Complex Markets, a Blunt Fed and the Rain Ahead
Matthew Piepenburg
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Market Appeasement

Consistent equity highs and bullish bond spreads feel unreal in an otherwise intuitively depressing aura of stagnant GDP and employment growth. Yet the market pundits continue to deliver the standard Panglossian optimism for future performance. Despite six years of a doubling sovereign deficit and an unprecedented increase (400%) of inflationary money printing, today's WSJ headlined more good news for the dollar. In this backdrop, voices of caution are often ignored as either wrong (at best) or fanatic (at worst). The setting brings to mind a frustrated Churchill in the 1930's. Then, a Europe exhausted by the appalling losses of 1914-18, was unwilling to even imagine another war. Consensus naturally flocked toward the forgivable comfort and reassurance of trusted experts like Chamberlain, who announced "peace in our time" while Hitler sharpened his knives and slowly, then quickly, *blitzkrieged* Europe into total collapse. But Churchill saw the storm coming. He rang the warning bells that went largely unheeded. Despite obvious signs (from *Mein Kampf*, *Kritsalnacht* and the *Anschluss*), the trend toward another crisis was understandably too unpleasant for most to even consider.

Today's global markets share a similar and deliberate blindness. Investors, burdened by the memories of 2001, 2007 and 2008, look away from the numbers and seem unwilling to imagine the signs of greater collapse ahead. Instead, they cling to a shared faith in the reassuring words of central bankers and the sell-side calm of wealth managers and televised experts. The markets are hitting all time highs. The recession, it seems, is behind us. In short, it seems as if we have "prosperity in our time." Wise men like Bernanke (TIME's man of the year), and his successors and predecessors, are trusted almost without question.

Yet the longer-term signs, seemingly obvious, point bluntly to a different reality. Very few are ringing the warning bells. The sincere concerns come not from contrarianism for contrarianism's sake or perma-bear stubbornness, but from a sober analysis of numbers, deficits, history, and the extraordinary complexity of modern markets.

Such analysis is far from positive, and hence far from popular.

Conventional Wisdom?

When considering risk and the capital markets today, we might be wise to look beyond conventional wisdom and its carefully presented faith in efficiency, reversion to the mean calm and cyclical, long-term trends/"guarantees" of up and to the right. Those days are gone, because those markets (made too complex for noble laureates and computers) are gone. The post-08 Wall Street (like the post-71 economy) is, in fact, different. The instruments, systems, controls and dimensions have changed. Despite the dangers posed by these changes, the industry's cadres of well-intended undergrads and MBA's with scratch handicaps, stellar SAT scores or lacrosse glory from the top prep and Ivy League schools remain big on pitch-booking comfort but short on candor, and hence short on courage. (Optimism and glossy pitch-books retain clients --the *raison d'etre* of the wirehouse wealth management teams.) The hallways of Goldman Sachs and JP Morgan (like the equally fungible hallways of Bear Sterns or Lehman Brothers) are filled with eager minds reheating the market views of their employers rather than building views from the evidence. This means that the vast majority of today's investors are sold to rather than educated, and thus, as is so often the case in the turning points of history, the vast majority of investors are ill prepared for what lies ahead.

These paragraphs are part of an ongoing effort to educate and prepare rather than rant or sell. What is attempted, hoped for and needed here is a non-ideological approach, free of either conservative or liberal rhetoric and grounded in curiosity, analysis and frank-speak. Ultimately, of course, it is just an opinion, yet given what is at stake, it is at least one worth considering.

Bluntly: I see *collapse* ahead. Not correction, but *collapse*. The thesis, which hinges upon deficit levels, money supply, asset bubbles and derivatives, is alarmingly simple. The storm is impossible to time, and my words may be long forgotten before the first lightening strikes, be it in a matter of years, months or hours. But I see clouds gathering. In seeking the storm's origins, one could potentially go as far back as the first bartering tables of the Byzantine Empire. For simplicity sake, however, I can offer more recent tipping points, including November 30, 1954, the day Larry Summers was born. This former Under Secretary of the US Treasury, Harvard University President and well-paid advisor to Wall Street juggernauts, enjoys the historically unmatched honor of putting his mind and pen upon two pivotal moments in recent market history: 1) the repeal of Glass-Steagall in 1999 and 2) the De-regulation of the derivatives industry under the Clinton Administration in 2000. These two acts—one which made depository banks into speculative hedge funds and the other which created a market of fictional instruments whose gross notional value (which sits off the balance sheets of the world's over-levered banks) exceeds 9 times global GDP. Such staggering outliers/numbers have made modern portfolio theory largely obsolete and capital markets infinitely more complex (and unsafe) than any risk management model (from VAR to regression analysis) can adequately measure.

This time is different.

Suggesting a collapse rather than a traditional correction implies a break from current outlooks—and certainly today's positive headlines. But at the risk of committing market blasphemy, one must consider that *this time it is different*. Different because unlike prior cycles, centuries, markets, asset classes, corrections, bubbles, busts and risk models, the current markets are characterized by an unprecedented scale of systemic complexity made particularly more so by the recent addition of the Ebola-like contaminant of an over-levered derivatives market. Equally unique this time around is an experimental class of central bankers (from Japan, to the EU to the US) whose faith in cyclical and traditional medicine for economic ills ignores the possibility that todays' problems are not cyclical in nature, but structural. Finally, the coming collapse involves the bursting of the last of all bubbles—the US dollar and debt bubbles. Unlike prior bubbles (from dotcoms and equities to sub-prime real estate) the buck stops at sovereign debt and currency implosions, and with that abrupt stop, so too marks the end of further bubble creation/"solutions," which, rather than promoting productivity through structural policies, has been the broken engine behind our so called "recoveries" since long before Bernanke started tossing money from helicopters.

Current Market Risks and Complexity Theory

Today's markets are the most complex—and hence risk-laden—in the history of capitalism. As such, they are worth considering in the context of complexity theory. Advanced in the 1960's, this risk measurement concept is premised on the belief that certain systems can reach a scale that cannot be modeled or predicted. In this backdrop, "complexity" does not equal "complicated." (The components of a watch, for example, are "complicated" yet understandable; the emotions of a random selection of teenagers, however, are "complex" and subject to infinite possibilities). Complexity theory argues that certain systems can morph and take new dimensions—i.e. fly away—with a limitless array of outcomes that can't be modeled.

With specific regard to capital markets, complexity theory maintains that modern markets are inherently complex (rather than complicated) systems precisely due to their increasing scale and interconnected components. For example, the ever-expanding range and size of exchanges, counterparties, and asset classes as well as the equally increasing range of instruments, leverage strategies and market participants makes capital markets increasingly difficult for any individual or program to model with meaningful probability. In this backdrop, modern market complexity theory's *piece de resistance* begins and ends with the impossibility of modeling the range of risks stemming from the global trade of derivatives, whose astounding notional numbers are more of an abstraction than an equilibrium input. Because complexity theory contends that the greatest catastrophes are exponential and non-linear in function and scale (meaning as a system doubles or triples in scale, the risk of catastrophe increases not by 2 or 3, but by 90 to a 100), the threat posed by the derivative "unknowable's" (unleashed, in part, by Mr. Summers) is by itself enough to render market risks inherently beyond the scope of predictability. This would mean that stress tests based on 9/11 or 08 market corrections have no practical forward use, as today's unprecedented systemic scale equates to equally unprecedented –and immeasurable-- systemic risk.

Such conclusions are reminiscent of Frank H. Night's seminal (1936) work, *Risk*, which addressed the difference between probability and uncertainty. The former, he demonstrated, can be modeled, whereas the latter cannot. Our highly complex and derivative-stained markets are potentially that—beyond probability. Today, even the best quants at the regulators offices or the trading desks, can't rely on regression analysis, because no matter how far back one "regresses" in time, current scaling dynamics (i.e. complexity) are outside of history. Nevertheless, Wall Street's experts continue to rely upon the same inadequate predictive models. Their traditional and shared tool kit for risk assessment is based upon stochastic algorithms which include nonlinear functions that show how a small change in an input can produce massive changes in results. These models can also be supplemented by calculus (to measure quantity) or differential calculus (to measure change). Add to that tapestry a few regression models and you have the typical quilt upon which modern risk management from hedge funds A, B, and C to banks X, Y, and Z place their faith. Unfortunately, such a quilt of risk modeling won't keep investors warm against the cold complexities of modern markets. Consequently, those relying on such models will find themselves just as ill prepared for crisis as they were in 87, 98, 2000 and 2008.

The Fed: More Complexity, More Uncertainty

Adding to the tremendous complexity (and hence unpredictability) of today's capital markets are the experimental policies of global central bankers operating in a world of fiat currencies. The US central bank, or Fed, is at particular risk, and thus so is its dollar and economy. Understanding this risk requires a look at the dollar itself. Since 1945, the dollar—then backed by the gold standard-- has served as the world's reserve currency. In the initial years following this designation, foreign central banks began accumulating lots of dollars— over $14B worth by the late 1960's. The problem was the US had only $3.2B worth of gold to back those dollars… The Fed had printed more money than it could collateralize. In short, the US was over its monetary skis, and this triggered dangerous inflation and a flight from the dollar. So what did the US do? Rather than accept the reality of a currency out of control *vis-à-vis* the gold standard, Nixon took the less noble way out and simply dropped the gold standard all together in 1971, thus making the dollar a pure, debt-based currency, and free to be printed as needed, akin to giving a teenager a credit card: eventually such freedom leads to debauchery, which is where we are today.

The temptation to solve problems with easy money rather than tough and structural productivity policies can lead to a kind of Ponzi scheme of borrowing and spending, where the spender/borrower knows it can always print cash when in a bind. This creates a political and national moral hazard, the results of which are being played out today at a historically unmatched scale. Since (and in response to) the 2008 market crisis, the Fed has increased the base money supply by 400%--printing more money in six years than was created in the prior 100 years combined. In that same period, the Treasury has doubled US national debt from $8T to over $17T. These figures are staggering.

Deflation: Fear

So how did we get here and where are we headed? As for origins, they are as old as philosophy itself, namely fear and greed. Governments, likes banks and individuals, have primitive drivers. And for our "independent" central bankers (as well as the Treasury and government they unofficially serve) nothing is more frightening than deflation. Primarily, this is because deflation is bad for debtors, and the US is a profligate debtor. During deflationary periods, for example, cash has greater value. Debtors thus prefer weaker (inflated) dollars to pay back debts, and the US Treasury (itself a debtor) is no exception [which is why its friends at the Fed instigated a deliberate, post-08 policy of attempting to create inflation via printing (aka Quantitative Easing)]. Deflation is also feared because it can't be taxed. (When cash is strong and price indexes are lower, this becomes an invisible "income boost" to dollar holders; but the government cannot tax the invisible.) Furthermore, at a macro level, deflation leads to hoarding/saving, which slows GDP growth. And at a national banking level, deflation leads to higher default rates, reduced lending and ultimately higher bank failures. Finally, deflation, unlike inflation, is harder to manipulate (at least initially) than inflation, which often responds well to interest rate and money supply policies. For all of these reasons, the Fed is afraid, very afraid of deflation. The bubble burst of 2008, therefore, was a kind of nightmare scenario, as the asset crashes created a massive drop in demand and hence pricing, which triggered deflationary conditions and the counter-acting inflationary policies which followed: a classic case of the tight-rope walk of dueling deflation and inflation.

Yet 2008 was hardly the first time a Federal Reserve Chairman (in that case Bernanke) was worried about deflation and responded with inflationary tactics. In 2001, in the wake of another bubble market crash, US inflation dipped to 1.6%. A frightened Greenspan sharply lowered rates, and by 2007, inflation climbed back to 4%. Happy ending? Hardly. The problem with having only two blunt instruments/hammers (i.e. rate and money supply manipulation) to fix complex problems (correlated markets, levered instruments, myriad counterparty behavior) is that every problem looks like a nail. By lowering rates, Greenspan bluntly solved the deflation fears of 2001, yet by reducing rates, merely created a lending bubble that would bring the housing market—and US economy—to its knees in 08. Thus, in 2010, inflation dipped once again to the 1.6% levels of 2001. Chairman Bernanke, like his predecessor Greenspan, went to the same toolbox and pulled out a familiar hammer, this time pounding rates to nearly zero while adding a number of zeros to our deficit and money supply figures. And once again, we are left to wait and see what pain will follow from too many swings of a hammer against the porcelain-like complexity of the global economy.

The above example is hardly unique (central bankers in Japan, the EU, UK and China use similar tools with similar, dramatic implications). Nevertheless, it highlights the struggle between deflation and inflation. The deflation, however, is natural and endogenous, the result of productive emerging markets, massive demographic shifts in Latin America, Asia and Africa, and the equally impactful rise of aging populations in developed countries, technology implications, and shifts in balance sheet deleveraging. The inflation, however, is an un-natural market force, centrally created, top-down and exogenous, the result of interest-rate policy and money printing. In sum, natural deflation and un-natural inflation, like two tectonic plates, are pushing against each other in moves measured not by a Richter scale but a handful of PhD's who think their experimental hammers can tame a global economy more complex than anything history—or their crude tool boxes—has ever encountered.

It is a convenient mistake, I feel, to underestimate this complexity. As far back as 1945, long before complexity theory became in vogue or the first derivative trader was even conceived, the economist Friedrich Hayek understood that no computer, risk committee or individual could ever obtain or interpret all the necessary information to understand, construct and manage economic order. Nevertheless, our central bankers, shuffling through *manipulated* CPI data, inflation reports and bond spreads, stubbornly believe they can effectively produce market results that require the dexterity of brain surgery with instruments as clumsy as a pair of monetary hammers. Even more odd, is that these financial "surgeons" are looking at market blood tests that aren't even natural, but the result of prior, self-contamination, making any natural diagnosis impossible.

The catch-22 here brings to mind the observations of economist Charles Goodhart, who demonstrated that once an indicator is an object of policy, it's no longer an indicator. Bernanke and other central planners are parties to a collective bankers' folly, for in attempting to reduce uncertainty, they are in fact adding to it. From the days of the revered Adam Smith, we have been warned against tampering with the invisible hands of markets. Today, however, there is nothing at all invisible about the hands of the central planners, who find themselves in a curious irony of taking signals from a market that is not a real market, but a central-bank-manipulated-market. The signals, in short, are not real signals—*but of their own making*. To quote James Rickards, the policy makers are "literally drinking their own Kool-Aid."

But even if we can forgive the central bankers for ignoring Adam Smith, it's harder to forgive such well-educated men and women (nod to Yellen) for forgetting history. The decades, centuries and bookshelves give ample evidence that central planning is not only sub-optimal, it's impossible. Even if common sense is not enough to convince Bernanke et al that the market data is just too voluminous for human or even computerized management, one would nevertheless hope that the smoldering examples of Lenin, Mao, or Castro's centrally planned fiasco's are proof enough. Long-term markets grow naturally from the bottom up, not imposed from the top down. Optimality ultimately emerges not from market manipulation (disguised by the Fed as "forward guidance"), but from a complex spontaneity. Let bad ideas (and ideologies), from Stalin's Five-Year plan to the empty metroplexes of Jaingning die a well deserved and natural market death, just as Bear Sterns rightfully earned its own. (Sadly, the promiscuous trades of Goldman Sachs, Citigroup and Morgan Stanly wrongfully avoided such a natural demise in 08, enjoying instead a series of un-natural bailouts and bonuses. It helps to have cronies in high places.) As Tolstoy noted long before the fall of the Romanovs, to interfere with what is natural is a form of the grotesque. Nowhere is this more true than in the capital markets.

Fed defenders, however, intelligently maintain that we had no choice in 2008, that given the enormity of the market collapse, drastic intervention was needed. History, business ethics and reality, however, support another conclusion. The bailed out banks should not have been saved, but temporary nationalized, their stockholders wiped out and their non-performing assets stripped and placed into receivership, and then into a long term government trust for the benefit of taxpayers. The managers of those financial institutions should have been fired, not rewarded, and some criminal prosecutions would have likely been warranted as well. Asset prices, moreover, should have been allowed to tank—particularly in the housing and equity sectors. This would have been extraordinarily ugly, yes, very ugly, but not as ugly—or "grotesque" – as the moral hazard that resulted and the collapse still to come. It is often joked that capitalism without austerity is like Christianity without Hell: it just doesn't work. 2009 could have been a powerful and humbling inflection point. Instead, it was just an expensive band aide on a wound that is waiting to resurface. The policies pursued in 08 and beyond have failed to grasp that the problems which lead to 08 were structural (*viz*. easy money, derivative deregulation, over-leverage, poor ratings agency oversight, weak banking regulation etc.) rather than cyclical. Thus, throwing money or lowering interest rates to create "cyclical demand" was like giving antibiotics to a cadaver: too little, too late. Better to bury the body, mourn the loss and move ahead. The deflation we feared post 08 was not a demon to destroy, but a valid price signal telling us the system had too much debt and that we, like Japan in 89, had recklessly invested too much into the wrong asset classes.

Inflation: Greed

When prices drop, and deficits climb and markets hit a deflationary trend, the Fed, as indicated above, becomes afraid, and from this fear emerges greed, in particular: greed for easy money. This in a nutshell, is the history of central bank created inflation policies from post-89 Japan to post-08 America. The rationale is simple: when demand, prices and economies stall, throw money at the problem, spur spending and wait for growth (aka "New Monetarism"). Of course if the growth doesn't come, your inflationary solution becomes an inflationary problem. This too, we've seen before. Adding too much money to the system, like adding too much water to lemonade, can kill the flavor of the currency, diluting its value to a point of being useless/tasteless. The easy fiat-dollar printing of the 1970's caused the US dollar index to fall so low that our Treasury was forced to back its paper with the Swiss Franc. Not until Volker raised interest rates dramatically did the over-inflated dollar get its "flavor" back in 1985. Recently, in the wake of the 08 crisis, the dollar index took a similar nosedive, and as expected, the printing presses went into overdrive, producing historically unmatched trillions in base currency, hardly a subtle or orderly inflationary policy. The consequences will, in turn, be no less subtle or orderly.

So Why No Inflation, Yet…?

Milton Friedman famously announced that inflation is always and forever a monetary problem, meaning it correlates directly to changes in the money supply. If this is the case, then why hasn't a 400% increase in the money supply lead to inflation? In fact, why is inflation at amazingly low reported rates?

The answer(s) are numerous, and at times complex. First, we do have inflation, much higher, in fact than what is reported by a disingenuous CPI, which if based on more accurate, pre-90's methodologies, puts inflation around 10%, rather than the reported 2% levels. (We feel this inflation in every day life). Secondly, even if savings-destroying inflation is yet to be reported or experienced honestly, it's still on its way. In fact, this lag in the realization and expression of inflation is known as the “money illusion” and it is driven by what Keynes described as market “animal spirits,” that is, the irrational optimism that investors hold when mistaking a central-bank supported economy and market for a naturally thriving market. The 1960’s-1970’s were a classic example of this “money illusion,” when easy money policies gave investors a false sense of order while average inflation hovered around 1.24%. But then, *boom*: by 1980 inflation was at 13.5%. Such abrupt shifts are yet another characteristic of complex, manipulated and unreal markets: they look and feel great, until almost instantly, they tumble, because artificial rather natural mechanisms held them in place. Currently, we are experiencing a profound case of this “money illusion” as those “animal spirits” drive all-time highs in the S&P and DOW while actual company earnings stagnate in the 3-4% range--classic signs of an artificial market, or “bubble.” The bond market is no different; in fact, it’s worse. Thinly traded, over-bought, and Fed-supported, its yields are so compressed that even junk bond risk delivers only low yield returns. The real estate market, itself a bubble driven by low rates and rising stock markets rather than growing populations and incomes, is another illusion/bubble, whose reported climbs hide the fact that most buyers (50% of which are all cash, the other 1/3 of which are FHA loans) are not even households…

Another key reason inflation has yet to appear in this otherwise perfect stage for it, stems from the fact that US inflation is exported abroad via exchange–rate mechanisms. That is, as the Fed prints more dollars, it’s effectively just exploiting its trading partners like Brazil or China, who in turn need to weaken/inflate their own currencies in order to compete with the world’s reserve currency. (In 2012, the Yen crashed 33% against the USD; then Korea had to reduce its currency as well.) In this manner, US inflation is muted by the cheap imports coming from its equally inflated trading partners/hostages. Furthermore, the fact the US has fought—literally fought—to keep the sale of oil pegged to the US Dollar is a critical point. The dollar-based agreements with Saudi Arabia and OPEC in 73 and 75 have been an obvious source of global demand for this otherwise policy-beaten dollar, allowing the greenback to be continually printed/inflated at home and absorbed abroad by global oil buyers. (Woe, incidentally, to those countries like Iraq in 2010, who wished to peg their oil prices to the Euro rather than the dollar. But that is another geopolitical can of worms). Furthermore, and contrary to Freidman’s mantra, it’s equally important to note that inflation is about more than just money supply*, it’s also about behavior*, namely in the form of lending and spending. Stagnation in business investment and consumer spending have been a counterforce, and such inflation and deflation counterforces can work to neutralize each other for an illusory period—until a spark leads to an explosion. (More on these sparks below.) Finally, and as our current fed Chairwoman, Janet Yellen intelligently maintains, the tapering of money printing can deflate bubbles without popping them. Yellen embraces the equilibrium models that believe such deflationary forces will balance out inflationary policies and thus prevent run-away inflation. There is some logic to this view, but, again, it ignores complexity theory’s equally logical warning of sudden systemic risk—or “sparks,” which is why Fed governor Jeremy Stein holds the opposing view, namely that further money supply printing just inflates asset bubbles without really increasing growth.

Nothing to Show for the Spending Spree

As for the growth question, the entire experiment ultimately begins and ends with this: has the monetary tightrope walk delivered any real increase in GDP? The short answer is no, and for this reason, concern for the future is more than just theoretical. GDP dropped to 1.8% in 2011, climbed modestly to 2.2% in 2012, and rose as high as 4.1% in the third quarter of 2013, but has hardly been a source of consistent optimism. The trend and averages (2.5%) are anemic. Nor can we expect any cyclical rise in the growth rate longer term, as the problems with our markets and economy are structural, not cyclical. Most distressing in the backdrop of these weak growth numbers is the multi-trillion dollar price we paid for them. Having driven our Treasury into record deficits/debt while quadrupling our money supply in a ZIRP, post-08 twilight zone, the US has very few tricks and pennies left. If all of these expenses add up to no growth, then the Fed experiment is a failure. Furthermore, when markets correct again—and markets can't always go up—there will be no more easy money to keep it inflated. The monetary helium runs out, despite all the hot air of market cheerleaders and FMOC announcements. Completing the string of metaphors, this means we have no further net beneath the deflation/inflation tightrope. The next crash will be a painful landing.

Not only have the twin hammers of easy money and low interest rates failed to deliver meaningful GDP numbers, they have equally under-delivered in spurring employment growth. Economist John Makin and market analyst Dan Albert have been consistently candid in painting our sober employment landscape. Makin contends that the depression that began in 07 will continue, and the strongest evidence for this is the depression level employment data. Despite recent cheerleading as to published job report numbers, a deeper look under the statistics mutes the excitement. In fact, almost 60% of the jobs created have been in the lowest wage sectors—not enough to ignite an economy—and predominantly part-time. If you re-evaluated the data based on full time work and also included the number of workers who have exhausted their unemployment benefits and otherwise stopped looking for work, the actual unemployment rate is not the reported 7.1%, but rather a depressing 14.3%. Equally daunting is the fact that 1 in 7 US citizens are on food stamps. Such numbers are, well: disgraceful.

So what do we have to show for doubling our debt and inflating our dollar? Low growth and high unemployment. Ouch.

The only aspect of our economy that is not a mirror of the Great Depression is the staggering deflation of that era, which was at 26%. Deflation is the natural state of a depression. People and businesses deleverage. They stop buying, demand plummets. Prices drop. But we aren't seeing that because six years of printing $3.2T in base money has worked to keep our collective noses just above the deflationary waterline. The inflationary supply of money has skyrocketed, while its velocity/turnover is in sharp decline as productivity growth and employment stagnate. It is really only a matter of time, however, before the temporary offsetting power of the money supply hammer can no longer manage the structural realities of a depressed economy and spending/velocity. The natural power of the markets—far stronger and more complex than Fed hammers— has the final say. To claim otherwise is optimism at best, hubris at worst.

Tipping Points: What, When and Where?

Given the foregoing complexities--from the irrational volume of off-the-balance sheet derivatives to record-breaking sovereign debt, bank leverage, Fed liquidity and co-linked bubbles--the storm clouds seem obvious. But when and how does a market storm explode? Is the rain really coming? Optimists say no, and correctly note that the dollar, after all, is still king. For now and the foreseeable future, there's truly no other currency to take its place as the world's reserve currency (though in time a new king will be crowned, most likely in the robe/form of IMF Special Drawing Rights, or SDR's). Furthermore, US Bonds are indeed the only markets in the world large and diversified enough to absorb investment flows from surplus nations like China, Korea, and Taiwan. In short, it seems that despite its myriad cuts, bruises and scars, the US dollar (and markets) is still the best horse in the global glue factory.

Such relative strength, however, is no defense against the power of natural market forces. Even the mighty dollar has fallen before, as recently as 1978. Furthermore, the international monetary system, like the Titanic, is not unsinkable, and despite its impressive size, is not stronger than nature (like an iceberg or market wind) and can and has sunk before, in 1914, 1939 and 1971. Even the most cursory look at market history, moreover, should weaken any false confidence in the current "money illusion" we are experiencing. Unfortunately, few in our industry understand market *history*, focusing instead on sales and myopic, salary-driven conclusions. The history is complex, yet the lessons (and patterns) are simple: manipulating markets with low rates or easy money creates bubbles, and all bubbles—from tulips to tech stocks to sub-prime CDO's—pop; what makes today's bubbles uniquely scary is that they have reached the final frontier in the form of sovereign debt and currency bubbles. Once these final bubbles explode, there's nothing left for our Fed and its twin hammers to do but watch the natural forces of the market reset prices, and that will be ugly, really ugly.

As for the nature of this explosion, it will ultimately take the form of *a loss of confidence in the dollar,* as the dollar has nothing to back it other than trust. Currently, that trust is still high; the "animal spirits" are served daily with more good news of market highs and market spin, because the industry knows that confidence alone is the linchpin of the entire illusion we live under. How and when this confidence will end is an open question. The timing is impossible to determine, but the inevitability of it is not.

Sparks are flying

Looking at what can spark a dollar-killing explosion, there are any number of possibilities, the greatest of which is time. That is, over time, and as markets continue to reach their erie, low-volume, ambiguously confident highs in the absence of real growth and employment, confidence will slowly wane, and then stop altogether. The most likely setting for this confidence slide is the bond market, which will eventually have to ask itself if treasury debt is sustainable? If the answer is yes, the market will continue to buy; if the answer is no, the market will dump the treasuries, interest-rates will skyrocket and the bond and stock markets will sink, and sink fast, as the Fed will be out of life jackets, hammers or magic tricks (you can't fight inflation with more inflation). Another possible spark could emerge from the hidden leverage on bank balance sheets in the form of derivatives and asset swaps, which would not in itself be a stock market crash, but rather a counterparty failure that precedes and causes a panic, which in turn dominoes toward a crash. Other potential sparks could stem from a collapse in Chinese growth or the resurfacing of a sovereign debt crisis in the EU; equally plausible sparks include an escalating war in the middle east, a commodity price shock, oil price spikes, or panicked gold buying—all of which could cause dollar dumping and inflation. The point here is not to predict the precise lightening bolt, but more simply to demonstrate that our dollar/markets are heading straight into a perfect storm and thus vulnerable to any number of potential strikes.

Summing it Up

The foregoing data points are a lot to swallow. Complexity—in both theory, practice, mathematics and market history—involves numerous interdependent factors, from central bank policies, inflation and deflation forces, derivatives risk, and even human psychology. The message and conclusion, however, is relatively straightforward: today's markets are too complex and structurally broken to be managed by the blunt forces and cyclically minded policies (interest rate and money supply manipulations) of the world's central bankers. The simple fact is this: where there is massive debt, massive inflation inevitably follows. Unprecedented global and national debt—the handiwork of over-levered banks and sovereigns—has reached a point of no return, having spawned unsustainable asset bubbles, co-linked and culminating in the most dangerous of all bubbles: debt and currency. The market, and not our leaders or bankers, will have the final say, in much the same way the oceans and not those who sail upon her, get the last word in every major tempest. Given the storm that lies ahead, it is my hope that investors and readers prepare their portfolios for assets that will weather the inflationary deluge to come. And as for this forecast, I'll conclude with a rhetorical question: When did Noah build the Ark?

Before the rain.