



Half a Bubble Off Dead Center

By John Mauldin | April 20, 2015

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San Diego, Raleigh, Atlanta, and New York

I can sense a growing unease as I talk with investors and other friends, from professional market watchers and traders to casual observers. What in the Wide World of Sports is going on? It is not just that markets are behaving in an unusual and volatile manner (see chart below showing multiple double-digit moves in the last few months); it's that the data seems to be so conflicting. One day we get data that shows the economies of the developed world to be slowing, and the next day we get positive numbers. The ship of the economy seems to be drifting rudderless.



My dad used to say about a situation that just didn't seem quite right that things were "about a half a bubble off dead center." (This was back in the days when we used bubble levels to

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determine whether something was level or plumb – before today’s fancy digital gadgets.)

There is a reason, I think, that everything seems just a little out of kilter. I believe that central banks, in their valiant, unceasing efforts to restore liquidity and growth, have unleashed numerous unintended consequences that are beginning to show up in earnest. Today we are going to review the well-meaning behavior of central banks for clues about our near future.

But first, let me take one final opportunity to invite you to come to the 2015 [Strategic Investment Conference](#). We’ve assembled an amazing cast of speakers who will delve deeply into what is really driving the world’s economy. I have some of the finest experts on China from around the world, central bankers, some very powerful analysts whose work commands the attention of the biggest institutions and hedge funds in the world (and whose work costs 20 times or more the price of my conference). Market analysts, geopolitical wizards, and futurists will be on hand, too. This is really the finest gathering of minds I have been pleased to assemble for a Strategic Investment Conference. Click on the link above and peruse the lineup and schedule. The conference starts in a little over a week, on the evening of April 29, and lasts through May 2 at noon. Between those times we will wine and dine you as you feast on powerful ideas, one after another. You will come away with a much better grasp of our near-term future, including when and how the Fed will raise rates, what will happen to China, how Europe will evolve (or devolve), and what the overall geopolitical outlook for the world is. All in one place with some of the smartest and friendliest attendees you’ll ever find.



Almost everyone who attends these conferences say they are the best they’ve ever been to, and I work hard to make sure they can say that every year. This year I believe they will be able to say it again. Make a last-minute decision to come – you’ll be glad you did. To make your decision easier, we are holding the current registration price of \$2,195 through the rest of the week.

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Now let's look at what central banks are doing to us.

Stuck in a Liquidity Trap?

A few years ago, Jonathan Tepper and I wrote a book called *Endgame*, in which we talked about liquidity traps developing at the end of debt supercycles. And we certainly did have a liquidity trap, all over the world. The major central banks came up with rather radical policies to deal with it, and those were necessary at the time. But then, like the proverbial Energizer Bunny, they just kept going and going and going.

Central banks have proven that they can make money cheap and plentiful, but the money they've created isn't moving around the economy or stimulating demand. It's like a car. Our central banker can put the pedal to the metal and flood the engine with gas; but because the transmission is busted, it's hard to shift gears, and power isn't delivered to the wheels. Without a transmission mechanism, monetary policy is ineffective. Study after study has shown that quantitative easing didn't produce the "bang for the buck" that central bankers hoped it would. After a credit crisis like last decade's, central bankers can cut the nominal interest rate all the way to zero and still not be able to get their economies in gear. Some economists call that a "liquidity trap" (although that usage of the term differs somewhat from Lord Keynes's original meaning).

The Great Recession plunged us into a liquidity trap the likes of which the world hadn't seen since the Great Depression, although Japan has been more or less mired in a liquidity trap since their bubble burst in 1989.

Economists who study liquidity traps know that some of the usual rules of economics don't apply when an economy is stuck in one. Large budget deficits don't drive up interest rates; printing money isn't inflationary; and cutting government spending has an exaggerated impact on the economy.

In fact, if you look at recessions that followed on the heels of debt crises, growth was almost always very slow. For example, a study by Oscar Jorda, Moritz Schularick, and Alan Taylor found that recessions that occurred after years of rapid credit growth were almost always worse than garden-variety recessions. One of the key findings of their study is that it is very difficult to restore growth after a debt bubble.

Yet Paul Krugman took a victory lap this week on behalf of the reigning economic paradigm and its role in the US recovery. While he was at it, he chided Europe for not pursuing the same policies:

It's true that few economists predicted the crisis. The clean little secret of economics since then, however, is that basic textbook models, reflecting an approach to recessions and recoveries that would have seemed familiar to students half a century ago, have performed very well. The trouble is that policy makers in Europe decided to reject those basic models in favor of alternative approaches that were innovative, exciting and completely wrong.

Actually the difference in the performance of the US and European economies was almost all attributable to our shale oil revolution. Without it, US growth would have been closer to 1% than our recent anemic 2% average (and likely to be 1% for the recent quarter).

Was it really central bank policy that made the difference? Let's examine.

Central banks in the US, Europe, and Japan want to create modest inflation and thereby reduce the real value of debt, but they're having trouble doing it. Creating inflation isn't quite as simple as printing money or keeping interest rates very low. Most Western central banks have built up a very large store of credibility over the past few decades. The high inflation of the 1970s is a very distant memory to most investors nowadays, and almost no one seriously believes in hyperinflation. The UK has never experienced hyperinflation, and you'd have to go back to the 1770s to find hyperinflation in the US – when the Continental Congress printed a boatload of money to pay for the Revolutionary War. (That's why the framers of the Constitution introduced Article 1, Section 10: "No state shall... coin money; emit bills of credit; make any thing but gold and silver coin a tender in payment of debts....") Japan and Germany have not had hyperinflation for over 60 years.

Today's central bankers want what they consider mild inflation (~2%) but only in the short run. (They would probably tolerate 3 to 4% before they leaned heavily against it in today's economic environment.)

As Janet Yellen has recognized, central banks with established reputations have a credibility problem when it comes to committing to future inflation. If people believe deep down that central banks will try to kill inflation if it ever gets out of hand, then it becomes very hard for those central banks to generate inflation. And the answer to that problem from many economists is that central bankers should be even bolder and crazier – sort of like everyone's mad uncle – or, to put it more politely, they should be "responsibly irresponsible," as Paul McCulley has quipped. And yet there is a growing chorus of serious economists beginning to suggest that keeping rates at 0% for six years is just about irresponsible enough.

In a liquidity trap, the rules of economics change. Things that worked in the past don't work in the present. Central bankers' economic models, iffy in the best of times, become even less reliable. In fact they sometimes suggest actions that are quite destructive. So why aren't the models working?

Sometimes the best way to understand a complex subject is to draw an analogy. So with an apology to all the true mathematicians among our readers, I want to revisit what I call the Economic Singularity. I must confess that when I coined the term in 2012 I had no idea how accurate the description would become in the past few quarters.

The Economic Singularity

Singularity was originally a mathematical term for a point at which an equation has no

solution. In physics, it was proven that a large enough collapsing star would eventually become a black hole so dense that its own gravity would cause a singularity in the fabric of space-time, a point at which many standard physics equations suddenly have no solution.

Beyond the “event horizon” of the black hole, the models no longer work. In general relativity, an event horizon is the boundary in space-time beyond which events cannot affect an outside observer. In a black hole it is “the point of no return,” i.e., the point at which the gravitational pull becomes so great that nothing can escape.

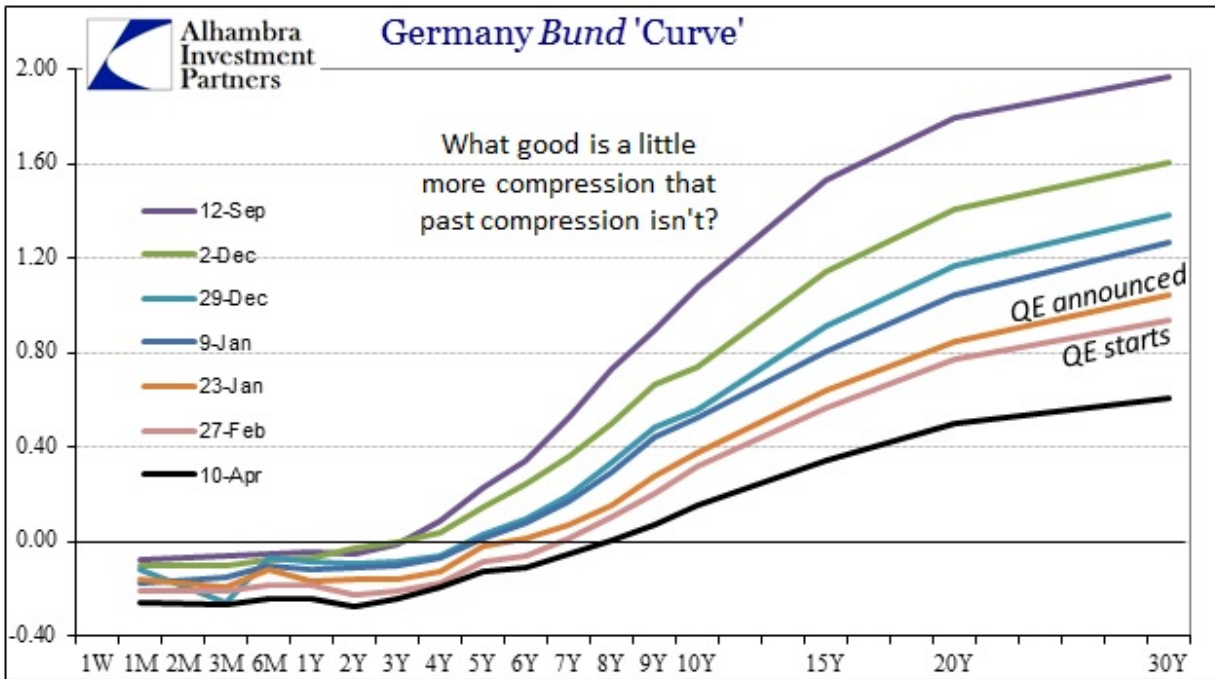
This theme is an old friend to readers of science fiction. Everyone knows that you can’t get too close to a black hole or you will get sucked in; but if you can get just close enough, you can use the powerful and deadly gravity to slingshot you across the vast reaches of space-time.

One way that a black hole can (theoretically) be created is for a star to collapse in upon itself. The larger the mass of the star, the greater the gravity of the black hole and the more surrounding space-stuff that will get sucked down its gravity well. The center of our galaxy is thought to be a black hole with the mass of 4.3 million suns.

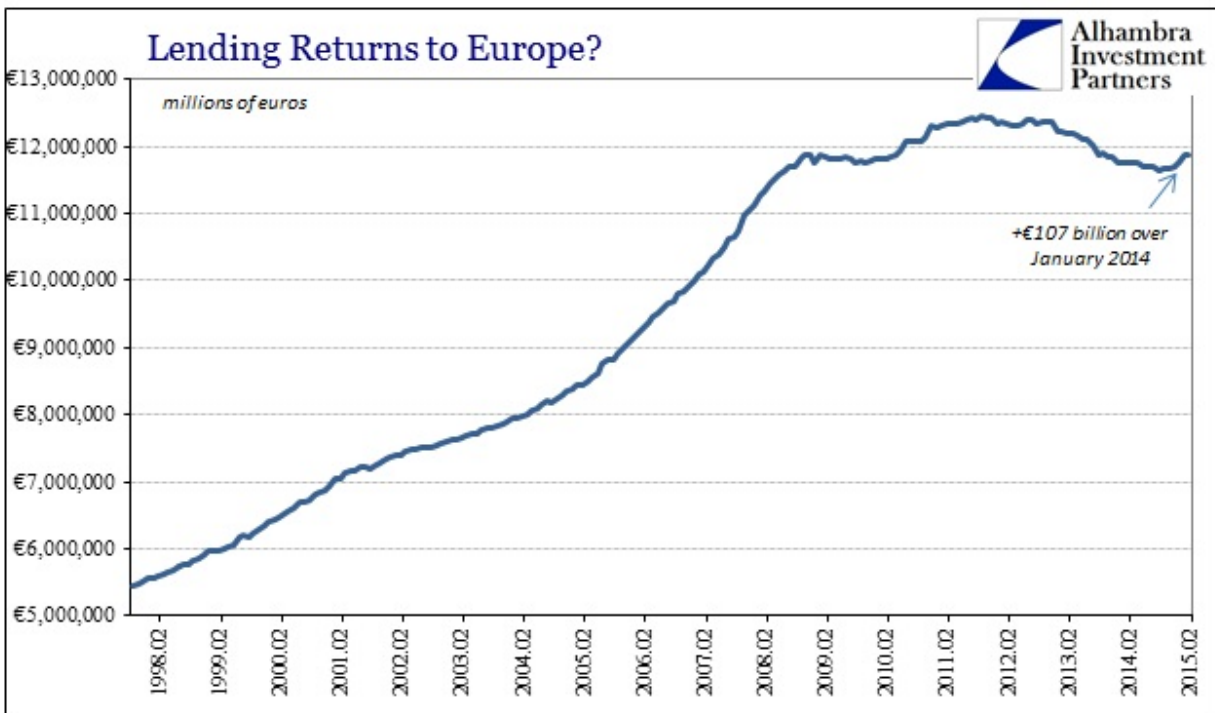
We can draw a rough parallel between a black hole and our current global economic situation. (For physicists this will be a very rough parallel indeed, but work with me, please.) An economic bubble of any type, *but especially a debt bubble*, can be thought of as an emergent black hole. When the bubble gets too big and then collapses in upon itself, it creates its own black hole with an event horizon beyond which all traditional economic modeling breaks down. Any economic theory that does not attempt to transcend the event horizon associated with excessive debt will be incapable of offering a viable solution to an economic crisis. Even worse, it is likely that any proposed solution will make the crisis more severe.

We are fast reaching the point where markets are crossing the event horizon, where mathematical investment analysis no longer makes sense. We read that some 25% of bonds in Europe now offer negative interest rates. How do your value equations work in an environment of negative yields? It becomes mathematically impossible for pensions and insurance companies to meet their goals, given their investment mandates, in a world of negative interest rates. While economists may applaud negative rates, those who will need their annuities and pensions are probably not yet aware that their futures have been mortgaged for a set of narrow economic goals, which look as though they are not being fulfilled at any rate. When the bill comes due in 10 years, those in charge today will have moved on to other more lucrative opportunities, and pensioners will realize how screwed they have been.

German bonds have negative yields out to the eight-year mark, as yields have steadily dropped for the last three years:



Switzerland is now *issuing* 10-year bonds at negative rates. Has lending returned to Europe? If you squint real hard, you might be able to detect an uptick in the next chart.



However, when you take a closer look, you find that the recent uptick is almost all in finance (in just two financial corporations, to be specific) and not in the household and business

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sectors, which are seeing credit lines being close to them. (Hat tip [Alhambra Partners](#).)

I believe the world will soon find out that by holding interest rates down and allowing sovereign debts to accumulate past the point of rational expectation for being paid, in one country in Europe after another (Greece is just the first), central banks have pushed us past the event horizon, believing they have supernatural powers that will let the global economy escape the debt black hole that has been created by and for governments.

The Minsky Moment

Debt (leverage) can be a very good thing when used properly. For instance, if debt is used to purchase an income-producing asset, whether a new machine tool for a factory or a bridge to increase commerce, then debt can be net-productive.

Hyman Minsky, one of the greatest economists of the last century, saw debt in three forms: hedge, speculative, and Ponzi. Roughly speaking, to Minsky, hedge financing occurred when the profits from purchased assets were used to pay back the loan; speculative finance occurred when profits from the asset simply maintained the debt service and the loan had to be rolled over; and Ponzi finance required the selling of the asset at an ever higher price in order to make a profit.

Minsky maintained that if hedge financing dominated, then the economy might well be an equilibrium-seeking, well-contained system. On the other hand, the greater the weight of speculative and Ponzi finance, the greater the likelihood that the economy would be what he called a deviation-amplifying system. Minsky's Financial Instability Hypothesis suggests that over periods of prolonged prosperity, capitalist economies tend to move from a financial structure dominated by (stable) hedge finance to a structure that increasingly emphasizes (unstable) speculative and Ponzi finance.

Minsky proposed theories linking financial market fragility in the normal life cycle of an economy with speculative investment bubbles that are seemingly an inescapable part of financial markets. He claimed that in prosperous times, when corporate cash flow rises beyond what is needed to pay off debt, a speculative euphoria develops; and soon thereafter debts exceed what borrowers can pay off from their incoming revenues, which in turn produces a financial crisis. As the climax of such a speculative borrowing bubble nears, banks and other lenders tighten credit availability, even to companies that can afford loans, and the economy then contracts.

“A fundamental characteristic of our economy,” Minsky wrote in 1974, “is that the financial system swings between robustness and fragility and these swings are an integral part of the process that generates business cycles.”

In *Endgame* I explored the idea of a debt supercycle, the culmination of decades of borrowing that finally ends in a dramatic bust. At the time I wrote the book, I felt that much of the developed world was at the end of the 60-year-long debt supercycle and approaching the event horizon of a global economic singularity.

The Event Horizon

A business-cycle recession is a fundamentally different thing than the end of a debt supercycle, such as much of Europe is tangling with, Japan will soon face, and the US can only avoid with concerted action in the next few years. A business-cycle recession can respond to monetary and fiscal policy in a more or less normal fashion; but if you are at the event horizon of a collapsing debt black hole, monetary and fiscal policy will no longer work the way they have in the past or in a manner that the models would predict, which is precisely what we're seeing today.

There are two contradictory forces battling in a debt black hole: expanding debt and collapsing growth. Raising taxes or cutting spending to reduce debt will have an almost immediate impact on economic growth.

But there is a limit to how much money a government can borrow. Although that limit can vary significantly from country to country, to suggest there is no limit puts you squarely in the camp of the delusional. In our analogy, the event horizon is relatively easy to pinpoint. It is what Rogoff and Reinhart call the “Bang!” moment, when a country loses the confidence of the bond market. For Russia it came at 57% of debt-to-GDP in 1998. Japan is at 250% of debt-to-GDP and rising, even as its population falls – the “Bang!” moment has arrived, and Japan is now monetizing debt at a rate that is unprecedented for a developed country in modern history. Obviously, Greece had its first such moment several years ago and is now getting ready to experience another such painful moment. Spain lost effective access to the bond market a few years ago and survived only because of European Central Bank intervention, as did Italy. If there is further contagion from Greece, will these and other southern- and eastern-tier European countries go Bang?

As an aside, it makes no difference how the debt was accumulated. The black holes of debt in Greece and in Argentina had completely different origins from those of Spain or Sweden or Canada (the last two in the early '90s). The Spanish problem did not originate because of too much government spending; it developed because of a housing bubble of epic proportions. Seventeen percent of the working population in Spain was employed in the housing industry when it collapsed. Is it any wonder that unemployment is now 25%? If unemployment is 25%, that both raises the cost of government services and reduces revenues by proportionate amounts.

The problem of too much debt is not new. Rogoff and Reinhart's epic research highlights 266 crises over the last few hundred years; and if they were writing their book today, they would be able to add a few new ones. I believe there will be even more such events within the next five to ten years.

The policy problem is daunting: how do you counteract the negative pull of a black hole of debt before it's too late? How do you muster the “escape velocity” to get back to a growing economy and a falling deficit – or, dare we say, even to a surplus that lets you pay down the old debt? How do you defuse the mutually amplifying forces of insufficient growth and too much debt?

The problem is not merely one of insufficient spending; the key problem is insufficient income. By definition, income has to come before spending. You can take money from one source and give it to another, but that is not organic growth. We typically think of organic growth as only having to do with individual companies, but I like to think the concept also applies to countries. The organic growth of a country can come from natural circumstances like ample energy resources or an equable climate or land conducive to agricultural production, or it can come from developing an educated populace. There are many sources of potential organic growth: energy, tourism, technology, manufacturing, agriculture, trade, banking, etc.

While deficit spending can help bridge a national economy through a recession, normal business growth must eventually take over if the country is to prosper. Keynesian theory prescribed deficit spending during times of business recessions, offset by the accumulation of surpluses during good times, in order to be able to pay down debts that would inevitably accrue down the road. The problem is that the model developed by Keynesian theory begins to break down as we near the event horizon of a black hole of debt.

Deficit spending is a wonderful prescription for Spain, but it begs the question of who will pay off the deficit once Spain has lost the confidence of the bond market. Is it the responsibility of the rest of Europe to pay for Spain or Greece? Or Italy or France, or whatever country chooses not to deal with its own internal issues?

Deficit spending can be a useful tool in countries with a central bank and an independent currency, such as the US. But at what point does borrowing from the future (that is, from our children) become a failure to deal with our own lack of political will in regards to our spending and taxation policies? There is a difference, as I think Hyman Minsky would point out, between borrowing money for infrastructure spending that will benefit our children and borrowing money to spend on ourselves today, with no future benefit. And for countries without a central bank, that are already trapped in a debt black hole, adding more debt just worsens the problem. Ask Greece.

Where Does Growth Come From?

While it may seem odd to shift directly from a discussion of debt to one about growth, the above question is actually at the heart of the matter. Paul Krugman and I would readily agree that growth of the type we experienced in the '80s and '90s is the best cure for too much debt. Nominal GDP growth at 6 to 7% with deficits rising no more than 2 to 3% (or even a surplus!) can quickly reduce a country's debt burden. Growth not only eases the debt burden, it produces jobs and a better standard of living for everyone. Growth is the equivalent of an economic magic elixir.

What causes growth? As noted above, Krugman wrote:

The clean little secret of economics since then, however, is that basic textbook models, reflecting an approach to recessions and recoveries that would have seemed familiar to students half a century ago, have performed very well.

The problem is that the models tend to confuse correlation with causation. The “textbook models” note that growth appears when rates are low and money is easier to find. Thus, when a central bank lowers its rates, it expects to see higher growth. It also wants to see an increase in jobs, and that is in fact what seems to happen.

I would not dispute that lower rates can for a time be a stimulus. But lower rate certainly weren't much of a stimulus in Japan and have not been all that successful in Europe over the last few years. There is something going on that a simple easy-money policy cannot address.

What happens after a recession is that companies adjust their business models. Initially this may mean cutting costs by reducing jobs and lowering overhead. Eventually, businesses start to be profitable again. Most companies try to take some of that profit and increase their business. It is the natural state of things that free entrepreneurs will figure out how to grow their businesses. The individual actions of almost 7 million businesses and 22 million self-employed workers trying to improve their lot in life create growth in the aggregate.

There is a fabulous infographic at [Business Insider](#), detailing the statistics on the state of US small businesses. It's way too long to reproduce here, but those who are interested can click on the link.

A few facts:

- 50% of the working population of the US works in small business.
- There are over 22 million self-employed workers, and the remaining almost 7 million businesses have almost 100 million employees.
- Small businesses have generated over 65% of the net new jobs since 1995.
- An astounding 543,000 businesses get started each month; and, for decades, more businesses would open than close. That has changed, and we are now closing more businesses than we are opening new ones. We have shut down the engine for the source of new jobs.
- Starting a new business is very risky. Only 7 out of 10 new employer firms survived at least 2 years, half last at least 5 years, a third make it for 10 years, and only a quarter stay in business 15 years or more. These are actually better odds than when I was researching and writing about the topic in the '80s. Perhaps that is because 52% of all small businesses are now home-based, with lower overhead and clearly different business models than were prevalent 30 years ago.
- That self-employed market contributes over 6% of GDP.

The growth of an economy after a recession is the result of tens of millions of small and large businesses figuring out how to improve their lot. To credit a central bank and its monetary

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policy as the primary forces in bringing about prosperity is misguided at best and disingenuous at worst. It is giving credit to the cart for delivering the package rather than to the horse that pulled it.

If we want growth, then we need more small businesses. Elon Musk employs 6000 employees, on his way to 10,000+; but his business started with a few people sitting around a table trying to figure out how to make it happen. Same with Google. Or Amazon. Or any big business.

You don't get big businesses with large numbers of employees without having an active pool of new businesses being created. The simple fact is that regulations and a complicated tax code have made starting a new business more difficult.

Economic Distortions and Unintended Consequences

The Federal Reserve policy of holding rates too low for too long in the middle of the last decade clearly helped create the environment for the housing bubble and the distortions in the financial markets that were at the root of the Great Recession. The Federal Reserve is once again making the mistake of leaving interest rates too low for too long and bringing about distortions that are creating bubbles all over the world, especially in the emerging markets.

By encouraging a reach for yield in riskier investments because interest rates are abnormally low, the Fed has created an environment in which far more risk is being taken than is normal and healthy. It is as if the central bankers and economists have decided that individuals are not smart enough to do what is in their own best interests and think they need to be encouraged to make riskier investments. The problem is that many of those riskier investments are now being made with funds that should in be lower-risk investments meant to sustain people well into their retirement years.

Most retirement money should be put to work in lower-risk investments meant for the long term. Now that investors have been forced into seeking higher-yielding, higher-risk investments, at the first sign of danger they will be emotionally driven to withdraw their funds at just the wrong time, as they did during the Great Recession. Central bank policy, even if well-meant, has created an environment of risk that monetary policy cannot resolve. We have sown the seeds of the next crisis throughout the economies of the world by distorting markets with low rates and encouraging \$9 trillion of dollar-denominated debt to flow into emerging markets.

Further, rather than reforming their labor and regulatory markets and unleashing their entrepreneurs, Japan and now Europe are engaged in what amounts to a currency war waged under the guise of trying to engender inflation.

The central banks of the major developed economies have once again dangerously distorted the real economy. It strains credulity to say that slowly raising rates by as little as 2% would somehow make it impossible for businesses to make money. A business that survives only because of 0% interest rates is a zombie business that is incapable of surviving in a normal economy. Repressing savers and destroying the income of those who have saved for a lifetime seems a very

high price to pay to support businesses that would fail in normal times. Thwarting savers greatly reduces the consumption those savers would have been able to contribute to the real economy. And to prop up the very financial institutions that were part and parcel of the last crisis? The income inequality that so many in academic circles decry is actually a studied result of current thinking about monetary policy.

We have once again entered dangerous ground where central banks with their low rate policies have distorted the economy. Yes, the near-zero rate policies of central banks have benefited financial businesses and large corporations that can take advantage of access to low-interest-rate financing, but they have not spurred the development of new businesses. Monetary policy does not create jobs. Businesses create jobs.

In addition, we have put in place onerous new banking regulations that are being thrust upon small banks, taking away their power to lend money to good businesses. We are strangling the real economy with easy-money policies and encouraging financial transactions that look a lot like Ponzi, as opposed to hedge, financing.

The total amount of global debt has risen by 33% in just the last seven years, that is, by a staggering \$57 trillion. How much of the \$57 trillion was pursued as hedge finance rather than Minsky's speculative or Ponzi finance? I fear that we are once again facing a Minsky Moment, when our accumulated debt and the continued distortion of the economy by central banks will create another financial crisis.

Is it 2005 all over again, so that we can expect another few years before the piper must be paid? Or is it mid-2007, so that we need to be preparing for another global crisis? In both cases the markets were telling us things were okay, but in 2007 we were beginning to notice signs of increased volatility, and growth seem to be weakening. What do you see when you look around? Does it feel like 2005, or 2007?

To me, the world feels like it's about half a bubble off dead center.

San Diego, Raleigh, Atlanta, and New York

I am home next week before heading over to San Diego a few days early for the [Strategic Investment Conference](#). If you are around Wednesday afternoon (the 29th), look me up in the gym. Once the conference starts Wednesday night, I will have very little time Thursday and Friday to catch my breath, let alone get into the gym. Maybe Saturday afternoon, if I have any energy left.

The middle of May sees me going to Raleigh for an institutional investment conference before participating in a board meeting for Galectin Therapeutics in Atlanta. In early June I have a trip scheduled to New York and then New Hampshire. I will likely drive from there up to Stowe, Vermont, where my Mauldin Economics partner Olivier Garret has his offices. I'm sure a few other trips will come along in the meantime.

My friends know that I enjoy a great science fiction book. I've been reading science fiction

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for well over 50 years. I'm really not sure how many thousands of books I've read in that span of time. Lately, not as many as I would like, as there is so much other material that I feel compelled to read. The really good writers (not just of science fiction) not only grip you tight with a well-told story, they seem to be able to throw in plot twists that open up new horizons for the protagonists and engender wonder and joy in the reader. Most of the time, at least. George R. R. Martin (best known for *Game of Thrones*) is notorious for plot twists that kill off main characters just as you have come to really feel that you know and like them. It does allow him to take his plot in unexpected directions, though.

Just when I thought I could see how things would progress into my own near future, there has lately been a plot twist or two in my life (fortunately no one has been sacrificed for the enhancement of my personal plot). I choose to see them as opening up new possibilities, and now find myself wondering what other opportunities are out there. Like any good novelist, I will make sure my character moves forward, taking his chances just over the next pass or out beyond the next star. How much more fun can you have than getting to write your own story? It's been a pretty good one so far. Let's see if this writer can keep it up.

Right now, though, I have to focus on finishing the final edits on a new book and putting the details into my speech for San Diego. New storylines will have to wait a few weeks. I hope you're having a great week. May all your plot twists be good ones.

Your wondering what genre of fiction I live in analyst,



John Mauldin

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