is this? By definition, a close call is a situation in which disaster was averted, albeit by a close margin. When this happens, in our human quest to develop explanatory narratives for the world around us, we focus far more on the comforting than the concerning. Let us relate this to two real life examples: one in the sphere of finance, the other in weather.

Long Term Capital Management Takes a Dive

In 1998, a top performing hedge fund called Long Term Capital Management (LTCM) led by an all-star team of investors, traders and economists, including two Nobel Laureates found themselves on the brink of collapse. The fund operated using complex strategies and considerable leverage, and focused on mean regression applying historical data to a variety of markets. LTCM had quickly gone from top performer to the brink of collapse, and worse yet, LTCM was so highly levered, so broadly situated across markets, and so intertwined with other financial institutions that its failure alone posed the real risk of bringing down our entire financial system with it.

Things at LTCM already took a turn for the worse before Russia defaulted, sending global markets into a tailspin. As a result, LTCM suffered over $4 billion of losses in less than 4 months. Here is a chart plotting LTCM's performance from inception, through the Russia crisis aftermath:



For a far more thorough summation of the events surrounding LTCM's collapse, we recommend reading Roger Lowenstein's outstanding narrative that reads like a financial thrilled called *When Genius Failed*. For our purposes here however, we will focus on our interpretation of the misapplied lessons from 1998. LTCM itself represented the first major threat of a global financial collapse in a long time, and a short decade later, that threat of collapse became near-reality. In fact, it is particularly striking to us how in the aftermath of LTCM, the very risks that brought LTCM down multiplied throughout the financial system because people viewed the lack of collapse as proof of the system's stability. The real causes behind LTCM's failure, which were really quite simple, were overlooked in favor of more complex, narrative-driven explanations.

At the end of the day, conventional wisdom viewed the failure of LTCM as a case of overconfidence by some prestigious academics. Further, it viewed the Federal Reserve's actions to simultaneously orchestrate the bailout of LTCM by the major players on Wall Street and flooding the system with liquidity as a "panacea" for deeper economic woes. In fact, in the wake of LTCM the financial sector pursued further integration and interconnectedness under

the guise of "spreading risk" as a way to prevent fragility, while ramping up leverage due to the false confidence inspired by this newfound scale and diversification. In reality, LTCM was a preview of what was to come, whereby no substantially large market crisis could be "contained" (like subprime) when leverage and complex interconnections are involved. Especially when the players involved turned out to be far larger and even more intertwined than LTCM.

Uncertainty vs. Risk

Hurricane Irene last summer offered us a "preview" for Hurricane Sandy this year. Irene was nowhere near the size and scope of Sandy in the days leading up to landfall, yet while watching the news preceding Sandy's arrival we saw far too many individuals say that they were "staying put at home, because last year Irene wasn't that bad." (Link) Even Mayor Bloomberg seemed reluctant to issue the evacuation order too early for fear of the "over preparedness" backlash slung by critics following Irene's relatively mild impact. Some attributed the overreaction to purely political reasons following Bloomberg's lack of preparedness in the wake of the 2011 blizzard, others called it "laughable" and proof that New Yorkers are no longer "tough as nails." (Link)

The reactions to Irene and its impact on preparations for Sandy cut at an important distinction for both disaster preparation and financial markets, and are a theme which Michael Mauboussin of Legg Mason has been teaching for quite some time: uncertainty and risk are not interchangeable terms. Mauboussin described the distinction as follows in a 2006 paper entitled *Interdisciplinary Perspectives on Risk* (Link).

> Risk describes a system where we don't know the outcome, but we do know what the underlying probability distribution of outcomes looks like. So think of a roulette wheel—when the croupier spins the wheel, you don't know where the ball will land, but you do know all the possibilities and their associated probabilities. Risk also incorporates the notion of harm—that is, you can lose.
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> In contrast, uncertainty reflects a situation where you don't know the outcome, but you also don't know what the distribution of the underlying systems looks like. Uncertainty also doesn't necessarily imply harm, although it often does. So it's not hard to see that most systems we deal with in the real world are really uncertain, not risky.

Hurricanes fall into this category of uncertainty. We have all too good an idea of what the damage inflicted by a hurricane would look like in our region (risk); however, we have a great deal of uncertainty as to if/when/how a hurricane would actually hit. It is under this cloud of uncertainty that our elected officials must make decisions on how aggressively to prepare for a disaster. Considering the level of risk to this region in the event of a hurricane making landfall (and let's be clear, Sandy hit not as a hurricane, but as a tropical storm in New York), when a storm is actually barreling our way with even a mid-level probability of a direct hit, we should prepare as much as possible.

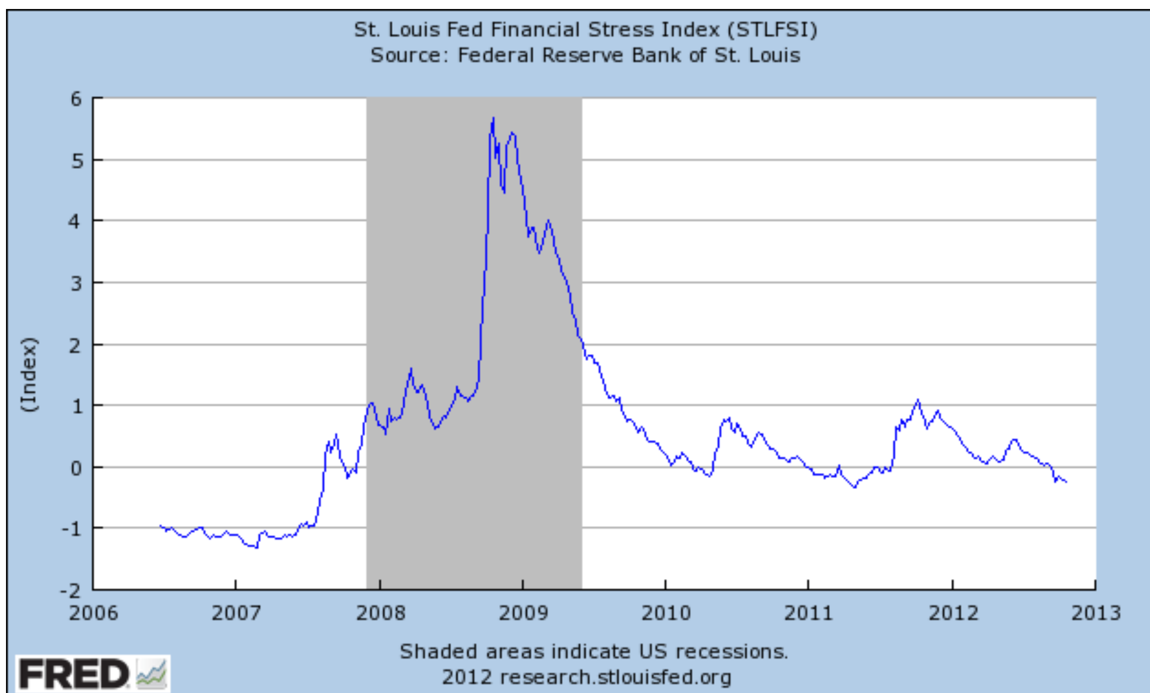
In finance, this lesson is little different. With LTCM we learned that one relatively small institution (relatively small in the grand scheme of things, though large in absolutely dollar

value) had the potential to bring down our entire economic system. With ever-larger institutions, and increasing global ties, these risks were exacerbated tremendously. Yet, on the cusp of crisis, many economists and pundits alike took comfort in the size and diversification of these very institutions. We knew the risks (i.e. the damage that could be inflicted) of a large, interconnected financial institution on the system; however, we greatly misunderstood the uncertainties of the outcomes. It turns out that these risks were far more likely to come to fruition than we originally thought. Herein lies the danger of uncertainty.

Building up Crisis Immunity

A related consequence, and a theme which we have discussed at length in prior commentaries, is the way in which people respond to crises. People have a strong tendency to fear calamitous events far more in their aftermath than in the period leading up to them, despite the warning signs. In financial circles this is most clear with the abundance of those claiming the "next crisis" is right around the corner every step of the way, despite the fact that no one was concerned about crisis when one was in fact imminent. This asymmetry isn't necessarily a bad thing, because this asymmetry itself is one of the strongest forces in helping to either prevent and/or mitigate the damage from the next problem.

Since 2008 we have had the opportunity to restructure our financial system such that it entails far less systemic risk, and we can see this clearly using the Federal Reserve's St. Louis Fed Financial Stress indicator:



Notice the massive spike in 2008-09, and the continuing decline in the stress index of late despite increasingly loud and urgent words of alarm. This is so because the system has reacted constructively to the damage inflicted in the recent past. And this is despite the significant

stresses placed on globally connected financial institutions by the Euro crisis—one that many caution has the potential to bring down our financial system here in the US.

We are optimistic that the response to Hurricane Sandy will be equally constructive in rebuilding our infrastructure in such a way that we are far less vulnerable to the next hurricane. Since forecasts by definition involve considerable uncertainty, the next one may be a year, a decade, or century away, but we know it will happen at some point. In the interest of sustainability, it's worth preparing for this inevitability. Our problems can never go away entirely, but we can responsibly build our institutions and infrastructure in increasingly better ways so that when the next one does come, the risk will be far less. This is part of the fabric of democracy and capitalism: the lessons learned from the past become important bedrock foundations for a better tomorrow. We don't just rebuild, we refine, optimize and strive ever-upwards.

Please call us directly to discuss this in more detail. You can reach Jason or Elliot directly at 516-665-7800. Alternatively, we've included our direct dial numbers below.

Warm personal regards,

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