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Risk Management:

The Current Financial Crisis, Lessons Learned and Future Implications

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The Human Touch Underlying the Current Financial Crisis

by Vivek Gupta

This article presents a hypothesis that the market cycles are primarily created by human actions, behavior and assumptions rather than by random variables. An analysis of main financial events over the last decade reveals that:

- Every one of these events has had a human touch.
- The current financial crisis is an aftermath of the excessive economic boom during this period.
- A new economy must emerge from human ingenuity and innovation.

The B!O!O!M!

The Internet and Y2K: When former U.S. President Bill Clinton declassified the military technology of the Internet for public use, it created an unprecedented tech boom, millions of new jobs and a booming global economy. Microsoft President Bill Gates added fuel to this fire by hyping the concerns of Y2K. Y2K fears forced almost every business in the world, especially in the developed world, either to upgrade or to replace their computer systems. No doubt, Y2K was one of the single most powerful economic catalysts ever experienced.

9/11: The horrific tragedy of 9/11 caused a major meltdown of the stock markets as well as of investor confidence. At that time, the U.S. government felt compelled to lift the American economy. To do so, former Chairman of the U.S. Federal Reserve Board Alan Greenspan started increasing the supply of money to lower the interest rates. In December 2003, federal funds rates touched as low as 0.96 percent, the lowest level ever recorded in American history. This unprecedented low rate did achieve the desired intent by lifting the stock markets and the mood of America in due course.

The housing boom and the home equity impetus: Due to low interest rates, paying an additional $10,000 for a house only meant an increase of $40-$50 in monthly mortgage payments. When the bankers were eager to lend a higher mortgage amount, the homebuyers started bidding up the house prices. The bankers bundled up these mortgages and sold mortgage-backed securities (MBS) all over the world to raise more cash. This iterative cycle through a never-ending supply of money resulted in ever-increasing house prices. Many homeowners borrowed against the equity of their homes and spent on renovations and travel and invested in the stock markets. This self-fulfilling prophecy created an enormous construction boom and uplifted the stock markets.

Extrapolation of historical data to make future assumptions: All financial players—lenders, borrowers and policymakers—believed that the U.S. house prices would never fall in the future because those prices had never fallen in the past. The lenders kept lending indiscriminately, assuming even if some homeowners default, they could recover their investment by selling the houses that were going to appreciate anyway. This assumption played a significant role in creating the recent housing boom.

Mathematical mirage of index returns through the smoke and mirrors of mergers and acquisitions (M&A): Lately, a combination of low interest rates and low credit spreads allowed high-end borrowers to borrow at, say, 4 percent. To earn a 1 percent spread, they valued the targeted stock expecting a 5 percent yield. The following example illustrates how M&A made the index returns look highly impressive.

When this stock started trading for $120, everyone who owned the stock in 2006 got an impression of 20 percent

Time	Expected Dividend	Expected Yield	Valuation Mathematics	Stock Price
2006	$6/per year	6%	6/.06	$100
2007	$6/per year	5%	6/.05	$120

appreciation in the "value" of their stock, whereas their income was still $6/per year. A simple analysis of historical stock prices cannot reveal how lowering the expectations of future income created a mirage of exuberant current income. In this process there is nothing illegal or even ill-intentioned on anyone's part.

Fire and hay: Intermediaries and investors: Generally, investors are averse to the guaranteed deposit returns and are so mesmerized by the historical surge in stock market indexes that they ignore the market risks and sales commissions. Intermediaries were easily steering such investors toward equities as preferred investment for their retirement. This raging bonfire was adding glow to the markets.

Oversupply of money, yet no inflation: Theoretically, the appropriate amount of money in the economy is that which keeps the inflation between 1 and 2 percent. The central banks have flooded the markets with money and have created enormous demand without disrupting the inflation charts. To achieve this most desirable outcome, they increased supply by liberalizing import quotas from China, India and other low-cost production regions. This phenomenon resulted in an unprecedented era of globalization, economic boom and vibrant stock markets.

The BUST

Imbalance of production and consumption: The fundamental reason for this recent bust is a trillion dollar (fiscal + trade) deficit. In the most fundamental trading relationship for humans, the barter, the United States has a gap of one trillion dollars. Essentially, the United States is saying to the rest of world: "Give us goods and we will pay you later." So far the rest of the world is accumulating "savings" by exporting goods to the United States, confident one day it will get its savings back with interest.

The housing bust and halt of the home equity impetus: Prudent Alan Greenspan admitted that the housing boom was reaching the tipping point by saying "There is some froth in the housing market." At a point when interest rates could not be pushed any lower, the house price boom stabilized and halted the free income from home equity. The artificial economic impetus disappeared.

Super-saturated housing market: Due to many enticing incentives, people who would have bought a house over the next three to four years had already bought a house. When the high-risk mortgages started defaulting in large numbers, lenders suddenly realized that they could not recover their investment through foreclosure in a super-saturated housing market. Lenders' fundamental assumption was punctured!

The domino effect: When lenders' overoptimistic assumptions did not pan out as expected, lending retreated, demand retreated, house prices plummeted, MBS value fell, guarantors of MBS defaulted, credit swaps fell in the money, and the issuers of credit swaps disappeared or weakened.

Rescue packages: The U.S. government could take over the severely defaulted mortgages in an attempt to unlock the credit crisis. However, would the bankers find enough creditworthy homebuyers with 25 percent down payments?

Sudden deleveraging: Eighty percent of U.S. GDP is dependent upon the consumer expenditure, which is in parts supported by borrowing. A $50 reduction in monthly pay means a reduction of $10,000 borrowing capacity. A slight slowdown in the job market will significantly reduce demand for everything, from cars to trinkets. It remains to be seen how nimbly the U.S. economy can shrink.

The …

The ripple effects of pension shortfalls: Due to declining stock markets and low interest rates, pension asset values have fallen and liabilities have increased. Some of this gap has to be covered from company profits this year. Due to a soft economy, profits have shrunk. Higher-than-expected pension contributions will further lower profits. This may

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result in lower credit ratings and further drops in stock prices. Since company A's stock is part of company B's pension portfolio and vice versa, more pension contributions will have a domino effect on stock prices. The defined benefit pension plans established many years ago will be hit hard.

The demographic shift: Developed countries are experiencing an aging population along with a slower growth in their intrinsic populations. A large segment of the working population will retire in the next few years. The economic growth is assumed to come from the increasing consumption by the stable population only.

The environmental scare: To some degree, most people believe something needs to be done to avoid looming environmental catastrophe. The proposed solutions either lead to job reductions or are considered ineffective. Most policymakers tend to favor jobs over the environment.

Innovation, the last hope: All the reasons that caused the bust have one common thread—the available capital cannot be deployed in new industries. Therefore, it is chasing a few opportunities, creating extreme volatility and resulting in loss of wealth. As far as I can see, innovation is the only comprehensive solution that can simultaneously overcome concerns regarding environment, economy and excessive capital. We need a paradigm shift in our thought process to achieve innovations that can further lift the standard of living for all humanity by adding enormous value—for example, harnessing gravity.

Summary: No one is proposing ways to rectify the trillion dollar deficit that is creating a serious geopolitical shift. Optimism is good; however, too much optimism fosters complacency. It is time we realize the severity of the situation, implement a serious change in behavior and act urgently to find long-term solutions, mainly through innovation and pension reforms, to overcome the current challenges. Such solutions will not be fast and easy but rather will require virtues like leadership, hard work, courage, innovation, sacrifice, etc. If we fail to do so, either environmental or economic woes will lead to widespread catastrophe. After all, there is good news. We still have *some* time to change course.

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